Reports of Decisions

OF

The Public Utilities Commission

OF THE

State of Colorado

From January 1, 1916, to November 1, 1916

Volume II

Containing also General Orders, Special Orders and Accident Reports

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Compiled, at the direction of the Commission, by C. E. Neil

THE SMITH-BROOKS PRESS, DENVER

Members of The Public Utilities Commission of the State of Colorado

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S. S. KENDALL

GEORGE T. BRADLEY

M. H. AYLESWORTH
Chairman

GEORGE F. OXLEY, Secretary

Denver, Colorado

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(February 2, 1916.)

INVESTIGATION on motion of the Commission as to the necessity for a station and agency at Hot Springs on the Denver & Rio Grande Railroad; station and agency ordered erected and maintained.

APPEARANCES: Hon. Frank H. Means, Mr. W. C. Briggs, Mr. R. Dunshee, for Saguache Chamber of Commerce, Intervenor; Messrs. E. N. Clark and J. G. McMurry, Mr. F. R. Rockwell, for the Defendant Railroad.

STATEMENT AND ORDER.

By the Commission:

On the 10th day of November, 1915, there were filed with this Commission two informal petitions requesting the Commission to

order The Denver & Rio Grande Railroad Company to build a suitable depot at the railroad siding of The Denver & Rio Grande Railroad Company known as Hot Springs, Colorado, the post office name of said community being designated as "Mineral Hot Springs"; and that the said The Denver & Rio Grande Railroad Company maintain a general agency station at said Hot Springs siding; one of the petitions bearing the signatures of prominent business men and county officials of Saguache and vicinity, and the other bearing the signatures of Frank H. Means, W. C. Briggs and R. Dunshee, representing the Commercial Club of Saguache, and many citizens of Mineral Hot Springs and Mirage, Colorado.

On the 17th day of November, 1915, an inspector, representing the Commission, visited Saguache and other towns in the vicinity of Saguache, for the purpose of reporting to the Commission relative to the informal complaints filed by the petitioners. On the 20th day of November, 1915, the Inspector filed his written report, and in accordance with the recommendations stated therein the Commission decided to investigate into the feasibility and necessity of the erection of a suitable station building and the installation and maintenance of an agency station at Hot Springs siding by the Defendant Railroad, and ordered The Denver & Rio Grande Railroad Company to appear at the Hearing Room of the Commission in the capitol building in the City and County of Denver, State of Colorado, on the 20th day of December, 1915, at the hour of 10:00 o'clock a. m., before the Commission *en banc*, to make such defense to this cause as might be thought necessary by the Defendant Company.

The above cause was heard on the 20th day of December, 1915, at the Hearing Room of the Commission; Messrs. E. N. Clark and J. G. McMurry, and Mr. F. R. Rockwell appeared for The Denver & Rio Grande Railroad Company, and Hon. Frank H. Means asked that he be permitted by the Commission to intervene in said hearing on behalf of the citizens of Saguache and the Commercial Club of Saguache, Colorado.

Witnesses testified in behalf of The Denver & Rio Grande Railroad Company, the Commercial Club of Saguache, and the Public Utilities Commission of the State of Colorado. At the conclusion of the hearing, and at the request of the Defendant, the Commission granted the said Defendant fifteen days in which to file a verified exhibit in the form of a written statement containing data as to freight tonnage received and delivered at Villa Grove and Moffat stations originating at or destined to Saguache, and the revenues accruing therefrom; and the Intervenor was granted seven days after receipt of said exhibit to file an answer to the exhibit of the Defendant Railroad Company.

On the 4th day of January, 1916, the Defendant, The Denver & Rio Grande Railroad Company, attempted to file with this Commission as a part of this case a petition praying that the

station at Villa Grove be ordered discontinued. The Defendant was not permitted to file this petition, and on January 17, 1916, filed a verified exhibit containing certain information desired by the Commission, and the Intervenor was granted ten days from the receipt of such verified exhibit of the Defendant Company in which to file an exhibit in the form of written affidavits in answer thereto.

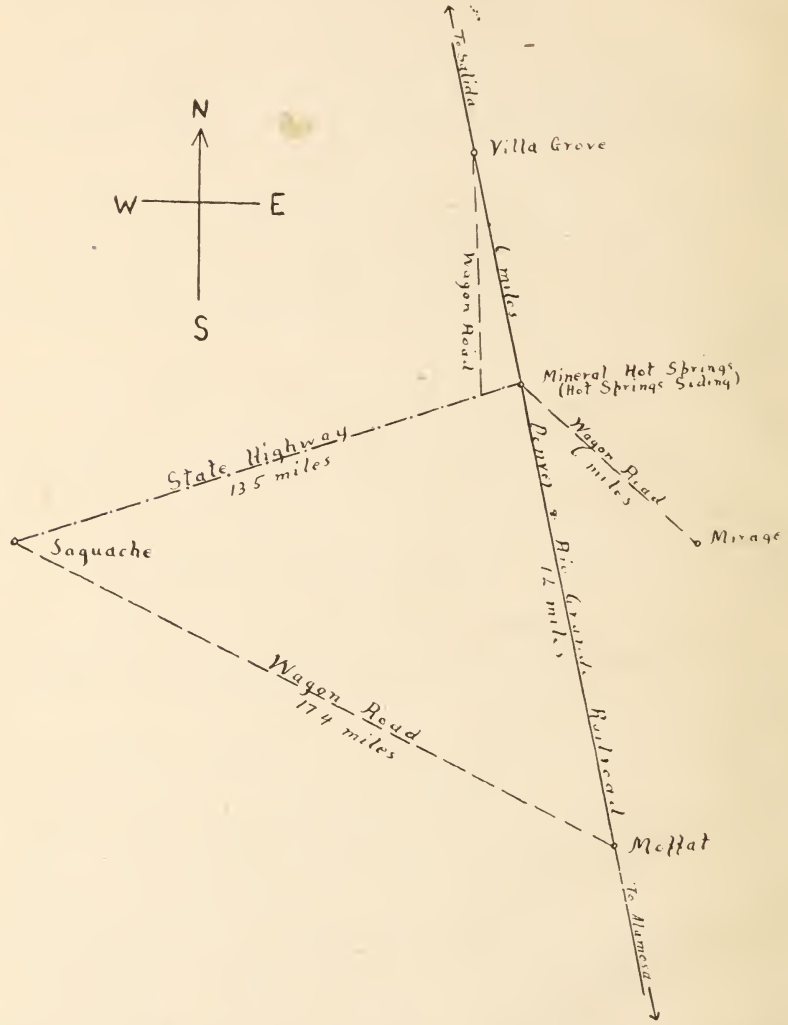
It appears from the evidence introduced at the hearing of this cause that the town of Saguache has a population of about 1,400 people, and is the county seat and trade center of Saguache county; is noted for its hay crops and stock industry, and is well equipped with an adequate high school, as well as a grade school building just completed at a cost of $25,000.00. A modern court house has just been completed, and a modern hotel building is being constructed at a cost of $21,000.00. Two banks and many substantial residences have been completed, and during the last ten years the town of Saguache has increased one hundred and fifty per cent in population.

Saguache is not located on any line of railroad, and lies 13.5 miles west of Hot Springs siding, located on the line of the Defendant Railroad; 19.5 miles south and west of Villa Grove station, on the line of the Defendant Railroad; 17.4 miles north and west of Moffat station, located on the line of the Defendant Railroad. Villa Grove station is located 6 miles north of Hot Springs siding, and Moffat station is located 12 miles south of Hot Springs siding. A small settlement known as Mirage is located 6 miles south and east from Hot Springs siding.

The population of Villa Grove station and vicinity is about 200 people. Moffat station has a population of about 300 people, and the communities of Hot Springs and Mirage have a population of about 250 people.

The towns of Saguache and Hot Springs siding are connected by wagon road. This road is a part of the State system of highways, and is partially maintained with funds from the treasury of the State of Colorado. The wagon road from Saguache to Moffat station is quite rough, and the condition of the soil is such as to make this road undesirable for the hauling of freight and passengers between Saguache and Moffat stations. Saguache and Villa Grove stations are connected by a highway running south from Villa Grove to Hot Springs siding, at that point connecting with the State highway which connects Saguache with Hot Springs siding. From Villa Grove station to Hot Springs siding climatic conditions are such that the road is maintained with difficulty. During the winter season it is impossible at times to haul freight by team and wagon from Villa Grove to the State highway at Hot Springs siding, and the character of the soil of the Saguache-Moffat station highway is adobe and pulverizes easily, and is unsatisfactory for permanent road construction.

Freight may be hauled by team and wagon from Saguache to Hot Springs siding, and the return trip completed within a period of ten hours, but the hauling of freight by team and wagon from Saguache to Villa Grove station and return, or from



Saguache to Moffat station and return, requires two days' time. The merchants and farmers located in Saguache and vicinity pay a charge of twenty-five (25) cents a hundred in less than carload lots for the hauling of freight between Saguache and Moffat station, or Saguache and Villa Grove station, but due to better road conditions existing between Saguache and Hot Springs

siding the charge is twelve and one-half (12½) cents a hundred for less than carload lots between said points.

Mirage settlement, located 6 miles south and east of Hot Springs siding, connected with Hot Springs siding by wagon road, is a growing and prosperous community.

The Defendant Railroad, in its exhibit filed with this Commission, admits that 55.3% of the revenue of the total business handled through Villa Grove station is destined to Saguache, and 38.4% in revenue of the total business handled through Moffat station is destined to Saguache; 1.7% in revenue of the total outbound business handled through Villa Grove station originates at Saguache, and 33.7% in revenue of the total outbound business through Moffat station originates at Saguache; but it is impossible for us to inform ourselves, from the exhibit of the Defendant company, as to revenues and tonnage handled through Villa Grove and Moffat stations and destined to and from the vicinity of Saguache. From the evidence introduced we are of the opinion that practically all of the merchants, farmers and other shippers in the town of Saguache and vicinity have expressed a desire that a suitable station building be erected by the Defendant carrier at Hot Springs siding, and that an agent be installed at said station. In fact, there have been many requests of this nature made to the Railroad Company during past years.

(1) The Defendant Railroad, on the 4th day of January, 1916, filed with this Commission a petition requesting an order permitting the Defendant to withdraw its agent from Villa Grove station in the event the Commission should in this case order the erection of a station building at Hot Springs siding by the Defendant Railroad, and the maintenance of an agency therein, and an attempt was made to file said petition as part of Defendant's case in this cause.

We are of the opinion that this petition was not relevant to the issues in this cause, and refused to allow the Defendant Railroad to file the same.

(2) The Defendant takes the position that its branch of railroad operated between Salida and Alamosa does not at this time pay operating expenses, and that any order of this Commission resulting in an increase in the expenses of this branch of railroad would amount to confiscation. The Defendant has not attempted to introduce evidence that would bear out this statement, and the presentation of conclusive evidence that a branch of railroad operated as a part of the system of the Defendant Railroad is being operated at a loss, would not justify this Commission in the refusal of a station and agent at a point located on the line of railroad of the Defendant in the event that it should appear to us that the convenience and needs of the public demanded these expenditures.

"The consideration for the franchise, rights and privileges granted the Railroad company by a state is of resulting benefits to the public, and the acceptance by the company, generally speaking, imposes upon it the obligation to operate when constructed the railroad as it was incorporated to construct, and of doing it in the manner and for the purpose contemplated in its charter. * * * The law imposes upon it the duty to furnish adequate facilities to the public upon its entire system, not a part; and it cannot be excused from performing its full duty merely because by ceasing to operate a part of its system, the net returns would be increased; so that it cannot be said under the evidence that requiring the plaintiff in error to perform its duty to the public by furnishing an adequate service over its line between Denver and Leadville, although a pecuniary loss is entailed, is unreasonable or deprives it of any constitutional right, either Federal or state.

In brief, under the facts of the case at bar, an order requiring a railroad company in the possession and enjoyment of its charter powers and privileges, to furnish a necessary service, does not, even though a compliance with the order entails a loss, deprive it of its property without due process of law, or compel it to devote its properties and revenues to a public use without just compensation, for the obvious reason that such an order merely requires it to discharge its legal obligations. Of course, that a service ordered will entail a loss is a circumstance to consider in determining the reasonableness of the order, but a common carrier cannot successfully complain that a loss will thus be occasioned when it appears that the ordered service requires nothing more than necessary transportation facilities."

Colo. & S. Ry. Co. v. State R. R. Comm., 54 Colo., 64 (94).

Atlantic Coast Line R. R. Co. v. N. C. Corp. Comm., 206 U. S., 1.

After having given serious consideration to all the evidence introduced in this case, we are of the opinion that the Defendant Railroad should erect at Hot Springs siding, Colorado, a suitable railroad station building, install an agent therein, and establish an agency station, until the further order of this Commission. The plans for the station at Hot Springs siding shall be submitted to the Commission for approval.

The Defendant Railroad has signified its intention of filing a petition with this Commission praying for an order permitting the abandonment of its agency at Villa Grove station. Time alone

will demonstrate the necessity and usefulness of the stations at Villa Grove, Moffat and Mineral Hot Springs.

The Defendant Railroad is at liberty to file a petition requesting an order of this Commission permitting the abandonment of one of these agency stations, and the said petition will receive our serious consideration if the evidence proves to us that two stations will reasonably serve the needs of the public.

It Is Therefore Ordered, That the Defendant, The Denver & Rio Grande Railroad Company, shall, within ninety (90) days from the date of this order, erect a suitable station building, install an agent therein, and maintain an agency station, at a point known as Hot Springs siding, or Mineral Hot Springs, Saguache county, Colorado, on its line of railroad.

It Is Further Ordered, That the architectural plans for the station building, and a plat indicating the site thereof, shall be submitted to the Commission for approval prior to the construction of said station building.

(Seal)

M. H. Aylesworth,
Geo. T. Bradley,
S. S. Kendall,
Commissioners.

Dated at Denver, Colorado, the 2nd day of February, 1916.

THE DENVER & SALT LAKE RAILROAD COMPANY v. CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY.

(*Case No. 33.)

THE DENVER & SALT LAKE RAILROAD COMPANY v. THE CHICAGO, ROCK ISLAND & PACIFIC RAILWAY COMPANY, J. M. DICKINSON, RECEIVER.

(*Case No. 34.)

THE DENVER & SALT LAKE RAILROAD COMPANY v. UNION PACIFIC RAILROAD COMPANY.

(*Case No. 35.)

Rates—Railroads—Divisions—Interest to public.

(1) The arranging of divisions of through rates between carriers is a matter of bargaining between the carriers, and, where the reasonableness of the through rate is not involved, is a matter in which the shipper and public have no interest.

Rates—Railroads—Broadening markets.

(2) The originating line generally initiates negotiations with its connections for the establishment of through rates and divisions with the view to extending the market for commodities produced on its line, and this is especially true where its commodities come into active competition with like commodities produced on the lines of its connections.

Rates—Railroads—Operating conditions.

(3) While the operating conditions on an originating carrier's line may be much more severe than those on its connections with which it seeks through rates, its operating disabilities are not to be considered as the controlling element in the establishment of divisions of the rates, and the proportioning of divisions on that basis only would place an undue burden on the connecting carriers by requiring them to assume a portion of the disabilities of the originating carrier, and it is doubtful if the Commission could directly, or indirectly, force them to assume any part of that burden.

Rates—Railroads—Divisions—Per ton mile.

(4) The amount of revenue per ton per mile received by carriers in the division of through rates is not a fair and equitable comparison, and the mere fact that there may be a wide range in the revenue per ton per mile accruing to each line is not a controlling factor and should not be considered as conclusive that the divisions are unreasonable.

*Petition for writ of review in Supreme Court (Nos. 8938, 8939).

Rates—Railroads—Divisions—Prior divisions.

(5) The Commission, in establishing divisions of rates between carriers, should have due regard for all the surrounding circumstances and conditions, and the fact that a basis of divisions, which, so far as the Commission was advised, was satisfactory to all carriers concerned, had been in effect for many years from a district, should bear weight and be given careful consideration in the determining of divisions of rates from a district on another line which desires to meet the rates from the former district.

Rates—Railroads—Divisions—Local rates.

(6) It is a general principle, in establishing divisions of through rates between carriers, that the proportion of a through rate received by a carrier should be somewhat less than its local rate.

Rates—Railroads—Divisions—Protection to markets.

(7) That a destination line, in carrying through rates in connection with another line, is required to accept commodities which supplant like commodities produced on its own line and on which it receives the entire haul is a factor entitling it to certain equities in the determination of divisions of the through rates.

Rates—Railroads—Divisions—Coal.

(8) In determining the proper division of through rates on coal from the Oak Hills District on the Denver & Salt Lake R. R. to points in eastern Colorado on the Chicago, Burlington & Quincy R. R. and the Union Pacific R. R. as ordered by the Commission to become effective August 1, 1915, in Case No. 10, the Commission finds that the former basis of divisions was not unreasonable or unfair, and that a prorating of the reduction between the carriers, using the former basis of divisions as factors, is both proper and reasonable.

Rates—Railroads—Divisions—Coal.

(9) The fact that the Chicago, Rock Island & Pacific Ry. receives coal from the Walsenburg District at Pueblo is not a valid reason for demanding the same division on coal that it receives at Denver, and the Commission finds that divisions to points east of Limon of the through rates on coal from the Oak Hills District on the Denver & Salt Lake R. R. should be on a parity with divisions made with other lines at Denver.

Rates—Railroads—Constant divisions.

(10) The Commission, while taking cognizance of the decision of the Interstate Commerce Commission in I. & S. Docket No. 344 (35 I. C. C., 456), establishing a fixed amount to be allowed the Denver & Salt Lake R. R. in the division of coal rates to points on the Chicago, Rock Island & Pacific Ry., finds that the conditions to points without the state are dissimilar to those within the state, on account of the fact that the rates in question were blanket rates covering areas, and the division of rates to one point was applicable to many points, and does not prescribe a constant division to be allowed the Denver & Salt Lake R. R. out of the through rates on coal to points on its connections at Denver.

Rates—Railroads—Divisions—Terminals.

(11) The fact that an originating carrier has no terminals is a disability entirely local to that road and in order to deliver its traffic to other carriers must either secure terminals or expect to pay other carriers for the use of theirs, and may not require its connections to assume any portion of that disability in the division of through rates.

(February 10, 1916.)

PETITION of Denver & Salt Lake R. R. Company for the Commission to fix divisions of through rates on coal to points on Chicago, Burlington & Quincy R. R., Chicago, Rock Island & Pacific Ry., and Union Pacific R. R., as ordered by the Commission in Case No. 10; divisions prescribed by Commission.

APPEARANCES: Tyson S. Dines, Esq., A. L. Vogl, Esq., Tyson S. Dines, Jr., Esq., for the petitioner; E. E. Whitted, Esq., T. M. Stewart, Jr., Esq., for Chicago, Burlington and Quincy Railroad Company; Wm. V. Hodges, Esq., D. Edgar Wilson, Esq., for The Chicago, Rock Island and Pacific Railway Company; C. C. Dorsey, Esq., J. Q. Dier, Esq., for Union Pacific Railroad Company.

one railroad agent another in Denver

OPINION AND ORDERS.

By the Commission:

On May 10, 1915, the Commission announced its decision in Case No. 10, *In re Eastern Colorado Coal Rates,* 1 Colo., P. U. C., 48, to become effective on August 1, 1915; wherein certain reductions were made in the local, joint and proportionate rates on Lump Coal from the various points of production in the State to all points in eastern Colorado.

Among the rates adjusted in that case were those from the Oak Hills District on the line of the petitioner herein, to all local points on the lines of the various defendants herein.

The Commission, in that case, did not undertake to divide the through rates, but left that question to the carriers themselves. It appears that the petitioner in this action was not satisfied with the divisions as tendered to it by the defendants, and on August 18, 1915, filed its petition in Cases Nos. 33 and 34, and on August 23, 1915, filed its petition in Case No. 35; wherein it alleged and complained, that it could not secure a fair and equitable division of the through rates on coal, all kinds, transported from the Oak Hills District on its line of railroad, to points on the lines of the respective defendants herein, all within the State of Colorado; and prayed to have the Commission fix by order, just and equitable divisions.

The defendants herein each filed separate answers, wherein they allege that they had offered to pro-rate with the petitioner, the reductions occasioned by the Commission's order in Case No. 10, using the old basis of divisions as factors; that any other basis of division would be unfair and unjust to them, and prayed to have the petition dismissed.

The issues thus made up came on for regular hearing on September 20, before the Commission *en banc,* at its Hearing Room

in the Capitol Building, Denver, Colorado, at which time the Commission announced that, as a matter of convenience, all three cases would be consolidated for the purpose of hearing. No objection being offered, this was accordingly done.

While these cases were consolidated for the purpose of hearing, the Commission, nevertheless, has given due consideration to the evidence in each particular case, separate and apart from the others. The only material difference in the facts in each case appears to be the manner in which the petitioner makes deliveries to the several defendants herein, in the City of Denver, the point of interchange.

The Chicago, Burlington & Quincy Railroad Company is the only one of the defendants with which the petitioner has a direct connection.

All traffic moving from the line of the petitioner to the rails of the Union Pacific Railroad Company, is handled by The Northwestern Terminal Company, a subsidiary company of the petitioner, and traffic moving from the line of the petitioner to the rails of The Chicago, Rock Island & Pacific Railway Company, is handled by an intermediate, independent road, which road does not participate in the through rate, but makes a charge of 20c per ton for performing the switching service, which charge is assessed to and paid by the petitioner out of its proportion of the through rate.

As stated in Case No. 10, *supra,* practically all Colorado produced coal that is used in the eastern part of the State, is shipped from ten different coal-producing groups, one of which is the Oak Hills District on the line of the petitioner, and all freight rates from those districts to Denver, or through that gateway, take a fixed arbitrary, either above or below the rates applying from the Walsenburg District through that gateway. In other words, the Walsenburg-Denver rate is used as a basis by all sections, on shipments of coal into and through the City of Denver.

The Commission in that case did not disturb these arbitraries or the blanketing system at the originating points as established by the carriers.

The Walsenburg District is one of the oldest coal-producing sections in the State. It is located approximately one hundred and eighty-five miles south of Denver, and the present rates of $1.60 per ton on Lump and $1.40 per ton on other classes of coal from Walsenburg to Denver, have been in effect for many years.

The Oak Hills District is of more recent development. The operators in that district first began making shipments about the year 1909, and the petitioner, or its predecessor, The Denver, Northwestern & Pacific Railway Company, notwithstanding the fact that the distance from that district to Denver was consider-

ably greater, and operating conditions more difficult, voluntarily put into effect the same rate from that district to Denver as applied from Walsenburg to Denver, to-wit: $1.60 per ton on Lump and $1.40 on other classes of coal, which rates have been in effect ever since.

These local rates were not disturbed by the Commission in Case No. 10, although they were used as factors in building up the through rates through the Denver gateway. Under these rates the petitioner has developed a substantial tonnage; subsequently it applied to the defendants herein to join with it in establishing through rates from the Oak Hills District to points on their respective lines.

In this matter the petitioner was successful, and through routes and joint rates were established. The through rates from Walsenburg were applied to shipments from the Oak Hills District, and divisions were made on the same basis as existed between the defendants herein and the lines operating south of Denver on coal from the Walsenburg District.

The petitioner now claims, however, that those divisions as agreed to, were never satisfactory to it and were only accepted because it could do no better. It also admits that the through rates as fixed by the Commission in Case No. 10 are reasonable, but that the basis of divisions heretofore used is wrong. The principal witness for the petitioner also stated that while its local rate from Oak Hills to Denver is not highly remunerative, he would not favor increasing it on account of competitive conditions.

The Commission, in Case No. 10, not only made a reduction of the through rates, but also wiped out the system of blanketing rates at destination. This of course necessitated a change in the divisions between the carriers, and the petitioner now asks that all former divisions be also wiped out, and new divisions be established on an entirely new basis, which would give it a greater return than it received before any reduction was made.

The defendants insist that the reductions made by the Commission should be pro-rated between the interested carriers, using the old basis of divisions as factors.

This is the first case of its kind ever filed with the Commission, and the conclusions reached in this case will establish a precedent for other cases of a similar nature. It is to be noted that precedents are lacking in this case, owing to the fact that the Interstate Commerce Commission has made few orders in division cases, and has established few principles applicable in cases of this kind. Such as are applicable, however, will be referred to in this opinion.

(1) The question of divisions is of interest only to the carriers. Primarily, the public has no interest except in the through

rate, in and of itself. Ordinarily it is, in the first instance, a matter of bargaining between the carriers, each one securing for itself all that it is in position to demand, which necessarily varies as conditions and circumstances are different in each case.

In the case of *Wichita Board of Trade v. A., T. & S. F. Ry. Co.,* 25 I. C. C., 625, the Interstate Commerce Commission said:

> "Divisions between carriers are a matter of bargaining between them, and only in case they cannot agree is this Commission warranted in attempting to fix them."

Again, in the case of *People's Fuel & Supply Company v. G. T. W. Ry. Co., et al.,* 30 I. C. C., 657, the Commission said:

> "The division of a joint rate between carriers is a matter of agreement between the participating carriers in the first instance. The law prescribes no basis upon which our findings shall rest, when in the event of the contingencies provided for in the act, the duty of fixing the divisions falls upon us."

(2) The negotiations for joint rates and divisions are usually initiated by the originating carrier, and are sought for the purpose of broadening the market for commodities produced on the line of the initial carrier, thereby increasing its tonnage and revenues. This is especially true when a commodity upon which it is seeking joint rates with other carriers, comes into direct competition with the same commodity produced on the line of the other carrier.

> "The establishing of joint through rates, generally speaking, tends to expand markets and facilitate trade."
>
> *Blakely Southern R. R. Co. v. A. C. L. R. R. Co.,* 26 I. C. C., 344.

The evidence disclosed the fact that this is true in the present case, as the product of the Oak Hills District is marketed not only in eastern Colorado, but also as far east as Missouri River points.

The petitioner in this case predicates its contention principally on the service rendered by it, as compared to the service rendered by the defendants, and, to substantiate its cause of action, cites the following facts:

First—That the average distance from the Oak Hills District to Denver is two hundred and twelve miles.

Second—That the nature of the business transacted by it is such that it is compelled to haul all equipment empty from Denver to the Oak Hills District, to be hauled back to Denver under load.

Third—That the topography of the country through which its

line runs, is almost entirely mountainous, with sharp curves, excessive grades and high altitudes, all of which materially increase the cost of operation.

Fourth—That it has no terminals of its own in the City of Denver and consequently is compelled to pay an intermediate switching charge on through business out of its proportion of the revenues derived from a through haul.

(3) It was admitted by the parties in this case, and is fully recognized by the Commission, that the operating conditions on the line of the petitioner are more difficult and expensive than obtain on the prairie lines, but the Commission cannot agree with petitioner that such conditions are controlling factors in an action of this kind. There are other elements to be considered, which are more important and entitled to more consideration.

If the Commission were to allow the petitioner a larger proportion of divisions, solely on this ground, it would, in effect, mean that the prairie lines would be assessed to help pay the operating expenses of the petitioner. The disability of the petitioner in this respect is of no concern to the defendants, and it is doubtful if the Commission could directly or indirectly force them to assume any part of that burden.

In Case No. 10, the Commission, on request of The Colorado Midland Railway Company, ordered that Company, in connection with other lines at Colorado Springs, to establish the Walsenburg basis of rates on coal moving from South Canon to Denver. Although the distance is one hundred and six miles farther and over heavy grades and mountain passes, The Colorado Midland Railway Company, notwithstanding this fact, agreed to assume and bear the burden of its own disability. Under no other circumstance would the Commission have been justified in entering such an order.

The petitioner herein introduced exhibits to show what proportion of the through rates would accrue to it if the divisions were made on a mileage pro-rate; also if made on a basis of its local rate to Denver, and then reduced those figures to cents per ton per mile to demonstrate and prove the inequalities of the divisions.

The petitioner also cited in its brief, to substantiate the mileage pro-rate theory of divisions, the case of *Stacy & Sons v. O. S. L. R. R. Co.*, 20 I. C. C., 136, wherein the Commission said:

> "The question of divisions of these rates is of course now left to the defendants to agree upon * * *. A mileage pro-rate of divisions would divide the earnings according to the services actually performed by each carrier."

We agree with the Interstate Commerce Commission in the above statement. It is, however, of no assistance to the Commis-

sion in this case. In that case, the Commission made no effort to divide through rates, and the above quotation is merely a statement of fact. If the question of divisions had been before the Commission, no doubt many other circumstances and conditions would have been considered, other than the actual service performed by the interested carriers.

In the case of *Pulp & Paper Mfrs. Traffic Asso. v. C., M. & St. P. Ry. Co.*, reported in 27 I. C. C., 83, the complainant proposed that the distance rates fixed by the Wisconsin Commission for the transportation of pulp wood within the State of Wisconsin, be applied as parts of through rates to the transportation of pulp wood from all Minnesota points to Wisconsin mills, by giving each participating carrier the full distance rate for its haul.

This, the Interstate Commerce Commission declined to do, but, nevertheless, considered the rates valuable for comparative purposes only.

(4) Neither can this Commission agree that the amount of revenue per ton per mile is a fair and equitable basis of divisions, and the mere fact that there may be a wide range in cents per ton per mile, as accruing to each line, is not a controlling factor and should not be considered as conclusive that the divisions are unreasonable.

In the case of *Board of Trade of Winston-Salem, N. C., v. N. & W. Ry. Co.*, 26 I. C. C., 146, the Commission said:

> "It is obvious that in many instances, if not generally, these comparisons of total rates with divisions, are of little value, as there are many considerations concerning which the public is not interested, which carriers in making arrangements between themselves may take into account in fixing joint rates and divisions. For instance, one road in a through line, may be so situated with respect to the movement of a particular kind of traffic, by reason of its location with reference to the point of supply and demand, or otherwise, that it is in a position to command a much more liberal allowance from its connections than it would be with respect to other kinds of traffic. On the other hand, another road may be under the necessity of accepting abnormally low divisions in order to participate in the traffic. It follows that there may be wide variations in per-ton-mile earnings by the carriers composing through lines. Should the Commission undertake to measure the local or individual rates of a carrier by its divisions of through rates it would inevitably lead to a continuous process of hammering down local rates or the withdrawal by carriers from such through routes and rates as yield only a small profit."

The facts in this case, as disclosed by the record, show that there are extensive coal fields on the lines of the respective defend-

ants. This is particularly true of the Union Pacific and the Chicago, Burlington & Quincy Railroad Companies, and by virtue of through routes and joint rates being established, coal from the Oak Hills and Walsenburg Districts comes into direct competition with coal mined locally on the lines of the defendants.

The joint rates on coal from the Walsenburg District to points on the lines of the defendants, have been in effect for many years, and as far as this Commission has been advised, the divisions of the same have been entirely satisfactory to all concerned.

(5) The Commission feels that a condition which has been in effect for so many years, and which is so closely associated with the present case, should have some weight and be given careful consideration.

In I. & S. Docket No. 299, *Rates on Lumber and Other Forest Products from Points in Arkansas and Other States to Points in Iowa, Minnesota, and Other States*—reported in 31 I. C. C., 673, the Commission said:

> "In establishing equitable divisions it is necessary to have regard for all the surrounding circumstances and conditions. It is therefore important to consider the conduct of other lines in like situations."

It is to be remembered that the petitioner herein voluntarily established the Walsenburg basis of rates to Denver, as well as the through rates involved in this case, although it contends that the divisions of the same are not equitable. It now asks to have the local rates to Denver applied as its proportion of the through rates.

This proposition carries with it the contention that it should be allowed the same proportion on all shipments, regardless of the distance, for the reason that it performs the same service in each case.

(6) It is a general principle that the proportion of a through rate shall be somewhat lower than the local rate. There are many reasons why this should be so, and the Commission can see no reason why that principle should not be followed in this case.

In the case of *Southwestern Shippers Traffic Asso. v. A., T. & S. F. Ry. Co.*, 24 I. C. C., 570, the Commission said:

> "* * * They should be required to accept as their division of the through rate, a reasonable sum, which may well be substantially less than their just local charges."

In I. & S. Docket 247, *In re Missouri River Building Stone Rates*, reported in 28 I. C. C., 269, the Commission said:

> "It is generally true that a carrier may reasonably accept less than its local rate as its division of a joint rate."

(7) It is immaterial to the defendants herein, whether they receive coal from the Oak Hills District or the Walsenburg District, as long as the rates and divisions are the same. In both cases, it is supplanting coal which is produced on their own lines, which fact is entitled to receive consideration.

Chamber of Commerce of Milwaukee v. C., R. I. & P. Ry. Co., 15 I. C. C., 460:

> "While it has the right, as we have endeavored to explain, to demand no more than a reasonable rate for the transportation of coarse grains to Milwaukee, the fact that the Rock Island system reaches other primary grain markets may fairly be said to give it certain equities in the adjustment of the divisions of any through rates that it may establish under our order with a connecting line."

The division sheets used by the carriers were not submitted to the Commission at the hearing. The Commission, however, issued an order subsequent to the hearing, requiring all parties of interest to furnish them, which was done, and they are now before the Commission for consideration.

As stated above, the defendants herein have heretofore offered to pro-rate with the petitioner, the reduction in rates as occasioned by the order in Case No. 10, using the old basis as factors. The Commission has analyzed these figures, based on the new rates, and finds that they are not disproportionate with the rates on coal from the local fields on the respective lines of the defendants to the various points as shown on the division sheets.

For illustration:—The local rates from the northern coal fields to nineteen stations east of Denver on the Kansas division of the Union Pacific Company range from 80c to $2.25 per ton, or an average of $1.563 per ton. The proportions accruing to the Union Pacific Company to the same stations on coal from the Oak Hills District range from 50c to $2.10 per ton, or an average of $1.419 per ton.

From the northern coal fields to nineteen stations on the Julesburg branch east of La Salle, the rates range from 90c to $2.00 per ton, an average of $1.434 per ton. The proportion of the through rate accruing to the Union Pacific on coal from the Oak Hills District ranges from 99c to $2.03 per ton, or an average of $1.465 per ton.

The proportion accruing to the line of the petitioner on coal destined to the first group of stations ranges from $1.152 to $1.50 per ton, or an average of $1.286 per ton or 80% of its local rate, and its proportion of the last group ranges from $1.25 to $1.525 per ton, or an average of $1.358 per ton, or 85% of its local rate, thus making a general average to all points on the Union Pacific covered by the Commission's order in Case No. 10, of 83% of its local rate to Denver.

The local rates per ton from the northern coal fields to forty-nine stations on the Chicago, Burlington & Quincy Railroad range from 80c to $2.40 per ton, or an average of $1.34 per ton. The proportion accruing to the Chicago, Burlington & Quincy Company on coal from the Oak Hills District ranges from 40c to $2.18 per ton, or an average of $1.608.

The proportions accruing to the petitioner on coal destined to the same stations range from $1.241 to $1.50 per ton, or an average of $1.346 per ton, or 84% of its local rate to Denver.

(8) So far as the Union Pacific and the Chicago, Burlington & Quincy are concerned, there is nothing in the record to indicate to the Commission that the old basis of divisions was unreasonable or unfair, and the Commission is not convinced that the prorating of the reduction, using the old basis of division as factors, would be unfair.

(9) The Commission finds, however, a different condition in reference to the defendant, The Chicago, Rock Island and Pacific Railway Company. The Commission agrees with the petitioner that The Chicago, Rock Island and Pacific Company's contention that it should be allowed a greater proportion of the divisions on account of its Pueblo connection, is not well founded. That Company operates into Denver, and the mere fact that it also operates into Pueblo, and by virtue of that fact can get a more liberal division on Walsenburg coal, has no bearing whatever on coal moving through the Denver gateway.

It might be well to here state that the Commission did not order joint rates between the petitioner herein and The Chicago, Rock Island and Pacific Company to points on the Rock Island line between Colorado Springs and Limon; and coal from the Oak Hills District, therefore, does not come into competition with coal from the Walsenburg District at those points.

The Commission believes that the divisions on coal moving from the Oak Hills District to local points on The Chicago, Rock Island and Pacific, east of Limon, should be on a parity with divisions made with other lines at Denver.

From the record before us, it would be impossible for the Commission to establish a similar amount on all shipments as the petitioner's proportion of through rates, with any certainty of not doing injustice to one or more of the parties to the case. In order to do so intelligently, it would be necessary to be fully advised as to the volume of business moving to each station, which information is not before us.

(10) We are not unmindful, however, of the recent decision of the Interstate Commerce Commission *In re Coal Rates from Oak Hills, Colorado*—I. & S. Docket No. 344, 35 I. C. C. 456, decided July 10, 1915—wherein that Commission allowed a fixed amount to the petitioner in this case as its proportion of the through rates on coal from the Oak Hills District to interstate points

located on the line of The Chicago, Rock Island and Pacific Railway Company, one of the defendants herein. That case, however, was quite different from this one, on account of the fact that the rates in question were blanket rates covering large areas, and the division of rates to one point was applicable to many points.

(11) The Commission is inclined to the view that the duty and expense, including intermediate switching incident to the delivery of coal to the defendants, rest with the petitioner. The fact that it has no terminals in the City of Denver is its own disability, and there is no reason why the defendants herein should bear any part of it. The petitioner must either acquire its own terminals or expect to pay some other carrier for the use of its terminals.

People's Fuel & Supply Co. v. G. T. W. Ry. Co., supra.

> "If it cannot afford to pay for the terminal service which other * * * carriers provide, it will doubtless have to retire from competitive traffic."

This same principle was upheld by the Interstate Commerce Commission in the case of *Waverly Oil Works Company v. P. R. R. Co.*, 28 I. C. C. 621.

Counsel for the petitioner has made reference to a recent decision of the Interstate Commerce Commission in the case of *Sloss-Sheffield Steel & Iron Company v. L. & N. R. R. Co.*, 35 I. C. C. 460.

The Commission, however, does not believe that case has any particular bearing on this question.

In the case above referred to, the disabilities rested equally on the carriers, both north and south of the Ohio River, which we think is quite different from the case under consideration.

From the above and foregoing, the Commission believes that the through rates on coal from the Oak Hills District on the line of the petitioner to points on the lines of the Union Pacific and the Chicago, Burlington & Quincy Companies, within the State of Colorado, should be pro-rated between them, using the old basis of divisions as factors.

We do not believe that the present proportion of the through rate accruing to the petitioner on coal from the Oak Hills District to points on the line of The Chicago, Rock Island & Pacific, east of Limon, Colorado, is sufficient.

Orders will therefore be entered in accordance with these conclusions.

ORDER IN CASE NO. 33.

It Is Hereby Ordered, That the joint rates on Lump coal from the Oak Hills District, on the line of The Denver and Salt Lake Railroad Company, to points on the line of the Chicago, Burlington and Quincy Railroad Company, as fixed by the Commission in its order in Case No. 10, decided May 10, 1915, effective August 1, 1915, be proportioned and divided by said carriers on the basis as set forth as follows, to-wit:

FROM OAK HILLS DISTRICT TO	IN CENTS PER TON OF 2,000 POUNDS THROUGH RATE	DIVISIONS D. & S. L. R. R.	C. B. & Q. R. R.
Derby	190	150.0	40.0
Barr	200	130.3	69.7
Hudson	210	126.0	84.0
Keenesburg	220	126.0	94.0
Roggen	230	127.9	102.1
Crest	235	126.0	109.0
Wiggins	240	124.1	115.9
Fort Morgan	250	125.0	125.0
Lodi	260	130.0	130.0
Brush	265	132.5	132.5
Pinneo	270	126.6	143.4
Xenia	275	126.9	148.1
Akron	285	129.6	155.4
Otis	300	132.0	168.0
Hyde	305	134.6	170.4
Yuma	310	136.8	173.2
Schramm	315	139.0	176.0
Eckley	325	143.4	181.6
Robb	325	143.4	181.6
Wray	330	145.5	184.5
Laird	340	149.9	190.1
Camden	270	135.0	135.0
Hillrose	270	135.0	135.0
Trowel Ranch	275	137.5	137.5
Union	275	137.5	137.5
Balzac	280	135.9	144.1
Merino	285	135.3	149.7
Atwood	290	131.1	158.9
Sterling	295	131.8	163.2
Galien	305	134.4	170.6
Fleming	315	135.6	179.4
Haxtun	325	138.6	186.4
Paoli	330	138.6	191.4
Holyoke	340	139.7	200.3
Amherst	350	136.2	213.8
Stein	305	131.6	173.4
Willard	310	133.7	176.3
Stoneham	320	136.9	183.1
Raymer	325	136.8	188.2
Buckingham	335	126.7	208.3
Keota	340	128.2	211.8
Sligo	350	132.0	218.0
Grover	350	132.0	218.0
Hereford	350	132.0	218.0
Ackerman	305	135.5	169.5
Minto	305	135.5	169.5
Padroni	320	140.0	180.0
Winston	330	142.0	188.0
Peetz	345	147.0	198.0

It Is Further Ordered, That the joint rates on other classes of coal, as published by the above named carriers, between points

as set forth above, be proportioned and divided on a basis of the percentage which each carrier's part bears to the total of the rates as set forth above, effective as of August 1, 1915.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 10th day of February, 1916.

ORDER IN CASE NO. 34.

IT IS HEREBY ORDERED, That the joint rates on Lump coal from the Oak Hills District, on the line of The Denver and Salt Lake Railroad Company, to points on the line of The Chicago, Rock Island and Pacific Railway Company, as fixed by the Commission in its order in Case No. 10, decided May 10, 1915, effective August 1, 1915, be proportioned and divided by said carriers on the basis as set forth as follows, to-wit:

FROM OAK HILLS DISTRICT TO	IN CENTS PER TON OF 2,000 POUNDS THROUGH RATE	DIVISIONS D. & S. L. R. R.	DIVISIONS C. R. I. & P. Ry.
Mustang	250	128.1	121.9
Genoa	255	126.6	128.4
Bovina	260	130.6	129.4
Arriba	270	136.1	133.9
Flagler	280	129.9	150.1
Seibert	295	134.5	160.5
Vona	305	137.4	167.6
Stratton	315	138.3	176.7
Bethune	325	141.6	183.4
Burlington	335	138.8	196.2

IT IS FURTHER ORDERED, That the joint rates on other classes of coal, as published by the above named carriers, between points as set forth above, be proportioned and divided on a basis of the percentage which each carrier's part bears to the total of the rates as set forth above, effective as of August 1, 1915.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 10th day of February, 1916.

ORDER IN CASE NO. 35.

It Is Hereby Ordered, That the joint rates on Lump coal from the Oak Hills District, on the line of The Denver and Salt Lake Railroad Company, to points on the line of Union Pacific Railroad Company, as fixed by the Commission in its order in Case No. 10, decided May 10, 1915, effective August 1, 1915, be proportioned and divided by said carriers on the basis as set forth as follows, to-wit:

FROM OAK HILLS DISTRICT TO	IN CENTS PER TON OF 2,000 POUNDS THROUGH RATE	DIVISIONS D. & S. L. R. R.	DIVISIONS U. P. R. R.
Sandown	200	150.0	50.0
Sable	200	136.4	63.6
Watkins	205	128.1	76.9
Bennett	215	115.2	99.8
Byers	225	120.6	104.4
Deer Trail	235	117.5	117.5
Agate	245	122.5	122.5
Limon	265	132.5	132.5
Lake	265	128.3	136.7
Bagdad	270	126.6	143.4
Hugo	275	125.0	150.0
Clifford	285	122.1	162.9
Boyero	290	124.4	165.6
Aroya	300	128.6	171.4
Kit Carson	315	126.0	189.0
Arena	320	128.0	192.0
Cheyenne Wells	335	134.4	200.6
Arapahoe	345	138.0	207.0
Chemung	350	140.0	210.0
Kersey	235	134.6	100.4
Kuner	235	130.7	104.3
Hardin	240	133.4	106.6
Masters	245	126.7	118.3
Orchard	250	129.3	120.7
Weldon	250	129.3	120.7
Fort Morgan	250	125.0	125.0
Snyder	270	152.5	117.5
Union	275	137.5	137.5
Balzac	280	135.9	144.1
Merino	285	135.5	149.5
Atwood	290	130.3	159.7
Sterling	295	132.5	162.5
Hayford	305	137.0	168.0
Powell	320	141.0	179.0
Crook	330	140.0	190.0
Sedgwick	330	140.0	190.0
Ovid	330	140.0	190.0
Julesburg	350	147.0	203.0

It Is Further Ordered, That the joint rates on other classes of coal, as published by the above named carriers, between points as set forth above, be proportioned and divided on a basis of the percentage which each carrier's part bears to the total of the rates as set forth above, effective as of August 1, 1915.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 10th day of February, 1916.

In Re: RATES AND RULES OF THE COLORADO SPRINGS LIGHT, HEAT & POWER COMPANY.

(Case No. 24.)

In Re: PETITION FOR REHEARING.

Discrimination—Impairment of contracts—Powers of Commission.

(1) Under the law it becomes the duty of the Commission, in fixing reasonable rates of a utility, to establish just and reasonable rates which shall be applicable to all consumers and purchasers under like conditions, although to do so may abrogate contracts entered into between the utility and its consumers whereby discrimination is effected.

Constitutional law—Presumptions—Impairment of contracts.

(2) It is a presumption that contracts between utilities and its consumers are within the scope of the right of regulation, unless the contrary has been expressly set forth, and the State is empowered to regulate and abrogate contracts which purport to cover rate regulation.

Rates—Reasonableness—Franchises.

(3) In ordering a utility to establish reasonable rates and charges fixed by the Commission the Commission did not fail to recognize any legal rights acquired by the utility through franchise contracts with municipalities, as there were no franchises introduced in the evidence, and in an application for a rehearing, the franchise having been introduced, the Commission found that no definite rates and charges for electricity were set forth therein, with the exception of a maximum rate on municipal street lighting, which was not material in the determination, due to the fact that municipal street lighting rates were not altered in the Commission's order.

Constitutional law—Regulation of rates—Jurisdiction of Commission—Impairment of contracts.

(4) In determining the reasonableness of rates of utilities the fact that a contract is involved in no respect alters the right of the Commission to revise rates, unless the Constitution or the legislature of the State has expressly delegated to the municipality the power to contract inviolably for rates for the period covered by the franchise.

Constitutional law—Police power—Regulation of rates—Jurisdiction of municipalities.

(5) Sec. 3, Art. XV, of the Constitution, providing that the legislature shall have the power to alter, revoke or annul the charter of a corporation whenever it may be injurious to the citizens of the State, and

Sec. 8, Art. XV, providing that the police power of the State shall never be abridged or so construed as to permit corporations to conduct their business in such a manner as to infringe the equal rights of individuals or the general well-being of the State, constitute an express prohibition against the right of a municipality to contract inviolably for rates and charges of public utilities.

Apportionment—Electric and gas properties—Valuation—Return.

(6) In an application of a utility for rehearing in a rate case, in which the Commission had segregated the gas and electric properties for rate-making purposes as the gas property was entirely separate and distinct from the hydro and electric properties and in no way physically connected and where to have combined the properties as one would have compelled the patrons of one class of service to help maintain the other, the Commission was unable to find authority or precedent for combining the properties as one.

Apportionment—Electric and steam properties—Valuation—Return.

(7) In an application of a utility for rehearing in a rate case, in which the Commission had segregated the electric, gas and steam properties for rate-making purposes, the Commission was unable to accept the view that the electric and steam properties should be combined for the determining of reasonable rates for electricity, although it was difficult to physically segregate certain parts of the steam heating property from the electric generating plant, and was of the opinion that had the electric and steam properties been considered as one, the utility would still earn a fair return on the values of the two properties combined.

Rates—Reasonableness—Return—Depreciation.

(8) A public utility is not subject to the general law of competition, and its position is entirely different from that of a private concern, in that its service must be continuous, uninterrupted and adequate, and should be supplied at the lowest reasonable cost, and the Commission, in fixing reasonable rates of utilities, should, after arriving at the present fair value of the property, permit the utility to earn a fair rate of return upon that present fair value, which should be in excess of a proper annual depreciation reserve to be set aside by the utility under the direction of the Commission, if the rates thus made are not in excess of the value of the service.

Valuation—Intangible properties.

(9) One of the great underlying dangers of state regulation is the attitude of public utility corporations favoring large intangible values for the purpose of presenting a large paper valuation of properties.

Depreciation—Electric and gas—Allowances for.

(10) In a valuation of an electric and gas utility for rate-making purposes the Commission prescribed an annual sum of $50,000 to be set aside by the utility as an annual depreciation reserve on its hydro and electric properties, the value of which was fixed at $1,481,762, and an annual sum of $20,000 to be set aside by the utility as an annual depreciation reserve on its gas property, the value of which was fixed at $710,917.

Rates—Reasonableness—Electric—Return.

(11) In an application of a utility for rehearing in a rate case the Commission was of the opinion that the rates and charges for electricity as fixed in its order would produce sufficient revenue to enable the utility to earn a fair return upon the present fair value of its hydro and electric properties, but was also of the opinion that the schedule should be readjusted and remain in effect for a period of one year, at the termination of which the company was to present its books to the Commission and if

it appeared at that time that the hydro and electric properties were earning other than a fair return the schedule would be further revised.

Valuation—Reproduction less depreciation.

(12) In a valuation of a utility for rate-making purposes one of the important tests used by the Commission in arriving at the fair value was reproduction cost less depreciation, but the Commission was unable to settle upon any one test which should be the sole basis of arriving at a sum of money upon which the utility should be permitted to earn a fair rate of return.

Security issues—Value of property.

(13) In taking into consideration the book value of a utility, in a valuation for rate-making purposes, the Commission found that the book value of the property taken over by the consolidation of the three companies forming the present company was $4,666,968.25 on June 30, 1910, and $4,887,183.77 on June 30, 1915, of which approximately $1,000,000 was found to be intangible values or watered stock, and that as the property of the previous companies had been acquired through bonds and stocks and the retirement of indebtedness, the discount of which, and the value of which stocks, was not shown, but carried at par value on the book accounts, the book value might be further reduced, and it was impossible to determine what amount of the remaining book value of the property purchased was properly chargeable to construction cost rather than to operating expenses, and it was also impossible to ascertain whether other expenditures constituting a part of the balance of the tangible book value were prudently and wisely made, and that, therefore, any determination as to the book value of the company would be no more than a conjecture and consequently of very little use.

Valuation—Abandoned property—Depreciation.

(14) In the valuation of a utility for rate-making purposes an estimated deduction from book value was made for property purchased from previous companies which had been abandoned and was not in use or useful in the operations of the present company, and where there was no evidence to show any depreciation deductions on the abandoned property.

Valuation—Percentage allowed for overhead expenses.

(15) In the valuation of a public utility for rate-making purposes the Commission was of the opinion that no allowance upon the present fair value of the utility should be set aside annually to protect the company against extraordinary accidents of the future.

Return—Character of management.

(16) The Commission, in the performance of its duties in the regulation of public utilities, must act in a dual capacity and protect not only the public in the charges it shall be required to pay, as well as in the adequacy of the service, but at the same time protect the utilities and their stockholders from losses due to poor management, and it shall be the position of the Commission, in rate cases, to condemn wasteful cost in operation and at the same time encourage efficient management, and believes it would indeed be unwise to prohibit an operating company from paying annually into the treasury of a holding company, a sum of money equalling 2 per cent of the gross sales to cover general supervision expense.

(March 1, 1916.)

PETITION for rehearing in Case No. 24, filed by Colorado Springs Light, Heat & Power Company; rehearing denied and order modified.

(2 Colo. PUC)

APPEARANCES: R. L. Holland for Colorado Springs Light, Heat & Power Company; J. L. Bennett for City of Colorado Springs.

By the Commission:

The above cause was the result of a resolution adopted by the City Council of Colorado Springs requesting this Commission to hold an investigation into the rates, service, rules, regulations and practices of The Colorado Springs Light, Heat & Power Company, which was followed by a six weeks' preliminary investigation by the engineering staff of the Commission, and which resulted in an order by this Commission, issued on the 17th day of June, 1915, inaugurating an investigation into the rates, service, rules, regulations and practices of the Respondent, accompanied by a notice to the said Respondent and the City of Colorado Springs that the above cause would be heard on the 3rd day of August, 1915, at 2:00 o'clock p. m., at the City Hall, Colorado Springs, Colorado.

On the 3rd day of August, 1915, the hearing was convened at Colorado Springs, and the Commission received the reports of its engineering and statistical staff, as well as the evidence of many witnesses on behalf of the Respondent utility corporation and the Commission. The engineering staff of the Commission introduced in evidence its report on the valuation of the properties of the Company. The Commission's statistician introduced into the evidence his report, in which was embodied a complete history of the Respondent company, as well as an abstract of the accounts and the distribution of the expense as between its electric, gas and steam properties. An adjournment was then taken until the 31st day of August, 1915, at which time the Engineer for the Company presented to the Commission opinion evidence as to the values of the properties, and other witnesses testified in behalf of both the Company and the Commission.

On the 15th day of December, 1915, the Commission rendered its written statement and order in this cause. (1 Colo. P. U. C., 159.)

For the purpose of making rates the Commission segregated the electric and hydro, gas and steam properties of the Respondent Company, and determined the present fair value of the electric and hydro properties of the Respondent to be $1,481,762.00, and, by averaging the net earnings of these properties for the years 1911, 1912, 1913 and 1914, arrived at an average net return of $233,875.00, and deducted from this amount the sum of $52,000.00 as an annual depreciation reserve, leaving an average net return, less depreciation, of $181,875.00 per annum. The Commission therefore concluded that the Respondent company was earning 12.27 per cent per annum on $1,481,762.00, which was held to be an excessive earning, and attempted to readjust the schedule of

electric rates and charges of the Respondent company to the end that a proper depreciation reserve should be set aside annually and still permit the Respondent company to earn a net revenue in excess of 7½ per cent per annum on $1,481,762.00. All discriminatory rates and charges were abolished by the Commission.

The present fair value of the gas property of the Respondent was found to be $710,917.00, upon which it was earning 1.16 per cent per annum, exclusive of the annual depreciation reserve, which rate of return was held not to be excessive. The present schedule of rates and charges covering the sale of gas by the Respondent company was temporarily approved by the Commission.

The present fair value of the property of the Respondent company in use and useful in the sale of steam heat was found to be $122,774.00; also that the Company sustains a loss in the operation of its steam property in the sum of $13,912.00 annually, said amount including $8,000.00 annual depreciation reserve. The schedule of rates and charges of the Respondent covering the sale of steam was not adjusted for the reason that the Commission has been advised by the Attorney General of the State of Colorado that it is without jurisdiction to make reasonable rates and charges for the sale of steam heat.

It was further ordered by the Commission that its order in the above cause should be in force and effect upon the 1st day of January, 1916, and should apply to all service furnished after said date.

On the 29th day of December, 1915, the Respondent in the above cause filed its written application to extend the time of the effective date of the order of this Commission until the 1st day of February, 1916. The application of the Respondent, and affidavits in support of the same, allege, in substance, that the order of the Commission established a schedule of rates for certain classes of service supplied by the Respondent, which, in order to compute customers' bills thereunder, necessitated the accurate ascertainment of the connected load of each individual consumer, and that the employes of the Company could not obtain the necessary data and information by January 1, 1916, the effective date of the order, and that the Respondent had not had sufficient time, since the entering of the above order, to fully advise itself as to the provisions and schedules in the order contained, or to apply the same to its business in order to determine with a reasonable degree of certainty the effect thereof, and would therefore be unable to satisfactorily determine whether or not it desired to file an application with the Commission for a rehearing in this case prior to the effective date of the order, and could not specifically set forth the ground or grounds on which it considered the decision and order to be unlawful, if it should finally con-

sider the same or any part thereof to be unlawful, as is required by the laws of the State of Colorado.

After an examination of the said petition and affidavits in support thereof, the Commission modified its order in the above cause, extending the time of the effective date of the order to February 1, 1916.

On the 31st day of January, 1916, the Respondent company, through its Attorney, Rush L. Holland, Esq., filed with this Commission its application for a rehearing of the above cause, setting forth thirty-five reasons in support of the application. The application for rehearing, accompanied by an elaborate brief in support of the allegations in said application, has received careful and serious consideration at the hands of this Commission. Many of the allegations contained therein, if true, would entitle the Respondent to an immediate rehearing of the above cause, with resulting changes in present fair value, and of the schedules of rates and charges covering the sale of electricity as ordered by the Commission on December 15, 1915.

For the purposes of this order, the objections of the Respondent to the order of this Commission in the above cause, contained in the application for rehearing, were considered as follows:

(1) That the order of the Commission fails to recognize the contractual rights and obligations of the Respondent company, both as to contracts with individuals and franchises held by the Company from municipalities.

(2) That the Commission has erroneously segregated and separately valued and considered the Respondent's electric, gas and steam heat plants, properties and business, whereas the plants, properties and business of the Company should have been considered and valued as a whole and rates established which would give to the Company a fair return on its entire investment.

(3) That the valuations fixed in the order of the Commission are confiscatory; deny to the Respondent a reasonable or fair return on the property employed in the business; and that the schedules of rates and charges for electricity and gas ordered by this Commission are unfair and unreasonable.

(4) That the order of the Commission denies to the Company the right to a fair return on its investment in its electric plants and property, by deducting therefrom a sum in excess of $300,000.00 for accrued depreciation, whereas the Company is entitled to a fair return on reproduction cost of physical property, which is maintained so as to render service 100 per cent efficient, without deducting therefrom so-called accrued depreciation, and that the order of the Commission is based solely on the theory of reproduction cost less theoretical depreciation, and that the Commission in its order disregarded and failed to consider

the undisputed evidence of the Statistician of the Commission, Fred W. Herbert, in regard to the book value of the company.

(5) That the Commission has not made adequate or sufficient allowance for working capital and overhead expenditures, and has made no allowance for surplus and contingencies.

(6) That the order of the Commission penalizes economical and efficient management.

(7) That the Commission declined to take jurisdiction as to steam heat, whereas under the law it has jurisdiction over a utility furnishing this commodity, and should have exercised it.

(8) That the order of the Commission prescribes rates which are inadequate, uncommercial, impracticable, discriminatory, inconsistent and non-inducive.

(9) That sufficient time was not allowed the Respondent company in which to prepare and file a complete inventory and appraisement of its property.

CONTRACTS—FRANCHISES WITH MUNICIPALITIES.

It is here contended that the Commission's order in the above cause expressly abrogates contracts with individuals and municipalities. (1) The duties of this Commission are clearly expressed in the laws of the State of Colorado pertaining to public utilities, and it became our duty, after the hearing of the above cause, to order the Respondent company to install just and reasonable charges and rates, and to do away with all alleged discrimination in its rates and charges, rules, regulations, practices and contracts. One of the fundamental reasons for State and Federal regulation of public utilities is to prevent and prohibit illegal discrimination as between patrons. It is certainly true that the utility must serve all its patrons of the same class and conditions of service at the same rates, and accord to each the same consideration. In the order of the Commission in the above cause, rendered on the 15th day of December, 1915, the Respondent was ordered to eliminate illegal discriminatory rates, charges and contracts, and was specifically directed to show no favoritism to its officers, directors, stockholders and employes as to rates and charges, and rules and regulations surrounding the same. The Commission also ordered the Respondent to collect from one G. A. Taff, in moneys, for all electrical energy furnished to him by the said Respondent corporation from and after the date of the order, in accordance with the schedule of rates and charges as specified by the Commission, and to desist from the practice of furnishing electricity to the said G. A. Taff, in accordance with the terms of an old contract, without a charge being made therefor.

In view of the numerous sections of the Utilities Act expressly mentioning contracts as being within the purview of the

jurisdiction of the Commission, and in view of numerous cases upholding the authority of the State to regulate and abrogate contracts which purport to cover rate regulation, it must be held that although counsel is here urging that the contracts in question are inviolable contracts under the Federal and State constitutions, no argument is presented that the contracts in question are not subject to regulation by this Commission. (2) In every case of this character it is to be presumed that the contracts are within the scope of the right of regulation unless the contrary clearly appears. The general view of the subject matter here is forecast by Mr. Justice Scott in the recent case of *Wolverton v. Mountain States T. & T. Co.,* 58 Colo., 58; 142 Pac., 165:

> "And it is now held that even in case of such contracts with public utilities for specific rates and for definite periods of time, these are subject to legislative acts of regulation."

Citing:

> *Louisville & Nashville R. R. Co. v. Mottley,* 219 U. S., 467.
>
> *Southern Wire Company v. St. L. B. & T. Co.,* 38 Mo. App., 191.

And likewise by the quotation made in *Colorado & S. Ry. Co. v. State Railroad Commission* (129 Pac., 506), 54 Colo., 64, at p. 92, from the decision of the Supreme Court of the United States in *Missouri Pacific Ry. Co. v. Kansas ex rel. Taylor,* 216 U. S., 262, as follows:

> "Unquestionably the railroad property is protected by the constitutional guarantees but these rights are not abridged by their being subjected to reasonable governmental power of regulation."

(3) It is contended by the Respondent company that this Commission has failed to recognize the contractual rights and obligations of the Company, both as to contracts with individuals and franchises held by the Company from municipalities. Careful reconsideration of the evidence and of the order fails to show lack of recognition of any legal rights acquired by this Respondent through franchise contracts with municipalities. No franchises were introduced in the evidence in this case, but, having received copies of these franchise contracts or ordinances, the Commission finds that no definite rates and charges for electricity are set forth, with the exception of a maximum rate on municipal street lighting, which would not in any way be material in the determination of this cause, as the rates and charges for municipal

lighting were not altered by this Commission. In this connection it should be remembered that this Commission has taken the position heretofore that it is its duty to make reasonable and just rates, regardless of whether certain defined rates and charges are set forth in a franchise contract or ordinance between the municipality on the one hand and the public utility on the other. (4) The fact that a contract is involved in no respect alters the right of the Commission to revise rates, unless the Constitution, or the Legislature of the State, expressly delegated to the municipality the power to contract, inviolably, for rates for the period covered by the franchise granted.

We quote from the decision in *City of Benwood v. Public Service Commission,* 83 S. E., 295; L. R. A., 1915 C., 261:

> "Though the grant and acceptance of the franchise wherein certain rates were fixed, created a contract between the water company and the city of Benwood, the rates thereby fixed are nevertheless cognizable for revision by the Public Service Commission under the broad powers delegated thereto, *unless prior to the delegation of those powers the Legislature expressly delegated power to the City of Benwood which authorized the city to contract inviolably for the rates mentioned in the franchise for the period stated therein.* Rate making is a legislative act. It is inherent in and belongs primarily to the Legislature. The rate making power is a power of Government—a police power of the State. The City of Benwood at the time of the making of the franchise, had no rate making power that could bind the State, if the Legislature of the Sovereign State had not theretofore delegated the same to the city And if such delegation or grant of rate making power was made to the City prior to the delegation of general and state wide powers in the same particular by the Legislature to the Public Service Commission, the language relied upon as evidence of such delegation or grant to the city must be clear and express. The presumption is against exclusive delegation of the Legislature's sovereign rate making power to a municipality. Unless there has been such delegation, by clear and express terms, the power is reserved in the State, which can exercise it at such times and to such extent as may be found advisable."

In the case of *State ex rel. Webster v. Superior Court,* 67 Wash., 37; 120 Pac., 861, at page 866, it is said:

> "Where the State is a party and it appears there has been no express grant or waiver of its constitutional right to fix rates so as to give an ordinance the force of a con

tract binding upon the state (granting that under our constitution this could be done), it cannot be held either as a matter of law or policy that a franchise such as the one now under consideration is a contract binding upon the state of Washington, and for several reasons. The power to fix rates being a right reserved by the people of the state, cannot, in the light of the constitution, be held to be an incident to the right to frame a free holder's charter."

Also, in the case of *Milwaukee Electric Railway & Light Company v. Railroad Commission* (Wis.), 238 U. S., 174; decided 1915, where, under the provisions of the Wisconsin Revised Statutes, 1911, Sec. 1862, empowering a municipality to grant the use of the streets to street railway companies "upon such terms as the proper authorities shall determine," in which the Wisconsin Supreme Court held that this statutory provision did not authorize a municipality to make a contract which would prevent the future exercise of the authority of the state to fix rates by legislative action, was followed by the Federal Supreme Court, in which case it was held that the exercise by a state of its lawful power to fix street railway rates, notwithstanding a municipal rate ordinance, does not deprive the street railway company of its property without due process of law; and the court states:

"On the hearing in the court of first instance, it was held that there was no contract made providing for the passage and acceptance of the ordinance which we have quoted, and the complaint was accordingly dismissed. Upon appeal to the Superior Court of Wisconsin, that judgment was confirmed (142 N. W., 491). The case was heard before six judges of that court. Three held that the statute upon which the plaintiff relied as conferring authority upon a municipal corporation to make the contract in question, did not authorize the making of a contract which would prevent the future exercise of the authority of the state to regulate the rates by legislative action. The fourth judge expressed no view upon this phase of the case, specifically holding that, under the Wisconsin Constitution, there was no power to delegate to municipal corporations an authority to make irrepealable contracts respecting rates." * * *

"In the view we take of the case, it is unnecessary to pass upon the question of whether the ordinance had the effect to make a contract binding between the city and the company, until subsequent legislative action by the state, or to decide whether the grant of the rights and privileges as to fares was, under the Wisconsin Constitution, revocable at the will of the legislature." * * *

"The fixing of rates which may be charged by public

service corporations of the character here involved, is a legislative function of the state and, while the right to make contracts which shall prevent the state during a given period from exercising this important power has been recognized and approved by judicial decisions, it has been uniformly held in this court that the renunciation of a sovereign right of this character must be evidenced by terms so clear and unequivocal as to permit of no doubt as to their proper construction. This proposition has been so frequently declared by decisions of this court as to render unnecessary any reference to the many cases in which the doctrine has been affirmed." * * *

"In view of the weight which this court gives in deciding questions involving the construction of legislative acts to decisions of the highest courts of the states in cases of alleged contracts, and our own inability to say that this statute unequivocally grants to the municipal authorities the power to deprive the legislature of the right to exercise in the future an acknowledged function of great public importance, we reach the conclusion that the judgment of the Supreme Court of Wisconsin in this case should be affirmed."

(5) It also is evident to the Commission that a clear prohibition is contained in the Constitution of the State of Colorado upon the right of a municipality to contract inviolably for rates and charges of public utilities operating within the State of Colorado. Sec. 3, Art. XV, of the Constitution provides:

"The General Assembly shall have the power to alter, revoke or annul any charter of a corporation now existing and revocable at the adoption of this constitution, or any that may hereafter be created, whenever in their opinion it may be injurious to the citizens of the State, in such manner, however, that no injustice shall be done to the incorporators."

And Sec. 8 of the same Article provides:

"The police power of the State shall never be abridged or so construed as to permit corporations to conduct their business in such a manner as to infringe the equal rights of individuals or the general well being of the State."

SEGREGATION OF HYDRO AND ELECTRIC, GAS AND STEAM PROPERTIES.

In its application for a rehearing of this cause the Respondent contends that its hydro and electric properties, gas properties,

and steam properties, should not be segregated for rate-making purposes, but this Commission is of the opinion that unless the gas property of the Respondent is segregated from the hydro and electric properties the patrons of the hydro and electric properties naturally will be compelled to maintain the gas plant of the Respondent, an arrangement for which there is no apparent authority in law.

(6) The gas property of this Respondent is physically separate and distinct from the Company's hydro and electric properties, and this Commission is unable to find authority for the proposition that, for rate-making purposes, gas and electric properties owned by one company should be valued as one property and the rate of return based upon the earnings of the entire property. In fact, counsel for Respondent frankly admits that this theory is without precedent.

(7) It is also earnestly contended by the Respondent that steam heat is really a by-product of the Company's manufacture of electricity, and that the steam heating and the steam and hydro-electric properties should be valued as one for rate-making purposes. This view cannot be accepted. While it is true that it is somewhat difficult to physically segregate certain parts of the Respondent's steam heating property from its electric generating plant, this condition exists only as to a small portion of the two properties. Should this theory be accepted, however, and, for purposes of rate-making, the steam heating and hydro and electric properties of the Respondent be considered as one property for the purpose of arriving at a present fair value upon which to base a reasonable rate of return, it is apparent from the schedule of rates hereinafter set forth that the Respondent would still be earning a rate of return of from 7½ to 8 per cent upon the values of these two properties combined as one.

VALUATION.

It is here contended that the order of this Commission and the valuations and schedules of rates and charges contained therein deprive the Respondent of its property without due process of law, in violation of the Constitutions of the State of Colorado and of the United States; and that the order of the Commission is in violation of the laws of Colorado pertaining to public utilities, in that the rates and charges set forth therein are unjust and unreasonable.

These contentions have received serious consideration and study at the hands of the Commission. While it has become almost a matter of course for a public utility applying for a rehearing of a case before a Public Utilities Commission, or appealing from an order of a Commission, to allege confiscation of its property without due process of law, or the confiscation of private

property for public use, this allegation is certainly of serious import and should be given due heed by every regulatory body. State regulation of public utilities through Public Utilities Commissions is in its infancy. At the inception of State regulation it was charged by many utilities that the regulatory bodies, in their endeavors to regulate the rates, charges and practices, and the rules and regulations surrounding the same, and the service of public utilities, would be over-zealous in their activities and would endeavor to manage the public utility in its operations, and, in their desire to curry public favor, would require the utility to earn such a low rate of return as to result in the confiscation of its property rather than the fair regulation of rates and service. Countercharges were made that the Public Utilities Commissions would look only to the interests of the utility, and would not give due regard to the interests of the consuming public, which necessarily must be dependent upon the regulating body as to the kind of service rendered by the utility and the proper rate and charge therefor.

(8) The public utility is not subject to the general law of competition, and its position is entirely different from that of a private concern. The service furnished by a public utility should be continuous, uninterrupted and adequate, and should be supplied at the lowest reasonable cost. Certainly it is true that this Commission, after arriving at the present fair value of the properties of public utilities, should permit these utilities to earn a fair rate of return upon that present fair value, which should be in excess of a proper annual depreciation reserve to be set aside by the utilities under the direction of the Commission, if the rates thus made are not in excess of the value of the service.

In the present case this Commission endeavored to determine the present fair value of the properties of the Respondent company, in use or useful in the sale of electricity, gas and steam heat. The investigations of the engineering and statistical department of this Commission, together with the hearing of the cause and the final determination of the same by the Commission, consumed about six months' time. The sums of money allowed by this Commission as the present fair values of electric and hydro properties of the Respondent, the gas properties of the Respondent, and the steam heating properties of the Respondent, have been carefully rechecked by this Commission, which is of the opinion that the sum of $1,481,762.00 is the present fair value of its electric and hydro property in use and useful in the sale of electricity for rate-making purposes; that $710,917.00 is the present fair value of the gas properties of the Respondent in use and useful in the sale of gas for rate-making purposes; and that $122,774.00 is the present fair value of the properties of the Respondent in use and useful in the sale of steam heat.

The Respondent corporation, since the date of the order of this Commission in the above cause, has employed a corps of rate experts, valuation engineers, and assistants, to examine the order and the schedule of rates and charges therein set forth, and their findings and theories are elaborately set forth in the application for rehearing filed on behalf of the Respondent by counsel.

On the 31st day of August, 1915, the Respondent company called witnesses who testified in its behalf before the Commission, among whom was Mr. P. B. Rice, Consulting Engineer for The United Gas & Electric Engineering Corporation, the holding company of The Colorado Springs Light, Heat & Power Company, who presented facts and theories on behalf of the Respondent. Engineer Rice testified that he had checked the appraisal of Mr. Fred J. Rankin, the Commission's Electrical Engineer, and found it approximately correct, with the exception of certain properties unintentionally omitted, and which were at this time presented in evidence by Mr. Rice with valuations fixed by him on the basis of cost of reproduction less accrued depreciation. These omitted items of property were added by the Commission to the appraisal of its engineer and constituted a part of the valuations upon which the Commission based the schedule of rates and charges for the Respondent company.

On the 3rd day of August, 1915, Engineer Rankin presented his report to the Commission, in which was contained the inventory of the physical properties of the Respondent, together with the cost to reproduce, less depreciation, for the purpose of arriving at the present fair value of the said properties. The Respondent corporation manufactures its electrical energy through a steam generating plant located at Colorado Springs and an hydro plant located at Manitou, and in the hearing of the above cause before the Commission, the Respondent earnestly contended that the water power, owned by the City of Colorado Springs and used by this Respondent through its hydro plant at Manitou, should be given a present fair value of $200,000.00 by the Commission in fixing the fair value of the hydro and electric properties of the Respondent. Mr. Rankin also testified that he had not included in his valuation an alleged water right, known in this case as the "Empire Land and Water Company option," which, according to the prayer of the Respondent in its application for a rehearing, should receive a value of $130,000.00 at the hands of this Commission. In the Commission's order of December 15, 1915, in the above cause, the position was taken that the hydro plant is auxiliary to the steam plant at Colorado Springs, due to the fact that the steam generating plant is sufficiently large to carry the entire load of The Colorado Springs Light, Heat & Power Company. The Commission also took into consideration the fact that the City of Colorado Springs is the

owner of the water power derived by the Respondent through its hydro plant at Manitou, and that the City of Colorado Springs had, in addition, the complete control of the use of the water power so used by the Respondent corporation. The evidence introduced pertaining to this situation, therefore, convinced the Commission that the value of the water power and the physical property of the hydro plant to the Respondent corporation consisted in breakdown service and the decrease in coal consumed at the steam generating plant of the company. The report of the Commission's Engineer in this case includes the sum of $202,421.00 as the present fair value of the physical property of the Respondent's hydro plant, but does not include any value for the water power now used in its operations, for the reason that a careful study of the conditions surrounding the operation of the hydro plant discloses the fact that the saving in coal effected by its use is entirely offset by maintenance, operating expenses, interest and depreciation on this plant, and the water power used for this purpose is of no value, inasmuch as no saving is made by its use.

Convincing evidence also was introduced that the Empire Land & Water Right option was not used or useful, and could never be used by the Respondent, and was therefore without value to the Respondent Company, and the Commission so decided. This position is now affirmed.

On the 3rd day of August, 1915, Engineer Rankin testified that he had made no allowance for development costs and going value, believing that these were matters which should be decided by the Commission.

In arriving at the sum of $1,481,762.00 as the present fair value of the hydro and electric properties of this Respondent there was included the sum of $79,125.00 to cover the preliminary organization and development of the electric and hydro properties, which, according to Witness Rice, included the items of organization, printing prospectus, promoters' returns, cost of printing necessary stock and bond forms, traveling expenses, cost of financing (including expenses of stock salesmen, underwriting expense, bond commission, traveling expenses of bond and stock salesmen), and also expense in connection with obtaining of franchises. The cost of establishing and maintaining the business, otherwise known as "going value," was given consideration by the Commission and an allowance made therefor. Had the sum of $200,000.00 for the Colorado Springs water power, and $130,000.00 for the Empire Land and Water right option, together with the sum of $400,000.00 for going value, been included, the valuations fixed by the Commission and by the Respondent's Witness Rice would have been in harmony. (9) One of the great underlying dangers of state regulation, in the opinion of the Commission, is the attitude of public utility corporations in

favoring large intangible values for the purpose of presenting a large paper valuation of public utilities property.

(10) In the order of December 15, 1915, the Respondent company was instructed to set aside an annual depreciation reserve of $52,000.00 on its hydro and electric properties. The Respondent now argues that $50,000.00 is sufficient as an annual depreciation reserve on its hydro and electric properties. This view will be accepted and the order of December 15, 1915, modified to that extent.

In determining upon the sum of $710,917.00 as a present fair value of the gas property of the Respondent for the purpose of rate-making, the Commission finds that the valuation, with the exception of the amount allowed for going value, is in harmony with the valuation fixed by the Respondent's Witness Rice; and the same is true of the sum of $122,774.00, the present fair value of the steam heating property of the Respondent as fixed by the Commission.

At this point the Commission calls attention to the testimony of Witness Rice, for the Respondent, in regard to the report of the Commission's Engineer Rankin, including his appraisal and valuations, which included the cost of reproduction—less depreciation, and which was one of the tests of present fair value used by this Commission in its order of December 15, 1915. The quotation is from page 112 of the Commission's record in this cause:

> "Mr. Holland: State whether or not you were requested to make an investigation as to the plants, properties and values of this company for this hearing?
>
> Mr. Rice: I was instructed to examine the report of the Commission's Engineer and to check its values, and, if necessary, prepare an independent valuation.
>
> Mr. Holland: When did you enter upon that work?
>
> Mr. Rice: I arrived in Colorado Springs two weeks ago yesterday.
>
> Mr. Holland: Had you done any work on it prior to that time?
>
> Mr. Rice: Only in the examination of some plans and list of property and reports on file in the New York office of the United Gas & Electric Engineering Corporation.
>
> Mr. Holland: State whether or not you have made an examination of the physical property of this Company?
>
> Mr. Rice: I have.
>
> Mr. Holland: State whether or not you have arrived at a determination in your own mind as to the fair value of that property, all things considered?
>
> Mr. Rice: I have.

M . Holland: State whether or not you have examined carefully the report of Mr. Rankin, Engineer of this Commission, which report was presented in evidence as Commission Exh. No. 2?

Mr. Rice: I have been through the report carefully both to determine its accuracy as covering a complete inventory, and also as to its prices.

Mr. Holland: I will ask you to state whether or not after having gone over this report, and over the physical property of the company, you, as an engineer, have reached a determination or conclusion as to the fairness or unfairness of the values stated in that report?

Mr. Rice: I find the report to be very fair in its unit prices, and to be approximately correct as to quantities and items, and feel that the report is a very excellent one from both the standpoint of the consumers and the owners of the property.

Mr. Holland: Are there any valuations placed in that report which you desire to change, as representing your own estimate of the value of the company's physical property?

Mr. Rice: I found an item covering a transmission line to one of the company's customers, namely, Woodmen's Home, which had been erroneously included in information furnished Mr. Rankin, and included in his report. As this line is the property of the Woodmen's Home it should be eliminated from the report. I have estimated the value of this line and checked the estimated against the actual cost, which I find to be $5894.45, the cost to reproduce, and present value $5157.64, which should be deducted from the total value in Mr. Rankin's report.

Mr. Holland: So that the net deduction would be $5158.00?

Mr. Rice: Yes sir.

Mr. Holland: In arriving at that you applied depreciation?

Mr. Rice: Yes sir.

Mr. Holland: State whether or not you applied the same depreciation which was applied by Mr. Rankin in preparing his report?

Mr. Rice: The same depreciation."

The sum of $710,917.00, found to be the present fair value of the gas property of the Respondent, includes $20.000 00 for preliminary organization and development expense, $15,000.00 as working capital, and an allowance for going value.

In arriving at the income and expenses of the hydro and electric and gas properties of this Respondent the net returns for the years 1911, 1912, 1913 and 1914 were averaged and, deducting the annual depreciation reserve to be set aside by the Respondent for the hydro and electric properties and the gas properties and making the change in the depreciation reserve for the hydro and electric properties as suggested by the Respondent in its application for rehearing, it is found that the Respondent company has been receiving a net return in excess of 12 per cent, exclusive of the annual depreciation reserve, on its hydro and electric properties, and a net return of 1.16 per cent, exclusive of the annual depreciation reserve, on its gas properties.

It appears that it is not the desire of the Respondent corporation to increase its rates and charges for gas, in effect prior to the order of this Commission, for the reason that it is not convinced that an increase in its gas rates and charges would reflect an increase in gas revenue. While the public utility is entitled to earn a reasonable return upon the present fair value of these properties, this return, as heretofore stated, is contingent upon the proposition that the consuming public be required to pay only the reasonable value for the commodity or service furnished. This Commission at all times is ready to entertain an application for an increase in the rates and charges covering the sale of gas by the Respondent.

The argument is also presented by the Respondent that the schedule of rates and charges for electricity, as prescribed by the Commission in its order of December 15, 1915, is unfair and unreasonable in that it does not give to the Company a fair return, in addition to the annual depreciation reserve, upon the present fair value of its hydro and electric properties. (11) The Commismission is of the opinion that the schedule of rates and charges for electricity as set forth in its order of December 15, 1915, will produce revenue which will give to the Respondent a fair return upon the present fair value of the hydro and electric properties, but the Commission is also of the opinion that the position of the Respondent, that the schedule established by the order is unreasonable in some respects and should be readjusted, is well taken, and shall at this time readjust the schedule of rates and charges for electricity, which said schedule shall be in effect for a period of one year from March 1, 1916, and until modified or amended by an order of this Commission, and that on February 28, 1917, or within ten days thereafter, the Respondent shall present its books to the Commission for further examination. If it is then found that the rate of return is excessive, the schedule of rates shall be further reduced; and if, on the other hand, it is shown to the Commission that the Respondent is not obtaining a fair rate of return upon the present fair value of its hydro and electric properties the schedule of rates and charges as set forth in this order shall be increased sufficiently to produce a fair return.

REPRODUCTION LESS DEPRECIATION—BOOK VALUE.

It is here contended by the Respondent in its application for rehearing that this Commission should have found the fair value of the hydro and electric properties of the Company to be a sum of money which would represent the cost of reproducing these properties new without deducting depreciation therefrom; and at the same time it is alleged that the Commission arrived at the present fair value of the hydro and electric properties solely on the theory of reproduction cost, less theoretical depreciation, and that the Commission failed to consider the evidence of its statistician, Mr. Fred W. Herbert, in regard to the book value of the Company.

(12) The reproduction theory, in arriving at the value in a rate-making case, is only one of many tests in computing the present fair value of the property.

The original order entered December 15, 1915, stated:

"FAIR VALUE OF ELECTRIC PROPERTY.

"After considering all of the evidence and testimony in the case bearing upon the value of the plant, and the cost to reproduce, the original costs, the investment, the present value, including preliminary and development costs, engineering and supervision, interest, insurance, organization and legal expense during construction, contingencies, working capital, and all other elements of value (tangible and intangible), and taking into consideration that the plant is in successful operation and a 'going concern,' the Commission finds the fair value of the electric and hydro property of The Colorado Springs Light, Heat & Power Company, for the purpose of determining reasonable and just rates in this case, to be $1,481,762.00. We therefore find that The Colorado Springs Light, Heat & Power Company is earning 12.27 per cent per annum on the fair and reasonable value of its electric and hydro properties."

In the case of *City of Belleville v. St. Clair County Gas & Electric Company*, No. 2237 B, before the State Public Utilities Commission of Illinois, decided November 24, 1915, it is stated by the Commission:

"It was argued by the Respondent that the reproduction-cost-new (undepreciated) is a proper and equitable value to be considered for rate-making purposes. The reasons advanced are, (1) that reproduction cost is the amount of money which would necessarily be expended by a utility in duplicating its plant, and (2) that, from a consumer's

point of view, a well-operated utility is delivering 100% service and is hence in 100% condition, irrespective of actual deterioration of the physical plant. If there is justifiable ground for such an argument, it must be based upon real reason, and not upon a mere desire of the owners of a property to maintain its paper integrity. The advocates of the theory would hardly admit that any need of actually duplicating the property will ever arise, or, if such need were to arise, that the property would be duplicated in the same identical manner, despite modern efficiency and economy and despite scientific development in the art. The fact must be faced squarely that property does depreciate in value with age, with use, with changes in the art, and with increases in load. A very vital element in the value of equipment lies in the fact that it probably has ahead of it certain years of effectiveness in the operation for which it was intended. As this period of potential operation is increased or decreased, the value of the equipment as a portion of an operating property is correspondingly enhanced or diminished."

This Commission is familiar with the decision of the Idaho Supreme Court in *Murray v. Public Utilities Commission,* 150 Pac., 47, and with the theory there announced that there should be no theoretical accrued depreciation deducted from the reproduction cost of the physical property, but the court there states that actual depreciation should be deducted. Just what method an Electrical Engineer may use in arriving at the actual depreciated value of an electric property without considering theoretical depreciation is somewhat beyond our scope of vision. There has been much criticism of the theory of reproduction cost —less accrued depreciation as the sole test for determining the present fair value of a public utility. This Commission is unable to settle upon any one test which shall be the sole basis of arriving at a sum of money upon which the utility shall be permitted to earn a fair rate of return. That the theory of reproduction—less depreciation is today one of the important tests is quite certain; in fact the principal engineer for the Respondent took the reproduction—less depreciation theory as the correct test in arriving at the present fair value of the properties of the Respondent in this case.

Following is a quotation from his testimony, found on page 142 of the record in this cause:

"Mr. Bennett: Mr. Rice, as I understood it, you testified that the total valuation, in your judgment, should be $2,902,210. I wish you would state of what that item consists, how you make that up—taking the totals.

Mr. Rice: I understand you want the segregation of the totals making up that amount?

Mr. Bennett: Yes sir.

Mr. Rice: To begin with, the depreciated value of the property, as shown in the Rankin report, is $2,023,708. Eliminate Woodmen's line, $5,158. Add for omitted property $18,660. Rights of way $10,000; preliminary organization expense $125,000. Value Empire property $130,000. Value of hydro-electric $200,000. Going value $400,000."

Reproduction—less depreciation was one of the important tests adopted by this Commission in its order in this case and there was no difficulty in finding high authority to sustain its position.

"The values testified to by him (a witness called on behalf of the Company) were adopted by the master in the great majority of cases. The witness's valuation of the tangible property was somewhat reduced by the master, but the reductions were not based upon the theory of depreciation, but upon a difference of opinion as to the reproduction cost.

The cost of reproduction is not always a fair measure of the present value of a plant which has been in use for many years. The items composing the plant depreciate in value from year to year in a varying degree. Some pieces of property, like real estate for instance, depreciate not at all, and sometimes, on the other hand, appreciate in value. But the reservoirs, the mains, the service pipes, structures upon real estate, standpipes, pumps, boilers, meters, tools and appliances of every kind begin to depreciate with more or less rapidity from the moment of their first use. It is not easy to fix at any given time the amount of depreciation of a plant whose component parts are of different ages, with different expectations of life. But it is clear that some substantial allowance for depreciation ought to have been made in this case."

Knoxville v. Knoxville Water Company, U. S. Sup. Ct., 212; U. S., 1.

Mr. Justice Hughes, in delivering the opinion of the Court in the case of *Simpson v. Shepard,* 230 U. S. 352 (456), said:

"The master allowed the cost of reproduction new without deduction for depreciation. It was not denied that there was depreciation in fact. As the master said, 'everything on or above the roadbed depreciates from wear and weather stress. The life of a tie is from eight to ten

years only. Structures become antiquated, inadequate, and more or less dilapidated. Ballast requires renewal, tools and machinery wear out, cars, locomotives, and equipment, as time goes on, are worn out or discarded for newer types.' * * * It was said that 'a large part of the depreciation is taken care of by constant repairs, renewals, additions and replacements, a sufficient sum being annually set aside and devoted to this purpose, so that this, with the application of the roadbed and adaptation to the needs of the country and of the public served, together with working capital * * * fully offsets all depreciation and renders the physical properties of the road not less valuable than their reproduction new.' And in a further statement upon the point, the 'knowledge derived from experience' and 'readiness to serve' were mentioned as additional offsets. We cannot approve this disposition of the matter of depreciation. * * * It is also to be noted that the depreciation in question is not that which has been overcome by repairs and replacements, but is the actual existing depreciation in the plant as compared with the new one. It would seem to be inevitable that in many parts of the plant there should be such depreciation, as, for example, in old structures and equipment remaining on hand. And when an estimate of value is made on the basis of reproduction new the extent of existing depreciation should be shown and deducted. * * * And when particular physical items are estimated as worth so much new, if in fact they be depreciated, this amount should be found and allowed for. If this is not done, the physical valuation is manifestly incomplete."

(13) It is also contended that the Commission disregarded the evidence of its Statistician in regard to the book value of the Company. The Statistician testified that on June 30, 1910, the book value of the property taken over by the consolidation of the three companies forming the Respondent company was $4,666,968.25, and on June 30, 1915, the book value of the Respondent company's property was $4,887,183.77. He also testified that approximately $1,000,000.00 of this amount was quite apparent, from the records, as being intangible values or watered stock. As the property of the previous companies was acquired through bonds and stocks and the retirement of some underlying bonds, the discount upon which, and the value of which stock, is not shown, but carried at par value on the book accounts, the book value might be further reduced. (14) A further estimate of deduction from book value should be made for property purchased from the previous companies, which has since been abandoned and not used or useful in the operation of the Respondent company, and

there was no evidence to show any depreciation deductions on the purchased property. It was only after a careful and diligent search that Statistician Herbert was able to obtain information as to values from old records of the company prior to June 30, 1910, and it has been impossible to determine, from the incomplete records found, what amount of the remaining book value of the property purchased was properly chargeable to construction cost rather than to operating expenses. From the records of book value gathered by Mr. Herbert it is impossible to ascertain whether other expenditures constituting a part of the balance of the tangible book value were prudently and wisely made, and, therefore, a book value in this cause would be merely a guess and of very little account.

In the case of *Simpson v. Shepard, supra,* at page 453, Mr. Justice Hughes says:

> "It is clear in ascertaining the present value we are not limited to the consideration of the amount of the actual investment. If that has been reckless or improvident, losses may be sustained which the community does not underwrite."

It is clear from the records of the Company, disclosed to Mr. Herbert, that the Commission was unable to ascertain with any degree of certainty what proportion of this alleged book value should be considered in arriving at the present fair value of the properties of the Respondent Company.

WORKING CAPITAL, OVERHEAD EXPENDITURES, SURPLUS AND CONTINGENCIES.

Careful attention has been given to the criticism of the Respondent to allowances made for Working Capital and Overhead Expenditures, and such a slight difference in the ultimate results is found that it is deemed unnecessary to discuss these objections. The Commission's allowance for Working Capital and Overhead Expenditures appear to be approximately correct.

(15) It is now claimed by the Respondent that this Commission should include in its findings an allowance of 2 per cent upon the present fair value of these properties to be set aside annually to protect the Respondent against extraordinary accidents of the future. This theory is not acceptable to the Commission. The same contention was made in the case of *City of Belleville v. St. Clair County Gas & Electric Company, supra,* in which the following statement was made by the Commission:

> "In view of certain facts in the case, viz.: (1) that losses sustained in accidents of the nature just described

may be guarded against by a suitable insurance, (2) that the respondent is now paying into the fund of its parent holding company an annual percentage which is supposed to cover casualties of the dependent companies, (3) that, during the years covered by the Commission's investigation, these casualties have occurred and have been met by emergency expenditures which seem to have found ultimate distribution in the respondent's operating accounts, and (4) that it seems unadvisable for a regulatory body to make advance allowance for remotely possible accidents—The Commission finds it difficult to concede an allowance of 2 per cent to cover possible calamities of the future. The stockholders' risk of maintaining an electric utility property against exceptional and unusual accidents of the nature just described is one of the items which generally entitle the *entrepreneur* to a greater rate of return than is represented by a nominal interest such as accrues from an investment in 'gilt edge' bonds."

MANAGEMENT.

(16) The Respondent pays into the treasury of the holding company 2 per cent of its gross sales to cover general supervision expense. In the opinion of this Commission a regulatory body would indeed be unwise in prohibiting this operating company from paying annually into the treasury of a holding company, a sum of money equalling 2 per cent of the gross sales to cover general supervision expense. This Commission is acting in a dual capacity in the regulation of rates of public utilities: it must protect the public in the charges for the service, as well as in the adequacy of the service, and at the same time it must protect the utility and its stockholders. Losses due to poor management must be borne by stockholders, as this is the penalty of inefficiency; therefore, the importance of discouraging poor management and encouraging good management is fully realized. The management of the Respondent in many respects has been excellent, a considerable reduction in the cost of operation having resulted under the local management of Mr. J. F. Dostal.

Mr. Dostal has made showing to this Commission that the pay roll of the Respondent has been decreased about 18 per cent since 1911, while, at the same time, the wage schedule has been increased in many departments. In the year 1911 a superintendent and an engineer for the Manitou Division were dispensed with, thus saving $250.00 a month without impairing the service. In the year 1911 two men were trimming arc lamps, while today one man does this work by the use of a bicycle. Where formerly in the testing of electric meters it was found necessary to use a

horse and wagon to carry the instruments and necessary apparatus, lighter and more compact sets of equipment have been purchased and the meterman now carries his equipment on a bicycle, thus being enabled to do twice as much work as formerly. In the outlying districts a horse and buggy was formerly used by the meter readers, whose work consumed from three to five days each month; now this work is done in two days by the use of a motorcycle. In many other ways economies have been effected and improvements made in the several departments of the Company.

It is and shall be the position of this Commission to condemn wasteful cost in operation of public utilities, to the extent that excessive cost of operation will not be countenanced in rate cases, and at the same time efficient management will be encouraged in every manner possible. In this case, in the schedule of rates set forth in our order of December 15, 1915, as well as the amended schedule made a part of this order, due consideration has been given to the effect of the economical management of the Respondent company. The showing of the gas and steam departments of the Respondent are unsatisfactory, and the Commission is at a loss to account for the showing on the gas property. It appears that the Respondent would be in much better position had it refused to enter the field of manufacturing steam heat.

JURISDICTION OF COMMISSION.

The Attorney General of the State of Colorado has advised this body that corporations not specifically designated as public utilities in the Public Utilities Law of the State of Colorado, with the exception of those persons or corporations heretofore by law declared to be public utilities, are not subject to regulation under the powers given this Commission in the Colorado laws pertaining to public utilities.

Steam heating appears to have been withheld from the jurisdiction of the Commission, and for this reason it is without power to adjust the rates of the steam heating department of the Respondent.

COMMISSION'S SCHEDULE OF RATES.

The Respondent, in its application for a rehearing of this cause, sets forth an elaborate statement in regard to the rate schedule for the sale of electricity adopted in the order of December 15, 1915. This Commission is convinced that there is merit in these contentions of the Respondent, and, although the Commission endeavored to follow the original plan of rate schedule of the Respondent, at this time the order made on December 15,

1915, will be modified by the substitution of a new schedule of reasonable rates and charges for the sale of electricity, as prepared by the Engineering Department of this Commission.

PREPARATION OF RESPONDENT FOR HEARING.

Respondent objects to the time extended to it by the Commission for the compilation of data necessary for its information and intelligence prior to the rendering of a fair and just decision. It is the opinion of the Commission that the Respondent had sufficient time in which to prepare its case, and no reason can be seen for granting a rehearing because of this objection.

The order in this case entered by the Commission on December 15, 1915, and the modified order entered December 29, 1915, will be modified to the extent that the Respondent's schedule of rates for the sale of electricity and the rules and regulations surrounding the same shall be amended to comply with the schedule of reasonable rates and charges for electricity and the rules and regulations surrounding the same as hereinafter set forth, and that the order of this Commission shall be in force and effect for a period of one year beginning March 1, 1916, and until modified or amended by an order of this Commission; provided, that on February 28, 1917, or within ten days thereafter, the Respondent shall again appear before the Commission and make a sufficient showing of its operating expenses and earnings for the year ending February 28, 1917, together with such additional evidence as it may desire to introduce to the end that the Commission may further adjust its schedules of rates and charges for gas and electricity in accordance with the showing then made by the Respondent and the witnesses for the Commission, if such adjustment is deemed necessary or advisable.

ORDER.

IT IS THEREFORE ORDERED, That the application for a rehearing of this cause is hereby denied.

IT IS FURTHER ORDERED, That the order of this Commission in this cause, entered December 15, 1915, and the modified order, entered December 29, 1915, shall be modified and amended to the extent hereinafter set forth:

(1) The Respondent shall set aside annually a depreciation reserve, to be expended in accordance with the rules and regulations of this Commission, in the following sums:

Hydro and electric property.....	$50,000.00
Gas property	20,000.00

(2) The order of this Commission in this cause, entered December 15, 1915, and the modified order, entered December 29, 1915, as here modified and amended, shall be in force and effect for a period of one year beginning March 1, 1916, and until modified or amended by an order of this Commission; Provided, that on February 28, 1917, or within ten days thereafter, the Respondent shall again appear before the Commission at its Hearing Room in the City and County of Denver, State of Colorado, and there make a sufficient showing of its operating expenses and earnings for the year ending February 28, 1917, together with such additional evidence as it may desire to introduce, to the end that this Commission may further adjust its schedule of rates and charges for gas and electricity in accordance with the showing then made by the Respondent and the witnesses for the Commission, if such adjustment is deemed necessary or advisable.

(3) The Respondent shall adopt the following schedule of reasonable rates and charges for the sale of electricity, together with the rules and regulations surrounding the same, which shall be in force and effect for a period of one year beginning March 1, 1916, and until modified or amended by an order of this Commission:

SCHEDULE A.

MUNICIPAL STREET LIGHTING.

Rate, All-Night Schedule:

7.5 ampere series A. C. arcs.....	$66.00 per year
80 c. p. series Mazdas.....	24.00 per year
Police alley lamps, 80 c. p.....	24.00 per year
150 watt series Mazdas.....	45.00 per year

80 c. p. series Mazdas, burning from dusk to midnight during the summer season, $2.00 per month for the season.

Ornamental street lighting, 3 cents net per kilowatt hour.

Terms and Conditions: The company will, except in the case of ornamental street lighting, furnish all lamps, wires, and other equipment required in rendering municipal street lighting service, and will maintain and operate the same.

Bills are to be paid in equal monthly installments at the end of each month. Existing rates tentatively approved, subject to further investigation at the discretion of the Commission.

SCHEDULE B.

COMMERCIAL LIGHTING SERVICE.

Available to all Commercial Lighting Users.

Rate: 8½ cents net, or 9½ cents gross, per kilowatt hour, for the first 60 hours' average use per month of the maximum demand.

5 cents net, per kilowatt hour, for the next 60 hours' average use per month of the maximum demand.

3 cents net, per kilowatt hour, for all current consumed in excess of 120 hours' average monthly use of the maximum demand.

Determination of Maximum Demand: The total installation is to be determined by an actual inspection upon the premises, but no maximum demand is to be figured as less than 500 watts.

The maximum demand shall be figured as 90% of the total installation. Heating devices, fans and small utility motors not exceeding ¼ horse power in size, shall not be included in determining maximum demand; provided, that in case of laundries, tailor shops, etc., making a large use of these utility devices, same shall be included in determining the maximum demand.

Prompt Payment Discount: Bills will be rendered at the gross rate for the first 60 hours' use, and discounted to the net rate if paid within the 10-day discount period, as indicated on the bill.

Guarantee: The consumer must guarantee a minimum monthly charge of $1.50 net per kilowatt connected, and, in no event, less than $1.50.

Schedule C.

LARGE LIGHT AND POWER SERVICE.

Available to all consumers using the company's standard service for light and power.

Rate—Demand Charge: $4.00 net or $4.50 gross per kilowatt, for the first 10 kilowatts of maximum demand each month.

$3.00 net per kilowatt for the next 15 kilowatts of maximum demand each month.

$2.00 net per kilowatt for the next 25 kilowatts of maximum demand each month.

$1.00 net per kilowatt of maximum demand in excess of the first 50 kilowatts of maximum demand each month.

Energy Charge: 9/10 cent per kilowatt hour.

Determination of Demand: The demand to be considered and paid for hereunder shall be the highest 15 minute peak previously recorded by demand meter, or as indicated by a suitable indicating instrument, but in no event, less than the guaranteed demand of 10 kilowatts. The company may, at its option, in lieu of a demand meter or a tested demand, base the demand hereunder on 75% of the total installation in motors and lighting equipment. In the case of extraordinary or abnormal demands, the company may, at its option, not consider such abnormal demands.

Power Factor: The consumer shall at all times take and

use power in such a manner that the power factor shall be as near 100% as possible, but when the actual power factor is 80%, or less, the demand to be charged and paid for shall be obtained by multiplying the demand at the time of measurement by 80, and dividing this product by the actual power factor.

Prompt Payment Discount: Bills will be rendered at the gross rate for the first 10 kilowatts of maximum demand and discounted to the net rate if paid within the 10-day discount period as indicated on bill.

Guarantee: The monthly guarantee shall be equivalent to a minimum monthly demand of not less than 40% of the total connected load, and in no event less than the guaranteed 10 kilowatts of the demand charge as above.

Direct Current: If direct current is furnished hereunder, the energy charge shall be 1 1/10 cents per kilowatt hour net.

Schedule D.

RESIDENCE LIGHTING SERVICE.

Available to all Residence Lighting Consumers.

Rate: 8½ cents net, or 9½ cents gross, per kilowatt hour, for all current consumed during the month.

Prompt Payment Discount: Bills will be rendered at the gross rate and discounted to the net rate if paid within the 10-day discount period as indicated on the bill.

Guarantee: The consumer guarantees a minimum monthly bill of $1.00 net or $1.10 gross.

Schedule E.

GENERAL POWER SERVICE—ALTERNATING CURRENT.

Available to all Alternating Current Power Consumers.

Rate: 6.66 cents per kilowatt hour for the first 30 kilowatt hours consumed per month per horse power of demand.

3 cents per kilowatt hour for the next 60 kilowatt hours used per month per horse power of demand.

1 cent per kilowatt hour for all current consumed in excess of the above amount.

Determination of Maximum Demand: The horse power demand will be considered as the manufacturer's rating of the motors as indicated in horse power on the name-plate of each motor. For installations consisting of more than two motors, the horse power demand shall be considered as 75% of the horse power installed; provided, that no demand shall be considered as being less than 2 horse power.

Prompt Payment Discount: A discount of 10% or 66/100

of 1 cent per kilowatt hour on the consumption billed at the 6.66 cent rate will be allowed on monthly bills if paid within the 10-day discount period as indicated on same.

Guarantee: The consumer guarantees a minimum monthly charge of 75 cents net, or $1.00 gross, per horse power or fraction thereof, connected. In no event will an installation be considered as less than two horse power. The minimum bill will be rendered in gross and discounted to the net amount if paid within the discount period. For installations consisting of more than two motors the minimum bill shall be based on 75% of the connected horse power.

Schedule E-1.

DIRECT CURRENT POWER SERVICE.

Rate: 7 cents per kilowatt hour for the first 30 kilowatt hours used per month per horse power of demand.

3 cents per kilowatt hour for the next 60 hours used per month per horse power of demand.

1 cent per kilowatt hour for all current consumed in excess of the above amount.

The horse power demand shall be determined in the same manner as for general Power Service.

A discount of 10% on the consumption billed at the 7-cent rate will be allowed on monthly bills paid within the discount period.

The minimum charge for this class of service shall be determined in the same manner as for General Power Service.

The Company reserves the right to discontinue direct current service at any time upon the approval and consent of the Public Utilities Commission of the State of Colorado.

Schedule E-2.

OFF-PEAK POWER SERVICE.

Available to Refrigerating Consumers and to General Power Consumers who will install and maintain a Time Switch approved by the Company, to control the use of the service.

The rates applicable to this class of service shall be the same as the regular power rates except that a discount of 30% shall be allowed on the first 30 kilowatt hours used per month per horse power of demand.

The other charges, minimum bill, and all other terms and conditions shall be the same for this class of service as for General Power Service.

Schedule F.

SIGN AND DISPLAY LIGHTING.

Rate: 80 cents per month per 100 watts connected, burning from dusk to 11:00 p. m.

$1.30 per month per 100 watts connected, burning all night.

Prompt Payment Discount: A discount of 10% will be allowed on all bills paid within the 10-day discount period as indicated on same.

Guarantee: The minimum monthly bill for this class of service shall be $1.00 net.

The Company will give free renewals of all carbon lamps, and tungsten lamps in 25-watt sizes and above.

Schedule G.

MILL POWER.

Rate: $1.25 per month per kilowatt of maximum demand, plus an

Energy Charge of: 5/10 cent per kilowatt hour for all energy used.

Minimum Charge: The consumer must guarantee a minimum "maximum demand" charge of $1,250.00 per month.

Terms of Contract: Five years, and thereafter until 30 days after the receipt by the Company of a written notice from the consumer to discontinue the service.

Schedule H.

REDUCTION MILLS.

Rate: 95/100 cent net per kilowatt hour for all current consumed for light and power.

Minimum Charge: None. Available only to consumer who will guarantee an annual load factor of 80% or higher.

Terms of Contract: Five years, and thereafter until 30 days after receipt of written notice by the Company from the consumer to discontinue the service.

Schedule I.

LARGE HOTELS—LIGHT AND POWER SERVICE.

Rate: 2 1/10 cents per kilowatt hour for the first 4,500 kilowatt hours consumed per month.

1 3/4 cents per kilowatt hour for all energy consumed in excess of the above amount.

Terms and Conditions: Available to all hotels having a monthly consumption in excess of 4,500 kilowatt hours.

High rate portion of bill subject to a discount of 1/10 cent per kilowatt hour for prompt payment.

CHANGES IN RULES AND REGULATIONS.

A connection charge of $3.00 per meter to be made for all installations connected for a period of four months or less. Officials and employes of the company to pay regular rates. All rates to be equally applicable to Colorado Springs, Manitou and suburbs.

S. S. KENDALL,
(SEAL) GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 24th day of February, 1916.

In Re: CRIPPLE CREEK WATER COMPANY.

(Case No. 31.)

Records—Production of—When without the state.

(1) In an investigation of the rates of a water utility which kept no books at its office within the state, the utility was ordered to produce before the Commission all books, accounts, papers and records, together with surveys and profiles of reservoirs, and water supply, transmission and distribution systems, hydrants and valve locations.

Franchises—Contracts.

(2) An investigation into the reasonableness of the rates of a water utility whose franchise had expired was commenced by the Commission upon request of a city in which the utility operated, which desired that reasonable rates be determined by the Commission before granting a new franchise, although the Commission had previously ruled that rates and charges, and rules, regulations and practices surrounding the same, set forth in a franchise contract may be altered, modified and readjusted by the Commission during the life of said franchise contract.

Valuation—Engineering and supervision—Contractors' profits.

(3) In a valuation of a utility for rate making purposes, the Commission, while of the opinion that 7% allowed for engineering services may not be excessive in estimating the reproduction cost of the properties of the utility in use and useful, held that the percentage may be applied only to that part of the properties which necessarily require engineering supervision; and, although the Commission in previous cases has permitted 10% for contractors' profits, under the reproduction method of valuing property, the allowance of such percentage was contingent on the fact that the same applied only to such properties as might require a contractor.

Valuation—Legal expenses.

(4) In a valuation for rate making purposes of a utility whose present fair value of properties in use and useful was found to be $150,000, the Commission held that $17,642 for legal services and investigation was unreasonable.

Valuation—Reproduction cost less depreciation—Depreciation.

(5) The Commission, while of the opinion that the reproduction method of valuing property is an important factor in valuation by state regulatory bodies, as a general rule is unable to follow or adopt the reproduction theory in the strictest sense of its meaning; and, while it is true that an engineer, in arriving at the present fair value of the property of a utility by the method of reproducing the property new as of the date of the valuation, arrives at the present fair value of the property by deducting accrued depreciation, yet this theory can not be followed to the extent that prices of material and the cost of labor should be taken as of the date of the valuation, but, in all fairness, should be averaged for a period of years.

Valuation—Original cost—Reproduction cost less depreciation.

(6) In a majority of cases before the Commission involving valuation of public utility properties, actual or original cost can not be ascertained with any degree of certainty, the reasons for this being self-evident; by "original cost" in the case of physical properties is meant the actual cost new of properties in use and useful; and while, in arriving at the reproduction cost, the Commission endeavors to ascertain the present day cost of replacing existing property, in both cases depreciation, or the estimated decline in units of service from wear, obsolescence, inadequacy or any other causes, is equally to be considered, and estimates necessarily must be used in both lines of investigation.

Valuation—Original cost.

(7) In a valuation of a utility for rate making purposes, the Commission was able to ascertain clearly the detailed cost of the properties of the utility in use and useful, and by applying the rule that where original costs may be obtained accurately the question of whether or not the investment had been made honestly, wisely and prudently must be considered also, the Commission arrived at the conclusion that the important test was the original cost to date, rather than the reproduction cost of the properties of the utility, provided the investment was honestly, wisely and prudently made.

Valuation—Present fair value—Overhead expenses—Working capital.

(8) In a valuation of a utility for rate making purposes, the Commission found the original cost new to date of the properties of the utility, to which was added a sum to include supervision during construction and also certain overhead charges not included in the books of the utility; and, by adoption of the method of depreciation as used by the Commission's engineer, by making fair allowance in accordance with the methods previously adopted by the Commission, and by considering the utility as a going concern, the Commission was able to arrive at the present fair value of the utility.

Valuation—Water rights.

(9) In a valuation of a water utility for rate making purposes, although no evidence had been introduced as to the necessity for acquiring certain additional water rights, it was to be inferred from the record that such purchases were dictated by the demands upon the company at the time of purchase and the reasonable anticipated demands of the future, and upon that basis it was to be assumed, in the absence of definite contravening testimony, that the investment in question was not unwisely made.

Valuation—Water rights—Market value.

(10) In the valuation of a water utility for rate making purposes, certain opinion evidence was presented with respect to the so-called "market value" of the utility's water rights, by reference to the values which the rights might possess if it were possible to transfer the diversion points thereof and supply distant communities with such water supply; but it was the opinion of the Commission that the evidence in that respect was not sufficiently definite in character to warrant fixing the value at other than the actual cost of such supply; and upon the presumption that the purchase was not unwisely made, the Commission reached the common sense inference that the actual value was the amount of the purchase price.

Valuation—Water rights—Titles.

(11) The Commission, in a valuation of a water utility for rate making purposes, gave careful consideration to the question of whether basic titles to the water rights of the utility were vested in the company or in

the consumers of water, as a body, supplied by the company's system, but found a determination as to same unnecessary in the instant case.

Valuation—Tangible property—Impounded water.

(12) In a valuation of a water utility for rate making purposes, where it was urged in the hearing that the quantity of water purchased by the company was excessive in amount, for the asserted reason that the quantity purchased was approximately three times that of the carrying capacity of the company's pipe lines, the Commission held the assumption that there was a reasonable necessity for the company to acquire an amount of water in excess of the discharge capacity of the company's pipe lines, as no evidence was produced as to whether or not the full amount of decreed water was available at all seasons of the year and this assumption was particularly applicable in view of the fact that the company owned two certain reservoirs which were apparently used exclusively for the temporary impounding of the water, to which the company, or the consumers, were entitled by virtue of the direct appropriation rights.

Valuation—Property in use—Reservoirs.

(13) In the valuation of a water utility for the purpose of rate making, the Commission, in the absence of any showing as to the existence of any unappropriated flood waters of Beaver Creek, one of the sources of the company's supply, did not allow the claim of the utility to the capacity value of certain reservoirs in addition to the construction cost, when the claim was apparently made upon the theory that if said reservoirs were not used for the purpose of temporarily impounding and more efficiently using the irrigation rights acquired, they could be used for the purpose of catching the flood and unappropriated waters of Beaver Creek during the storage season; nor did the Commission feel that a theoretical availability in use of such reservoirs for different purposes than that for which they were being utilized was properly for the consideration of the Commission in determining the case; and, while it was conceded that these reservoirs were valuable adjuncts in the utilization of the direct flow rights acquired, the Commission considered that the company, in being allowed the full value of such rights and the expense of construction of such reservoirs, had received all that it was legally entitled to receive with respect to its water rights.

Valuation—Property in use—Pipe lines.

(14) In a valuation of a water utility for rate making purposes, where it was shown that the company had constructed an additional pipe line parallel to its existing pipe line, the Commission found that the investment made by the company for the additional pipe line was not wisely and prudently made, and that the same could not be considered by the Commission as property in use or useful.

Valuation—Present fair value.

(15) In a valuation of The Cripple Creek Water Company for rate making purposes, the Commission, after deducting the present fair value of a pipe line found to be not in use or useful, found the present fair value of the property of the company in use and useful to be $150,000, for rate making purposes.

Depreciation—Annual allowance held reasonable.

(16) In a valuation of a water utility for rate making purposes, whose present fair value was found to be $150,000, the Commission found $2,500 to be the proper amount to be set aside annually as a depreciation reserve.

Return—General management.

(17) In a valuation of a water utility for rate making purposes, whose present fair value was found to be $150,000, an annual amount of $1,000 was found to be reasonable for general management and the keeping of the books of the company.

Return—Water company—Amount.

(18) In a valuation of a water utility for rate making purposes, it was necessary for the Commission to average the revenues, exclusive of hydrant rentals, for a three year period, in order to arrive at the annual revenues, due to the negligent manner in which the company had kept its books.

Return—Inefficient management.

(19) In a valuation of a utility for rate making purposes, the Commission had no recourse but to state the fact that the employes of the company had been negligent in the collection of revenues, and the Commission was unable to understand or condone the lax business methods of the company, as the Commission had many times stated that it could not and would not tolerate wasteful management of public utilities within the state of Colorado when called upon to adjust and fix fair rates or adequate service.

Service—Water—Connections.

(20) In an investigation as to the reasonableness of the rates of a water utility, the Commission found that the practice of the company of compelling the consumer to lay and pay for the service pipe from the company's main to the curb of a consumer's property was unreasonable and illegal, as it is the duty of the water company to supply a service connection to the property line, as it is the duty of the company to supply a meter to the consumer when the service is metered, and the utility, not the consumer, has the right to occupy the streets, and all pipe lines in the streets should be the property of the utility and the expense of placing them should be borne by the utility, as it is the business of the water company to deliver its product to the premises of the consumer.

Rates—Reasonableness—Water.

(21) The Commission, in an investigation as to the reasonableness of the rates of The Cripple Creek Water Company, after finding the present fair value of the company and the return thereon, found that the rates of the company were unreasonable and ordered a reduction of 10% in the existing rates, with the exception of fire hydrant rentals, upon which specific rates were prescribed.

(March 25, 1916.)

INVESTIGATION on the Commission's own motion, as to the reasonableness of the rates and the adequacy of the service of The Cripple Creek Water Company; rates found unreasonable and reasonable rates prescribed for the future.

APPEARANCES: J. E. and W. G. Simonson for Cripple Creek Water Co.; Frank J. Hangs for Intervenor, The City of Cripple Creek.

STATEMENT AND ORDER.

By the Commission:

On the 20th day of July, 1915, the City Council of the City of Cripple Creek, State of Colorado, passed a resolution requesting the Public Utilities Commission of the State of Colorado to investigate the rates and charges, and the rules, regulations and practices surrounding the same, of The Cripple Creek Water Company.

On the 13th day of August, 1915, the Commission issued an order instituting an investigation on the motion of the Commission into each and every rate or charge made by The Cripple Creek Water Company, and into the adequacy of the service, and the reasonableness of the rules, regulations and practices of the Company, and ordered the said The Cripple Creek Water Company to appear at the council chamber in the city hall in the City of Cripple Creek on the 5th day of October, 1915, at the hour of 10:00 o'clock a. m., to take such part in the investigation and hearing, and to make such showing upon its own behalf as it might desire or its interests might require.

(1) On the 18th day of August, 1915, Mr. F. W. Herbert, the Statistician of the Commission, reported that The Cripple Creek Water Company kept no books at its Cripple Creek office, and that he had learned that the said books were kept at the general office of the Company at Bay City, Michigan. On the 20th day of August, 1915, the Commission issued an order to E. H. Smith, Superintendent and Manager of The Cripple Creek Water Company, at Cripple Creek, ordering the said E. H. Smith to produce within twenty days from the date of said order, for inspection and investigation of this Commission, all books, accounts, papers, and records of The Cripple Creek Water Company, with surveys and profiles of reservoirs and water supply, transmission and distribution systems, hydrants and valve locations, and to furnish additional data set forth in the Commission's order of August 20, 1915.

On the 13th day of September, 1915, The Cripple Creek Water Company filed with the Commission a petition for an extension of thirty days from and after October 5, 1915, in which to comply with the order of the Commission dated August 20, 1915; on the 14th day of September, 1915, this petition was denied by the Commission.

The hearing of the above cause convened at the City of Cripple Creek on the 15th day of October, 1915, at 9:00 o'clock a. m., at which time and place Mr. Herbert, Statistician for the Commission, introduced into the record a written report setting forth the property and plant account of The Cripple Creek Water Company; the balance sheet of December 31, 1914, of said Com-

pany; a statement of the assets and liabilities of the Company, as of December 31, 1914; a summary of the annual report of The Cripple Creek Water Company, made December 31, 1914; a statement of the revenues and operating expenses of the Water Company for a period of fourteen years beginning with the year 1901 and closing with the year 1914; a statement of the profit and loss account of The Cripple Creek Water Company, and a detailed income account of the Water Company from the year 1909 to and including the year 1914.

Mr. D. S. Hooker, the Commission's Civil Engineer, introduced into the record a written report in which was set forth in detail the cost of reproducing those properties of The Cripple Creek Water Company in use and useful. The City of Cripple Creek was permitted to intervene in the above cause, and Messrs. W. D. Armstrong and A. M. McVicar, councilmen for the City of Cripple Creek, testified in behalf of the intervenor. Messrs. H. F. Smith, Lawrence Moran, Jas. F. Smith, E. H. Smith and C. P. Allen testified in behalf of The Cripple Creek Water Company.

Mr. C. P. Allen, Engineer for the Water Company, introduced into the record a written report containing his opinion of the cost of reproducing those properties of The Cripple Creek Water Company in use and useful. At the termination of the hearing time was allowed The Cripple Creek Water Company and the City of Cripple Creek to file briefs with the Commission.

Following is a condensed summary of the cost to reproduce the property owned by The Cripple Creek Water Company, as contained in the report of Mr. Hooker, Civil Engineer for the Commission:

CONDENSED SUMMARY OF VALUATION—
THE CRIPPLE CREEK WATER COMPANY

Classification	Cost New	Scrap Value	Present Value
Land	$ 5,321	$.....	$ 4,972
Reservoirs	27,767	.....	21,658
Main Supply Pipe Line	65,928	7,673	57,129
Distribution System	135,479	59,625	120,265
Miscellaneous Equipment	1,771	.....	1,771
Water Rights	28,000	.....	28,000
Totals	$264,266	$67,298	$233,795

Following is a statement of the overhead charges of The Cripple Creek Water Company, as allowed by Civil Engineer Hooker and included in his summary of valuation:

STATEMENT OF OVERHEAD CHARGES—
THE CRIPPLE CREEK WATER COMPANY

Items	Classification of Property, Land	Supply and Mains	Distribution	Reservoirs
Inventory Omissions and Contingencies	0	2	2	1
Engineering	1	5	2	5
General Supervision	0	2	2	½
Interest during Construction	7	2	2	2
Legal	2	½	½	½
Taxes and Insurance	0	1	1	0
Totals	10	12½	9½	9

Following is a summary of the cost of reproduction of those properties of The Cripple Creek Water Company in use and useful, as estimated by C. P. Allen, the Water Company's Engineer:

Distribution System	$167,344.27
Supply Pipes	75,780.82
Reservoirs	60,555.00
Water Rights	72,200.00
Storage	35,464.00
Real Estate	2,280.00
Interest during construction, one year 8%, $389,742.10	31,896.16
Legal Services and Investigation	17,642.00
Total	$463,152.26
Depreciation	116,337.06
Present Physical Value	$346,815.20

Mr. Allen found the cost of development to be:

Engineering Services	7%
Contingent Expense	6%
Contractors' Profits	20%
Interest during construction, interest on full cost of plant for one year at	8%

The following are extracts from the report of the Commission's Statistician, based upon figures secured from the books of The Cripple Creek Water Company and The Michigan Pipe Company:

"Property and Plant Account, The Cripple Creek Water Company:		
Cripple Creek Contract	$63,783.62	
Pipe Line Extensions	83,749.97	
Jones' Contract	3,404.01	$150,937.60
Water Rights		28,000.00
Real Estate:		
Wilber Land	$ 1,650.90	
Texas Placer	504.35	2,155.25
Total Property and Plant		$181,092.85

The above shows actual book accounts of Property and Plant Account. These amounts are shown by schedules furnished in Exhibit A, being the amounts taken from the books of the Michigan Pipe Co., for material, etc., furnished in the construction of The Cripple Creek Water Company and transferred afterward to the records of the Water Company. In this Exhibit A is also a schedule which is an account of The Cripple Creek Water Company with The Michigan Pipe Company, amounting to $16,676.14, which I am informed by Mr. H. F. Smith should be included in the Plant Account of the Water Company, as it was paid out of the earnings of the Water Company and is a part of the items shown in the balance sheet account of The Michigan Pipe Company. As this does not appear in the book accounts of The Cripple Creek Water Company, I am unable to consider this amount in the Property and Plant Account. I have examined the items in Exhibit A and find that these items are all proper charges to Construction Account. I have not checked these accounts with

the books of The Michigan Pipe Company, of which this is a copy, and the amount was charged in a lump sum on the books of the Water Company.

STATEMENT OF REVENUE AND OPERATING EXPENSES

For Year	Assessment Roll	Hydrant Rental	Expenses
1901	$32,452.98	$ 7,220.00	$13,840.38
1902	31,704.18	8,495.00	12,300.04
1903	24,713.37	8,720.00	13,518.86
1904	27,361.24	8,720.00	9,815.37
1905	32,389.86	8,720.00	11,184.62
1906	29,739.45	8,720.00	10,028.13
1907	25,777.54	4,450.00	8,150.79
1908	28,205.58	4,405.00	9,333.12
1909	29,771.37	6,675.00	9,793.48
1910	28,032.70	17,625.00	6,418.43
1911	26,223.93	8,500.00	6,070.37
1912	25,481.40	6,700.00	6,797.85
1913	24,817.81	9,600.00	20,451.61
1914	22,040.76	3,550.00	16,085.02

The above is memoranda data of accounts as taken from the record book of The Cripple Creek Water Company. It represents actual entries on said records which are more fully explained in the statement of Detailed Income Account. This record covers a period from 1901 only, inasmuch as there are no records previous to that date. The items of hydrant rental are actual book records; adjustments of differences between the amount received and this account appears in Bills Receivable, as the Hydrant Rentals were paid by city warrants and in some cases entries were made when warrants were received and in some cases when warrants were paid. These amounts I am unable to check fully on account of the differences in way of crediting these amounts as the records are kept. These items should have been shown by journal entries, instead of direct ledger charges, and in some cases these warrants were used by The Michigan Pipe Company and H. B. Smith as collateral for bank loans.

The extraordinary increase in expense accounts shown in the years 1913 and 1914 is due to the charges of $3,000.00 for management by Bay City, Michigan, general offices; also the amounts of $7,546.88 charged to Depreciation in 1913, and $7,243.71 charged to Depreciation in 1914. These charges were not made in previous years."

DETAILED INCOME ACCOUNT.

OPERATING REVENUE	1909	1910	1911	1912	1913	1914
Assessment Roll	$29,771.37	28,032.70	$26,223.93	$25,481.40	$24,817.81	$22,040.76
Hydrant Rental	6,675.00	17,625.00	8,500.00	6,700.00	9,600.00	3,550.00
Miscellaneous			52.00			
Total Operating Revenue	$36,446.37	$45,657.70	$34,775.93	$32,181.40	$34,417.81	$25,590.76
OPERATING EXPENSE						
Operation					M3,000.00	M3,000.00
Superintendence	1,999.93	1,999.95	2,000.00	2,000.00	2,000.00	2,000.00
Office Expense	204.75	193.10	183.50	242.00	409.77	436.34
General Expense	192.40	232.05	162.93	160.05	224.35	345.70
Advertising	6.50	5.00	55.00	15.00	30.00	40.00
Rebates	5.00	1.40			Ins. 13.60	(S. 60.00)
Commission		70.25	141.50	205.85	185.00	168.55
					(S. 40.00)	
Total Operation	2,408.58	2,501.75	2,522.93	2,622.90	5,902.72	6,050.59
MAINTENANCE						
Labor	3,063.40	2,677.40	2,787.85	3,172.90	3,021.20	2,709.35
Meters	1.00	13.26	18.10	175.85	200.25	
Reservoir	32.85	43.75	72.05	36.90	9.60	31.80
Pipe Lines	387.30	278.47	227.15	513.00	604.15	284.48
Hydrants	9.15	2.30	1.00			
Services	175.60	165.33	90.25	125.65	81.65	53.74
Total Maintenance	3,669.30	3,180.51	3,196.40	4,024.30	3,916.85	3,079.37
TOTAL ABOVE EXPENSE	6,077.88 6,077.88	5,682.26 5,682.26	5,719.33 5,719.33	6,647.20 6,647.20	9,819.57 9,819.57	9,129.96 9,129.96
Taxes	2,418.35 2,418.35	212.09 212.09	319.10 319.10	148.65 148.65	10,628.04 10,628.04	6,764.10 6,764.10
Depreciation					7,546.88	7,243.71
TOTAL OPERATING EXPENSE	8,496.23 8,496.23	5,894.35 5,894.35	6,038.43 6,038.43	6,795.85	27,994.49	23,137.77
Net Operating Revenue	27,950.14	39,763.35	28,737.50	25,385.55	6,423.32	2,452.99
Non-Operating Revenue	1,504.07	1,313.47	1,687.49	1,625.94	2,159.40	3,116.37
Gross Income	29,454.21	41,076.82	30,424.99	27,011.49	8,582.72	5,569.36
Interest on Floating Debt	1,297.25	524.08	31.94	2.00	43.67	190.96
Net INCOME	28,156.96	40,552 71	30,393.05	27,099.49	8,539.05	5,378.40

The Cripple Creek Water Company was incorporated on the 4th day of December, 1894, with capital stock of $100,000.00, divided into 4,000 shares of $25.00 each. The term of the charter of the corporation was twenty years, and the incorporators were Stephen B. Saleno, Eugene H. Smith, and Henry Diedrich. On the 13th day of February, 1915, the charter of the corporation was renewed, and the annual report filed with the Secretary of State on the same date contains, among other items, the following:

> "Eighth: The property of The Cripple Creek Water Company is in good condition, both real and personal. The deterioration of the supply and distributing pipe line amounts to a reasonable depreciation for wear and tear.
>
> The financial condition of the Company at the present time is good, there being no bonded or other indebtedness.
>
> M. H. SMITH, Acting President.
> HENRY B. SMITH, Secretary."

On the 19th day of May, 1893, the City of Cripple Creek passed an ordinance granting to one S. V. Saleno, of Bay City, Michigan; a representative of the owners of The Michigan Pipe Company, who are also the owners of The Cripple Creek Water Company, a franchise for a period of twenty years, which was sub-transferred to the Cripple Creek Water Company. The franchise provided that the City of Cripple Creek should pay to The Cripple Creek Water Company an annual rental of $5,000.00, payable quarterly, for eighty double-discharge fire hydrants; that all fire hydrants ordered by the Board of Trustees in excess of eighty should be paid for at an annual rental of $60.00 each; and that four drinking fountains should be erected by the company for public use, in return for which the company should be exempt from municipal taxes. The franchise further provided that the fire hydrants should be used only in case of fire and for the flushing of gutters and sewers, with a further proviso that the City should be entitled to take therefrom free water for the sprinkling of streets. A schedule of rates was included in franchise and provision made that the water works should be completed by November 1st, 1893.

It appears that a period of four months was consumed in the construction of The Cripple Creek Water Company plant, and that the corporation began actual operation in the year 1894. The books of the corporation never have been kept in the City of Cripple Creek, but were made a part of the books of The Michigan Pipe Company at Bay City, Michigan. It therefore became necessary for the Commission to order The Cripple Creek Water Company to produce its books for examination within the State of Colorado.

(2) The franchise granted the Water Company by the City of Cripple Creek expired May 19, 1913. Since that time the Water Company has operated in the City of Cripple Creek without a franchise, there having been a disagreement between the City and the Water Company as to the rates and charges, and the rules, regulations and practices surrounding the same, of The Cripple Creek Water Company; and it appears from the resolution passed by the City Council of Cripple Creek requesting the Commission to investigate into the rates and charges of the Water Company, and the rules, regulations and practices surrounding the same, that it is the desire of the City to first have the Commission determine reasonable rates and charges which the Cripple Creek Water Company should charge the City of Cripple Creek and its citizens before entering into a franchise contract with the Water Company, although it heretofore has been decided by the Commission that rates and charges, and rules, regulations and practices surrounding the same, set forth in a franchise contract, may be altered, modified, and readjusted by the Commission during the period of said franchise contract.

The Water Company, through its Engineer, Mr. Allen, introduced into the record an estimate of the cost of reproducing its property in use and useful, setting forth the cost new and also the present fair value of the properties. The fair present value of the properties of The Cripple Creek Water Company in use and useful has been estimated by the witness Allen, under the reproduction method, to be $346,815.20. This value exceeds by $113,020.00 the present fair value of the properties as found by the Commission's Engineer. While the Commission does not doubt the sincerity of the witness Allen it finds that the sum of $346,815.20, estimated by him to be the cost of reproducing the properties of the Water Company in use and useful, less accrued depreciation, to be highly excessive.

(3) In his estimate of the reproduction cost of the properties of the Water Company in use and useful, Engineer Allen has allowed 7 per cent for engineering services, but, while the Commission realizes that 7 per cent for engineering services may not be excessive in estimating the reproduction cost of the properties of the company, under this method of estimating value, it must insist that the percentage be applied only to that part of the properties of the company which necessarily requires engineering supervision, and it finds in the Allen report an application of the 7 per cent engineering service to properties of the company in which no engineering service is required. In previous cases the Commission has permitted 10 per cent for contractors' profits under the reproduction method of valuing property, but the allowance of this percentage is contingent upon the fact that the same be applied only to such properties as require a contractor. Engineer Allen not only has allowed 20 per cent for contractors'

profits. but has applied the same to properties purchased without the aid of a contractor, such as stores and supplies, meters, etc.

(4) He also has allowed $17,642.00 for legal services and investigation, an amount which the Commission holds is unreasonable.

The Witness Allen made an allowance "Interest during construction, 8 per cent of $389,472.00, or $33,896.15." The allowance made by the Commission's Engineer for interest during construction does not exceed $4,000, and the Commission is of the opinion that this allowance is a liberal one.

It becomes apparent, therefore, that the report introduced into the record in the above cause by Engineer Allen has been of no real value to the Commission in arriving at the present fair value of the property of The Cripple Creek Water Company.

REPORT OF THE COMMISSION'S ENGINEER.

The Commission's Engineer, in arriving at the present fair value of the properties of The Cripple Creek Water Company in use and useful, adopted the reproduction method and found the cost of reproducing the properties new; also the present fair value of the properties by deducting accrued depreciation. In arriving at the present fair value of the properties, Mr. Hooker has allowed $28,000.00 for water rights, which sum appears actually to have been expended by the Company. All other allowances made by the Commission's Engineer were in accordance with the method of finding the cost of the reproduction of the properties, including current prices for material and labor.

(5) The Commission is of the opinion that, while the reproduction method of valuing property is an important factor in valuations by State regulatory bodies, the Commission as a general rule is unable to follow or adopt the reproduction theory in the strictest sense of its meaning. While it is true that an engineer, in arriving at the present fair value of a public utility property by the method of reproducing the property new as of the date of the valuation, arrives at the present fair value of the property by deducting accrued depreciation, yet this theory cannot be followed to the extent that prices of material and the cost of labor should be taken as of the date of the valuation, but, in all fairness, should be averaged for a period of years—the reason for this conclusion being quite apparent.

The Commission's Engineer finds that the present fair value of the properties of The Cripple Creek Water Company in use and useful is $233,795.00.

ORIGINAL COST.

(6) Pursuant to an order of the Commission, The Cripple Creek Water Company produced its books for inspection by the

Commission's Statistician, and from an examination of the report of Mr. Herbert, the Commission has been able to find the original cost of the properties of The Cripple Creek Water Company. It certainly is true that actual and reproduction cost may well be taken as checks upon each other. This Commission is aware that, in a large majority of the cases presented to it, actual or original cost cannot be ascertained with any degree of certainty. The reasons for this conclusion are so evident as to need no elaboration. By original cost, in the case of physical properties, is meant the actual cost new of properties in use, while in arriving at the reproduction cost the Commission endeavors to ascertain the present day cost of replacing existing property, in both cases, depreciation, or the estimated decline in units of service from wear, obsolescence, inadequacy or any other causes, is equally to be considered and estimates necessarily must be used in both lines of investigation. In this case the Commission has been able to ascertain the actual cost of the properties of the Water Company, this being shown in its books and other records.

(7) In the cases heretofore presented to this Commission it has been impossible to ascertain the true original cost to date, or the cost of the existing property, as few accounts would bear the test of a careful examination for the purpose of arriving at original cost. Frequently there has been confusion between the cost of renewals and repairs and maintenance, and usually many of the older records were out of existence. This case presents one of the rare instances in which the Commission has been able to ascertain the actual cost of the properties of the utility in use and useful. In this case it has been possible to ascertain clearly the detailed cost of these properties, and by applying the rule that where original cost may be obtained accurately the question of whether or not the investment was made honestly, wisely and prudently must be considered also, the Commission has arrived at the conclusion that the important test in this case is the original cost to date of the properties of The Cripple Creek Water Company, provided the same was honestly, wisely and prudently made, and that the valuations made by the engineers of the Water Company and the Commission should receive small consideration at its hands.

(8) From an examination of the report of the Commission's Statistician, and from the undisputed evidence in the record, as well as from the admissions in the brief of counsel for The Cripple Creek Water Company, it is found that the original cost new to date of the properties of the Water Company is $197,768.99; provided, that the Commission should add to this amount the sum of $4,700.00 to include the salaries of H. F. Smith, Henry Diedrich and S. V. Saleno for services during the construction of the system. At the time of the construction of the properties of The Cripple Creek Water Company these men were employed by The

Michigan Pipe Company, and were sent to Colorado by that company to supervise the construction of the work in this State. To this amount should be added also certain overhead charges not included in the books of the company. Thereupon, by adopting the method of depreciation, as used by the Commission's engineer, by making allowance for working capital, in accordance with the methods heretofore adopted by this Commission, and by considering the properties of The Cripple Creek Water Company as a going concern, the Commission arrives at the present fair values of the properties of The Cripple Creek Water Company.

WATER RIGHTS.

It appears from the evidence in this case that Henry B. Smith, on the 13th day of February, 1893, purchased Priorities No. 7, 67, 151 and 298, Water District No. 12, in Fremont County, Colorado, totalling 1.33 cubic feet of water per second of time, from the Fremont Ditch, Pipe Line and Water Company, and subsequently conveyed the same to The Cripple Creek Water Company. These appear to be the only water rights owned by The Cripple Creek Water Company up until the year 1901, although the Company was delivering water to the municipality of Cripple Creek and its citizens for a period of eight years prior to this date.

Subsequently the Water Company purchased four separate priorities to the use of water taken from Beaver Creek, totalling 5.89 cubic feet per second of time. The amount paid for these rights, as shown by the record, was $28,000.00.

(9) Although no evidence was introduced as to the necessity for acquiring the additional water rights in the year 1901, it is fairly inferable from the record that these purchases were dictated by the then existing demands upon the Company and the reasonable anticipated demands of the future, and upon this basis it may be assumed, in the absence of definite contravening testimony, that the investment in question was not unwisely made.

(10) Some opinion evidence was presented with respect to the so-called "market value" of these water rights by reference to values which the rights might possess if it were possible to transfer diversion points thereof and supply a distant community with this water supply, but it is the opinion of this Commission that the evidence in that respect is not sufficiently definite in character to warrant fixing the said value at other than the actual cost of such supply.

Upon the presumption that the purchase was not unwisely made the Commission reaches the common sense inference that the actual value was the amount of the purchase price in this case.

(11) The Commission has given careful consideration to the question of whether the basic title to the water rights in question is vested in the company, or in the consumers of water, as a body, supplied by the Company's system. On the one hand it is argued; on the authority of *Farmers' High Line Canal & Reservoir Co. v. Southworth,* 13 Colo., 111, and *Wheeler v. Northern Colorado Irrigation Co.,* 10 Colo., 582; that the basic right is in the water consumer, not in the carrier, and that the carrier's relationship to the consumer is that of agent, and permitting the consumer's appropriation to become vested in him. On the other hand; upon the basis of the decision in the *San Joaquin & Kings River Canal & Irrigation Co. v. County of Stanidavs,* 233 U. S., 454, and analogous cases; it is urged that the title is vested in the company and that the consumer bears the relationship to the carrier of mere licensee, and that this evidently is the situation, where, as in the pending case, the water right in question was bought outright from the original appropriator by the carrier company.

The Commission finds it unnecessary to determine this interesting and important question. Should the first stated view be determined to be correct, it obviously is true that before the carrier company in the present case was in position to perform its agency duties it was necessary for it to expend money in the acquirement of rights already vested to the use of the waters of Beaver Creek, and, in the absence of a definite showing that the quantity acquired was excessive in amount or in price paid, it must be assumed, in arriving at the fair valuation of the Company's property, that the Company is entitled to include therein the purchase price of the water rights acquired. Under the second view—that an unlimited fee title to the water right acquired is vested in the company—it is clearly the duty of the Company to present definite evidence with respect to the market value of such rights. This it has not done.

(12) It was urged in the hearing that the quantity of water purchased by the company was excessive in amount for the asserted reason that the pipe lines owned by the company, and which afforded the one means of transporting the water in question to the city, have a combined carrying capacity of 2.5 cubic feet per second of time, and that therefore no reason existed for the company acquiring 7.22 cubic feet of water per second.

With respect to this contention, no definite testimony was adduced as to the seasonal low conditions of Beaver Creek, nor with respect to the rights of prior appropriators, if any, on Beaver Creek. That is to say, there is no evidence presented as to whether or not these 7.22 cubic feet of decreed water is available at all seasons of the year. Under these circumstances, the Commission feels that it must assume that there was a reasonable necessity for the company to acquire an amount of water in ex-

cess of the discharge capacity of the company's pipe lines. This assumption is applicable particularly in view of the fact that the Company owns two certain reservoirs, which apparently are used exclusively for the temporary impounding of the water to which the company, or the consumers, are entitled by virtue of the direct appropriation rights.

The testimony in this case, therefore, leads reasonably to the conclusion that said reservoirs were acquired for the purpose of more efficient utilization of the direct diversion rights purchased by the Company, to the end that the water supply obtained might be equalized and rendered certain throughout the year.

(13) In addition to the construction cost of said reservoirs, the company, if its contention is understood, has laid claim to their capacity value, apparently upon the theory that if said reservoirs were not used for the purpose of temporarily impounding and more efficiently using the irrigation rights acquired, they could be used for the purpose of catching the flood and unappropriated waters of Beaver Creek during the storage season.

In the absence of any showing as to the existence of any unappropriated flood waters of Beaver Creek, the Commission cannot allow this claim, nor does the Commission feel that a theoretical availability in use of these reservoirs for a different purpose than that for which they are now utilized is properly for the consideration of the Commission in determining this case.

It is conceded that these reservoirs are valuable adjuncts in the utilization of the direct flow rights acquired, but the Commission considers that the Company, in being allowed the full value of such rights and the expense of construction for such reservoirs, has received all it is legally entitled to receive with respect to its water rights.

PIPE LINES.

In the year 1901 The Cripple Creek Water Company purchased a quantity of used pipe line material and constructed a 9-inch pipe line running parallel to the then existing 8-inch pipe line from its mountain reservoirs to a reservoir known as the "City Reservoir," located at Cripple Creek, which is of sufficient capacity to provide adequate fire protection and continuity of service.

(14) The record has been searched in vain to find a reason for the construction of this additional pipe line. In 1901 the City of Cripple Creek was not growing; in fact, the population had begun to diminish. The Commissioner's Engineer testified that 1,790,000 gallons of water can be delivered daily to the city of Cripple Creek by the use of the two wooden pipe lines now constructed, and that the daily consumption at Cripple Creek today is 650,000 gallons of water, therefore, the Commission is impelled

to the conclusion that the investment made by the Company for the additional pipe line in the year 1901 was not wisely and prudently made, and that the same cannot be considered by this Commission, in a rate-making case, as property in use and useful today.

(15) Hence the Commission has deducted from the present value of the properties of The Cripple Creek Water Company the present value of the additional pipe line, and finds the present fair value of the properties of The Cripple Creek Water Company in use and useful to be $150,000.00, for rate-making purposes.

OPERATING EXPENSES AND REVENUES.

It appears from one of the exhibits introduced into the evidence by the Commission's statistician that the Water Company has earned in excess of $350,000.00 in fourteen years' operation, exclusive of the aggregate operating expenses and the depreciation reserve of $14,000.00 laid aside by the Company in the years 1913 and 1914. It likewise appears from the report of the Commission's Statistician that the Company has current assets of $62,803.94. No difficulty was experienced in ascertaining the fact that a large part of the Company's investment was made from earnings and that this company has been one of the most prosperous and best paying public utilities doing business within this State.

The operating expenses of The Cripple Creek Water Company, exclusive of depreciation, taxes, and Bay City management, for the year 1914, were $6,129.96. The taxes paid by this Company in the year 1914 upon its properties (a part of same not being in use and useful in the furnishing of water to the citizens and municipality of Cripple Creek) were $6,764.10. Allowing $1,000.00 for the management of the Company at Bay City, Michigan, and an annual depreciation reserve of $2,500.00, the total operating expenses of the Company are found to be $16,394.06. It is true that the Water Company set aside on its books for the years 1913 and 1914, respectively, a depreciation reserve of $7,546.88 and $7,243.71, plus the sum of $3,000.00 as an annual operating expense for management and to cover the salary of a clerk at Bay City, Michigan.

(16) The Commission is of the opinion that $2,500.00 is the proper amount to be set aside annually for The Cripple Creek Water Company as a depreciation reserve.

(17) And that an annual charge of $1,000.00 is liberal for general management and the keeping of the books of the company, which hereafter shall be kept at the City of Cripple Creek and reports made therefrom to the Commission in accordance with its rules and regulations.

(18) It appears from the records of the Company that for the years 1912, 1913 and 1914 the revenues of the Water Company, exclusive of hydrant rental, were $72,339.97, or an average of $24,113.32 annually. The books of the Company have been kept in so negligent a manner as to give the Commission no better basis upon which to arrive at the annual revenues, exclusive of hydrant rentals. The municipality of Cripple Creek has paid to the Company an annual hydrant rental of $8,600.00, or an average of about $61.50 per hydrant, there having been 140 fire hydrants in use. The municipality, through its city council, has discontinued the use of forty of these hydrants, and the Commission must therefore attempt to estimate the fire hydrant revenues of the Water Company for the future. Assuming that the City of Cripple Creek will use not less than 100 fire hydrants for fire purposes and street sprinkling, and assuming the annual rental of each fire hydrant to be $52.50, the annual fire hydrant rental revenue should be $5,250.00, making the total annual revenues of the Company $29,363.32. It is true that the Water Company will lose some saloon revenue, due to the State Prohibition law, effective January 1, 1916, but it may be fair to assume that other business ventures will take the place of the saloons in the City of Cripple Creek, as elsewhere.

(19) Also this Commission has no recourse but to state the fact that the employes of the Water Company have been negligent in the collection of revenues, and that it is unable to understand, or to condone, the lax business methods of this Company, as the Commission has many times stated that it cannot and will not tolerate wasteful management of public utilities within the State of Colorado, when called upon to adjust and fix fair rates for adequate service.

SERVICE CONNECTIONS.

(20) It is the practice of this Company to compel the consumer to lay and pay for the service pipe from the Company's main to the curb of the consumer's property. The Commission cannot concede the justice of this rule and finds it to be unreasonable and illegal. The utility, and not the consumer, has the right to occupy the streets and all pipes laid in the streets should be the property of the utility and the expense of placing them should be borne by the utility, as it is the business of the Water Company to deliver its product to the premises of the consumer. It is and shall be the opinion and position of this Commission that no water utility in the State of Colorado shall require, by its rules and regulations or otherwise, any water consumer to lay and pay for a service connection from the Company's main to the consumer's premises. It is as much the duty of the Water Company to supply a service connection to the property line as it is the duty of the Company to supply a meter to the consumer when the service is metered.

The consumer has no right to dig up the streets and lay service pipes, this right belonging to the Water Company alone; the justice of this being shown in the fact that, after being laid, the pipes are under the complete control of the Water Company. The position of the Commission in this instance is sustained by the following authorities:

City of Glendale v. Title Guar. & T. Co., 2 Calif. R. C., 989.

City of Janesville v. Janesville Water Co., 7 Wis. R. C. R., 628.

In re Practice of Water, etc., Utilities Requiring Deposits, 7 Calif. R. C. 830; P. U. R., 1915 E., 741.

Hatch v. Consumers Co., 17 Ida., 204; 40 L. R. A. (N. S.), 263; 104 Pac., 670.

Consumers Co. v. Hatch, 224 U. S., 148 (56 L. Ed., 703).

(21) The Commission further finds that the rates and charges and the rule pertaining to service connections of The Cripple Creek Water Company are unreasonable.

ORDER.

It Is Therefore Ordered, That The Cripple Creek Water Company shall, within thirty (30) days from the date of this order, file with this Commission a schedule of reasonable rates and charges, which schedule shall reduce not less than ten (10) per centum each and every rate and charge said The Cripple Creek Water Company now has or makes; said schedule to be subject to the approval of this Commission and to become effective for the service rendered during the month of April, 1916, and to remain in effect thereafter.

It Is Further Ordered, That The Cripple Creek Water Company shall charge the municipality of Cripple Creek for fire hydrant rental, which shall include the use of the fire hydrants for street sprinkling purposes and flushing of sewers and gutters, not to exceed $52.50 per hydrant per annum with a minimum use of one hundred (100) fire hydrants by the municipality of Cripple Creek, and an annual charge of $45.00 per hydrant in excess of 100 hydrants used by the City; said hydrant rates to become effective for the service rendered during the month of March, 1916, and to remain in effect thereafter.

It Is Further Ordered, That, the rule of The Cripple Creek Water Company requiring the consumer to lay and pay for a service connection from the main of the Water Company to the

property of the consumer having been found to be unreasonable, the following reasonable rule be substituted for this unreasonable rule, viz.:

"The Company, at its own expense, shall install all service connection."

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 25th day of March, 1916.

THE WELLINGTON COMMERCIAL CLUB, ET AL.,

v.

THE COLORADO & SOUTHERN RAILWAY COMPANY.

(Case No. 48.)

Service—Railroads—Less carload freight.

(1) A practice of a railroad company in holding less carload shipments of freight consigned to a small town, at another point for assembly, until such shipments aggregated 5,000 pounds was found unreasonable, and a schedule furnishing the town with three trains a week for the picking up and laying down of less carload freight was found reasonable.

(April 8, 1916.)

COMPLAINT against the service facilities for handling freight at the town of Wellington as furnished by The Colorado & Southern Railway Company; plans for new depot as submitted by the defendant approved by the Commission and less carload freight schedule of not less than three times a week ordered.

APPEARANCES: For the petitioners, Messrs. Lee & Shaw. For the respondent, E. E. Whitted, Esq.; A. S. Brooks, Esq.

By the Commission:

On the 2nd day of February, 1916, the petitioners filed their written petition with the Commission, alleging that the facilities and service of the respondent at the town of Wellington were inadequate for the service of the patrons of the railway company, and that the freight house provided by the respondent at Wellington was unsafe for the storage of freight.

The petitioners also alleged that it was the custom of the respondent to carry freight consigned to persons residing in Wellington and vicinity from Cheyenne, Wyoming, and connecting points, through the said town of Wellington to the city of Fort Collins, and to retain at Fort Collins all freight consigned to Wellington, originating south of Fort Collins and on the Greeley line of the respondent, until the freight received at Fort Collins should amount to 5,000 pounds in weight before delivering same at Wellington, for the consignees thereof.

The petitioners further alleged that this rule of transportation adopted by the respondent was unjust and unreasonable.

The petitioners prayed that a hearing be held upon their petition, to the end that the Commission should order the respondent to establish adequate and sufficient facilities at Wellington, and that the Commission should determine the rule of the respondent with respect to the transmission and delivery of freight consigned to consignees at Wellington to be unjust and unreasonable, and determine the just and reasonable rule with respect to same.

On the 23d day of February, 1916, the respondent filed its written answer with the Commission, and in the answer so filed stated that long prior to the filing of the petition of the petitioners, the respondent had under consideration improvements of the station at Wellington; that the contemplated improvements included the construction of a new depot and the rearrangement of the present tracks at said station; but that, on account of the finances of the respondent and of the financial depression which had existed for some time past, the respondent had been unable to arrange for the improvements until the present year, and that the estimated cost of improvements at said station was contained in the 1916 budget of the respondent; and that the respondent was ready to commence the construction of the said new depot and the rearrangement of the present tracks at once.

The respondent further answered that it was ready to inaugurate a schedule covering the transportation of inbound less-than-carload shipments of freight consigned to the town of Wellington, originating at Fort Collins and south thereof, and that under said schedule the respondent would handle this freight three times each week, leaving Fort Collins on Tuesday, Thursday and Saturday; and the respondent further answered that it was ready to inaugurate a schedule for outbound less-than-carload shipments of freight originating at the station of Wellington, so that such less-than-carload shipments of freight would be transported from the station of Wellington on Wednesday of each week.

The respondent then closed its answer with a prayer that the Commission should approve the matters and things set forth in said answer, and that the petition of the petitioners should be dismissed.

The respondent filed with the Commission, as a part of its answer, extensive plans representing the contemplated improvements referred to in its answer.

A copy of the answer of the respondent was filed with the attorneys for the Wellington Commercial Club, et al., and on March 24th, 1916, the Commission received a written communication from Lee & Shaw, the attorneys for the petitioners, setting forth that the answer of the respondent company, together with the plans and specifications submitted by it for the depot at

Wellington, was satisfactory to the petitioners, and suggesting that the Commission enter an order dismissing the above cause, with the proviso that the respondent company carry out the terms of its agreement, expressed in its answer, within a reasonable time to be fixed by the Commission.

On the 24th day of February, 1916, the Commission received a written communication from D. S. Hooker, the Commission's Civil Engineer, stating that he had examined the plans for the proposed passenger and freight depot at Wellington on the lines of the respondent company, and further stating that, if the depot building was constructed in accordance with the plans as submitted, the depot facilities would be entirely suitable for both passenger and freight traffic obtaining at the present time, with due allowance for growth in the future.

ORDER.

IT IS THEREFORE ORDERED, That The Colorado & Southern Railway Company construct a passenger and freight depot and rearrange the present tracks at Wellington, Larimer County, Colorado, in accordance with the plans as filed with the Commission, within a reasonable time, to-wit, the 1st day of July, 1916.

IT IS FURTHER ORDERED, That the rule of the respondent, as set forth in the petition of the petitioners, with respect to the transmission and delivery of freight consigned to consignees in the town of Wellington and its vicinity, is declared unjust and unreasonable; and that the proposed schedule covering the transportation of inbound less-than-carload shipments of freight and outbound less-than-carload shipments of freight, as set forth in the answer of the respondent, is declared to be reasonable; and the respondent is ordered to comply with the said proposed schedules as set forth in its answer.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 8th day of April, 1916.

In Re: TELEPHONE EXCHANGES AT PIERCE AND AULT.

(Case No. 50.)

Service—Telephones—Exchanges.

(1) In an investigation to determine the proper location of a district telephone exchange serving two towns, the Commission held that any conclusion as to same would be inadvisable, inasmuch as a general investigation of telephone matters by the Commission was in progress which would include the determination of the above.

April 8, 1916.

INVESTIGATION on motion of the Commission as to the proper site for location of a district telephone exchange serving the towns of Ault and Pierce; complaint dismissed.

APPEARANCES: John F. Duncan and Others, petitioning for consolidation of the two exchanges of The Mountain States Telephone and Telegraph Company at Pierce and Ault; G. S. Hubert and Others, petitioning against consolidation of the two exchanges of The Mountain States Telephone and Telegraph Company at Pierce and Ault; Milton Smith, Esq., for The Mountain States Telephone and Telegraph Company.

By the Commission:

On the 6th day of March, 1916, written petitions were filed with the Commission, signed by persons residing within the boundaries of what is called "The Pierce, Colorado, telephone district of The Mountain States Telephone and Telegraph Company," the said petitioners not having telephone service at the time of filing said petitions, requesting this Commission to order The Mountain States Telephone and Telegraph Company to remove its telephone exchange now located at Pierce, Colorado, to Ault, Colorado, thereby consolidating the Pierce and Ault telephone exchanges.

It was set forth in the petitions of the petitioners that, in the event the Commission should make the order prayed for, these signers would at once become subscribers for telephone service. These petitions were also signed by persons residing within the town of Ault, who, at the time of the filing of the petitions, were subscribers for telephone service and who desired

the consolidation of the above named exchanges of The Mountain States Telephone and Telegraph Company.

On the 8th day of March, 1916, the Commission received a written petition signed by the Pierce Commercial Club, objecting to the removal of the telephone exchange at Pierce, Colorado, to Ault, Colorado, and requesting the Commission to investigate fully the needs of the communities affected and the merits of the petitions filed with the Commission by citizens of Ault, Colorado, and farmers residing in the "Pierce Telephone District."

On the 8th day of March, 1916, the Commission decided to investigate, on its own motion, into the feasibility and necessity of removing the telephone exchange of The Mountain States Telephone and Telegraph Company from Pierce, Colorado, to Ault, Colorado, thereby effecting a consolidation of the two exchanges of The Mountain States Telephone and Telegraph Company, said investigation to cover all issues pertaining to the removal of said Pierce exchange; and gave notice to parties interested that the investigation would be heard at the Hearing Room of the Commission, in the Capitol Building, in the City and County of Denver, State of Colorado, at the hour of 10 o'clock a. m., on the 22nd day of March, 1916.

The hearing of the above cause convened at the Hearing Room of the Commission in the City and County of Denver, on the 22nd day of March, 1916, at the hour of 10 o'clock a. m., at which time the Commission heard many witnesses, who testified in support of the consolidation of the telephone exchanges and against the consolidation of the telephone exchanges. A written petition, signed by subscribers of The Mountain States Telephone and Telegraph Company of Pierce and vicinity, and by business men and citizens of Pierce who were not telephone subscribers, and requesting the Commission to deny the application in support of the consolidation of the Pierce and Ault telephone exchanges, also was presented. This petition, objecting to the consolidation of the telephone exchanges, contained names of many signers of the original petitions in support of the consolidation of the telephone exchanges.

From the evidence submitted at the hearing of the above cause, the Commission readily ascertained that the telephone service of The Mountain States Telephone and Telegraph Company at its Pierce exchange was adequate, and that all parties to the hearing were actuated by a sincere desire to improve the existing telephone service and to obtain new subscribers for The Mountain States Telephone and Telegraph Company.

The Mountain States Telephone and Telegraph Company was permitted to intervene in the above cause, and took the position that the Commission should dismiss this action and that the issues herein contained should be decided in the Commission's determination of Case No. 22,

"In the Matter of an Investigation and Hearing, on Motion of the Commission, into the reasonableness of the Rates and Charges of The Mountain States Telephone and Telegraph Company within the State of Colorado, and into the Service of The Mountain States Telephone and Telegraph Company within the State of Colorado, and the Rules, Regulations and Practices affecting the same."

Subsequent to the hearing of this cause, L. G. Gomez, the Commission's telephone expert, addressed a written communication to the Commission, stating that, in his opinion, the above cause is only one of a number of many similar cases now existing in Colorado, in which the question of district service is involved, and that it would not be advisable for the Commission to take any definite stand on the question of district service at present, and that this cause should be dismissed and determined by the Commission's decision in Case No. 22.

It has become apparent to the Commission that a decision in this cause would be inadvisable, inasmuch as the general subject of district service and the rates and charges, and rules, regulations and practices surrounding the same, should be very carefully considered by the Commission before determination. It is the opinion of the Commission that the above cause should be dismissed and the issues contained therein be determined by the Commission in its decision of Case No. 22.

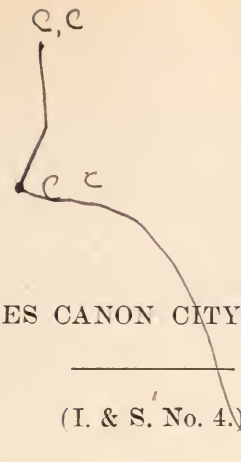
ORDER.

It Is Therefore Ordered, That Case No. 50, "In the Matter of an Investigation and Hearing, on motion of the Commission, into the feasibility and necessity of removing the telephone exchange of The Mountain States Telephone and Telegraph Company at Pierce, Colorado, to Ault, Colorado, thereby effecting a consolidation of the two exchanges of The Mountain States Telephone and Telegraph Company; said investigation to cover all issues pertaining to the removal of said Pierce exchange," be dismissed.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 8th day of April, 1916.



In Re: COAL RATES CANON CITY TO CRIPPLE CREEK.

(I. & S. No. 4.)

Rates—Reasonableness—Railroads—Competition.

(1) When a carrier puts into effect rates applicable via another line, both carriers being operated under one general management and under a combination in which all of the revenues and expenses of both lines are divided without regard to which road produces the revenue or incurs the expense, the Commission finds that such competition is not forced and that there would be no inducement for either road to enter into competition with the other.

Rates—Reasonableness—Railroads—Equalization.

(2) The fact that certain carriers had filed proposed increased rates on lump coal from a coal producing district in order that such rates might be on a parity with the rates from another district was controverted in part by the fact that no attempt was made to make uniform the rates on other classes of coal than lump.

Rates—Reasonableness—Railroads—Burden of Proof.

(3) The burden of proof is upon the carriers to justify increases in rates although such proposed increased rates were published and filed for the purpose of placing one producing district on an equality with another producing district.

(April 22, 1916.)

INVESTIGATION AND SUSPENSION of advance in rates on coal from Canon City to Cripple Creek from $2.50 to $3.00 per ton on lump coal and corresponding increases on other classes; increases found not justified and schedules ordered canceled.

By the Commission:

This investigation involves the reasonableness of the proposed increase of 50 cents per net ton in the rates for transportation of bituminous coal, all classes, from the mines in the Canon City District to points in the Cripple Creek District, as set forth in tariffs filed by the Atchison, Topeka & Santa Fe Railway, the Colorado Midland Railway, and the Denver & Rio Grande Railroad.

The tariffs under investigation in this proceeding were filed by respondents to become effective July 26, 1915, and August 5, 1915, but were suspended by the Commission until September 12, 1915, and subsequently suspended until May 24, 1916, upon the protests of dealers in coal.

The effective rates and the proposed increased rates per net ton from the Canon City mines to Cripple Creek points are as follows:

Route	Effective Rates			Proposed Rates		
	Lump	Nut	Slack	Lump	Nut	Slack
Via D. & R. G. R. R.—						
C. C. & C. S. R. R.	$2.50	$2.40	$2.15	$3.00	$2.90	$2.65
Via A. T. & S. F. Ry.—						
C. C. & C. S. R. R. or A. T. & S. F. Ry.—C. M. Ry.—M. T. Ry.	2.50	2.40	2.15	3.00	2.40	2.15

On August 20, 1915, an informal hearing was held at the office of the Commission, at which all of the Respondents were represented. Following this hearing, the Respondents filed statements setting forth their reasons for the advances.

Many protests have been received from the Canon City District coal dealers, protesting against the advance from Canon City, and many protests against the suspension of the advances have been received from the Walsenburg District coal dealers, who desire that the rates from the two Districts be the same.

From the facts presented, the Commission must arrive at the conclusion that the main reason advanced for the proposed increase is the placing of the Canon City and the Walsenburg Districts on a parity. In fact, one of the Respondents made the statement that it "does not object to the continuance of the current Canon City rate to Cripple Creek, provided the differential that has been maintained for so many years from the other coal mining districts can be maintained."

As the reasonableness of the proposed advances from Canon City to Cripple Creek is the only question here involved, the reasonableness or unreasonableness of the rates from the Walsenburg or other coal districts is not pertinent to this case. The rates from Canon City to Cripple Creek were put into effect originally by The Denver & Rio Grande Railroad and The Florence & Cripple Creek Railroad, and were in effect by that route from 1896, without change, until the abandonment of the latter road on July 21, 1912, due to floods washing out the road bed. In the year 1902 the same rates were published via the Colorado Springs Gateway, in connection with The Denver & Rio Grande Railroad and the Colorado Springs & Cripple Creek District Railway, and subsequently in connection with The Atchison, Topeka & Santa Fe Railway via the Colorado Springs and Divide gateways.

(1) It is claimed by the carriers Respondents hereto that the rates via Colorado Springs and Divide were competitive rates necessary to meet rates via the Florence & Cripple Creek Railroad.

This competition was not forced on the Cripple Creek lines, as they are operated under one management and control. In *Canon City v. F. & C. C. R. Co.,* Colorado P. U. C., First Annual Report, Page 108, the Commission found that, under a combination entered into in 1905, all of the carriers entering Cripple Creek were to be operated under one general management, and that the revenues and expenses of the three roads were to be combined each month without regard to which road produced the revenue or incurred the expense, and the proceeds then divided between the different roads. The evidence in that regard was undisputed. The Commission said:

> "By this agreement, it can readily be seen that there is little inducement for the defendant, The Florence & Cripple Creek Railroad Company proper, to enter into any active competition with the Colorado Springs & Cripple Creek District Railway or the Midland Terminal Railway for the purpose of increasing the earnings of the narrow gauge division."

Nor would there be any inducement for any one of the three roads to enter into competition with the others.

(2) It is evident from the schedules filed that, while the Respondents propose a uniform advance of 50 cents per ton on all classes of coal, when routed via The Denver & Rio Grande Railroad, no attempt is made to increase the rates on nut, pea or slack coal, when routed via The Atchison, Topeka & Santa Fe Railway through the Colorado Springs or Divide gateways. This fact would tend to controvert, in part, the contention of the Respondents with regard to the uniformity desired.

The present rates from the Canon City District to Cripple Creek produce revenues per ton per mile to the carriers as follows:

Route	Distance	Cents per Ton per Mile Lump	Nut	Slack
Via D. & R. G. R. R.—C. C. & C. S. R. R. or A. T. & S. F. Ry.—C. C. & C. S. R. R.	132	1.893	1.818	1.530
Via A. T. & S. F. Ry.—C. M. Ry.—M. T. Ry.	138	1,811	1,739	1,558

Many references from Interstate Commerce Commission cases have been cited by the Respondents in support of the necessity for advances in rates to make rate adjustments, in order to place similarly located producing districts on an equality. In all such cases examined, however, the Interstate Commerce Commission found the advanced rates to be reasonable in and of themselves.

(3) Having due regard for the necessity of placing the Canon City and Walsenburg District rates on a parity and for other pertinent facts presented, it is the conclusion of the Commission, and it therefore finds, that the carriers have not sustained the burden of proof in justification of the increased rates proposed

by the suspended schedules. An order requiring their cancellation will be issued.

ORDER.

IT APPEARING that, by orders dated July 14th and July 22nd, 1915, the Commission entered upon a hearing concerning the propriety of the increases and the lawfulness of the regulations and practices stated in schedules enumerated and described as Supplement 2 to Colorado Midland Railway Tariff No. 1862-C, Colorado P. U. C. No. 14; Items 5 and 15 of Atchison, Topeka & Santa Fe Railway Tariff No. 8571-D, Colorado P. U. C. No. 647; and Item 17 of Denver & Rio Grande Railroad Tariff No. 5316-A, Colorado P. U. C. No. 378; and subsequently ordered that the operation of said schedules be suspended until May 24, 1915, and

IT FURTHER APPEARING that a full investigation of the matters and things involved has been had, and the Commission on the date hereof has made and filed a report containing its findings of fact and conclusions thereon.

IT IS ORDERED, That the carriers Respondents herein be, and they are hereby, notified and required to cancel, on or before May 24, 1916, the rates and charges stated in the schedules enumerated and described above.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 22nd day of April, 1916.

THE GRAND JUNCTION MINING & FUEL COMPANY, ET AL.,

v.

THE COLORADO MIDLAND RAILWAY COMPANY AND GEORGE W. VALLERY, RECEIVER, ET AL.

(Case No. 43.)

Rates—Reasonableness—Railroads—Divisions.

(1) Unless the proportions of through rates received by carriers are so low as to become a burden upon local traffic the Commission will not allow the introduction of testimony in reference to divisions as the public is interested only in the through rates in and of themselves and is not concerned in the matter of the divisions.

Rates—Reasonableness—Railroads—Equalization.

(2) It was the opinion of the Commission that the rates on coal from the Palisade-Cameo district to Cripple Creek were not such as to afford the coal operators an opportunity to compete for business, and that somewhat lower rates were justified and that the carriers would be fully compensated for their services thereby, and therefore found rates of $3.00, $2.90 and $2.65 per ton on lump, nut and slack coal, respectively, to be reasonable.

Rates—Reasonableness—Railroads—Differentials.

(3) The Commission, in prescribing reasonable coal rates from the Palisade-Cameo district to Cripple Creek, ordered that the same differential remain in effect from the South Canon district as existed prior to the effective date of the order.

Rates—Reasonableness—Railroads—Equalization.

(4) The Commission, in prescribing reasonable coal rates from the Palisade-Cameo district to Cripple Creek, took into consideration the necessity of maintaining an harmonious relation between such district rates and the rates from the Canon City and Walsenburg districts, and was of the opinion that the Palisade-Cameo district rates should be 50 cents per ton higher than the Canon City and Walsenburg district rates, although the present Canon City and Walsenburg rates were not on a parity, the Walsenburg rates having never been passed upon by the Commission.

Rates—Reasonableness—Railroads—Divisions.

(5) The Commission will not attempt to establish divisions of through rates prescribed by it, unless the carriers are unable to agree among themselves as to the proper divisions.

(April 22, 1916.)

COMPLAINT against the rates on coal from the Palisade-Cameo district to Cripple Creek; present rates found unreasonable and reasonable rates prescribed for future.

APPEARANCES: For Complainants, Messrs. Whitehead & Vogl, Guy D. Duncan, Esq.; for The Colorado Midland Railway Company and George W. Vallery, Receiver, Henry T. Rogers, Esq., George A. H. Fraser, Esq.; for The Midland Terminal Railway Company and The Cripple Creek & Colorado Springs Railroad Company, F. C. Matthews, Esq., Ralph Hartzell, Esq.

STATEMENT.

By the Commission:

On October 21, 1915, the petitioners herein filed complaint with the Commission, attacking the reasonableness of the joint rates on coal, all classes, from Palisade and Cameo points on the Colorado Midland Railway, to all points on the line of the Midland Terminal Railway from Divide to and including Cripple Creek, all within the State of Colorado, and prayed for an order establishing just and reasonable rates between the aforesaid points.

The Defendants herein made separate answers to the petition, and therein admit that they are charging the rates as alleged in the petition, but deny that said rates are unjust or unreasonable, and pray that the petition be dismissed.

On this issue the cause came on for hearing before the Commission at its hearing room in the Capitol Building, Denver, Colorado, on December 22, 1915.

Palisade and Cameo are coal-producing points located on the main line of The Colorado Midland Railway, Cameo being located four miles east of Palisade; both are classed in the same group and the same rates apply from both points. Shipments from these points to Cripple Creek move over the rails of the Colorado Midland Railway to Divide, and thence over the rails of the Midland Terminal Railway to Cripple Creek. Divide is located 259 miles east of Palisade, and Cripple Creek is located 29 miles south of Divide, making a total haul of 288 miles on such shipments.

As the Commission understands this case, the petition is predicated somewhat on the fact that The Colorado Midland Railway Company, one of the Defendants herein, has established and has in force at the present time a rate of $1.75 per ton on lump coal from Palisade to Colorado Springs, which is the eastern terminus of that road—being 27 miles east of Divide, although

petitioners did not attack the rate up to Divide, but attempted to show by testimony that the proportion of the through rate accruing to the Midland Terminal Railway Company is excessive and results in an unreasonable through rate.

(1) The Commission would not allow Petitioners to introduce testimony to show the divisions of the through rates, taking the view that the public is interested only in the through rates in and of themselves, and is not concerned in the matter of divisions, unless the proportions are so low as to become a burden to local traffic. The Commission has taken this position heretofore and adheres to it in the present case.

The evidence shows that the coal involved in this case comes into direct competition in the Cripple Creek district with coal from the Trinidad and Walsenburg districts, Canon City district, and the Pikeview district, the respective distances being as follows:

Cameo-Palisade District to Cripple Creek	286 miles.
Trinidad District to Cripple Creek	185 miles.
Walsenburg District to Cripple Creek	163 miles.
Canon City District to Cripple Creek	136 miles.
Pikeview District to Cripple Creek	56 miles.

And the following rates apply:

Walsenburg to Cripple Creek,

Lump, egg, or mine run	$3.00
Nut	2.90
Slack	2.65

Trinidad to Cripple Creek,

Lump, egg, or mine run	$3.25
Nut	3.15
Slack	2.90

Canon City to Cripple Creek,

Lump, egg, or mine run	$2.50
Nut	2.40
Slack	2.15

Palisade to Cripple Creek,

Lump, egg, or mine run	$3.50
Nut	3.40
Slack	3.15

Pikeview to Cripple Creek,

Lump, egg, or mine run	$1.75
Nut	1.65
Slack	1.40

These rates on lump coal produce the following rates per ton per mile:

	Cents.
Palisade to Cripple Creek	1.22
Trinidad to Cripple Creek	1.77
Walsenburg to Cripple Creek	1.84
Canon City to Cripple Creek	1.83
Pikeview to Cripple Creek	3.12

(2) The Commission feels, as stated in Case No. 10 *In re Eastern Colorado Coal Rates,* 1 Colo. P. U. C., 48 (56), "That wherever possible the coal-mining districts of this State should be placed on an equality, and given the fullest opportunity to compete with each other." It is apparent that the existing rates do not afford the operators at Palisade and Cameo an equal opportunity to compete for business in the Cripple Creek district and the Commission feels that a somewhat lower rate is justified and would fully compensate the carriers for the service performed.

The Commission finds that a fair rate on coal from the Palisade and Cameo districts to all points on the Midland Terminal Railway, from Divide to Cripple Creek, inclusive, via the Colorado Midland and Midland Terminal lines, would be $3.00 per ton on lump, $2.90 per ton on nut, and $2.65 per ton on slack coal, carloads, and further finds that any rate in excess of these amounts is unjust and unreasonable.

(3) It is to be further understood that the same differential as now applies between the Cameo-Palisade group of mines and the South Canon group is to be maintained in future.

(4) In arriving at these figures the Commission is not unmindful of the fact that the railroads of this state have used the coal rates applying from Walsenburg as a basis in computing rates on coal from other producing points, using a fixed arbitrary, either above or below the rates applying from that point. Generally speaking, the rates on coal from the Canon City and Walsenburg Districts are on an equality, and it might be here noted that the Commission has this day found a rate of $2 50 per ton on lump coal to be reasonable from the Canon City district to Cripple Creek, and permanently suspended tariffs of certain carriers wherein an attempt was made to increase the rate from $2.50 to $3.00 per ton. While the rates from the Walsenburg District to Cripple Creek were not involved in that case, nor are they before the Commission for consideration at this time, the Commission has considered the necessity of maintaining an harmonious relation between the rates from these groups and feels that the rates on coal from the Palisade-Cameo District to Cripple Creek should be 50 cents per ton higher than the rates from the Canon City and Walsenburg Districts.

(5) The Commission will not attempt at this time to make divisions of the rates, but will leave that matter to the carriers to adjust. In case they fail to agree, the Commission, on petition of any interested party, will fix the divisions by supplemental order.

ORDER.

It Is Ordered, That The Colorado Midland Railway Company, George W. Vallery, Receiver, and The Midland Terminal Railway Company, be, and they are hereby, ordered to cease and desist from charging, demanding, collecting or receiving their present rates for the transportation of lump, nut and slack coal, carloads, from Palisade, Colorado, and points taking Palisade rates, to all points on the Midland Terminal Railway from Divide, Colorado, to Cripple Creek, Colorado, inclusive.

It Is Further Ordered, That the Colorado Midland Railway Company, George W. Vallery, Receiver, and The Midland Terminal Railway Company, be, and they are hereby, ordered to publish and put in force joint rates not exceeding $3.00 per net ton on lump coal, $2.90 per net ton on nut coal, and $2.65 per net ton on slack coal, carloads, from Palisade, Colorado, and points taking Palisade rates, to all points on The Midland Terminal Railway from Divide, Colorado, to Cripple Creek, Colorado, inclusive.

It Is Further Ordered, That the Defendants herein shall publish and make effective the rates as herein set forth by this order on or before May 15, 1916.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 22nd day of April, 1916.

CITIZENS OF MOSCA

v.

THE DENVER & RIO GRANDE RAILROAD COMPANY.

(Case No. 53.)

COMPLAINT against the Denver & Rio Grande Railroad petitioning for the establishment of a stock yard and pen, and for a representative of the company to sell tickets and transact its business generally, at Mosca; satisfied.

(April 24, 1916.)

STATEMENT AND ORDER.

By the Commission:

On the 27th day of March, 1916, the Commission received a written petition signed by citizens located in the trade center of Mosca, Colorado, who requested the establishment of a permanent depot agent at Mosca for the purpose of facilitating the transportation of freight and express at that station. On the 7th day of April, 1916, the Defendant corporation, The Denver & Rio Grande Railroad Company, filed with the Commission its answer and offer to satisfy, in which answer tabulations of receipts from freight received from and forwarded to Mosca through the stations of Alamosa and Hooper by months during the calendar year 1915 were set forth, as well as tabulations showing the revenue derived from freight received from and forwarded to Mosca through other stations during the last ten fiscal years. The Defendant company also alleges in its answer that the maintenance of a station at Mosca would be at a loss to the Company, and that the maintenance must be at the expense of the revenues at other stations, which are already contributing their proper quota toward maintenance and operation. The answer also sets forth that there is a station building at Mosca, which has been abandoned due to the fact that the expense of maintenance of an agent and facilities at said station consumed from fifty to seventy-five per cent of the revenues of said station.

The defendant company also answers that the Superintendent of its Third Division, on which Mosca is located, has investigated the above cause, and reports that the principal grievance of the persons residing in the community of Mosca is that they have no facilities for handling livestock shipments to and from that point. The Defendant company then alleges that it is willing to install a yard and pen sufficient for the handling of such shipments, and will also install a platform for the loading and unloading of hogs from wagons.

The Defendant company also states that it is willing to make arrangements with the proprietor of one of the merchandising establishments at Mosca, or with the postmaster, to handle express matter for the Company and residents in the vicinity.

On the 11th day of April, 1916, the Commission received a written report from its Inspector, Mr. E. S. Johnson, stating that he had visited Mosca on the 10th day of April, 1916, for the purpose of investigating the matters set forth in the complaint filed by the citizens of Mosca relative to shipping facilities and station agent. Mr. Johnson states that he attended a conference at which thirty of the representative citizens of Mosca and vicinity were present, and that the principal complaints of the petitioners are that outbound shipments are received by the train conductor and billed at the nearest open station, and that trains often pass through Mosca in the night, which necessitates a shipper's presence for the purpose of receiving a receipt for outbound shipments and in order to protect inbound shipments from exposure. At this conference a resolution was adopted requesting this Commission to order the Defendant railroad company to install a yard and pen sufficient to care for live stock shipments, and to erect a platform for the loading and unloading of hogs; to employ a local agent or caretaker to sell tickets, sign freight receipts, handle express matter, attend to telephone inquiries regarding late trains and shipments; and otherwise attend to the Railroad company's interests.

The Commission's Inspector, in his report to the Commission, states that the town of Mosca and vicinity is fast recovering from a recent depression, and recommends that the Commission issue an order granting the relief sought.

A copy of the report of the Commission's Inspector was filed with the Defendant company, and the Commission is in receipt of a communication from it offering to comply with the resolution as adopted by the citizens of Mosca and vicinity.

ORDER.

It Is Therefore Ordered, That the Defendant, The Denver & Rio Grande Railroad Company, install at a station on its line

of railroad known as Mosca, a yard and pen sufficient to care for local livestock shipments; erect a platform for the loading and unloading of hogs; arrange with some merchant or business man of Mosca, at the expense of the Defendant company, sign freight receipts, handle express matter, and answer telephone inquiries regarding late trains and shipments.

It Is Further Ordered, That the above order of the Commission be complied with by the Defendant railroad, The Denver & Rio Grande Railroad Company, within a reasonable time.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 24th day of April, 1916.

TOWN OF ARVADA

v.

THE ARVADA ELECTRIC COMPANY.

(Case No. 42.)

Expenses—Purchased Power—Reasonableness of Rates for.

(1) In a valuation of an electric utility for rate-making purposes it appeared that a charge of 2½ cents per k. w. h. plus a fixed charge of $25 00 per month for energy purchased to be distributed for lighting purposes. and 2 cents per k. w. h. for energy for power purposes, was not unduly high.

Return—Electric—Depreciation—Reasonableness of Rates.

(2) In a valuation of the Arvada Electric Company's properties for rate-making purposes the Commission found that, with the assumption that the sum of $1.050 charged to bond interest for the year 1914 should not be deducted from the total earnings of the company, and that the Commission should permit the company to set aside a conservative amount as an annual depreciation reserve, the company was not earning a fair return upon its properties, and the Commission, from the evidence presented, was unable to order a reduction in the company's rates and charges.

Service—Electric—Adequacy.

(3) In a valuation of the Arvada Electric Company's properties for rate-making purposes the Commission was of the opinion that the service of the company was entirely adequate inasmuch as there was no evidence presented to the contrary.

Rates—Reasonableness of—Electric—Increase—Burden to Public.

(4) The Commission, in a valuation of the Arvada Electric Company's properties for rate-making purposes, would not allow the company to increase its rates and charges, although it was found that the company was not earning a fair return upon its properties, for the reason that any increase in rates and charges would result in reduced revenue to the company, and would therefore require the consumer to pay more than the service was really worth.

(April 27, 1916.)

COMPLAINT against the rates, practices and service of The Arvada Electric Company; rates found not unreasonable and service found adequate; complaint dismissed.

APPEARANCES: George Campbell, Esq., Town Attorney, Arvada; W. C. Sterne, Esq., for The Arvada Electric Company.

STATEMENT AND ORDER.

By the Commission:

On the 15th day of October, 1915, the Petitioner filed with the Commission, through its Town Attorney, a resolution adopted by the Board of Trustees of the town of Arvada on the 11th day of October, 1915, authorizing the Town Attorney to prepare and present to the Public Utilities Commission of the State of Colorado a petition requesting the Commission to investigate the rates, practices and service of The Arvada Electric Company. It is alleged by the Town Attorney in his petition that the rates of the Respondent corporation are unreasonable, unfair and discriminatory.

On the 2nd day of November, 1915, the Respondent electric company, by its General Manager, W. C. Sterne, filed with the Commission its answer to the petition of the Town of Arvada, denying that its rates and charges are unreasonable, and alleging that its service is adequate, and that its rates and charges should be increased.

The above case was heard on the 10th day of January, 1916, at the hearing room of the Commission, at which time and place Fred J. Rankin, Electrical Engineer for the Commission, introduced as evidence a written report showing his opinion of the cost to reproduce new the properties of The Arvada Electric Company and the present fair value of said properties, together with a statement of overhead charges properly included in construction cost. Following is a summary of the valuation of the Commission's Electrical Engineer and his statement of construction overheads:

Summary of Valuation—The Arvada Electric Company.

Items	Cost of Reproduction	Present Value
Buildings	$ 1,500.00	$ 1,275.00
Station Equipment	5,282.00	4,469.00
Transmission and Distribution	20,658.00	17,733.00
Total	$27,440.00	$23,477.00
Add Overhead 11%	3,018.00	2,582.00
Land	1,500.00	1,500.00
General Equipment	2,258.00	2,105.00
	$34,216.00	$29,664.00
Interest During Construction Period, 2%	684.00	593.00
Working Capital	1,000.00	1,000.00
Total	$35,900.00	$31,257.00
Cost of Developing Business, 10%	3,590.00	3,126.00
Grand Total	$39,490.00	$34,383.00

Statement of Construction Overheads.

Engineering and Superintendence	5%
Legal and Organization	2
Insurance During Construction	1
Contingencies and Omissions	3
Total	11%

Applicable to items of construction only. Interest during construction, 2%, applicable to all property.

Mr. Rankin added to the physical properties of The Arvada Electric Company ten (10) per cent to cover the cost of developing the business and its "going value." It therefore appears from the evidence that it is the opinion of the Commission's Engineer that $39,490.00 is the cost of reproducing new the properties of The Arvada Electric Company, both tangible and intangible, and that the present fair value of its properties for rate-making purposes is $34,383.00.

The Commission's Chief Statistician, Fred W. Herbert, filed his written report with the Commission, and the same was introduced into the evidence in the above cause, showing that the revenues of the Respondent corporation for the year 1914 were $7,439.26, and that the operating expenses of the Defendant company, as determined from an examination of its books, was $6,247.95, and that the profit of the said Respondent company from its sales of merchandise was $346.90, making a grand total of $1,538.21 as the total net earnings of the Respondent corporation for the year 1914.

From an examination of the books of the Respondent corporation it is apparent that the Respondent company has charged against the total earnings account $1,050.00 for bond interest.

(1) It appears from the evidence that the Respondent corporation purchases electric energy for lighting purposes from The Denver Gas & Electric Company on the basis of 2½ cents per kilowatt hour delivered to the sub-station of the Respondent corporation, plus a fixed charge of $25.00 per month, and 2 cents per kilowatt hour flat for electric energy for power. It is apparent to the Commission from the amount of electrical energy furnished by The Denver Gas & Electric Company to The Arvada Electric Company that this charge is not unduly high.

The Company seems to be operating at a minimum expense, there being no extraordinary expense items and no exorbitant salaries paid for management or clerk hire.

(2) Assuming, but not deciding, that the sum of $1,050.00 charged to bond interest for the year 1914 should not be deducted from the total earnings of the Respondent corporation in this case, and assuming that the Commission should permit the said

Respondent corporation to set aside a conservative amount as an annual depreciation reserve, it becomes apparent that The Arvada Electric Company is not earning a fair return upon its properties in the Town of Arvada, and it is beyond the power of this Commission to order a reduction in the rates and charges of the Respondent corporation on the basis of the evidence introduced at the hearing of the above cause.

(3) No evidence was introduced at the hearing of the above cause as to the inadequacy of the service, and the Commission is of the opinion that the service of the Respondent corporation is adequate.

(4) While it is true that The Arvada Electric Company is not at this time earning a fair return upon the present fair value of its properties in Arvada, the Commission will refuse to permit an increase in its rates and charges for the reason that any increase in rates and charges ordered by the Commission would result in reduced revenue to the Company, and would therefore require the consumer to pay more than the service is actually worth.

It Is Therefore Ordered, That the complaint of the petitioner be dismissed, and that the present schedule of rates and charges, and the rules, regulations and practices surrounding the same, as now on file with this Commission, shall remain in force and effect until the further order of the Commission.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 27th day of April, 1916.

CITIZENS OF LA JUNTA

v.

THE ARKANSAS VALLEY RAILWAY, LIGHT & POWER COMPANY, CITY OF LA JUNTA, INTERVENOR.

(Case No. 38.)

Evidence—Relevancy—Valuation.

(1) The Commission, in a case involving the reasonableness of the rates of an electric utility within a certain municipality, refused to admit any evidence pertaining to the value and cost of service of a municipally owned and operated electric plant, and would not take any action in regard to estimating the cost of such proposed plant, as such matters were irrelevant to the proceeding before it.

Apportionment—Expenses—Sub-station electric energy.

(2) In a valuation of the properties of an electric utility within a certain city for rate-making purposes, the Commission's engineer valued the city properties separately from the system of the utility and treated the city properties as an individual operating company purchasing current delivered at its sub-station by a transmission company, and found a rate of 2.4 cents per kilowatt hour (which figure was variable and subject to decrease as the company's business developed and the consumption of energy increased) to be the amount at which the company could afford to deliver energy to sub-stations located in the "Valley Division," by taking into account and apportioning on an equitable basis the company's investment in its generating plant, the transmission line, step-down transformer sub-station, and the cost of generation at the generating plant.

Apportionment—Expenses—Sub-station electric energy.

(3) In determining the cost per kilowatt hour of energy furnished a sub-station by the generating company the Commission was of the opinion that the exclusion, by the Commission's Engineer in his appraisal of the properties of the company located within a certain city, of the value of arc lighting transformers, motor-generating sets, and rotary converters used in connection with the street railway system of the company, was justified, inasmuch as such properties were simply energy-transforming devices used in the utilization of electrical energy by the different departments of the company, formed no part of the generating plant equipment, and were not used in any way in connection with the supplying of energy to the company's Valley Division sub-stations.

Valuation—Electric—Working capital.

(4) In the valuation of the properties of an electric utility located within a certain city for rate-making purposes, upon which the present fair

value was found to be $80,000, the Commission, by averaging the value of the stores and supplies over a period of one year, amounting to $1,500, and by taking one-twelfth of the total billing of the station for the previous fiscal year, which amounted to $3,500, found the proper amount to be allowed as working capital to be $5,000.

Valuation—Electric—Fair value.

(5) The Commission, in a valuation for rate-making purposes, after considering development expenses, going value, and all other tangible and intangible values, found the present fair value of the La Junta properties of the Arkansas Valley Railway, Light & Power Company, to be $80,000 for rate-making purposes.

Valuation—Electric—Book value.

(6) The Commission, in a valuation for rate-making purposes, found the book value of the properties of the Arkansas Valley Railway, Light & Power Company in the City of La Junta to be $135,375.81.

Apportionment—Values, earnings and expenses.

(7) In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the sum of $2,054.88, representing the cost of sub-station labor and miscellaneous supplies and expense, to be properly chargeable to the La Junta properties, as such items were entirely local to the La Junta properties, and found the sum of $2,654.72, representing distribution, to be a proper charge to the La Junta properties, as the entire expense of such distribution occurred within the City of La Junta.

Apportionment—Expenses—Depreciation.

(8) In the valuation of the La Junta properties of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found that the sum of $500 was a proper amount to be deducted from distribution maintenance and included in depreciation, inasmuch as it was ascertained that depreciation was carried under the head of "Maintenance" by the company, and as the Commission ordered the company to set aside an annual depreciation fund the above amount would be a duplication of some of the items set forth under the head of "maintenance" in the company's operating expenses.

Apportionment—Values, expenses and earnings—Amortization.

(9) In the valuation of the La Junta properties of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission was of the opinion that an item of $1,626.86, included in the operating expenses as "municipal ownership election expenses," while being a proper charge against the company—for the company has a right to protect its property through any legitimate expenditure—should not be charged against the properties in the City of La Junta as an expense for the year, but should be amortized over a period of years, if charged to the La Junta properties, but the Commission was of the opinion that the amount was more properly chargeable to the entire system of the company, and ordered the company to so distribute it on the consumer basis, which amounted to 8.08 per cent, or $130.03, as applicable to the La Junta properties.

Depreciation—Electric—Amount found reasonable.

(10) In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the proper amount of depreciation to be set aside annually by the company for the La Junta properties to be $2,500, the present fair value of the properties having been found to be $80,000.

Service—Electric—Adequacy.

(11) In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found after a thorough investigation that the service of the company in the City of La Junta was entirely adequate and beyond criticism.

Rates—Electric—Reasonableness of.

(12) In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the existing schedule to be unreasonable insofar as it exceeded the schedule of rates set forth and prescribed as reasonable rates in the order of the Commission.

(April 29, 1916.)

COMPLAINT against the rates and service of the Arkansas Valley Railway, Light & Power Company in the City of La Junta; existing schedule of rates found unreasonable and reasonable rates prescribed; service found adequate.

APPEARANCES: For the Petitioners, O. G. Hess, Esq.; for the Respondent Company, Messrs. Devine and Preston; for the City of La Junta, Intervenor, H. W. Allen, Esq.

STATEMENT AND ORDER.

By the Commission:

On the 30th day of September, 1915, there was filed with the Commission a written petition signed by twenty-five taxpayers, and consumers of electric current, of the City of La Junta, Colorado, stating, in substance, that a majority of the taxpayers of La Junta, at a general city election in April, 1915, voted in favor of a municipal bond issue of $75,000.00 for the erection of a municipally owned and operated electric light plant. The petitioning taxpayers, in their petition, question the feasibility of the erection and operation of a municipally owned and operated electric light plant, but alleged that the City of La Junta and its inhabitants are entitled to and should receive lower rates for electric light and power service than those now charged by The Arkansas Valley Railway, Light & Power Company, and requested the Commission to investigate and to determine upon reasonable rates for electric service to the City of La Junta and its inhabitants, as now furnished by The Arkansas Valley Railway, Light & Power Company, the Respondent, and further requested this Commission to determine the cost of erecting a municipally owned plant, together with the cost of service and the reasonable rates which should be charged by the City to its patrons.

On the 1st day of October, 1915, the Respondent company filed with the Commission its answer to the petition of the petitioners and denied that its rates and charges for supplying electricity to the City of La Junta and to the inhabitants of said City were in any respect unfair, unreasonable, unjust, excessive or discriminatory, and averred that the rates and charges of the Respondent company were just, fair, reasonable and equal, and that the service furnished by it to the said City of La Junta and its inhabitants was above criticism.

In accordance with instructions from the Commission, F. J. Rankin, the Commission's Electrical Engineer, and F. W. Herbert, the Commission's Chief Statistician, began an investigation to determine the present fair value of the properties of the Respondent company, located in the City of La Junta, together with the valuation of the generating plant at Pueblo and the transmission lines conveying energy to La Junta, and also a complete, detailed examination of the books of the Respondent company.

The hearing of the above cause convened at La Junta, Colorado, in the City Hall, at the hour of 10:00 o'clock a. m., December 7, 1915, O. G. Hess, Esq., appearing for the petitioners, Messrs. Devine & Preston appearing for the Respondent company, and H. W. Allen, City Attorney, appearing for the City of La Junta, which requested and was granted permission to intervene.

(1) The Commission then ruled that the matters contained in the petition relating to the value and the cost of service of the proposed municipally owned and operated electric light plant were irrelevant to the hearing, and refused to take action as to these matters, wherefore no evidence pertaining to the same was permitted to be introduced.

The following witnesses testified for the Commission:

F. W. Herbert, Chief Statistician; F. J. Rankin, Electrical Engineer.

The following witnesses testified for the Respondent company:

E. J. Rosenauer, General Auditor; Geo. W. Milliken, Local Manager; W. F. Raber, General Manager; F. H. Lane, Consulting Engineer for H. M. Byllesby & Company, the holding company of the Respondent company.

From the evidence introduced it appears that the Respondent company is engaged in the business of manufacturing electrical energy at Pueblo and Canon City, Colorado, and serves a territory in Colorado which is divided into three divisions designated on the Company's books as the "Mountain Division," "Pueblo Division," and the "Valley Division." The City of La Junta, located in the Arkansas Valley, is served from the generating

plant of the Respondent company located at Pueblo, and is connected by a transmission line running from the generating plant of the Respondent company at Pueblo through the Arkansas Valley, and from which a number of other towns and cities located in the Arkansas Valley are served.

The energy is furnished for the Valley section by means of a 33,000 volt transmission line. At a point 52 miles east of Pueblo, and on the transmission line of the "Valley Division" of the Respondent company, is located the City of Rocky Ford, at which point the Company has installed a transformer sub-station which transforms the energy supply from 33,000 to 11,000 volts for the purpose of distribution of electric energy to Rocky Ford, La Junta, Fowler, Manzanola, Swink, Ordway, Sugar City and smaller settlements in this section of the State.

(2) For the purpose of this investigation the Commission's Engineer has determined the rate per kilowatt hour for which the Respondent company can afford to deliver energy to sub-stations located in the "Valley Division," and under this method the La Junta property was treated as an individual operating company purchasing current delivered at its sub-station by a transmission company. In order to arrive at the average cost per kilowatt hour at which it is possible to deliver 3-phase, 60-cycle, 2,300 volt energy to the Valley sub-stations, the Respondent company's investment in its Pueblo generating plant, the investment in its Valley transmission line, stepdown transformer sub-station, and the cost of generation at the Pueblo station, were taken into account by the Commission's Engineer and apportioned on an equitable basis. The Pueblo generating station of the Respondent company furnishes energy for general lighting and power purposes in Pueblo, Colorado, for the Pueblo street railway system, for certain territory contiguous to Pueblo, and for the "Valley Division" of the Company, as above stated. Some energy also is furnished from the Pueblo station, at 30 cycles, for use by the "Mountain Division" of the Company, the greater portion of the energy for the "Mountain Division" of the Respondent company, however, being manufactured at the Canon City generating plant. That part of the Company's investment in the Pueblo property which is used for generating purposes was apportioned to its "Valley Division" on the basis of the relation of the maximum demand of the "Valley Division," at the time of the station peak, to the total maximum demand. In this way the fixed charges on the Pueblo station, which naturally should be charged to the "Valley Division" of the Company, were determined. Mr. Rankin testified that the investment in the Company's transmission line extending from Pueblo to Rocky Ford was properly chargeable to the consumers in the "Valley Division" of the Company, and that it had been so considered in his report.

The cost of energy delivered to the Valley transmission line, as found by the Commission's Engineer, is made up of operating expenses in the Pueblo plant, which include fuel, labor, repairs and maintenance; the portion of the general office expense properly chargeable to generation; the fixed charges on the Pueblo plant, which include taxes, depreciation and interest on the investment; and the fixed charges on, and the cost of operation and maintenance of, the Valley transmission line. The Commission's Engineer has reported these costs for the conditions now prevailing in the "Valley Division" of the Company as follows:

Operating Expenses	.7619c per k. w. h. generated
Fixed charges on Pueblo generating plant	.5047c per k. w. h. delivered to "Valley Division"
Fixed charges on Valley transmission line	.8461c per k. w. h.
Total	2.1127c per k. w. h.

It may therefore be readily seen that the Commission's Engineer finds that 2.1127c per kilowatt hour is the cost of electric energy delivered to the Valley transmission line, as metered at the Pueblo generating station. The operating records taken from the Company's books for several years past indicate that the loss of energy in transmission at present is approximately 12 per cent. It therefore appears that 2.4c per kilowatt hour is the cost, according to the Commission's Engineer, of delivering 3-phase, 60-cycle, 2,300 volt energy to the Company's Valley sub-stations under conditions prevailing at this time. Mr. Rankin testified that this average cost per kilowatt hour takes into account only the present development of this part of the Company's business, and, as its business develops and the consumption of energy increases, the average cost of 2.4c per kilowatt hour should be materially reduced. From the evidence at hand the Commission is convinced that the average cost per kilowatt hour of delivering this energy to the Company's Valley sub-stations has been reduced in the past three years.

(3) F. H. Lane, Engineer for the Company, filed with the Commission his detailed report stating his opinion of the average cost per kilowatt hour of delivering 3-phase, 60-cycle, 2,300 volt energy to the Company's Valley sub-stations. This figure is somewhat higher than that determined upon by the Commission's Engineer, but the difference between Mr. Lane's conclusions and those of Mr. Rankin was readily accounted for by the Commission. For instance, the Respondent's Engineer, in arriving at the cost of current delivered to La Junta, included in his report of the investment in the Pueblo generating station the cost of arc lighting transformers, motor-generator sets, and rotary converters used in connection with the Pueblo street railway system, which were not included by the Commission's Engineer for the reason they are not used in the generation of energy. In the opinion of the Commission this equipment was properly excluded

by Mr. Rankin for the reason that these properties are simply energy-transforming devices used in the utilization of electrical energy by the different departments of the Company; they form no part of the generating equipment, and are not used in any way in connection with the supplying of energy to the Company's Valley sub-stations.

The Commission's Engineer introduced in evidence a written report in which was contained the inventory and appraisal of the property of the Respondent company located in La Junta, and used the date of October 1, 1915, as the date of the appraisal. Mr. Rankin stated that his report covers only the property of the Respondent company located in the City of La Junta and does not include any part of the transmission line from Pueblo to La Junta, the Pueblo station, or Pueblo generating equipment. Mr. Rankin also stated that his report excludes the Company's property at Swink and other surrounding points.

Following is a summary of the cost to reproduce, new, and the depreciated, or present fair value of the Company's properties located in La Junta, as determined by the Commission's Engineer:

SUMMARY OF VALUATION OF THE PROPERTIES OF RESPONDENT COMPANY, LOCATED IN LA JUNTA.

Items	Cost of Reproduction	Present Value
Buildings	$ 4,402.00	$ 3,434.00
Station equipment	19,188.00	14,367.00
Distribution	44,148.00	34,905.00
	$ 67,738.00	$ 52,706.00
Add overhead, 13%	8,806.00	6,852.00
	$ 76,544.00	$ 59,558.00
Land	2,000.00	2,000.00
	$ 78,544.00	$ 61,558.00
Interest during construction	2,356.00	1,848.00
	$ 80,900.00	$ 63,406.00
General equipment	4,170.00	3,725.00
	$ 85,070.00	$ 67,131.00
Working capital	5,000.00	5,000.00
	$ 90,070.00	$ 72,131.00
Developing business	10,000.00	10,000.00
	$100,070.00	$ 82,131.00
Financing	5,000.00	5,000.00
Total	$105,070.00	$ 87,131.00

Following is a statement of Construction Overheads applicable to items of construction on the Company's properties at La Junta, as determined upon by the Commission's Engineer:

CONSTRUCTION OVERHEADS.

On the Properties of Respondent Company, Located in La Junta	
Engineering and superintendence	7½%
Legal and organization expense	2 %
Insurance during construction	1 %
Omissions and contingencies	2½%
Total	13 %
(Applicable to items of construction only)	
Interest during construction	3 %
(Applicable to all physical property)	

Mr. Rankin finds that $85,070.00 is the amount of money required to reproduce, new, the physical properties of the Respondent company located at La Junta, and that $67,131.00 is the depreciated, or present fair value of these properties. The Respondent's Engineer, in his report to the Commission, finds the present fair value of the Company's physical properties located in La Junta to be a sum a trifle less than that determined upon by the Commission's Engineer, but this small difference is accounted for by an erroneous assumption on the part of the Engineer for the Respondent company.

For the purpose of calling the attention of the Commission to the fact that certain intangible values should be added to the present fair value of the physical properties of the Respondent company located at La Junta, the Commission's Engineer has set forth certain sums of money to cover working capital, developing the business, and financing.

WORKING CAPITAL.

(4) In arriving at the sum of money that should be included in the present fair value of the Company's properties at La Junta under the head of "Working Capital," the Commission has taken the total billing for the year ended June 30, 1915, and, by taking one-twelfth of this sum, the average revenue for one month has been determined as approximately $3,500.00, which is sufficient to cover the cash required for working capital. As the La Junta property is operating through the Company's office at Pueblo, no consideration is given here to the difference between "bills payable" and "bills receivable" as an addition to working capital. The item of "Stores and Supplies" properly should be included under the head of "Working Capital" and the Commission is therefore of the opinion that the Commission's Engineer should not have included the sum of $1,621.00 for "Stores and Supplies" in his appraisal of the physical properties of the Respondent Company at La Junta. This sum has been deducted from Mr. Rankin's total of the present fair value of the physical properties of the Respondent company at La Junta and included in the Working Capital. The present fair value is therefore corrected to read $65,510.00. In arriving at the sum of $1,621.00 to cover "Stores and Supplies," Mr. Rankin determined the values of the "Stores and Supplies" on hand at the date of the ap-

praisal. The Commission is of the opinion that the Stores and Supplies should be averaged for a period of one year, and from this average we arrive at the sum of $1,500.00. The Commission therefore finds that the proper amount of Working Capital to be allowed in this case is $5,000.00.

PRESENT FAIR VALUE.

(5) The Commission has given careful consideration to the evidence introduced by the Respondent company as to the proper allowance which should be made for the development of its business and the added value of its property at La Junta, due to the fact that it is an established business, and has considered all other intangible values suggested by the Company. The Commission finds the present fair value, for rate-making purposes, of the Company's properties at La Junta, tangible and intangible, to be $80,000.00.

BOOK VALUE.

(6) The La Junta Electric Light Company was incorporated November 11, 1893, with a capital stock of $25,000.00, and the Commission has ascertained from the report of its Statistician that the total amount originally invested in the La Junta Electric Light Company was $25,000.00. On December 31, 1907, the capital stock of the Company was increased from $25,000.00 to $50,000.00. The additional capital stock was issued to J. B. Farrish and W. S. Baggott, to cover amounts advanced by them on notes given by the Company, which money was put into the plant from time to time, and the purpose of this additional issue of $25,000 was to retire indebtedness as follows:

J. B. Farrish	$13,600.00
W. S. Baggott	11,400.00

The plant investment on that date, as represented on the books of the La Junta Electric Light Company, amounted to $78,948.48, and the Company deducted, through its Profit and Loss Account, for depreciation, $28,948.48, which made the total of the Plant Account $50,000, an amount evidently intended to correspond with the amount of capital stock outstanding. When the accounts of The La Junta Electric Light Company were transferred to the Respondent company on December 1, 1911, due to the purchase of the local plant by the Respondent company, the plant investment on the local company's books showed a value of $66,130.66, divided as follows:

Plant	$64,377.68
Street lines and mains	224.41
Organization and reorganization expense	396.00
Electric service	361.28
Furniture and fixtures	626.23
Tools and implements	24.09
Undistributed construction	120.94

From December 1, 1911, to June 30, 1915, the Respondent company's construction accounts for the La Junta property (which represented the rebuilding of the La Junta plant from the date it was acquired by the Respondent company, due to replacements and betterments, to the date of the report of the Commission's Statistician) was $32,446.07, distributed as follows:

Real estate and buildings	$ 408.94
Electric plant	441.24
Street lines and wires	10,879.89
Electric service	2,009.41
Transformers	856.37
Meters, $3,909.40 less $672.00, Swink	3,237.40
Arc lamps	165.21
Tools and implements, electric	28.20
Transmission sub-station, transformer station and equipment	9,183.86
Furniture and fixtures	557.90
Horses and vehicles	123.64
General construction	4,554.01

In addition to the above amounts, the books of the Respondent company show the sum of $1,376.78, inventory of Material and Supplies as of June 30, 1915, together with the sum of $35,422.30, which comes under the head of adjustments of Profit and Loss and Undivided Surplus due stockholders of the old La Junta Electric Light Company and paid by the Respondent company for the business. The present book value of the La Junta properties of the Respondent company therefore appears to be $135,375.81, as found by the Statistician of the Commission.

REVENUES AND OPERATING EXPENSES.

A statement of the earnings of the La Junta properties of the Respondent company from June 30, 1914, to June 30, 1915, as found by the Commission's Statistician, is as follows:

EARNINGS—JUNE 30, 1914, TO JUNE 30, 1915.

City arc lighting	$ 4,241.88	
City incandescent lighting	958.32	
		$ 5,200.20
Commercial lighting, metered	$27,771.40	
Commercial lighting, not metered	894.85	
		28,666.25
Commercial power, metered		5,967.05
Signs, not metered		400.80
Total earnings, electric sales		$40,234.30
Merchandise, sales, profits		599.46
Forfeited discounts		473.75
Total operating earnings		$41,307.51
Less rebates and allowances		109.70
Gross operating revenue		$41,197.81
Non-operating revenue, water		600.53
Total gross revenue		$41,798.34

A statement of the operating expenses of the La Junta properties of the Respondent company from June 30, 1914, to June 30, 1915, as taken from the books of the company by the Commission's Statistician, is as follows:

OPERATING EXPENSES—JUNE 30, 1914, TO JUNE 30, 1915.

COST OF MANUFACTURE.

Operating:		
Power plant wages		$ 16.38
Power plant miscellaneous supplies and expense		20.57
Fuel used, 131.03 tons at $2.97		389.56
Hired power, 68,607 K. W. H. at 2.4c		16,465.68
Oil and waste		6.22
Total operating		$16,898.41
Maintenance:		
Steam plant	$5.00	
Electric plant	3.93	
Total maintenance		8.93
Total operating and maintenance		$16,907.34
Less other departments, 29,573 K. W. H. at 2.4c		709.75
Total manufacturing cost		$16,197.59

COST OF TRANSMISSION.

Operating:	
Miscellaneous supplies and expense, 4,283 K. W. H. at 2.4c	$ 165.50
Sub-station labor	1,889.38
Total operating	$ 2,054.88
Maintenance:	
Sub-station trans station equipment	41.72
Total transmission	$ 2,096.60

DISTRIBUTION.

Operating:	
Meter reading	$ 381.00
Trimming arcs	107.62
Supplies and expense	1.74
Cost of meter changes	588.08
Lamp renewals	427.46
Customers' repairs	981.00
Carbons used	104.35
Globes used	31.28
Leased signs	32.19
Total operating	$ 2,654.72
Maintenance:	
Street lines and wires	$ 756.42
Electric services	173.93
Street lights	265.06
Transformers	68.77
Meters	505.60
Total maintenance	$ 1,769.78
Total distribution	$ 4,424.50

GENERAL EXPENSE.

Salaries, general officers	$ 351.00
Salaries, clerks	2,812.88
Printing, stationery, postage	373.21
Telegraph and telephone	106.34
Advertising, canvassing, soliciting	434.45
Miscellaneous general expense, 3,253 K. W. H. at 2.4c	2,901.30
Legal expense	755.92
Loss, injuries and damages	143.85
Rents	678.00
Taxes	1,083.93
Insurance	188.46
Bad debt account	151.61
Store room expense	3.08
Municipal compensation	682.14
Total general expense	$10,666.77

TOTAL OPERATING EXPENSES.

Cost of manufacture	$16,197.59
Transmission	2,096.60
Distribution	4,424.50
General expense	10,666.77
Total	$33,385.46
Total gross revenue	$41,798.34
Total operating expenses	33,385.46
Net earnings	$ 8,412.88

The Commission is of the opinion that the operating expenses of the La Junta properties, as above set forth, and with certain exceptions, are properly chargeable to the La Junta properties.

(7) Under the head of "Transmission," in the above statement of Operating Expenses, is the sum of $2,054.88, the cost of sub-station labor and miscellaneous supplies and expense. This item is properly chargeable to La Junta, as no part of the sub-station labor or miscellaneous supplies and expense occurs as to any of the properties of the Respondent Company except these properties in the City of La Junta. Under the head of "Distribution" in the above statement of Operating Expenses is the sum of $2,654.72, which is a proper charge to La Junta, as the entire expense of distribution as above set forth occurs within the City of La Junta.

(8) Under the head of "Maintenance" in the above statement of Operating Expenses is a total of $1,769.78, and, while the items under "Maintenance" are properly chargeable to La Junta, it has been ascertained by the Commission that Depreciation is carried under the head of "Maintenance" in the above statement, and, as an Annual Depreciation Reserve Fund will be ordered set aside, which fund will be a duplication of some of the items set forth under the general head of "Maintenance," the Commission has arrived at the sum of $500.00 as a proper amount to be deducted from "Maintenance," due to items of replacement set forth under "Maintenance," and which properly come under the head of "Depreciation," thereby reducing the total of maintenance from $1,769.78 to $1,269.78 and reducing the total of "Distribution" from $4,424.50 to $3,924.50.

(9) Under the head of "General Expense" in the above statement, and under the sub-head of "Miscellaneous General Expense," is an item of $2,901.30. Included in this amount is the sum of $1,626.86, expended by the Respondent Company during the period from June 30, 1914, to June 30, 1915, under the head of "Municipal ownership election expenses." While this is a proper charge against the Respondent Company—as this company has a right to protect its property through any legitimate expenditure—and therefore should be included in operating expenses, the Commission is of the opinion that the entire amount should not be charged to the La Junta plant as an operating expense during the year of June 30, 1914, to June 30, 1915, but

either should be distributed over the entire system of The Arkansas Valley Railway, Light & Power Company, the Respondent Company, or spread over a period of years, if charged to the La Junta property as an operating expense. In this case we are of the opinion that the same should be distributed over the entire system of the Defendant Company, and, in order so to distribute it, the Commission has arrived at a percentage on the consumer basis, amounting to 8.08% applicable to the La Junta properties, or $130.03.

It therefore appears that the sum of $1,491.83 should be deducted from the item of "Miscellaneous General Expense," as above set forth, leaving a total "General Expense" of $9,174.94.

The Commission finds that the net earnings of the La Junta properties of the Respondent Company, excluding the annual depreciation reserve, are $10,404.71.

DEPRECIATION.

(10) The Commission finds the proper amount of depreciation to be set aside annually by the Respondent Company for the La Junta properties to be $2,500.00, until the further order of the Commission.

SERVICE.

(11) The Commission finds that the service of the Respondent Company in the City of La Junta is adequate. Considerable money has been expended by the Company in rebuilding the La Junta system and no complaints were placed before the Commission as to inadequate service. Continuity of service is one of the important factors in cases of this nature and after a thorough investigation the Commission arrives at the conclusion that no reasonable criticism of the adequacy of the service of the Respondent Company has been or can be made.

REASONABLE RATES.

(12) The Commission finds that the rates and charges of the Respondent Company now in force and effect in the City of La Junta are unreasonable. Following is the schedule of rates and charges of the Respondent Company now in force and effect in the City of La Junta:

PRESENT SCHEDULE OF RATES AND CHARGES.

General Lighting Service:

First 50 K. W. H. per month, per K. W. H.	$ .12
Next 100 K. W. H. per month, per K. W. H.	.10
Next 100 K. W. H. per month, per K. W. H.	.08
Next 100 K. W. H. per month, per K. W. H.	.07
Next 150 K. W. H. per month, per K. W. H.	.06
Excess K. W. H. per month, per K. W. H.	.04
Discount	10%
Minimum per month	$1.00
General flat rate for signs, windows, display and outline lighting (patrolled service), per month per 100 watts connected	$1.25
Discount	10%
Minimum per month	$1.00

General Power Rate:

First 100 K. W. H. per month, per K. W. H.	$ .08
Next 200 K. W. H. per month, per K. W. H.	.06
Next 200 K. W. H. per month, per K. W. H.	.05
Next 500 K. W. H. per month, per K. W. H.	.04
Next 1000 K. W. H. per month, per K. W. H.	.03
Next 2000 K. W. H. per month, per K. W. H.	.02½
Excess K. W. H. per month, per K. W. H.	.02
Minimum per month per H. P. connected	1.00

Old Power Rate (under which there are still a small number of customers):

1 to 100 K. W. H. per month, less no discount, per K. W. H.	$ .09
101 to 150 K. W. H. per month, less 5% discount, per K. W. H.	.09
151 to 250 K. W. H. per month, less 10% discount, per K. W. H.	.09
251 to 400 K. W. H. per month, less 20% discount, per K. W. H.	.09
401 to 600 K. W. H. per month, less 25% discount, per K. W. H.	.09
Excess K. W. H. per month, less 30% discount, per K. W. H.	.09
Additional discount	5%

Irrigation and Refrigeration Rate:

Primary charge per month per H. P. connected	$1.00
Plus a secondary charge for all current consumed for a period of not less than five months, per K. W. H.	.03
Discount	10%
Minimum per month per H. P. connected	$1.00

Irrigation Only:

At the expiration of the above period (five months), the consumer may have service continued for the other seven months in the year by agreeing to pay for each of the seven months—

Per month per H. P. connected	$ .25
Plus secondary charge per K. W. H. for all current of	.05
Discount	10%
Minimum per month per H. P. connected	$ .25

Street Lighting Service:

54 series arc lights, 7 amperes, 2000 c. p., or equivalent in cluster lights of 4—60 watt Mazdas, each per year	$80.00
44 Mazda lights, 60 watts each, per cluster of four per year	80.00

In arriving at a schedule of reasonable rates and charges for electric energy to be charged by the Respondent Company in the City of La Junta, the Commission has assumed that the Company will continue to do business within the City.

The Commission finds that the schedule of rates and charges as hereinafter set forth in the order of the Commission are just and reasonable.

ORDER.

It Is Therefore Ordered, That The Arkansas Valley Railway, Light & Power Company shall, within thirty (30) days from the date of this order, file with this Commission the following schedule of reasonable rates and charges to be charged by it, the said The Arkansas Valley Railway, Light & Power Company, within the City of La Junta:

SCHEDULE A—GENERAL LIGHTING SERVICE.

Available to all consumers using the Company's standard service for lighting.

Rate:

First 50 K. W. H. per month, per K. W. H.	$ .11
Next 100 K. W. H. per month, per K. W. H.	.09
Next 100 K. W. H. per month, per K. W. H.	.08
Next 100 K. W. H. per month, per K. W. H.	.07
Next 150 K. W. H. per month, per K. W. H.	.06
Excess consumption during the month	.04
Discount	10%
Minimum per month	$1.00 net

SCHEDULE B—RESIDENCE LIGHTING SERVICE.

Available to residence consumers only.

Rate:

First 5 K. W. H. consumption per "active" room per month, per K. W. H.$ .11
Next 5 K. W. H. consumption per "active" room per month, per K. W. H. .08
Excess consumption during the month, per K. W. H. .03½
Discount 10%
Minimum per month $1.00 net

All rooms except basements, halls not in general use, bath rooms, porches and unfinished attics, are to be considered as "active;" provided, that no installation shall be considered as having less than three (3) nor more than nine (9) active rooms.

SCHEDULE C—MUNICIPAL STREET LIGHTING.

Rate:

$69.00 per year for each 7½ ampere A. C. enclosed arc lamp burning all night.
$69.00 per year per cluster of four 100 watt Mazda lamps, burning all night.

SCHEDULE D—GENERAL POWER SERVICE.

Available to all consumers using the Company's standard service for power.

Rate:

First 100 K. W. H. per month, per K. W. H.$ .07
Next 200 K. W. H. per month, per K. W. H. .06
Next 200 K. W. H. per month, per K. W. H. .05
Next 500 K. W. H. per month, per K. W. H. .04
Next 1000 K. W. H. per month, per K. W. H. .03
Next 2000 K. W. H. per month, per K. W. H. .02½
Excess consumption during the month, per K. W. H. .02
Discount 10%
Minimum per month per horsepower connected $1.00 net

SCHEDULE E—SIGN AND FLAT LIGHTING.
(Patrolled Service.)

Rate:

Per month for each 100 watts connected $1.25
(Burning from dusk until 11:00 p. m.)
Discount 10%
Minimum per month $1.00 net

SCHEDULE F—IRRIGATION AND REFRIGERATION RATE.

A fixed charge per month per horsepower connected of $1.00
Plus an energy charge for all current consumed for a period of not less than five months, per K. W. H. .03
Discount 10%
Minimum per month per horsepower connected $1.00 net

SCHEDULE F-1—IRRIGATION ONLY.

Rate:

At the expiration of the above five months period, the consumer may have service continued for the remainder of the year by paying for each of the seven months 25 cents per horsepower connected, plus an energy charge of 5 cents per K. W. H. This schedule will be subject to a discount of 10% with a net minimum of 25 cents per month per horsepower connected.

It Is Further Ordered, That the above schedule of rates and charges shall become effective and apply to all electric energy furnished by The Arkansas Valley Railway, Light & Power Company to the municipality of La Junta, Colorado, and the citizens thereof, for the month of May, 1916.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 29th day of April, 1916.

TOWN OF ARVADA

v.

THE ARVADA ELECTRIC COMPANY, In Re PETITION FOR REHEARING.

(Case No. 42.)

Valuation—Transmission lines—Present fair value.

(1) In valuing the properties of the Arvada Electric Company for rate-making purposes, the Commission found that an error was made in including the sum of $3,158.78, the value of the transmission line, which was not the property of the respondent, and found, after deducting same, the present fair value of the properties of the company to be $31,224.22.

Discrimination—Consumers—Graduated scale.

(2) The Colorado laws pertaining to public utilities do not contemplate the same rate for all classes of service, but in specific terms state that electric utilities under the direction of the Public Utilities Commission may establish graduated scale of charges for electric energy.

Rates—Electric—Reasonableness of.

(3) The Commission was of the opinion that any action on its part to reduce the rates of the Arvada Electric Company, would be illegal, as the company would be unable to earn operating expenses, and such action would bring about a deplorable state of affairs in connection with the ownership and management of the company's property, resulting in temporary benefit only to the consumers.

(May 18, 1916.)

PETITION of the Town of Arvada for rehearing; rehearing denied and order modified.

APPEARANCES: Geo. B. Campbell, Esq., for Complainant; Mr. W. C. Sterne, for the Respondent Company.

REHEARING DENIED AND ORDER MODIFIED.

By the Commission:

On the 27th day of April, 1916, the Commission dismissed the complaint of the Plaintiff in the above entitled cause, setting forth sufficient reasons for so doing.

On the 8th day of May, 1916, Geo. B. Campbell, Esq., Town Attorney for the Town of Arvada, the Complainant in this cause, filed a motion for a rehearing, alleging that the Commission erred in including the sum of $3,158.78 in arriving at the sum of $34,383.00 as the present fair value of the properties of the Respondent company, for the reason that the sum of $3,158.78 represents the value of the transmission line owned by The Denver Gas & Electric Company, the wholesaling company.

(1) It appears from the evidence that the Commission erred in including the present fair value of the transmission line, which is the property of The Denver Gas & Electric Company, as a part of the present fair value of the properties of the Respondent Company. This error having been very properly called to the Commission's attention the present fair value of the Respondent company's property in the sum of $34,383.00, as found by the Commission, is accordingly reduced to equal the sum of $31,224.22.

The Complainant contends that the Commission further erred in taking as the basis of its computations the earnings for the year 1914 instead of the year 1915. The Commission had presented to it in the evidence the earnings of the Respondent company for ten months during the year 1915, as well as the earnings for the entire year of 1914, and while it is true that the Respondent company demonstrated a better showing for the year 1915 than was made in the year 1914, the increase in earnings was such that it could result in no difference in the decision of the Commission.

(2) The Complainant also complains that the Commission committed error in its order of April 27, 1916, in the above cause, in that it did not order every consumer of the Respondent company to pay the same rate for electric energy. The Colorado laws pertaining to public utilities and the regulation thereof do not contemplate the same rate for all classes of service furnished by electric utilities, but in specific terms state that electric utilities under the direction of the Public Utilities Commission may establish a graduated scale of charges for electric energy. Of course the Commission expects the Respondent company to charge the same rate for the same class of service to each of its consumers, and so orders.

(3) It appears from the evidence that in the event the Commission should reduce the rates of the Respondent company, as prayed for in the complaint of the Plaintiff and in its petition for a rehearing, the Respondent company would then be unable to earn operating expenses, and the Commission is of the opinion that such action on the part of the Commission would be illegal and would bring about a deplorable state of affairs in connection with the ownership and management of the Respondent company's property, resulting in only temporary benefit to the citizens of the Town of Arvada.

It Is Therefore Ordered, That the Complainant's application for a rehearing of the above cause be denied.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 18th day of May, 1916.

COLORADO STATE BOARD OF STOCK INSPECTION COMMISSIONERS, ET AL.,

v.

THE ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY, ET AL.

(Case No. 20.)

Pleading—Commission practice—Demurrer to jurisdiction.

(1) Where the defendants in a case before the Commission had filed a petition to vacate the order requiring the defendants to answer the complaint and to have an order issue permitting the defendants to file demurrers, on the ground that the Commission had no power or jurisdiction to grant the relief prayed for in said complaint, the Commission entered an order permitting each of the defendants to demur to the jurisdiction of the Commission, providing the said demurrer be accompanied by an answer admitting or denying the allegations set forth in the complaint.

Parties—Plaintiffs—Persons who may sue.

(2) In a case brought by the Colorado State Board of Stock Inspection Commissioners, the Colorado Stock Growers' Association and others, against the carriers of the State, to compel the Commission to enforce an act requiring carriers to fence their rights-of-way, the Commission ruled that, under Section 45 of the Public Utilities Act, the parties plaintiff to the action were competent to maintain the proceeding.

Pleadings—Absence of direct damage—Intent of legislature.

(3) It was the intention of the Legislature, in the Public Utilities Act, that no complaint should be dismissed because of the absence of direct damage to the complainants.

Jurisdiction of Commission—Suits against receivers.

(4) The Commission was of the opinion that no court, federal or state, would permit one of its servants or officers over whose acts it had plenary control to merely neglect to obey, much less to openly violate, the terms of a valid law, and that the public utilities operating in the State of Colorado and under the management of receivers appointed by either state or federal courts, were subject to the police power of the state, citing as authorities the Laws of Colorado for 1913, relating to Public Utilities; State v. Flannelly, 152 Pac., 22; Railroad Commission of Alabama v. A. G. S. R. R., 185 Ala., 354, 56 L. R. A. (N. S.) 98, 1915 D.

Jurisdiction of Commission—Duties to enforce prior acts.

(5) It is made the duty of the Commission, by the terms of the Public Utilities Act, to determine the just, reasonable, safe, proper, adequate or sufficient rules, regulations, practices, equipment, appliances, facilities, service or method to be observed, furnished, constructed, enforced or

employed by carriers; and, while the Commission was uncertain as to whether it was the intent of the Legislature that the "Fencing Act" should be enforced through the action of the Commission, it was the opinion of the Commission that it was plainly the intent of the Legislature to vest in the Commission power and authority to assume jurisdiction over the subject matter contained in a petition presented to require the railroads to fence their rights-of-way, and the Commission therefore allowed the petitioners to present evidence in the cause against the defendant carriers, for the purpose of showing the Commission that additional instrumentalities, equipment, appliances, facilities, apparatus or improvements to the physical property of one or more of the defendant carriers should be made to promote the safety, health, comfort and convenience of its patrons, employes and the public, and to make the same in all respects adequate, efficient, just and reasonable.

(May 18, 1916.)

PETITION presented by the Colorado State Board of Stock Inspection Commissioners and others against the carriers of the state to compel the Commission to enforce an act for fencing railroad lands, Session Laws 1911, Section 1; question as to jurisdiction of Commission to enforce "fencing act" not determined; held that Commission has power and authority, under the provisions of the Public Utilities Act of 1913, to provide and maintain such instrumentalities, equipment and facilities as promote the safety, comfort and convenience of their patrons, employes and the public; demurrers and motions to strike and dismiss presented by carriers overruled and denied; petitioners ordered to appear before the Commission and make such showing as they desire as to the subject matter contained in their complaint.

APPEARANCES:

For the Colorado State Board of Stock Inspection Commissioners,
Mr. E. J. McCrillis, Secretary,
J. W. Kelly, Esq.,

Colorado Stock Growers' Association,
Mr. Fred P. Johnson, Secretary,

The Atchison, Topeka & Santa Fe Railway Co.,
Henry T. Rogers, Esq.,
Geo. A. H. Fraser, Esq.,
Messrs. Rogers, Ellis & Johnson,

The Beaver, Penrose & Northern Ry. Co.,
Mr. Spencer Penrose,

Chicago, Burlington & Quincy R. R. Co.,
E. E. Whitted, Esq.,
Thos. R. Woodrow, Esq.,

The Chicago, Rock Island & Pacific Railway Co.,
W. V. Hodges, Esq.,
D. Edgar Wilson, Esq.,

The Colorado & Southern Railway Co.,
E. E. Whitted, Esq.,
Thos. R. Woodrow, Esq.,

The Colorado Midland Railway Co.,
Henry T. Rogers, Esq.,
Geo. A. H. Fraser, Esq.,
Messrs. Rogers, Ellis & Johnson,

The Crystal River & San Juan Railroad Co.,
Mr. H. D. Boughner,

The Denver & Intermountain Railroad Co.,
H. S. Robertson, Esq.,

The Denver & Rio Grande Railroad Co., and
The Rio Grande Southern Railway Co.,
E. N. Clark, Esq.,
J. G. McMurry, Esq.,

The Denver, Boulder & Western Railroad Co.,
E. E. Whitted, Esq.,
Thos. R. Woodrow, Esq.,

The Denver, Laramie & Northwestern Railroad Co.,
W. W. Garwood, Esq.,

The Cripple Creek & Colorado Springs Railroad Co., and
The Midland Terminal Railway Co.,
Ralph Hartzell, Esq.,
Messrs. Schuyler & Schuyler,

The Great Western Railway Company,
Chas. W. Waterman, Esq.,
Caldwell Martin, Esq.,

The Missouri Pacific Railway Co.,
Thos. H. Devine, Esq.,
J. W. Preston, Esq.,

The San Luis Southern Railway Co.,
Franklin S. Brooks, Esq.,

The San Luis Central Railroad Co.,
W. V. Hodges, Esq.,
D. Edgar Wilson, Esq.,

The Uintah Railway Co.,
Messrs. Vaile, McAllister & Vaile,
Geo. E. Tralles, Esq.,

Union Pacific Railroad Company,
C. C. Dorsey, Esq.,
E. I. Thayer, Esq.,
J. Q. Dier, Esq.,

The Denver & Salt Lake Railroad Co.,
Tyson S. Dines, Esq.

ORDER OVERRULING DEMURRERS AND MOTIONS TO DISMISS COMPLAINT.

By the Commission:

On the 1st day of June, 1915, the State Board of Stock Inspection Commissioners of the State of Colorado and the Colorado Stock Growers' Association filed with the Commission a complaint against the above named common carriers operating railroads within the State of Colorado, alleging in substance that the defendants own and operate in the State of Colorado more than five thousand miles of main-line railway, along and over which passenger and freight trains, operated by steam and other motive power, are moved daily and constantly at great speed under the direction and control of said Defendants; that the tracks of the above carriers are constructed upon the rights of way owned by the Defendants or under their control, and the rights of way are of the width of 200 feet extending 100 feet on each side of the railway tracks; that the above named common carriers are public utilities and as such are under the jurisdiction of the Commission and subject and amenable to its lawful orders; that the rights of way and railway tracks of the above common carriers extend and are constructed through and across cultivated farming lands and pasture lands, and for the most part said rights of way and railway tracks are unfenced and not protected in any way from trespass of livestock upon the said rights of way and railway tracks; that said defendants in operating said railways and the freight and passenger trains thereof do not furnish, provide and maintain such instrumentalities, equipment and facilities as promote the safety, comfort and convenience of its patrons, employes and the public, and as are in all respects adequate, efficient, just and reasonable, and that the failure by the said Defendants so to do, as herein set forth, is unlawful and contrary to the Public Utilities Act, Session Laws, 1913, page 464, and of Sections 13 and 57 thereof, and of an Act pertaining to the fencing of railroad lands, Session Laws, 1911, page 400, and Section 1 thereof.

The complaint then alleges that livestock strays upon the rights of way and tracks of the above carriers and is often struck violently by the rapidly moving passenger and freight trains of the above Defendants, and when so struck is either instantly killed or so greatly injured as to become a total loss to the owners, except for the hides thereof, the value of which hides is only a small percentage of the value of said livestock; that the injury and damage from the destruction of said livestock generally occur at night, or so far from the presence of any witnesses, except employes and servants of the Defendants, that the owners of the said livestock are unable to prove the liability for damages of the said Defendants for killing or injuring the said livestock; that in the said State of Colorado there is each year unlawfully destroyed by

the said Defendant railways thousands of head of livestock for which no payment is ever made by the said Defendants to the owners thereof.

The complaint further alleges that the straying of the livestock, as aforesaid, upon the said rights of way and railway tracks, where they are unlawfully struck and destroyed by the said trains, is a great and constant menace to the safety, comfort and convenience of passengers traveling upon the trains of the Defendants, of the employes of the Defendants, and of the public, for the reason that when trains of the said Defendant railways strike and destroy livestock the said trains are frequently thrown from said tracks thereby and precipitated against or down or over embankments, causing great loss of property to shippers of freight and danger to and loss of life of passengers and employes of the said Defendants; that this loss of life and property and constant danger to passengers and employes of said Defendants is unnecessary, easily preventable, and would not occur if the said railways and rights of way and tracks thereof were protected by suitable fences capable of barring straying livestock from the rights of way and tracks of the said Defendants; that the erection of said fences, with suitable cattle guards at road crossings, by the Defendant railways, would prevent the said livestock from straying upon the rights of way and railway tracks and eliminate the consequent loss and damage to the owners of the livestock, and to shippers of freight, and to passengers, and the consequent danger to and loss of life by passengers and employes of the said Defendants.

It is then alleged in the complaint that the neglect and refusal of the said Defendant railways to fence their rights of way and railway tracks, and the said operation of trains upon and over said unfenced tracks, are contrary to the statutes of the State of Colorado affecting railways, the enforcement of which statute is not specifically vested in any officer or tribunal, and therefore to be enforced by this Commission within the meaning of Sec. 57 of the Public Utilities Act; and that the statute for fencing railway lands, Session Laws 1911, page 400, or a law similar or identical in its purposes, terms or effect, has been upon the statute books of the State of Colorado for a term of years prior to the filing of this complaint, and that the Defendants have at all times unlawfully refused, neglected and wilfully disobeyed, violated and broken the said law by neglecting and refusing to fence their said rights of way or railway tracks, or to pay to the owners of livestock unlawfully killed upon said rights of way or railway tracks, the value thereof.

The Plaintiffs pray for an order of this Commission commanding the Defendant carriers to erect and maintain fences alongside of their roads, or the part thereof open to use, where the same pass through or along or adjoin enclosed or cultivated

fields or unenclosed lands, with openings and gates therein, to be hung and to have latches and hinges so they may be shut and opened, at all necessary farm crossings of the road, except at crossings of public roads and highways and within the limits of incorporated towns and cities or the yard limits of established stations; and also to construct and maintain at all public road crossings good and sufficient cattle guards, such fences, gates and cattle guards, for the protection of livestock and to promote the safety, comfort and convenience of the defendant railways' patrons, employes and the public, to be so constructed as to prevent horses, mules, asses and cattle from straying upon said rights of way and railway tracks.

On the 9th day of June, 1915, nine of the above Defendant carriers filed a petition with the Commission praying that the Commission vacate the order entered requiring the Defendants to answer the complaint herein, and requesting that the Commission issue an order permitting the Defendant carriers to file a demurrer to the complaint on the ground that the Commission lacks power or jurisdiction to grant the relief prayed for in said complaint.

(1) On the 11th day of June, 1915, the Commission entered an order permitting each of the Defendant carriers to demur to the jurisdiction of the Commission, providing that each of said demurrers be accompanied by an answer admitting or denying the allegations set forth in the complaint.

On the 18th day of August, 1915, at the Hearing Room of the Commission, in the State Capitol building in the City and County of Denver, the Defendant carriers argued orally before the Commission in support of their several motions and demurrers to the complaint, and to the jurisdiction of the Commission, and the attorney for the Plaintiffs argued orally in support of the complaint and against the motions and demurrers of the several Defendants.

The motions and demurrers of the Defendant carriers brought to issue the following propositions, viz.:

1. The right of the Complainants to appear as parties plaintiff before the Commission.

2. A denial of the jurisdiction of the Commission over the following named Defendant carriers, viz.:

The Chicago, Rock Island & Pacific Railroad Company, J. M. Dickinson, Receiver,
The Colorado Midland Railway Company, Geo. W. Vallery, Receiver,
The Denver, Laramie & Northwestern Railroad Company, Marshall B. Smith, Receiver,

for the reason that these carriers are represented by receivers duly appointed by courts of competent jurisdiction and subject only to the orders of these courts.

3. That the Commission has no jurisdiction over the subject matter contained in the complaint and no power or authority to grant the relief sought therein.

COMPETENCY OF PARTIES PLAINTIFF.

(2) The first objection made to the complaint by the Defendant carriers is that the plaintiffs are not competent to maintain this proceeding before the Commission. Section 45 of the Public Utilities Act authorizes the Commission to make complaint on its own motion, and permits any corporation, person, chamber of commerce, board of trade, or any civic, commercial, mercantile, traffic, agricultural, or manufacturing association or organization, or any body politic or municipal corporation to file a complaint before this Commission, except as to the reasonableness of any rates or charges of any gas, electrical, water or telephone corporation, and as to those questions permits the Commission to bring a complaint upon its own motion or the petition may be signed by the mayor or chairman or president of the board of trustees, or majority of the council, commission or other legislative body of the county, city and county, or city or town, if any, within which the alleged violation occurs, or not less than twenty-five consumers or purchasers or prospective consumers or purchasers of such gas, electric, water or telephone service.

(3) It further appears in this Act that it is the intent of the Legislature that no complaint shall be dismissed because of the absence of direct damage to the complainants.

It would therefore appear that the position of the Defendant carriers as to the incompetency of the parties plaintiff is not well taken.

JURISDICTION OF THE COMMISSION AS TO RAILROADS OPERATED BY FEDERAL AND STATE RECEIVERS.

(4) Three of the Defendant carriers, viz.:

The Colorado Midland Railway Company,
By Geo. W. Vallery, Receiver,
The Denver, Laramie & Northwestern Railroad Company,
By Marshall B. Smith, Receiver,
The Chicago, Rock Island & Pacific Railroad Company,
By J. M. Dickinson, Receiver,

have demurred to, and moved to strike, the complaint for the reasons that railroads operated by receivers acting under authority of Federal or State courts are not subject to the jurisdiction of the Public Utilities Commission of the State of Colorado, and that leave must be obtained from the courts appointing the respective receivers before an action can be brought by or before the Public Utilities Commission of the State of Colorado.

Sub-section E of Section 2 of the Colorado law pertaining to public utilities reads as follows:

> "The term 'common carriers,' when used in this Act, includes every railroad corporation; street railroad corporation; express corporation; despatch, sleeping car, dining car, drawing room car, freight, freight line, refrigerator, oil, stock, fruit, car loaning, car renting, car loading; and every other corporation or person affording a means of transportation by automobile or other vehicle, similar to that ordinarily afforded by railroads or street railways and in competition therewith, either passengers, freight or express between fixed points or over established routes; and every other car corporation or person, their lessees, trustees, receivers, or trustees appointed by any court whatsoever, operating for compensation within this State."

It therefore becomes quite apparent that the Legislature of the State of Colorado empowered the Commission with jurisdiction to regulate railroads operated by receivers appointed by any court whatsoever.

It is alleged by the Defendant carriers that this Act of the Legislature was ultra vires.

The Denver, Laramie & Northwestern Railroad is operated under the management of Marshall B. Smith, Receiver, appointed by the District Court of the Second Judicial District of the State of Colorado, and it becomes necessary for the Commission to determine whether or not the Denver, Laramie & Northwestern Railroad, and its Receiver, Marshall B. Smith, are subject to the control of the Public Utilities Commission of the State of Colorado, the said receiver having been appointed by a State court of competent jurisdiction. The Supreme Court of the State of Kansas decided this very question in the case of *State ex rel. Caster v. Flannelly* (decided October 1, 1915, reported in 152 Pac., 22, at page 26), stating:

> "The next question is, Are the receivers subject to the control of the Public Utilities Commission, under the Public Utilities Act? The Kansas Natural Gas Company, whose property is now in the possession of the receivers, and whose business is now being conducted by them, was engaged in the business of a public utility. When the receivers continue to do the same business and render the same service as that performed by the Kansas Natural Gas Company, they are a public utility, as defined in the Public Utilities Act, and are subject to the provisions of the act. The appointment of receivers to carry on the business of a public utility does not withdraw that public utility or its receivers from the control of the laws of the

State. The Public Utilities Commission can make the same orders, rules, and regulations governing these receivers and the property in their control that they could have made concerning the Kansas Natural Gas Company and its property before the Receivers were appointed. The receivers have the same right to appeal to the courts, that the Kansas Natural Gas Company had—no greater, no less."

The Colorado Midland Railway Company, operating in the State of Colorado by George W. Vallery, Receiver, and the Chicago, Rock Island & Pacific Railroad Company, operating within the State of Colorado by J. M. Dickinson, Receiver, question the jurisdiction of this Commission for the reason that these railroads are operated by receivers appointed by the Federal Court.

It therefore becomes necessary for the Commission to determine whether the railway companies operating in the State of Colorado and under the management of a receiver appointed by a Federal Court may evade the laws of the State and be not subject to the police power of the State. It would appear to be the position of these three objecting carriers that their respective receivers can stand in open opposition to the police power of the State and the statutes pertaining to the regulation of public utilities. This Commission is of the opinion that no court, Federal or State, would permit one of its servants or officers, over whose acts it has plenary control, to merely neglect to obey, much less to openly violate, the terms of a valid law, and the Commission is of the opinion further that the position of these three carriers is untenable. As authority for this proposition, the attention of the objecting Defendants is called to the case of the *Railroad Commission of Alabama v. A. G. S. R. R. Co.,* decided by the Supreme Court of Alabama on June 30, 1913, and found in 185 Ala., 356; 56 L. R. A. (N. S.), 98, 1915 D.

In this case the Railroad Commission of Alabama directed certain railroads operating within the State of Alabama to abandon certain parts of their present facilities and to acquire the necessary property and construct and maintain a union passenger station within the City of Bessemer, Alabama. The Supreme Court of Alabama, after deciding that the Railroad Commission had legal authority to require the construction of a union railroad station, together with the abandonment of facilities and the acquirement of other facilities, and that the facts in that case sustained the judgment of the Railroad Commission in its order, was called upon by certain objecting carriers operated by receivers appointed by Federal courts to decide whether a railroad company in the possession of receivers appointed by a Federal court is taken out of the operation of a State statute authorizing a railroad commission to regulate common carriers. The Court stated in part:

"It is the *duty* of all persons who receive *protection* at the hands of the law to *obey* it. Recognizing the binding necessity of this truism, the Congress of the United States has expressly declared that 'whenever, in any cause pending in any court of the United States, there shall be a receiver or manager in possession of any property, such receiver or manager shall manage and operate such property, according to the requirements of the valid laws of the State in which such property shall be situated, in the same manner that the owner or possessor thereof would be bound to do if in possession thereof.' 4 Fed. Stat. Anno., p. 386, Comp. Stat. 1913, Sec. 1047. If, therefore, the receivers of the Atlanta, Birmingham & Atlantic Railroad Company are acting under the appointment and supervision of a Federal court, they are bound, under the express mandates of a Federal statute which provides a penalty for its non-observance, to obey the valid laws of this state. * * * This proceeding in no way involves the actual custody or control of the receivers of the Atlanta, Birmingham & Atlantic Railroad Company, over the property of said railroad company. It undertakes to take no property from them whatsoever. It simply undertakes to compel the receivers, in their operation of the railroad of which they are receivers, to obey a valid law of this state. The Congress of the United States has declared that 'every receiver or manager of any property, appointed by any court of the United States, may be sued in respect of any act or transaction of his in carrying on the business connected with such property, without the previous leave of the Court in which such receiver or manager was appointed' (see Fed. Stat. Anno., vol. 4, p. 387, and authorities cited in the notes to that section); and under this section it is generally held that previous leave of the court in which the receiver was appointed, to sue a receiver, is necessary only when the suit involves the actual custody or control by the receiver of the property, or a part of the property, of which he is in possession or control as such receiver. High, Receivers, 4th Ed., p. 542, Sec. 395 b. * * * The present suit was instituted for the purpose of compelling receivers, in the administration of the affairs of a corporation in this state, to obey laws which they are neglecting to obey, and for which neglect they are liable to a penalty. * * * This proceeding, in so far as the insolvent railroad company is concerned, as already stated, grows out of the neglect of its receivers to obey one of the general laws of this state, which law has become operative in the City of Bessemer by virtue of the order of the Railroad Commission. For their neglect or refusal to obey or carry out the terms of this law, these receivers, or the rail-

road company of which they are receivers, are liable to a penalty fixed by the act. For the collection of this penalty, undoubtedly an action, without first obtaining leave of the court in which the receivers were appointed, would lie. High on Receivers, 4th ed., p. 542, Sec. 395 b, and authorities cited. And as this proceeding is to confer action on the part of the receivers in a matter growing out of their management of the property as receivers, and required of them by the law of this state, we can see no reason why the above-quoted Federal statute does not apply in this case. High, Receivers, 4th ed., supra."

See, also:

Erb v. Morsch, 177 U. S., 584; 44 L. D., 829.

The above reasoning appears to be logical, and it is the opinion of the Commission, therefore, that the objections of the three defendant carriers operated by receivers to the jurisdiction of the Commission is not well taken.

JURISDICTION OF COMMISSION OVER THE SUBJECT MATTER CONTAINED IN THE PETITION.

The complaint in this case prays for an order by the Commission "directing and commanding the Defendants, within a time to be fixed by the Commission, to erect and thereafter maintain fences on the sides of their roads, or the part open to use, where the same pass through, along or join enclosed or cultivated fields or unenclosed lands, with openings and gates therein, to be hung and have latches and hinges so that they may be opened and shut, at all necessary farm crossings of the road, except at crossings of public roads and highways, and within the limits of incorporated towns and cities, or the yard limits of established stations; and also to construct and thereafter maintain at all public road crossings now existing, or hereafter established, good and sufficient cattle guards, such fences, gates and cattle guards for the protection of livestock, and to promote the safety, comfort and convenience of the Defendants' patrons, employes and the public, to be constructed so as to be, in the opinion of the Commission, amply sufficient to prevent horses, mules, asses and cattle from straying upon said rights of way and railway tracks."

It is the contention of the Plaintiffs that large portions of the rights of way and railway tracks of the Defendant carriers are unfenced, and are not protected in any way from trespasses of livestock, and that the Defendant carriers, in operating said railways and the freight and passenger trains thereof, do not furnish, provide and maintain such instrumentalities, equipment, and facilities as promote the safety, comfort and convenience of their patrons, employes and the public, and as are in all respects

adequate, efficient, just and reasonable, and that the failure by the defendant carriers so to do is contrary to the Public Utilities Act of the State of Colorado and contrary to an act relating to the fencing of railroad lands found in the Session Laws of the State of Colorado, at page 400, for the year 1911.

Section 57 of the Public Utilities Act makes it the duty of the Commission to see that the provisions of the Constitution and Statutes of this State affecting public utilities, the enforcement of which is not specifically vested in some other officer or tribunal, are enforced and obeyed, and that the violations thereof are promptly prosecuted and the penalties due the State therefor collected; and it is further provided that it shall be the duty of the Attorney General or the District Attorney of the proper county or county and city to aid in any investigation, hearing or trial had under the provisions of this Act, and to institute and prosecute actions and proceedings for the enforcement of the provisions of the Constitution and Statutes of this State affecting public utilities, and for the punishment of all violations thereof.

The Defendant carriers attack the constitutionality of the "fencing act," and earnestly contend that the Commission has no power to order the Defendant carriers to comply with this statute; and also contend that the Commission, under the terms of the Public Utilities Act, is not empowered with legal authority to order the said carriers to fence their rights of way or any part thereof, taking the position that even though the Commission has been given this authority by the Legislature the same is unconstitutional and null and void.

(5) It is perhaps within the province of this Commission to suggest to the Attorney General that a suit be brought in the name of the People of the State of Colorado, or the Public Utilities Commission of the State of Colorado, to compel the Defendant carriers to fence their rights of way in accordance with the provisions of the "fencing act," but it is the opinion of the Commission that where the Legislature has directly vested the Commission with authority to direct every public utility to provide and maintain such service, instrumentalities, equipment and facilities as shall promote the health, safety, comfort and convenience of its patrons, employes and the public, and as shall in all respects be adequate, efficient, just and reasonable, and in Sections 24 and 25 of the Public Utilities Act providing that whenever the Commission, after a hearing upon its own motion or upon complaint, shall find that the rules, regulations, practices, equipment, appliances, facilities or service of any public utility are unjust, unreasonable, unsafe, inadequate or insufficient, or where the Commission shall find that additions, extensions, repairs or improvements to or change in the existing plant, operating facilities or other physical property of any public utility, or of any two or more public utilities, ought reasonably to be made, or that the new structure or structures should be erected to promote the con-

venience or security of its employes or the public, or in any other way to secure adequate service or facilities, it is made the duty of the Commission to determine the just, reasonable, safe, proper, adequate or sufficient rules, regulations, practices, equipment, appliances, facilities, service or method to be observed, furnished, constructed, enforced or employed, and to direct that the additions, extensions, repairs, improvements or changes be made, or such structure or structures to be erected.

The Commission is of the opinion that the Legislature of the State of Colorado has directly vested the Commission with jurisdiction over the subject matter in the petition of the petitioners.

It then becomes necessary for the Commission to determine whether it shall attempt by proper action to enforce the provisions contained in the "fencing act," or, in lieu thereof, permit the Plaintiffs in this cause to present to the Commission sufficient showing, if the same can be made, to require an order of the Commission directing one or more of the Defendant carriers to fence and otherwise properly protect portions of the rights of way owned and controlled by a defendant carrier or carriers.

The Commission is uncertain as to whether the Legislature intended that the "fencing act" should be enforced through the action of this Commission, but has concluded that it was the intention of the Legislature to vest in the Commission power and authority, by the terms of the Public Utilities Act, to assume jurisdiction over the subject matter contained in the complaint of the Plaintiffs, and the Commission therefore will permit the Plaintiffs to present evidence in the above cause against one or more of the Defendant carriers for the purpose of showing the Commission that additional instrumentalities, equipment, appliances, facilities, apparatus or improvements to the physical property of one or more of the Defendant carriers should be made to promote the safety, health, comfort and convenience of its patrons, employes and the public, and to make the same in all respects adequate, efficient, just and reasonable.

It Is Therefore Ordered, That the demurrers of the Defendant carriers to the complaint of the Plaintiffs be overruled.

It Is Further Ordered, That the motions to strike and the motions to dismiss the complaint be denied.

It Is Further Ordered, That the Plaintiffs may appear before the Commission, upon a date to be set by the Commission, and make such showing as they desire as to the subject matter contained in their complaint.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 18th day of May, 1916.

In re: IMPROVEMENT OF GRADE CROSSINGS IN COLORADO.

(Case No. 56.)

Grade crossings—Protection on highways—Co-operation of State Highway Commission.

(1) The Commission held that it had no power to order the state to place protective signals on highways not on the rights of way of carriers, but was of the opinion that the State Highway Commission should take some action to co-operate with the carriers in the protection of grade crossings in the state.

Grade crossings—Uniformity of protection devices.

(2) While the Commission had ordered certain carriers to protect grade crossings on their lines by the use of audible and visual signals, otherwise known as "wig-wag" signals, as well as by flagmen and other devices of safety, the Commission had made no rule of uniformity as to designs of safety devices, and before promulgating any uniform rule, awaited the report of the American Railway Association upon such matters, if said report were made within a reasonable time.

Grade crossings—Protections at.

(3) From the annual reports of the carriers on file with the Commission, as of June 30th, 1915, the Commission found that there were at that time 3,676 railway crossings at grade within the State of Colorado, of which 3,422 were unprotected and 254 protected, the protection consisting of gates, flagmen, bells and other safety devices, in addition to the usual crossing signs.

Grade crossings—Increase of accidents at.

(4) From the accident reports which the carriers are required to file with the Commission, it was found that the number of accidents occurring at grade crossings had greatly increased during the preceding years, due largely to the increased number and use of automobiles.

Grade crossings—Jurisdiction of Commission over.

(5) The legislature of Colorado has vested in the Public Utilities Commission authority to adequately protect all railway crossings at grade within the state and, if necessary, to eliminate all railway crossings at grade.

Grade crossings—Adequacy of protections at.

(6) The Commission was of the opinion that, while the elimination of all railway crossings at grade was unnecessary and impracticable, the time had arrived to adequately protect grade crossings by automatic signals, electric bells or audible and visual signals.

Grade crossings—Uniformity of protection devices—Co-operation of the state.

(7) The Commission was of the opinion that, due to the improved highways and increased travel at grade crossings, it is the duty of every railroad to afford to the public adequate protection at its railway crossings at grade, and that a uniform rule of improvement and maintenance of these railway crossings at grade should be established by the Commission for permanent improvement and the better protection of the public at large, and that it should be the position of the State of Colorado to assist the carriers in their efforts to protect railway crossings at grade by furnishing and maintaining, at the state's expense, uniform signals of safety on the highways of the state, in addition to the devices of protection which now are and hereafter will be furnished and maintained by the carriers on their rights of way.

Grade crossings—Specifications of.

(8) The Commission prepared printed forms for distribution among the carriers, one for each railway crossing at grade, upon which the carriers were ordered by sketch and description to furnish the Commission with information showing, for each railway crossing at grade, the railway alignment and grade location to nearest section line, the rate of grade and all other relevant information, the same to be furnished to the Commission within reasonable time, as definitely set forth in the order.

Grade crossings—Uniformity of protections at.

(9) The Commission promulgated a uniform rule in regard to adequate protections at grade crossings, subject, however, to exception, when sufficient showing is made to the Commission by the carrier to excuse it from strict compliance with the rule.

Grade crossings—Uniform construction—Expense.

(10) The Commission, after investigation and hearing, ordered the carriers to provide, within a reasonable time, and maintain at their own expense, at each intersection at grade of railroad tracks with public highways, grade crossings and approaches thereto at least twenty-four feet in width when the intersection is with a State Highway, whether primary or secondary, and sixteen feet in width when at intersection with public highways other than State Highways; the roadway on either side of the track or tracks to be constructed and maintained level with the top of rails for not less than twenty feet from the center line of tracks on either side and, when more than one track is crossed, for not less than twenty feet from the center line of outside track; the approaches to be constructed on uniform grade of not to exceed 6% from a point at least twenty feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel or some other suitable paving material and a smooth roadway surface maintained on approaches and crossings; all crossings within city or town limits to be planked ten inches on the outside and inside of each rail and the space between the planking in the center of the track to be filled with gravel or other suitable material, the kind of material used to be discretionary with the carrier and under the supervision of the Commission's engineer, the planking or gravel material to be not less than ten feet in width; that, on all crossings not within city or town limits, the carriers may use either planking, gravel, slag or other suitable material, provided the same be not less than sixteen feet in width, slag or other sharp edged material not to be used unless covered with bonding clay or sand to compact and give a smooth surface.

Grade crossings—Specifications of.

(11) The Commission, after investigation and hearing, ordered the carriers within the state to furnish information to the Commission upon forms to be furnished the carriers, showing for each railroad crossing at grade, the railway alignment and grade location.

(May 27, 1916.)

INVESTIGATION AND HEARING, on motion of the Commission, as to the necessity and feasibility of carriers within the state constructing and maintaining uniform grade crossings and filing specifications of all grade crossings within the state with the Commission; carriers ordered to construct grade crossings at their own expense within a reasonable time, in accordance with uniform specifications as provided in the Commission's order; carriers ordered to file, within ninety days, specifications of grade crossings within the state.

FINDINGS AND ORDER.

By the Commission:

On the 8th day of April, 1916, D. S. Hooker, Civil Engineer of the Commission, pursuant to instructions to him by the Commission that he investigate the necessity and feasibility of improving grade crossings of steam and electric railroads operating within the State of Colorado, filed a written report with the Commission recommending that the Commission, on its own motion, institute an investigation into the feasibility and necessity of ordering the steam and electric railroads now operating and doing business within the State of Colorado, when crossing any public highway within the State of Colorado at grade, to provide and maintain at each intersection at grade of railroad tracks with public highways, grade crossings and approaches thereto at least twenty-four (24) feet in width, the roadway on either side of track or tracks to be constructed and maintained level with the top of rails for not less than twenty (20) feet from the center line of tracks on either side, and, when more than one track is crossed, for twenty (20) feet from center line of outside track; the approaches to be constructed on uniform grade of not to exceed six (6) per cent. from a point at least twenty (20) feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel, or some other suitable paving material, and a smooth roadway surface on approaches and crossings to be maintained, with planking between the rails and for one foot on the outside of either side thereof for the full width of the traveled highway, such planking to be not less than sixteen (16) feet in any case, all to be done at the expense of the above named railroads; and into the feasibility and necessity of requiring each and all the above named railroads to furnish to the Public Utilities Commission of the State of Colorado information showing, for each railroad crossing at grade, the railway alignment and grade location to nearest section line; the section, township, range and county; a cross-section sketch of the railway crossing, showing the crown and approaches with the rate of grade; the physical condition on either side of railroad crossing, with cuts,

fills, trees, buildings, and other obstructions on right of way which interfere with the view of approaching trains; the character of the crossing; the protection of the crossing, whether by gates, flagman, standard sign, special sign, bell or automatic audible or visual signal; and the daily number, direction and speed of trains.

On the 13th day of April, 1916, the Commission directed the above named carriers to appear, through representatives, before the Commission, *en banc*, at the hearing room of the Commission, in the State Capitol Building, in the City and County of Denver, Colorado, on the 10th day of May, 1916, at the hour of 10:00 o'clock a. m., to make such showing as their interests seemed to require in answer to the recommendations to the Commission by its Engineer, Mr. Hooker.

On the 10th day of May, 1916, at the hearing room of the Commission, Mr. Hooker, the Engineer of the Commission, testified, and, with some slight modifications, again recommended that the Commission order compliance by the above named carriers with the recommendations contained in his report to the Commission as hereinabove specifically set forth.

Mr. H. U. Mudge, the President of The Denver & Rio Grande Railroad Company, upon request by the Commission, testified and stated that, as president of the American Railway Association, he had appointed a committee of seven operating railway officers to report on "Prevention of accidents at Grade Crossings," and stated that the subject of prevention of accidents at grade crossings having become one of the most important subjects before the officers of operating railways of this country, this committee would report to the said Association on the 17th day of May, 1916, in the City of New York.

Mr. Mudge then read the report of the Committee to the members of the American Railway Association, and suggested that the Commission make no order pertaining to the matters and recommendations contained in such report until such time as the American Railway Association should act upon the same, and stated that in his opinion a rule of uniformity should exist throughout the United States on the matters contained in the report of the committee.

(1) It was apparent from the reading of the report of the committee by Mr. Mudge that the matters under consideration by the committee pertain to a rule of uniformity on the protection of grade crossings by gates, flagmen and automatic signals. Mr. Mudge recommended to the Commission that distant signals should be placed on state highways within the State of Colorado, and that the style of signal should be uniform throughout the United States. While the Commission has no power to order the State to place such signs on highways not on the rights of way of carriers, it is the opinion of the Commission that after

the American Railway Association has acted upon the report of its committee the State Highway Commission should take some action to co-operate with the carriers in the protection of grade crossings in the State.

(2) While it is true that the Commission has ordered certain carriers to protect grade crossings by the use of audible and visual signals, otherwise known as "wig-wag" signals, as well as by flagmen and other devices of safety, the Commission has made no rule of uniformity as to designs of safety devices, and will await the report of the American Railway Association upon these matters, if said report is made within a reasonable time.

Mr. C. H. Bristol, General Superintendent of The Atchison, Topeka & Santa Fe Railway Company, then testified before the Commission to the effect that the recommendations of the Commission's Engineer were very good as a whole, although he was of the opinion that some exceptions should be made to the general rule.

Mr. H. W. Wagner, Engineer of the Northern District of the Western Lines of the Atchison, Topeka & Santa Fe Railway Company, testified that, in his opinion, the Commission could make a feasible general rule applicable to all grade crossings, and permit any carrier to make a showing in event of it appearing that the general rule should not apply in certain cases.

Mr. W. F. Thiehoff, on behalf of The Chicago, Burlington & Quincy Railroad Company, testified that The Chicago, Burlington & Quincy Railroad Company would co-operate in every way with the Commission, and recommended that a Committee of the engineers representing the defendant carriers meet with the Commission's engineer for the purpose of preparing and presenting to the Commission a report containing recommendations pertaining to the matters before the Commission.

The hearing was then adjourned so that a committee of the engineers representing the defendant carriers could meet with the engineer of the Commission on the 16th day of May, 1916, as suggested.

On the 16th day of May, 1916, the committee of engineers met and adopted the following resolution and presented the same to the Commission:

"RESOLVED, That it is the sense of the engineers, in view of the fact that none of the carriers have among their records sufficient data to adequately comply with the Commission's order as to information to be furnished, and to prepare the maps desired illustrating the conditions at each crossing, and that to obtain such data will involve an expense not warranted by the results which we believe will thereby be obtained;

IT IS THEIR RECOMMENDATION, in order to obtain the most prompt results and to effectively remedy such defective or

seemingly hazardous conditions as obtain at each crossing, that the highway crossings on each railroad be made the subject of joint inspection by a representative or representatives of the Commission and of the owning or operating railroad, whose joint recommendation as to improvements should be accepted by both parties.

(SGD) Atchison, Topeka & Santa Fe Railroad Co.,
By D. E. Helvern,

(SGD) The Chicago, Burlington & Quincy Railroad Company,
By F. T. Darrow,

(SGD) The Chicago, Rock Island & Pacific Railway Company,
By S. L. McClanahan,

(SGD) The Colorado & Southern Railway Company,
By E. F. Vincent,

(SGD) The Colorado Midland Railway Company,
By V. B. Wagner,

(SGD) The Denver & Rio Grande Railroad Company,
The Rio Grande Southern Railroad Company,
By J. G. Gwyn,

(SGD) The Denver & Salt Lake Railroad Company,
By L. D. Blauvelt,

(SGD) The Great Western Railroad Company,
By C. B. Daniels,

(SGD) Union Pacific Railroad Company,
By Chas. Wanzer,
Geo. F. Davis.

(SGD) The Midland Terminal Railroad Company,
The Cripple Creek & Colorado Springs Railroad Co.,
The Beaver, Penrose & Northern Railroad Co.,
By J. J. Cogan,

(SGD) The Denver Tramway Company,
The Denver & Intermountain Railway Company,
The Denver, Laramie & Northwestern Railroad Co.,
By Edward A. West.

Dated at Denver, Colorado, this 16th day of May, 1916."

(3) The Commission is of the opinion that it is sufficiently advised in the premises to dispose at this time of the issues contained in the above cause. The annual reports of the defendant carriers filed with this Commission as of June 30, 1915, show that at that time there were 3,676 railway crossings at grade within the State of Colorado, of which 3,422 were unprotected and 254 were protected, the protection consisting of gates, flagmen, bells, or other safety devices in addition to the usual crossing signs.

(4) The defendant carriers are required to submit to the Commission reports of all accidents, and the causes thereof, upon railroad trains or railroad tracks, and from these reports the Commission is able to arrive at the conclusion that the number of accidents has greatly increased of late years, due largely to the increased number and use of automobiles.

(5) The Legislature has vested in the Commission the authority to adequately protect all railway crossings at grade within the State of Colorado, and, if necessary, to eliminate all railway crossings at grade.

(6) The elimination of all railway crossings at grade at this time is unnecessary and impracticable. The time has arrived, however, when adequate protection must be given the traveling public, when crossing railway crossings at grade. In many cases, where the facts so justified, the Commission has ordered certain carriers of the State to adequately protect railway crossings at grade by automatic signals, electric bells or audible and visual signals, and doubtless will continue to order additional protection to railway crossings at grade where the conditions justify such action.

(7) Prior to the common use of the automobile, highway conditions and highway improvement were of far less importance than they are today. A horse-drawn vehicle, traveling at a rate of not to exceed five miles an hour and naturally within a limited radius, did not require the improved highway and the protection at railway crossings at grade that today must be given the traveling public, and this is illustrated in many ways. From the year 1913 up to the present time more than three millions of dollars have been expended on the State highway systems of Colorado (that is, highways constructed entirely or in part by State funds), involving an improved mileage of 6,200 miles. County and city commissions and officials have expended large sums of money on the main arteries within their jurisdiction, whether or not supported by the State, and the "good roads" movement has become one of the important questions of the day, and perhaps the most important concerning the people of the State of Colorado, due to the vast number of tourists traversing the highways within the State to points of interest and scenic beauty.

While it appears that the State of Colorado and its counties and municipalities have expended vast sums of money in constructing and improving highways of Colorado, it is apparent that the railroads operating within the State have not entirely kept pace with the changed conditions at their railway crossings at grade. This is quite natural, and the Commission is of the opinion that the railroads operating within the State of Colorado have had the interests of the public before them and at a great expense have kept abreast with the changed conditions in

the mode of travel in that many betterments for swifter and safer travel upon their systems of railways have been instituted within the past few years.

However, it is the duty of every railroad to afford to the public adequate protection at its railway crossings at grade, and, in the opinion of the Commission, a uniform rule of improvement and maintenance of these railway crossings at grade should be made by this Commission at this time for permanent improvement and the better protection of the public at large. It also should be the position of the State of Colorado to assist the carriers in their efforts to protect railway crossings at grade by furnishing and maintaining at the State's expense uniform signals of safety on the highways of the State in addition to the devices of protection which now are and hereafter will be furnished and maintained by the carriers on their rights of way.

(8) The Commission has had prepared and printed forms which will be distributed among the defendant carriers, one for every railway crossing at grade, upon which the carriers shall, by sketch and description, furnish the Commission with information showing for each railway crossing at grade the railway alignment and grade location to nearest section line, the section, township, range and county; the cross section of the railway crossing showing the crown and approaches, with the rate of grade; the physical condition on either side of railway crossing, with cuts, trees, fills, buildings, and other obstructions on right of way which interfere with the view of approaching trains; the character of the crossing; the protection of the crossing, whether by gates, flagmen, standard sign, special sign, bell or automatic audible or visual signal; and the direction and speed of trains. This information shall be furnished to the Commission within a reasonable time, to be definitely set forth in this order.

The Commission is well aware of the many different kinds of highways within the State of Colorado. Upon some the traffic is greatly congested; upon others very little travel is found today. Some highways traverse the valleys and plains of the State, while others wind in and out among the mountainous passes; and while the speed of the vehicles traversing some of the highways is great, the character of the country through which some of the highways pass is of such a nature that the speed of vehicles traversing them is necessarily restricted.

(9) The Commission is convinced that no general rule laid down by this Commission can or should be complied with in every case, and it therefore has come to the conclusion that a general rule of uniformity should be applied, subject, however, to exception when sufficient showing is made to the Commission by the carrier to excuse it from strict compliance with the rule. While well aware of the fact that the order to be made by it in this cause will result in expense to the defendant carriers, the Com-

mission is of the opinion that, regardless of the duty of the carrier to adequately protect the traveling public at railway crossings at grade, much permanent benefit will result to the railroads from the order.

ORDER.

(10) It Is Therefore Ordered, That the above named railroads now operating and doing business within the State of Colorado, at all points where their railways cross any public highway known as a State Highway, whether primary or secondary, within the State of Colorado, at grade, shall provide and maintain at each intersection at grade of railroad tracks with such public highways, grade crossings and approaches thereto at least twenty-four (24) feet in width, the roadway on either side of track or tracks to be constructed and maintained level with the top of rails for not less than twenty (20) feet from center line of tracks on either side, and, when more than one track is crossed, for not less than twenty (20) feet from center line of outside track; the approaches to be constructed on uniform grade of not to exceed six (6) per cent. from a point at least twenty (20) feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel, or some other suitable paving material, and a smooth roadway surface to be maintained on approaches and crossings; all crossings within city or town limits shall be planked ten inches on the outside and inside of each rail and the space between the planking in the center of the track shall be filled with gravel or other suitable material, the kind of material used to be discretionary with the carrier and under the supervision of the Commission's engineer, and in no case shall the planking or the gravel material be less than sixteen (16) feet in width; that on all crossings not within city or town limits the railroad may use either planking, gravel, slag, or other suitable material, provided same be not less than sixteen (16) feet in width, but in no case shall slag or other sharp-edged material be used unless the same be covered with bonding clay or sand to compact and to give a smooth surface; each of the above named railroads to bear the expense of complying with these requirements with regard to crossings at grade on its lines within the State of Colorado.

It Is Further Ordered, That the above named railroads now operating and doing business within the State of Colorado, at all points where their railway tracks cross at grade any public highway other than State highways within the State of Colorado, shall provide and maintain at each of such intersections grade crossings and approaches thereto at least sixteen (16) feet in width, the roadway on either side of track or tracks to be con-

structed and maintained level with the top of rails for not less than twenty (20) feet from the center line of tracks on either side, and, when more than one track is crossed, for twenty (20) feet from center line of outside track; the approaches to be constructed on uniform grade of not to exceed six (6) per cent. from a point at least twenty (20) feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel, or some other suitable paving material, and a smooth roadway surface to be maintained on approaches and crossings; all crossings within city or town limits shall be planked ten inches on the outside and inside of each rail and the space between the planking in the center of the track shall be filled with gravel or other suitable material, the kind of material used to be discretionary with the carrier and under the supervision of the Commission's engineer, and in no case shall the planking or the gravel material be less than sixteen (16) feet in width; that on all crossings not within city or town limits the railroad may use either planking, gravel, slag, or other suitable material, provided same be not less than sixteen (16) feet in width, but in no case shall slag or other sharp-edged material be used unless the same be covered with bonding clay or sand to compact and to give a smooth surface; each of the above named railroads to bear the expense of complying with these requirements with regard to crossings at grade on its lines within the State of Colorado.

Provided, that upon a showing made by any carrier that the above order, when applied to any crossing or crossings, would be unreasonable or unjust, the Commission may exempt said carrier from a strict compliance with the same by a special order setting forth the conditions which shall be complied with by the carrier.

It Is Further Ordered, That all work done by the carriers in compliance with the above order, or any order which the Commission may hereafter make pertaining thereto, shall be under the supervision of the Engineering Department of the Commission, and that the defendant carriers shall begin at once to improve the most dangerous railway crossings at grade and to accomplish all of the work required within a reasonable time.

(11) It Is Further Ordered, That the above named railroads furnish within ninety (90) days, unless additional time be granted by written consent of the Commission, to the Public Utilities Commission of the State of Colorado information to be given upon forms to be placed with the railroads by this Commission, showing, for each railroad crossing at grade, the railway alignment and grade location to nearest section line; the section, township, range and county; a cross-section sketch of the railway crossing, showing the crown and approaches, with the rate of grade; the physical condition on either side of railroad crossing, with cuts, fills, trees, buildings, and other obstructions on right of way which interfere with the view of approaching trains;

the character of the crossing; the protection of the crossing, whether by gates, flagmen, standard sign, special sign, bell or automatic audible or visual signal; and the daily number, direction and speed of trains.

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

(SEAL)

Dated at Denver, Colorado, this 27th day of May, 1916.

THE GRAND JUNCTION MINING & FUEL COMPANY, ET AL.,

v.

THE COLORADO MIDLAND RAILWAY COMPANY AND GEORGE W. VALLERY, RECEIVER, ET AL.

(Case No. 43.)

(May 27, 1916.)

REHEARING DENIED.

By the Commission:

WHEREAS, on the 12th day of May, 1916, The Midland Terminal Railway Company, by its Attorney, C. C. Hamlin, Esq., and The Colorado Midland Railway Company and George W. Vallery, as Receiver, by their attorneys, Messrs. Henry T. Rogers, George A. H. Fraser, and Rogers, Ellis & Johnson, filed with the Commission petitions for rehearing in the above entitled cause; and

WHEREAS, on the 12th day of May, 1916, the Commission extended to the 1st day of June, 1916, the effective date of its order in the above entitled cause; and

WHEREAS, The Commission is now advised in the premises.

IT IS THEREFORE ORDERED, That the petitions for rehearing filed by the Defendants in the above entitled cause be denied.

IT IS FURTHER ORDERED, That that part of the opinion of the Commission in the above entitled cause bearing date of April 22, 1916, which reads:

> "(3) It is to be further understood that the same differential as now applies between the Cameo-Palisade group of mines and the South Canon group is to be maintained in future."

is altered and modified to read as follows:

The Commission is of the opinion that a differential of twenty-five (25) cents should apply between the Cameo-Palisade group of mines and the South Canon group.

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

(SEAL)

Dated at Denver, Colorado, this 27th day of May, 1916.

BRECKENRIDGE CHAMBER OF COMMERCE

v.

THE COLORADO & SOUTHERN RAILWAY COMPANY.

(Case No. 74.)

(R. R. Comm. No. 59.)

Pleading—Prior laws.

(1) A petition filed with the Railroad Commission under the Railroad Commission Act, and pending at the time of the effective date of the Public Utilities Act, which repealed the former Act, would have its determination under the provisions of the Public Utilities Act, in accordance with Section 66, Chap. 127, Session Laws of 1913.

Pleading—Specific complaint—Reasonableness of rates.

(2) Where a petition is filed attacking the reasonableness of general and specific commodity rates, and it develops at the hearing of the cause that the principal complaint is directed against the rates on a certain commodity and practically all of the testimony introduced concerns those particular rates, the Commission will confine its determination to the passing upon the reasonableness of the rates on the particular commodity.

Interstate Commerce Commission—Uniform action with—Reasonableness of rates.

(3) Where a complaint was filed with the Commission involving the reasonableness of the rates on a certain commodity between points within the state, and a similar complaint had been filed with the Interstate Commerce Commission attacking the same rates as applicable to interstate commerce, it was agreed between all parties of interest that the findings and order of the Interstate Commerce Commission would be followed by this Commission.

Reasonableness of rates—Reasons for increase.

(4) In passing upon the reasonableness of the rates on ore from Breckenridge to Denver, it developed that freight rates had been increased, owing to an action of mandamus brought to enforce an order of the State Railroad Commission to compel the railway to operate its line between such points and also due to the heavy operating expenses of the railway in that division; and, as practically all of the ore shipped out of the Breckenridge district was low grade, the advance in the rates thereon amounted to approximately 100%, which made prohibitive the shipment of low grade ore, thereby decreasing the revenues of the carrier.

Reasonableness of rates—Railroads—Graduated scale based on valuation.

(5) The Commission was of the opinion that the practice of carriers in making a graduated scale of rates on ores, based on valuation, was a reasonable one, and that the scale should be such as to permit the free movement of low grade ore, as well as high grade ores.

Reasonableness of rates—Railroads—Ore.

(6) The Commission was of the opinion that the rate on ore and concentrates of all kinds, having a value of not over $12.00 per ton, from Breckenridge and points in Summit County to Denver of $3.00 per ton was unreasonable and unjustified and resulted in a charge in excess of the value of the service, and held that a rate of $2.25 per net ton would be a reasonable and just rate.

(June 5, 1916.)

COMPLAINT against the passenger and freight rates between Breckenridge and Denver; that portion of complaint having reference to passenger rates dismissed; rate on ore and concentrates, having valuation of not over $12.00 per ton, of $3.00 found unreasonable and rate of $2.25 per ton found reasonable for the future.

APPEARANCES: Barney L. Whatley, Esq., for Petitioner; E. E. Whitted, Esq., for Defendant.

STATEMENT.

By the Commission:

On September 23rd, 1913, the above named petitioner filed complaint before the State Railroad Commission of Colorado, and, eliminating the formal allegations, alleged: first, that the passenger fares charged by the defendant to and from points on its line of railroad located in Summit County, Colorado, and to and from other points on its line of railroad in Colorado, particularly between the Town of Breckenridge and the City of Denver, are unreasonable, excessive and discriminatory; second, that the defendant has and is maintaining and enforcing unjust and unreasonable freight rates on all commodity shipments and on ores, lumber, logs, hay, straw, etc., to and from points on its line of railroad west of Como, Colorado, and between points on its line of railroad situated wholly in Summit County; that said passenger fares and freight rates were wholly unreasonable, unfair and unjustly discriminatory, and prayed for an order directing the defendant to cease and desist from demanding, collecting and receiving said unreasonable, unfair and unjust fares and rates, and further prayed that the Commission fix, by order, reasonable, fair and just fares and rates, and such other and further relief as to the Commission might seem meet and proper.

By way of answer, the defendant made a general denial of all the material allegations in the petition and particularly denied that any of its passenger rates, fares or charges between Leadville and Denver, or between Breckenridge and Denver, or between Breckenridge and Leadville, or between any other points, have at any time been unjust or unreasonable or unjustly discriminatory or unduly prejudicial; and for further answer alleged that at all times since it resumed operation of the line between Como and Leadville, said line from Denver to Leadville, as well as its branches, has been operated at a large monthly and annual loss to defendant; that both freight and passenger business over said line from Denver to Leadville, and from Breckenridge to Denver, and from Breckenridge to Leadville, as well as over all branches, have been carried on at a heavy monthly and annual loss; that said state of conditions had existed for a period of more than ten years prior to January 1st, 1912, and that said line from Denver to Leadville is at present being operated at a heavy monthly and annual loss in operating expenses alone, excluding both taxes and interest upon the value of the property employed by this defendant between Denver and Leadville; that to reduce any of the passenger or freight rates on said line would have the effect of increasing losses, which are already heavy and very unjustifiable, and that to reduce any of said rates and fares below the rates and fares which exist at present would be unjust to the defendant, would be taking its property without due process of law, would compel the defendant to devote its property to public use without just compensation, and would be a denial of equal protection of the law to the defendant, in violation of both the Constitution of Colorado, and the Constitution of the United States, and prayed that said petition be dismissed.

The issues thus made up, the case came on for regular hearing before the State Railroad Commission of Colorado at its hearing room in the Capitol Building, Denver, Colorado, at 10 o'clock a. m., November 24th, 1913, the petitioner being represented by Barney L. Whatley, Esq., and the defendant by E. E. Whitted, Esq.

(1) While the petition in this cause was filed and heard under the former Railroad Commission Act, which law was automatically repealed when the present Public Utilities Commission Law became effective on August 12th, 1914, the final determination of the cause will be made under the provisions of the present Public Utilities Act, Section 66, chap. 127, Session Laws of 1913.

That part of the complaint referring to passenger fares having been heard and determined by the Commission, since the filing of this petition, in another action designated as Case No. 11, *In re Passenger Rates and Rules,* reported in 1 Colo. P. U. C., 35, it therefore is dismissed.

(2) While the petition attacks the reasonableness of general

and specific commodity rates as carried by the defendant carrier between points on its line into and out of points on its line in Summit County, and points wholly situated on its line of railroad in Summit County, it developed at the hearing that the principal complaint was directed to the rates on low grade ores from Breckenridge to Denver, and almost all of the testimony introduced concerned these particular rates. The identical rates involved in this case were attacked before the Interstate Commerce Commission also, in the case of *The Wellington Mines Company v. The Colorado & Southern Railway Co. et al.*, 39 I. C. C., 202. In that case the reasonableness of the proportion on the through rate on ore from Breckenridge to Denver, as applied to shipments moving from Breckenridge to Bartlesville, Oklahoma, was attacked. The testimony in that case was taken before an Examiner of the Interstate Commerce Commission, just prior to the hearing in this case, and much of the relevant testimony taken in that case was submitted in the form of exhibits to the State Railroad Commission for its consideration in this case.

(3) While no written stipulation was filed, it was agreed between all parties of interest that the findings and order of the Interstate Commerce Commission in the case above referred to would be followed by the Commission in this case. The case just cited was decided by the Interstate Commerce Commission on May 2nd, 1916, that Commission finding that a rate of $2.25 per ton on ore, not exceeding in value $12.00 per ton of two thousand pounds, would be a reasonable rate from Breckenridge to Denver, when applied as a proportion of a through rate to Bartlesville, Oklahoma.

(4) On November 1st, 1910, the defendant herein ceased to operate that portion of its line between Como and Breckenridge. The Breckenridge Chamber of Commerce filed a complaint before the State Railroad Commission protesting against the closing of this portion of the line. The defendant was ordered to re-establish service between these points, but refused to comply. An action of mandamus was brought to enforce the order, which was sustained in both the District and Supreme Courts of the State (C. R. C. Biennial Report 1911-12, page 39; also 54 Colo., 64).

It is contended by the petitioner, and admitted by the defendant, that the order in the above case was the direct cause of the increase in freight rates into and out of stations on its line of railroad in Summit County. It appears that when the line between Como and Breckenridge was closed for traffic on November 1st, 1910, and for many years previous thereto, the defendant carried the following rates on ore, carloads, from Breckenridge to Denver:

			Released to	Over
Valuation per ton...	$8.00	$12.00	$18.00	$100.00	$100.00
Rate per ton.....	1.50	1.75	2.00	3.00	6.00

On January 20th, 1913, subsequent to the opening and resumption of service of the line between Como and Breckenridge, the defendant filed with this Commission Supplement 16 to Tariff 1-I, C. R. C. 219, which provided for a rate of $3.00 per ton on all grades of ore from Breckenridge to Denver. This supplement, however, made no change in the rate of $1.50 per ton on low grade ore from Como, a point 22 miles east of Breckenridge, to Denver.

The testimony developed the fact that practically all of the ore produced in Summit County is low grade. This change in the rates therefore resulted in a substantial increase on every ton of ore shipped out of the district, which increase amounted to one hundred per cent. in practically every case. The defendant introduced testimony showing the heavy operating expenses on its Leadville Division, that part of its line between Leadville and Como, in justification of the increase.

The testimony developed the fact, however, that the increase in rates made prohibitive the shipment of low grade ore, thereby greatly curtailing the output of that class of ore and materially decreasing the revenues of the defendant.

(5) The Commission is inclined to the view that the practice of the carriers in making a graduated scale of rates on ores based on valuation is a reasonable one. The scale, however, should be such as to permit the free movement of low grade, as well as high grade ores.

The Commission is of the opinion, and so finds, that the increase of the rate on low grade ore from Breckenridge and points in Summit County to Denver, to $3.00 per ton, is unreasonable and unjustified and results in a charge in excess of the value of the service. The fact that the defendant for many years had carried a rate of $1.50 per ton on ore, not exceeding in value $8.00 per ton, from Breckenridge to Denver, raises a presumption that the rate was reasonable.

(6) The Commission is of the opinion, and so finds, that a rate of $2.25 per net ton on ore and concentrates of all kinds not exceeding in value $12.00 per ton of two thousand pounds would be a reasonable rate to charge on shipments from Breckenridge and points on the line of the defendant railroad company in Summit County to Denver.

An order therefore will be entered in accordance with this opinion.

ORDER.

It Is Ordered, That the defendant, The Colorado & Southern Railway Company be, and it is hereby notified and required to cease and desist on or before June 20th, 1916, and thereafter to abstain from, publishing, demanding or collecting its present

rate for the transportation of ore and concentrates of all kinds in carloads, when the value thereof does not exceed $12.00 per ton of two thousand pounds, from Breckenridge, Colorado, and points on its line of railroad in Summit County, to Denver, Colorado, which rate has been found to be unreasonable.

It Is Further Ordered, That The Colorado & Southern Railway Company be, and it is hereby, notified and required to establish on or before June 20th, 1916, upon notice to the Public Utilities Commission and the general public, by not less than five days' filing and posting in the manner prescribed by law, and thereafter to maintain and apply to the transportation of ore and concentrates of all kinds from Breckenridge, Colorado, and points on its line of railroad in Summit County, to Denver, Colorado, a rate of not in excess of $2.25 per ton of two thousand pounds, when the value thereof does not exceed $12.00 per ton, which rate is found to be reasonable.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 5th day of June, 1916.

THE CITY OF COLORADO SPRINGS

v.

THE COLORADO SPRINGS AND INTERURBAN RAILWAY COMPANY.

(Case No. 79.)

Practice and procedure—Hearing—Parties.

(1) In a case before the Commission in which a stipulation had been entered into between a municipality and a street railway utility, requesting the Commission to issue an order directing the carrier to furnish additional routes and service, the Commission held a public hearing in order that all citizens or any parties interested might be heard as to the matters relevant to the issues.

Service—Electric railways—Altering routes.

(2) Where a petition had been filed with the Commission petitioning for an order permitting a street railway company to make a change in certain of its tracks and routes, and the municipality in which the railway operated had agreed to such proposed changes, the Commission, after a public hearing, ordered the company to make such changes.

(June 14, 1916.)

The Colorado Springs and Interurban Railway Company and the City of Colorado Springs having filed a stipulation with the Commission requesting the Commission to order the carrier to make certain changes in its routing, in order to furnish service to the St. Francis Hospital, the Commission held a public hearing and, no objection being made to such stipulation, an order was made requiring the carrier to make the changes.

APPEARANCES: J. L. Bennett, Esq., for the City of Colorado Springs; Messrs. Chinn & Strickler, for the Defendant Company.

STATEMENT.

By the Commission:

On the second day of June, 1916, a written petition was filed with the Commission by the City of Colorado Springs, through its attorney, J. L. Bennett, Esq., directed against the

Colorado Springs and Interurban Railway Company, by stipulation with Messrs. Chinn & Strickler, attorneys for the Defendant Railway Company, and requesting that the Commission issue an order directing the said Colorado Springs and Interurban Railway Company to furnish to the St. Francis Hospital such street railway service as may be deemed adequate by the Commission, setting forth the routes to be adopted for such purpose, and further directing the Defendant Railway Company to apply to the City Commissioners of Colorado Springs for such revocable permits as may be found by the Commission necessary to be obtained by the Defendant Railway Company prior to the beginning of construction work on the extension so ordered.

The petition set forth that the action was brought before the Commission as a result of certain informal complaints having been filed with this Commission by the St. Francis Hospital, a charitable institution in the City of Colorado Springs, alleging that the Defendant Railway Company was failing to furnish adequate service to the said St. Francis Hospital, and following conferences between The Public Utilities Commission of the State of Colorado, the City Commissioners of Colorado Springs, and representatives of the Defendant Railway Company, at which conferences it was agreed and stipulated that said petition should be filed and said order or orders issue in conformity therewith, together with such further order or orders as this Commission might deem just and proper.

(1) On the eighth day of June, 1916, the Commission gave notice to the citizens of Colorado Springs, through daily newspapers published in said city, that on the tenth day of June, 1916, at 10:00 o'clock a. m., the Commission would convene a hearing in this cause at the council chamber of the City Commissioners of Colorado Springs in the City Hall at Colorado Springs, Colorado, for the purpose of receiving the report of D. S. Hooker, Civil Engineer for the Commission, as to the necessity of the proposed service and as to the routes to be adopted by the Colorado Springs and Interurban Railway Company in the event that the Commission should order inaugurated the service petitioned for, and to the end that a public hearing be held by the Commission, permitting citizens of Colorado Springs to testify to all matters relevant to the issues.

On the tenth day of June, 1916, at the council chamber of the City Commissioners of Colorado Springs, at Colorado Springs, Colorado, the Commission convened the above cause and received the report of its engineer, recommending that the proposed service be furnished to the St. Francis Hospital, and presenting to the Commission a plan calling for certain extensions of railway lines by The Colorado Springs and Interurban Railway Company, and the temporary discontinuance of certain lines of railway service.

The Commission now being fully advised in the premises:

ORDER.

(2) It Is Ordered, That the Defendant, The Colorado Springs and Interurban Railway Company, remove its tracks from that portion of Kiowa Street, in the City of Colorado Springs, beginning with the intersection of Kiowa Street with El Paso Street and running thence east to the intersection of said Kiowa Street with Institute Street, and to discontinue the operation of a car line thereon, and that the said Defendant is further ordered and directed to remove its tracks on that portion of Platte Avenue, in the City of Colorado Springs, beginning with the intersection of Platte Avenue with Wahsatch Avenue and running thence east on Platte Avenue to the intersection of Platte Avenue with El Paso Street, and discontinue the operation of a car line thereon.

It Is Further Ordered, That the Defendant, The Colorado Springs and Interurban Railway Company, immediately apply to the City of Colorado Springs, through its Board of Commissioners, for a permit, revocable or otherwise, permitting the said Colorado Springs and Interurban Railway Company to extend, construct and operate a line of railway, at all times subject to the supervision of the Public Utilities Commission of the State of Colorado, on Pike's Peak Avenue in the City of Colorado Springs, beginning at the point thereon where its line of railway now turns into the station of the Atchison, Topeka & Santa Fe Railway and running thence easterly on Pike's Peak Avenue to the intersection of Pike's Peak Avenue with Institute Street, and thence northerly on Institute Street to the intersection of Institute Street with Kiowa Street, and to extend its line of railway on El Paso Street, commencing at the intersection of El Paso Street with Kiowa Street and running thence northerly on El Paso Street to the intersection of El Paso Street with Platte Avenue.

It Is Further Ordered, That, upon the issuance of said permit or permits by the Commissioners of the City of Colorado Springs, the said Colorado Springs and Interurban Railway Company operate and maintain these extensions as a part of its system of street railways, under the supervision of the Public Utilities Commission of the State of Colorado.

It Is Further Ordered, That the Colorado Springs and Interurban Railway Company, at its expense, extend the conduit on Institute Street and make the fill therefor, under the supervision of the Commissioner of Public Works and Property of the City of Colorado Springs and the Engineer for the Public Utilities Commission of the State of Colorado.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated this 14th day of June, 1916, at Denver, Colorado.

(2 Colo. PUC)

In Re: CROSSING PROTECTIONS BETWEEN DENVER AND PUEBLO.

(Case No. 76.)

Grade crossings—Elimination of—Safety appliances.

(1) The Commission's engineer was of the opinion that the elimination of the grade crossings upon The Atchison, Topeka & Santa Fe Railway and The Denver & Rio Grande Railroad between Denver and Pueblo was impracticable, and would be impracticable for many years to come, but that, due to the traffic on these crossings, the same were dangerous and it was necessary to install such protections as were feasible.

Safety appliances at grade crossings—Maintenance and operation of.

(2) Since the Commission inaugurated its work of ordering railways to properly protect their grade crossings, there has been a marked improvement in the maintenance and operation by the carrier as, prior to that time, no attempt had been made to properly maintain or inspect such appliances, due to the discouragement of the railway officials at the attitude of the public in regard to all signals; and, in all cases where the Commission has ordered the installation of audible and visual signals, all of which are being properly maintained and inspected, it has been noted that the traveling public is co-operating with the carriers and that a large majority of the drivers of vehicles stop their machines at the time the signal begins to move, to await the passing of the approaching train.

Grade crossings—Safety appliances—Audible and visual signals.

(3) The Commission is of the opinion that, while electric warning bells at grade crossings are adequate protection in many cases, where traffic is heavy the protection afforded by the audible and visual type of signal warrants the additional expense of same, as the electric bell simply sounds a warning upon the approach of a train, while the audible and visual signal, commonly known as the "wig-wag," is ordinarily an electric motor-driven device sounding an alarm upon the approach of a train and swinging a red disk of sufficient size, upon which is printed the word "danger," and in which is enclosed a red electric light, thus affording additional protection at night by calling attention to impending danger, even if the traveler is unable to hear the warning bell.

Grade crossings—Sufficiency of protections.

(4) The Commission, after instituting an investigation and hearing as to the sufficiency of grade crossing protections and as to the feasibility of the elimination of the twenty-crossings at grade on The Atchison,Topeka & Santa Fe Railway and The Denver & Rio Grande Railroad between Denver and Pueblo, at each of which approximately 300 automobiles and 100 other vehicles passed each day, found the elimination of same to be impracticable and, after making a careful study of the cost of installation

of warning devices, as well as the maintenance thereof, ordered the companies to install, within sixty days, audible and visual signals, after first submitting the plans for the same to the Commission for its approval.

(June 15, 1916.)

INVESTIGATION on motion of the Commission as to the sufficiency of grade crossing protections and as to the feasibility of the elimination of crossings at grade on the lines of The Atchison, Topeka & Santa Fe Railway Company and The Denver & Rio Grande Railroad Company between Denver and Pueblo; elimination of crossings at grade found impracticable and companies ordered to install audible and visual signals.

APPEARANCES: Henry T. Rogers, Esq., J. H. McMahon, Esq., D. E. Helvern, Esq., W. H. Rife, Esq., for The Atchison, Topeka & Santa Fe Railway Company; A. E. Sweet, Esq., F. J. Easley, Esq., A. Ridgway, Esq., for The Denver & Rio Grande Railroad Company.

ORDER.

By the Commission:

On the 17th day of April, 1916, the Commission's engineer in charge of railways, pursuant to a request made by the Commission, made a thorough examination of all railway crossings at grade on the railway lines of The Denver & Rio Grande Railroad Company and The Atchison, Topeka & Santa Fe Railway Company between Denver and Pueblo, within the State of Colorado.

On the 17th day of May, 1916, the Commission received a communication from Henry T. Rogers, representing The Atchison, Topeka & Santa Fe Railway Company, submitting prints showing crossings on the Colorado division of the lines of The Atchison, Topeka & Santa Fe Railway Company at which the said company intended to install crossing bells.

The communication was accompanied by standard plans for installation. The proposed plans for installations of crossing bells pertained to certain railway crossings at grade between Denver and Pueblo, and the Company was notified that the Commission did not desire, at the time of the receipt of the communication, to approve the plans, as the Commission was awaiting the report of its railway engineer as to the adequacy of protection at the railway crossings at grade on The Atchison, Topeka & Santa Fe Railway between Denver and Pueblo.

On the 27th day of May, 1916, the Commission received a detailed report from its engineer in charge of railways, stating, in substance, that an examination had been made of each of the railway crossings of the above railway lines between Denver and

Pueblo, and that an inspector for the Commission had obtained a traffic census upon the railway crossings of the above railway lines located between Denver and Pueblo, showing that about 300 automobiles cross the railroad tracks at these crossings each day and that about 100 other vehicles cross these railway crossings each day.

The report of the Commission's inspector was made during the month of May, 1916, prior to the period of heavy summer traffic throughout the State of Colorado.

(1) The Commission's engineer, in his report, stated that the elimination of all of the grade crossings upon the above lines of railway between Denver and Pueblo is impracticable at present and will be impracticable for many years, but that the crossings are now dangerous and it becomes necessary, therefore, in his opinion, for the Commission to order the installation of such grade crossing protections as is feasible, that the driver of a vehicle may be given every chance to safeguard his passage over each of the railroad crossings and devote his entire attention to watching for signals and approaching trains without being diverted in attempting to choose a smooth road over the tracks; and that, while the Commission's order in Case No. 56, when complied with, will naturally result in improved crossing conditions, it becomes necessary for the Commission to otherwise protect the traveling public at certain railway crossings at grade within the State of Colorado.

The report shows that the distance between Denver and Pueblo is 119 miles, and that there are twenty grade crossings located on the lines of railway of the above carriers between these cities, eleven of which are on The Atchison, Topeka & Santa Fe Railway and nine on The Denver & Rio Grande Railroad; and that, after a thorough investigation of these twenty grade crossings between Denver and Pueblo, the engineer arrived at the conclusion that none is less dangerous than any other between these points. The report was accompanied by photographs of each railway crossing and by certain communications from The Denver Motor Club, pertaining to the safety of these crossings. With the report was submitted the traffic report of E. S. Johnson, inspector for the Commission.

The engineer for the Commission recommended the installation of audible and visual signals at the railway crossings at grade between Denver and Pueblo, similar to those heretofore ordered by the Commission to be installed at certain other crossings on lines of railway within the State of Colorado.

On the 1st day of June, 1916, the Commission decided to hold a hearing on its own motion into the feasibility and necessity of the installation of safety devices by The Denver & Rio Grande Railroad Company and The Atchison, Topeka & Santa Fe Railway Company at their railway crossings located on their respective

lines of railway between the City of Denver and the City of Pueblo, within the State of Colorado, and ordered the said railway companies to appear through representatives at the Commission's hearing room in the State Capitol Building, in the City and County of Denver, on the 9th day of June, 1916, at the hour of 10 o'clock a. m., before the Commissioners *en banc,* to make such showing in the above cause as to them might be thought necessary.

On the 9th day of June, 1916, this cause was convened by the Commission and the report of the Commission's engineer was read and the engineer was subjected to cross-examination. Representatives of the railway companies testified, and announced their desire to co-operate with the Commission upon the question of the adequate protection of the traveling public when crossing railway crossings of these railway companies located between Denver and Pueblo, within the State of Colorado.

While certain witnesses representing the carriers testified that crossing bells were adequate protection at railway crossings such as these, and that the installation of an audible and visual signal was, in many cases, unnecessary and thus became a burden of unnecessary expense upon the carriers, these statements were due largely to the fact that certain officials of the railroads had become somewhat discouraged by the attitude of the traveling public regarding the protection of railway crossings at grade. Some of the testimony was to the effect that travelers do not give the necessary attention to safe driving and were inclined to disregard any protection offered. While the Commission has no doubt as to the truth of the statements made at the hearing by the operating officials of these railroads, it regards these illustrations as exceptions, rather than the general rule.

The highway in question is known as a State Highway, due to the fact that the State of Colorado has contributed to its construction and is contributing to its maintenance. It is one of the important highway arteries of the state, all travel between Denver, Pueblo and Colorado Springs traversing it, and from this main artery are constructed many lateral highways with destinations in Southern and Western Colorado, and reaching the mountain resorts of the Southwestern part of the state.

(2) When the Commission first began to enforce this important duty, assigned to it by the legislature, of protecting the traveling public and the railways by the safeguarding of highway crossings at grade, a deplorable condition existed. While the railways operating within the State of Colorado had afforded some protection at highway crossings at grade within the city limits of municipalities within the State of Colorado by the means of flagmen, only a few crossing bells had been installed, and upon some of the railroads no attempt had been made to maintain the same. Consequently, a great damage resulted to the traveling public, in that its right to depend upon the warning

of a crossing bell, when the same had been installed, was entirely swept away. Today all of the automatic signals of protection at grade crossings within the State of Colorado are operating and are being properly inspected and, while this is due partly to strenuous work of the Commission, much credit is due the railroads for their hearty co-operation.

The Commission has not become discouraged because of the apparent disregard of the travelers of the danger at railway crossings, but is of the opinion that, as the traveling public becomes aware of the work of this Commission and the large sums of money being expended by the railways for its protection, more attention will be given to careful driving and appreciation of crossing protection.

Inspectors of the Commission have reported that, at railway crossings where the Commission has ordered the installation of audible and visual signals, the desired result has been accomplished, and that a large majority of the drivers of vehicles stop their machines, at the time the signal begins to move, to await the passing of the approaching train.

(3) Electric warning bells at crossings are adequate protection in many cases, but the Commission is of the opinion that where traffic is heavy the protection afforded by the audible and visual type of signal warrants the additional expense.

The advantage of the audible and visual signal over the ordinary crossing alarm bell is apparent. The latter is an electric bell which sounds a warning upon the approach of a train. The audible and visual signal, commonly known as the "wig-wag," is ordinarily an electric motor-driven device sounding an alarm upon the approach of a train and swinging a red disk of sufficient size, upon which is printed the word "danger" and in which is enclosed a red electric light, thus affording additional protection at night by calling the attention of travelers to impending danger, even though the traveler is unable to hear the warning of the bell.

(4) The Commission has made a careful study of the cost of the installation of warning devices, as well as the cost of maintenance, and is of the opinion that each railway crossing at grade located upon the railway lines of The Denver & Rio Grande Railroad Company and The Atchison, Topeka & Santa Fe Railway Company between Denver and Pueblo shall be protected by an audible and visual signal, the plans for which shall first be submitted to the Commission for its approval.

It Is Therefore Ordered (a) That The Denver & Rio Grande Railroad Company install and maintain at its expense an audible and visual signal at each of its railway crossings at grade with "State Primary Highways" Nos. 3, 4 and 8, on its line of railway between Denver and Pueblo, within the State of Colorado.

(b) It Is Further Ordered, That these audible and visual signals shall be installed within a period of sixty days, and that

the plans for the installation of same shall first be approved by the Commission.

It Is Ordered (a) That The Atchison, Topeka & Santa Fe Railway Company install and maintain at its expense an audible and visual signal at each of its railway crossings at grade with "State Primary Highways" Nos. 3, 4 and 8, on its line of railway between Denver and Pueblo, within the State of Colorado.

(b) It Is Further Ordered, That these audible and visual signals shall be installed within a period of sixty days, and that the plans for the installation of same shall first be approved by the Commission.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 15th day of June, 1916.

MULLEN & COMPANY

v.

THE DENVER & RIO GRANDE RAILROAD COMPANY.

(Case No. 83.)

Police power—Regulation of utilities—Abrogation of contracts.

(1) A contract between a shipper and a carrier providing for switching charges at other than the tariff rate must be deemed to have been entered into in contemplation of the reserve power of the State of Colorado to regulate the rates of public utility companies, and, while binding upon the parties when made, became null and void when the Legislature of the State of Colorado resumed its police power by the enactment of a Railroad Commission law and, subsequently, a Public Utilities Commission law.

Discrimination—Switching rates—Abrogation of contracts.

(2) Where a shipper and a railroad company entered into a contract providing for a nominal switching charge, the consideration for which was the building of a mill by the shipper upon the lines of railway of the railroad company, and subsequently the State of Colorado enacted a Railroad Commission law and, later, a Public Utilities Commission law providing for uniform rates and charges and tariffs containing the same to be filed by the public utilities with the Commission, and where the tariff rates so filed provided for a different rate than that called for in the contract for the same class of business, the contract becomes null and void.

(June 17, 1916.)

PETITION of Mullen & Company for ruling as to legality of contract with The Denver & Rio Grande R. R. Co., for switching charges and service.

STATEMENT.

By the Commission:

On the 3rd day of September, 1915, the Complainant, by J. K. Mullen as General Manager, filed with the Commission a written petition alleging that, in the year 1875, J. K. Mullen leased the Star Mills, located in North Denver, Colorado, which at that time were operated by water power; and that, in the summer of 1878, the said J. K. Mullen bought the Excelsior

Flour Mill, located at 8th and Lawrence streets, and immediately thereafter enlarged the capacity of the said mill and purchased a home on the corner of 9th and Lawrence streets, two blocks distant from the mill. It appears from the petition that it then became necessary for the said J. K. Mullen, in order to supply his customers, to double the capacity of the Excelsior Flour Mill or, in lieu thereof, to build a new mill, and that the said J. K. Mullen decided on the latter plan and purchased a location on the corner of Wewatta and 15th streets; and that, subsequent to the purchase of said location, the said J. K. Mullen, as General Manager of J. K. Mullen & Company, was approached by D. C. Dodge, then Vice-President of The Denver & Rio Grande Railroad Company, who requested him to locate his company's new mill on the tracks of The Denver & Rio Grande Railroad Company. Mr. Mullen informed Mr. Dodge that it had become necessary to construct an elevator in which grain could be handled in bulk and that the most desirable location was on a line of railroad traversing the grain fields of Northern Colorado and over the lines of which the said J. K. Mullen could receive grain from Utah and Idaho, as well as from Kansas and Nebraska, without being compelled to pay switching charges. It appears that Mr. Dodge stated that his company wished to have Mr. Mullen build his mill on its line of railway, so it would not be necessary for the said railroad company to switch empty cars over and across Cherry Creek, then pay another railroad company for taking the empty cars from the transfer track and switching them over to the line that brought the grain and products into Denver and then returning the loaded cars to the transfer tracks of The Denver & Rio Grande Railroad Company.

Mr. Dodge agreed that his company would make only a nominal charge for all loaded cars of grain delivered at the proposed mill of J. K. Mullen & Company, and asserted that the cost would be so small as to equalize conditions and give to Mr. Mullen as good a location as though he built on the East side of Cherry Creek.

On the 14th day of February, 1883, J. K. Mullen & Company entered into a certain written agreement with The Denver & Rio Grande Railroad Company, as follows:

> "THIS AGREEMENT AND CONTRACT made by and between The Denver & Rio Grande Ry. Co. and J. K. Mullen & Co., of Denver, Colorado;
>
> WITNESSETH: That whereas the said J. K. Mullen & Co. propose to build on Block 73, West Denver, a Flouring Mill & Elevator at a cost of not less than Seventy Thousand Dollars and in order to successfully operate said Mill and Elevator it will be necessary to have The Denver & Rio Grande Railway Company switch promptly to the

said proposed Mill and Elevator all cars of Grain, Merchandise and Coal received by the said J. K. Mullen & Co. or their successors in business, on same location, regardless of which Railway hauls the same to Denver;

NOW THEREFORE, In consideration of the amount of money involved by the said J. K. Mullen & Co. and as an inducement for them to locate their business on the line of The Denver & Rio Grande Railway, we, The Denver & Rio Grande Railroad Co., through their General Manager, D. C. Dodge, do promise and agree and by this contract has contracted, promised and agreed to do the necessary switching for the said J. K. Mullen & Co., or their successors in business, for so long a time as they or their successors shall continue to transact a Grain and Feed business on said Block 73, in West Denver, at the following named prices and on the following terms, to-wit:

On all cars from East of Meridian of Kansas State Line, and Utah and California,—in other words, all cars on which the Union Pacific or B. & M. R. R. agree to refund the amount charged by the D. & R. G. Ry.—switching charge to be Two Dollars per car.

On all cars from Local points in Colorado, or from Utah and California on which the Union Pacific or B. & M. R. R. refund no part of amount charged by D. & R. G. R. R., switching charge to be Seventy-Five Cents per car.

In witness whereof we hereunto set our hand and seal this fourteenth day of February, Eighteen Hundred and Eighty-three.

D. & R. G. RY. CO.,
By D. C. DODGE,
V. P. & G. M.
J. K. MULLEN & CO."

It is then alleged by Mr. Mullen, as General Manager of J. K. Mullen & Company, that the construction of the Hungarian Mill & Elevator was begun in the year 1883, at a cost of more than $70,000, and that the mill was operated for the first time in the fall of 1883. It appears that The Denver & Rio Grande Railroad Company complied with the terms of the contract until the year 1910. The Denver & Rio Grande Railroad Company then took the position that the switching rate set forth in the contract was discriminatory and in violation of the Interstate Commerce Act. The petition then states that the Interstate Commerce Commission notified the railroad company and J. K. Mullen that the switching contract was in no way affected by the rulings of the Interstate Commerce Commission, for the reason that its application was to intrastate business. The

Denver & Rio Grande Railroad Company then took the position that the contract was in violation of the Railroad Commission Law of the State of Colorado and is now in violation of the law pertaining to public utilities.

It is then alleged that the contract is legal and of binding force, and the complainant prays for an order of this Commission directing The Denver & Rio Grande Railroad Company to comply with the terms of the contract and to make reparation upon the alleged excessive charges heretofore collected from the complainant by the respondent.

The Denver & Rio Grande Railroad Company does not resist the petition, but desires the Commission to rule as to the legality of the contract.

It is admitted by the parties to this cause that the rates and charges for switching as set forth in the contract executed by the complainant and respondent are lower than those rates and charges which are set forth in the tariffs of The Denver & Rio Grande Railroad Company and on file with this Commission. It is admitted, also, that the respondent railroad company has collected from the complainant the tariff charges as filed with the Railroad Commission of Colorado and with this Commission since the year 1911. It therefore becomes apparent that, by complying with the terms of the contract, The Denver & Rio Grande Railroad Company would collect from the complainant a less rate than its tariff rates now on file with the Commission and, therefore, collect an illegal charge from and make a discriminatory rate to the complainant. It is the contention of the complainant, however, that the contract is a legal contract binding the parties thereto.

The Commission heretofore has decided this very question in other cases, and has received an opinion from the Attorney General of the State of Colorado as to the legal status of this particular contract.

(1) The contract in question must be deemed to have been entered into in contemplation of the reserve power of the State of Colorado to regulate the rates of public utility companies. The contract was binding on the parties when made, but, in contemplation of the law, was intended to bind them only so long as the legislature saw fit not to exercise such power. The laws of the State of Colorado permit no discrimination in rates, but call for uniformity, and, therefore, the State has asserted in no uncertain terms its intention to resume the power of state regulation. By the terms of the Railroad Commission Act and the Public Utilities Act, and the subsequent filing of tariffs containing the legal rates of public utilities within the State of Colorado, all contracts creating discriminatory or special rates were

abrogated automatically and the tariff rates become the only rates that the public utilities may collect.

Colorado & S. Ry. Co. v. State Railroad Commission, 54 Colo. 64, at 92; 129 Pac. 506;

Wolverton v. Mountain States T. & T. Co., 58 Colo. 58; 142 Pac. 165;

Louisville & Nashville R. R. Co. v. Mottley, 219 U. S. 467;

Southern Wire Co. v. St. L. B. & T. Co., 38 Mo. App. 191;

Missouri Pacific Ry. Co. v. Kansas ex rel. Taylor, 216 U. S. 262;

City of Benwood v. Public Service Commission (W. Va.), 83 S. E. 295;

State ex rel. Webster v. Superior Court, 67 Wash. 37; 120 Pac. 861.

Milwaukee E. R. & L. Co. v. Railroad Commission (Wis.), 238 U. S. 174;

City of Manitowoc v. M. & N. T. Co., 145 Wis. 13;

Duluth Street R. R. Co. v. Railroad Commission (Wis.), 152 N. W. 887, at 890;

Seattle Electric Co. v. City of Seattle, 206 Fed. 955;

California-Oregon Power Co. v. City of Grants Pass, 203 Fed. 173;

Minneapolis, St. P. & S. S. Ry. Co. v. Menasha Woodenware Co., 159 Wis. 130.

(2) It, therefore, is the opinion of the Commission that the contract in question, insofar as it affects intrastate business, is discriminatory and illegal.

The Commission has had submitted to it for decision Case No. 28, which deals with the reasonableness of rates for switching within the City of Denver. The question of the reasonableness of all switching rates within the City of Denver will be decided by the Commission in that case.

If the complainant has a cause of action for damages against the respondent, and as to this right the Commission expresses no opinion, the same should be presented to the courts and not to this Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 17th day of June, 1916.

In re: SAN LUIS VALLEY FREIGHT RATES.

(Cases Nos. 49 and 51.)

Rate—Railroads—Comparison of rates.

(1) The Commission, in determining the reasonableness of the rates on coal from the various producing districts to points in the San Luis Valley, was of the opinion that the rate on lump coal from the Walsenburg District to Denver was not a fair measure of comparison with the rates from Walsenburg District to the points in the San Luis Valley, due to the difference in grades and the density of traffic.

Rates—Railroads—Reasonableness—Differentials.

(2) The Commission, in investigating the reasonableness of the coal rates to points in the San Luis Valley, endeavored to ascertain the general practice of making differentials on nut and slack coal under the lump coal rates, but found no established basis in effect and in the rates as found reasonable a differential of 25 cents per ton on nut coal under the lump coal rate was fixed, without making a fixed differential on slack coal under lump coal.

Rates—Railroads—Reasonableness of coal rates.

(3) The Commission, in an investigation as to the reasonableness of the coal rates from the various coal producing districts to points in the San Luis Valley, found the rates from the various districts to be unreasonable and prescribed reasonable rates from the Walsenburg, Trinidad, Canon City, Crested Butte and Somerset District on bituminous coal and from the Crested Butte District on anthracite coal.

Rates—Railroads—Reasonableness—Differentials.

(4) The Commission, in an investigation as to the reasonableness of the rates on coal from the various producing districts to points in the San Luis Valley, prescribed reasonable rates from the Walsenburg District and used the rates from that district as a base upon which to predicate the rates from the other groups using differentials over the Walsenburg District rates.

(June 20, 1916.)

COMPLAINT AND INVESTIGATION on Commission's own motion, as to the reasonableness of the coal rates from the various producing districts on The Denver & Rio Grande Railroad to points in the San Luis Valley; rates found unreasonable and reasonable rates prescribed for the future.

APPEARANCES: A. L. Moss, W. R. Pike, Robert Ginn, Jas. Roper, Jas. D. Pilcher, for Alamosa County. E. H. Ellithorpe, Delfino Salazar, for Costilla County. John I. Palmer, John Britton, for Saguache County. W. H. Barlow, Antonio J. N. Valdez, for Conejos County. L. A. Ruark, H. N. Howard, C. H. Akers, C. S. Campbell, Geo. Gates, for Rio Grande County. J. G. McMurry, E. N. Clark, Fred Wild, Jr., for The Denver & Rio Grande Railroad Company. C. E. Neil, for the Commission.

STATEMENT.

By the Commission:

On February 1st, 1916, there was filed with the Commission a resolution adopted and passed by the Board of County Commissioners of Alamosa County, and on February 10th, 1916, a resolution adopted and passed by the Board of County Commissioners of Costilla County, making complaint against the rates on all commodities as charged by The Denver & Rio Grande Railroad Company from and to points in the San Luis Valley, as being discriminatory and rendering inestimable harm to the upbuilding of the San Luis Valley. Prior to the receipt of the above mentioned resolutions, the Commission had received many informal complaints as to the unreasonableness of the rates to and from the San Luis Valley.

On March 4th, 1916, pursuant to the informal complaints and resolutions filed, the Commission instituted an investigation on its own motion, as to the reasonableness of the local class and commodity rates, as charged by The Denver & Rio Grande Railroad Company between points in the San Luis Valley; also between points in the San Luis Valley and points on The Denver & Rio Grande Railroad in the State of Colorado where the transportation was wholly within the State of Colorado; and ordered The Denver & Rio Grande Railroad Company to appear and make such showing in the cause as might be thought necessary by the said defendant. "San Luis Valley" was defined by the Commission in its order instituting the hearing as follows: "Creede, Antonito, La Veta and Villa Grove and all points intermediate therewith."

On March 10th, 1916, a complaint was filed with the Commission by The Akers Lumber Company, the J. S. Campbell Company and W. J. Clark attacking the rates on all classes of coal from the Walsenburg, Canon City and Trinidad Districts to Monte Vista. As the matters involved in this complaint were also involved in Case No. 49, the Commission consolidated Cases Nos. 49 and 51 and convened the causes for hearing before the Commissioners *en banc* in the hearing room of the Commission in Denver, Colorado, on May 23d, 1916, at which time witnesses for

the Commission, the plaintiffs, the intervenors and the defendant appeared. Representatives of Alamosa, Costilla, Saguache, Conejos and Rio Grande Counties were allowed to intervene in Case No. 49. No representatives appeared from Mineral County, although rates to and from Mineral County were involved in Case No. 49.

Case No. 51, which related to the coal rates to Monte Vista, was heard and concluded on May 23d, 1916, and such portion of Case No. 49 as related to coal traffic was heard and concluded on May 24th, 1916, when an adjournment was taken as to the balance of the matters involved in Case No. 49 until July 10th, 1916, at Alamosa. At the adjournment it was agreed by both the intervenors and the defendant in Case No. 49 that, as all of the testimony in regard to coal rates had been submitted, the Commission could render a decision on such rates only without prejudice to the balance of the case. The present order, therefore, will pertain only to the rates on coal to points in the San Luis Valley, and the balance of the case will be held open and the decision thereon will be rendered in a supplemental order.

An exhibit was submitted by the Rate Expert of the Commission, setting forth the rates in effect on coal from the Walsenburg, Trinidad, Canon City, Crested Butte and Somerset Districts to the open stations in the San Luis Valley. This exhibit showed the average mileage from all of the mines in each district to the points of destination named, the rates on lump, nut and slack coal, and the rate per ton per mile on lump coal. The rates as shown in the exhibit were the rates in effect at the time of the hearing, there having been certain reductions in the Walsenburg lump rates made by the defendant subsequent to the institution of the investigation and just prior to the hearing.

George H. Akers appeared on behalf of The Akers Lumber Company, and Mr. C. S. Campbell appeared for the J. S. Campbell Company, and stated that their companies handled domestic, steam and anthracite coal, practically all of which came from the Walsenburg, Canon City and Crested Butte Districts.

Mr. Fred Wild, Jr., the Freight Traffic Manager of The Denver & Rio Grande Railroad Company, appeared on behalf of the defendant, and testified as to the reasonableness of the rates on coal from the various districts to the San Luis Valley points. The principal testimony of this witness, however, was directed to the rates from the Walsenburg District, as it has been the general practice of the defendant carrier to use the Walsenburg District as a basis on which to predicate the differentials in rates from other districts. The adjustment of coal rates to points in the San Luis Valley, prior to the institution of this investigation, was without any seeming correlation. The rates on nut and slack coal did not bear any established relationship to the rates on lump coal, nor did the rates from the various districts bear established differentials in relation to the Walsenburg District rates.

Subsequent to the instituting of this investigation, the defendant, as explained above, changed certain of its rates on lump coal from the Walsenburg District. No change was made in the rates on nut or slack coal.

Certain mines which are classified in the Walsenburg District in connection with rates to Denver, Pueblo and points east of the Colorado Common Points Line, are classified in the Trinidad District when destined to points in the San Luis Valley and certain other points on the line of The Denver & Rio Grande Railroad Company. There was no explanation made in reference to this fact and, as there has been no showing as to any hardship worked thereby, it will be unnecessary to make any readjustment of the grouping of the mines in the Walsenburg District on traffic destined to San Luis Valley points. Much stress was laid by the intervenors upon the comparison of the rates on coal from the Walsenburg District to Denver and the rates to points in the San Luis Valley. The rate on lump coal from Walsenburg to Denver is $1.60, and the average mileage is 185 miles. (1) The Commission is of the opinion that this rate is not a fair measure of rates to points west of Walsenburg in the San Luis Valley. The grade from Walsenburg to the San Luis Valley is double that of the grade from Walsenburg to Denver, the maximum in the former case being 3% adverse grade, and in the latter 1.42%. The density of traffic on the line to Denver is undoubtedly a great many times that on the line from Walsenburg to La Veta. All of these conditions tend to destroy the use of the Walsenburg-Denver rate as a standard for the measure of the reasonableness of the Walsenburg-San Luis Valley rates.

The traffic moving from Walsenburg to points in the San Luis Valley must cross over La Veta Pass, which is located 32 miles west of Walsenburg. Rates from the Walsenburg District in effect prior to April 18th, 1916, to the entire San Luis Valley points averaged as one, resulted in an average revenue per ton mile of 2.12c on lump coal, 1.92c on nut coal and 1.53c on slack coal. The average revenue per ton mile on lump coal to the same points, in effect on and after April 18th, 1916, is 2.04c.

The Commission endeavored, in the investigation, to determine a reasonable differential on rates as between lump, nut and slack coal. The former rates on nut coal ranged from 10c to 35c under the rates on lump. It was stated by the defendant that it had never established any definite differential as between nut and lump, the difference depending, to a certain extent, on the rate on the lump coal, and when the rate on lump coal was high enough a differential would be applied on the nut coal, and when the rate on lump coal was not high enough to justify a differential, the nut rate would be placed at the same as the lump rate. The rates in effect from the Walsenburg District, however, do not seem to have conformed to this theory. For instance, the lump rate from Walsenburg to Garland has been $1.75 per ton and the

nut rate $1.50, making a differential of 25c. From Walsenburg to Villa Grove, a point more than double the distance, the rate on lump coal has been $2.60 per ton and the rate on nut coal $2.50, a differential of only 10c per ton.

(2) The Commission has endeavored to ascertain the general practice throughout the country of making differentials on nut and slack coal rates from bituminous coal districts, and has examined many cases decided by various regulatory bodies. No reference to an established differential as between lump and nut or between lump and slack has been found in the Interstate Commerce Commission opinions in the Western part of the country. There have been many cases decided, however, without establishing a fixed differential, the facts in each case determining the proportion which the nut or slack rate should bear to the lump rate. In the case of *Nebraska State Railway Commission v. U. P. R. R. Co.*, 13 I. C. C., 349 (355), the Commission found that the reduction in rates ordered on lump coal from the Hanna and Rock Springs Districts in Wyoming to points in Western Nebraska, would result in having slack and pea coal rates higher than the lump rates, and stated that such relation of rates could not be allowed and that, where such a condition existed, it was expected that the defendant would make a reasonable differential between those rates and the lump coal rates. A $3.00 rate was ordered in by the Interstate Commerce Commission from the Rock Springs District to Sidney, Nebraska, and, in conformance with the Commission's request, a rate of $2.75 was established on nut coal, a differential of 25c, and a rate of $2.50 established on slack coal, a differential of 50c. In other cases the Interstate Commerce Commission has prescribed specific rates on lump, nut and slack coal. A general revision has recently been put into effect from the Colorado and Wyoming mines to points in Eastern Colorado, Kansas and Nebraska, on nut coal. This action was brought about by the Union Pacific Railroad Company, reducing its rates on nut coal from the Hanna and Rock Springs Districts in Wyoming, in order to increase the output of the mines of nut coal, and it became necessary for the lines operating in the Walsenburg, Oak Hills and other districts to establish the same rates, for competitive conditions. The differential observed generally throughout this revision was 50c under the lump rate.

A case which involved, among other things, the reasonableness of the spread between lump, nut and slack coal, was decided by the Kansas Supreme Court on May 18th, 1915, in the case of the *Union Pacific Railroad Company v. Public Utilities Commission of Kansas,* 95 Kan., 604; 148 Pac., 667, wherein it was stated that "in making rates for slack, nut and pea coal, the custom is to fix them at 80% of bituminous coal."

The rates in cents per ton of 2,000 pounds from the Walsenburg District to the points in the San Luis Valley in effect on March 4th, 1916 (the date of the commencement of this investi-

gation), and as amended by the defendant carrier on April 18, 1916, and effective on less than statutory notice by permission of this Commission were as follows:

	Rates as of Mar. 4, 1916			Rates as of Apr. 18, 1916
	Lump	Nut	Slack	Lump
La Veta	75	65	65	75
Francisco	100	90	75	100
La Veta Pass	125	100	85	125
Sierra	140	115	95	140
Russell	150	125	100	140
Garland	175	150	120	160
Blanca	185	160	125	160
Alamosa	200	165	125	190
Monte Vista	215	175	145	200
Del Norte	220	195	150	210
Wagon Wheel Gap	235	205	150	215
Creede	240	215	150	225
Mosca	215	200	160	200
Hooper	220	210	170	210
Moffat	250	240	190	250
Villa Grove	260	250	200	260
Orient	280	270	215	280
La Jara	215	200	160	200
Romeo	220	210	170	210
Antonito	220	210	170	210

(3) The Commission is convinced, after carefully considering the testimony and evidence introduced in this case, and the tariffs on file with the Commission, that the rates on lump, nut and slack coal from the Walsenburg District to points in the San Luis Valley are unreasonable, to the extent that they exceed the rates as prescribed by the Commission in its order in this case and which are set forth below. The basis found by the Commission to be reasonable fixes a differential of 25c on nut coal under the lump rates, and results in varying differentials on slack coal under the lump coal rates of from 10c to 70c per ton, according to distance. While a fixed differential might be desirable on the slack coal, it has been found impossible to arrive at any such differential, as to do so would increase a large number of rates which are admitted by the defendant carrier to be reasonable.

During the year from March 1st, 1915, to February 29, 1916, the Denver & Rio Grande Railroad Company shipped into Monte Vista, a point as well representative as any in the San Luis Valley, with a population of approximately 3,000 people, 13,510 tons of coal from the Walsenburg District. 40% of this tonnage was lump coal, 42.6% nut coal and 17.4% slack coal. The number of ton-miles which this coal moved was 1,406,299, and the

average haul per ton 104 miles, exactly the same distance as the average from all of the mines in the district. A comparison of the revenues received by the defendant on the coal traffic to Monte Vista will be illustrative of almost any point in the Valley.

			Rates as of Mar. 4, 1916		Rates Under Commission's Order	
	Per Cent	Tons	Rate	Revenue	Rate	Revenue
Lump	40. %	5,404	215	$11,618.60	185	$ 9,997.40
Nut	42.6%	5,755	175	10,071.25	160	9,208.00
Slack	17.4%	2,351	145	3,408.95	135	3,173.85
		13,510		$25,098.80		$22,379.25

The revenue received under the rates in effect prior to April 18th, 1916, result in a revenue per ton mile of 1.8c, and under the rates as prescribed by the Commission 1.6c. The rates found reasonable by the Commission will give a revenue per ton mile to the defendant of 1.9c on lump coal, 1.7c on nut coal and 1.4c on slack coal. The average revenue per ton mile on The Denver & Rio Grande Railroad within the State of Colorado on coal traffic for the year 1912 was 1.029c; for 1913, 1.047c; for 1914, 1.042c.

In only one or two instances do the rates fixed by the Commission result in producing 1c per ton mile or less, and in these cases the low revenues per ton mile are and have been received by the defendant on such traffic, as the rates were not altered by the Commission.

The average rate on lump coal, as set forth by the Commission in this order, is $1.77 to all points; on nut coal, $1.53, or 87% of the lump rate; and on slack coal, $1.31, or 74% of the lump rate. The former average rate on nut coal was 90% of the rate on lump coal; on slack coal, 72%.

Some reference was made by the defendant to the charge they are required to pay The Colorado & Southern Railway Company for trackage rights when the coal originates at mines located on The Colorado & Southern Railway, from which the Walsenburg District rates apply. This charge, as stated by Mr. Wild, varies from $2.00 to $5.00 per car, according to the distance handled by The Colorado & Southern Railway, and that amount is absorbed by The Denver & Rio Grande Railroad Company from its earnings. This condition exists not only when the traffic is destined to San Luis Valley, but prevails on coal moving from Walsenburg to all other points on The Denver & Rio Grande Railroad.

The total amount of coal from mines located on The Colorado & Southern Railway to Monte Vista, during the period mentioned above, was 539 tons, or 4% of the total movement from the Walsenburg District.

(4) The Commission is of the opinion that the differential on coal from the Trinidad District should not be any greater when applied to rates to points in the San Luis Valley than to other points on the defendant's lines, and finds that rates from the Trinidad District should be uniformly 25c higher than the rates from the Walsenburg District. Coal traffic from the Trinidad District must necessarily move over the same tracks as the coal originating in the Walsenburg District from La Veta to all points of destination in the San Luis Valley.

The rates from the Canon City District to all points between La Veta, Creede and Antonito should likewise be made upon a certain differential over the Walsenburg District rates, as the coal must move over the same line from La Veta to the points of destination. The Commission is of the opinion that 60c would be a reasonable differential from the Canon City mines, and that any greater differential than that would be excessive, and so finds. The rates on coal from the Canon City District to points between Villa Grove and Alamosa must include a sufficient sum to provide for the transfer of the coal from broad to narrow gauge cars at Salida, and this fact has been taken into consideration by the Commission.

The present rates from Crested Butte District on bituminous coal are upon the same basis as the rates from the Canon City District. The Commission does not believe that these rates should be the same, and is of the opinion that there should be a differential established. The distance is somewhat greater than that from the Canon City District. The Commission finds that a differential of 15c over the Canon City rates will result in the establishment of fair and reasonable rates from the Crested Butte District to all points except east of Alamosa, to which points reasonable and just rates are specifically provided.

The present rates on anthracite coal from the Crested Butte District vary from 90c to $1.10 per ton higher than the bituminous lump rates. The anthracite coal originates at branch line points out of Crested Butte where the operation is rather difficult and which are possible to operate only during the summer months. The Commission, however, is of the opinion that 80c is a sufficient amount over the bituminous lump rate at which the rates on anthracite coal should be fixed, and that such a differential will be sufficient to cover the additional cost of the service and take into consideration the additional value of the commodity handled.

The rates from the Somerset District on lump coal vary from 50c to 65c over the rates from the Crested Butte District. The Commission is of the opinion that a differential of 50c from the Somerset District over the Crested Butte District is entirely reasonable and just, and so finds. The application of this differential will result in leaving practically all of the slack rates from the Somerset District unchanged.

An order will be entered requiring the cancellation of the

present rates on coal as charged by The Denver & Rio Grande Railroad Company to points in the San Luis Valley, and reasonable and just rates will be prescribed for the future in accordance with the above findings.

ORDER.

It Is Ordered, That the defendant, The Denver & Rio Grande Railroad Company be, and it is hereby, ordered to cease and desist from charging, demanding, collecting, or receiving its present rates for the transportation of bituminous coal from the Walsenburg, Trinidad, Canon City, Crested Butte and Somerset Districts, and for the transportation of anthracite coal from the Crested Butte District, to points in the San Luis Valley designated as follows: La Veta, Francisco, La Veta Pass, Sierra, Russell, Garland, Blanca, Alamosa, Monte Vista, Del Norte, Wagon Wheel Gap, Creede, Mosca, Hooper, Moffat, Villa Grove, Orient, La Jara, Romeo and Antonito.

It Is Further Ordered, That the defendant, The Denver & Rio Grande Railroad Company be, and it is hereby, ordered to establish and put in force the following rates for the transportation of lump, nut and slack bituminous coal, and anthracite coal, which rates shall be in cents per ton of 2,000 pounds and shall not be exceeded to any point of destination located between two specified points of destination:

	Bituminous Coal								
	Walsenburg District			Trinidad District			Canon City District		
	Lump	Nut	Slack	Lump	Nut	Slack	Lump	Nut	Slack
La Veta	75	65	65	100	90	90	135	125	125
Francisco	100	90	75	125	115	100	160	150	135
La Veta Pass	125	100	85	150	125	110	185	160	145
Sierra	130	105	90	155	130	115	190	165	150
Russell	130	105	90	155	130	115	190	165	150
Garland	150	125	110	175	150	135	210	185	170
Blanca	150	125	110	175	150	135	210	185	170
Alamosa	170	145	125	195	170	150	230	205	185
Monte Vista	185	160	135	210	185	160	245	220	195
Del Norte	195	170	145	220	195	170	255	230	205
Wagon Wheel Gap	215	190	150	240	215	175	275	250	210
Creede	220	195	150	245	220	175	280	255	210
Mosca	190	165	140	215	190	165	220	195	170
Hooper	200	175	150	225	200	175	210	185	160
Moffat	220	195	170	245	220	195	200	175	150
Villa Grove	240	215	190	265	240	215	190	165	140
Orient	260	235	210	285	260	230	210	185	160
La Jara	185	160	135	210	185	160	245	220	195
Romeo	190	165	140	215	190	165	250	225	200
Antonito	195	170	145	220	195	170	255	230	205

	Crested Butte District —Bituminous—				Somerset District — Bituminous —		
	Lump	Nut	Slack	Anthracite	Lump	Nut	Slack
La Veta	..	...	...	...	...	...	...
Francisco	..	...	...	...	...	...	...
La Veta Pass	..	...	...	...	...	...	...
Sierra	..	...	...	...	...	...	...
Russell	..	...	...	...	...	...	...
Garland	270	245	200	350	...	...	...
Blanca	260	235	185	340	...	...	...
Alamosa	245	220	175	325	295	270	225
Monte Vista	260	235	185	340	310	285	235
Del Norte	270	245	200	350	320	295	240
Wagon Wheel Gap	290	265	225	370	340	315	250
Creede	295	270	225	375	345	320	250
Mosca	235	210	185	315	285	260	225
Hooper	225	200	175	305	275	250	220
Moffat	215	190	165	295	265	240	200
Villa Grove	205	180	155	285	255	230	190
Orient	225	200	175	305	...	...	...
La Jara	260	235	200	340	...	...	...
Romeo	265	240	205	345	...	...	...
Antonito	270	245	210	350	...	...	...

It Is Further Ordered, That the defendant, The Denver & Rio Grande Railroad Company, shall publish and make effective the rates herein set forth by this order on or before July 1st, 1916.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 20th day of June, 1916.

THORMANN, ET AL.

v.

THE DENVER & INTERURBAN RAILROAD COMPANY.

(Case No. 55.)

Jurisdiction of Commission—Public Utilities subject.

(1) The Public Utilities Commission has repeatedly held that it has original, exclusive jurisdiction over every public utility operating within the State of Colorado defined by the Public Utilities Law to be a public utility, and that the jurisdiction of the Commission extends to all matters pertaining to rates and service of all public utilities, and such position is sustained by the decision of the Supreme Court of the State of Colorado in the case of The Denver & South Platte Railway Company v. City of Englewood, decided July 3d, 1916.

Service—Street railways—Effect on real estate values.

(2) Every public utility under the jurisdiction of the Commission must furnish, provide and maintain such service, instrumentalities, equipment and facilities as shall promote the health, comfort and safety of its patrons, employes and the public, and as shall in all respects be adequate, efficient, just and reasonable; and the Commission has no power to order an extension of a street railway line because it will enhance the value of the property, nor has it the authority to prohibit the removal of street railway tracks solely on the ground that the removal of said tracks will depreciate the value of the property.

Service—Street railways—Extensions of line and removal of tracks.

(3) The Commission, after a hearing, and in accordance with a compromise between the City of Fort Collins and The Denver & Interurban Railroad Company, permitted the carrier to remove its tracks on College Avenue from Walnut Street to Jefferson Street, and on Jefferson Street from College Avenue to Linden Street, inasmuch as the service was of very little value to the residents and the real objection thereto was that the value of the property would be depreciated; and the carrier, having received the consent of the majority in frontage of the owners of property and a permit from the city council, was ordered to construct a line of railway along Walnut Street between College Avenue and Linden Street, and maintain adequate service over such line.

(July 11, 1916.)

COMPLAINT against the removal of The Denver & Interurban Railroad Company of the tracks on College Avenue from Mountain Street to Jefferson Street and on Jefferson Street from

College Avenue to Linden Street in the City of Fort Collins; the Commission, in accordance with compromise between the carrier and the city, allowed the carrier to remove its tracks on College Avenue from Walnut Street to Maple Street, and on Jefferson Street from College Avenue to Linden Street, and ordered the carrier to construct a track on Walnut Street from College Avenue to Linden Street, and maintain adequate service over such line.

APPEARANCES: Messrs. Lee & Shaw, for the objectors on North College Avenue, L. D. Thomason, Esq., for the Union Pacific Railroad Company, and objectors on Jefferson Street; E. E. Whitted, Esq., and A. S. Brooks, Esq., for The Denver & Interurban Railroad Company.

STATEMENT AND ORDER.

By the Commission:

On the 13th day of April, 1916, a written petition, signed by fifty-two citizens of Fort Collins, Colorado, was filed with the Commission, alleging in substance that for a period of years The Denver & Interurban Railroad Company has operated a street railway within the City of Fort Collins under a franchise granted to the said The Denver & Interurban Railroad Company by the City of Fort Collins, and has operated street cars on North College Avenue and Jefferson Street, and on other streets within the said City of Fort Collins on a 20-minute schedule.

The petition also alleged that The Denver & Interurban Railroad Company had announced its intention of discontinuing its present street car service on North College Avenue from Mountain Avenue north to Jefferson Street, and on Jefferson Street from North College Avenue to Linden Street, in the said City of Fort Collins. It is further alleged that the discontinuance of the service would injuriously affect the petitioners, and other citizens, and owners of property within the City of Fort Collins, and the petitioners pray for relief.

On the 24th day of May, 1916, the Defendant corporation filed with the Commission a demurrer and answer in this cause, and, for grounds of demurrer, alleged that the Public Utilities Commission of the State of Colorado has no jurisdiction, power or authority under the Public Utilities Act, or under any other law or statute of the State of Colorado, to hear, consider or determine the matters set forth in said petition, and that said Commission has no authority, power or jurisdiction to make and enter an order granting the relief prayed for by the petitioners.

The Defendant, in its answer to the petition, admits that it operates a street car system over certain streets and avenues in the City of Fort Collins, State of Colorado, under and by virtue

of the terms and conditions of a certain franchise granted to the Defendant corporation by the City of Fort Collins, and admits that it contemplates the discontinuance of service on certain streets in the City of Fort Collins and removal therefrom of its tracks and poles; and that the Defendant corporation has heretofore presented to the City Commissioners of the City of Fort Collins a certain petition requesting authority to take up and remove certain of its tracks as set forth in the said petition, and that on the 22nd day of May, 1916, at a regular meeting of the City Council of the City of Fort Collins, Colorado, a resolution was adopted by the City Council of the City of Fort Collins, spreading at length upon the journal of the council the petition of The Denver & Interurban Railroad Company, a true copy of the said petition being as follows:

"Denver, Colorado, May 20, 1916.

To The Honorable The City Commissioners,
of the City of Fort Collins:

Gentlemen:

Your petitioner, The Denver & Interurban Railroad Company, would respectfully represent to your honorable body, that under the provisions of Ordinance No. 13, of the Series of 1906 of the City of Fort Collins, it has constructed certain street railway lines in the City of Fort Collins and is operating cars thereover.

That one of these lines is upon College Avenue from Mountain Avenue to Pitkin Street, and on Pitkin Street to Remington Street, and thence on Remington Street to Elizabeth Street, and thence back to College Avenue, forming a loop at the southern terminus of its said College Avenue line.

That it also operates a line of cars on Whedbee Street from Magnolia Street to Elizabeth Street. That it has the franchise right to extend its Whedbee Street line south from its present terminus at Elizabeth Street to Edwards Street, and on Edwards Street from Remington to Whedbee and desires to do so and make this a loop connecting the College and Whedbee Street lines.

That if this be done it will be unnecessary longer to continue the operation of the track upon Remington Street between Edwards and Elizabeth Streets.

Your petitioner therefore respectfully requests the approval of your honorable body to this change of line and to the abandonment of the tracks as hereinbefore stated.

Your petitioner further represents that it is also the owner and now operates under the provisions of said franchise ordinance, a railroad track on North College Avenue

from Mountain Avenue to Jefferson Street, and on Jefferson Street from College Avenue to Linden Street.

That it desires to abandon the operation of this track, as it has always made its transfer of passengers from one line to another at the corner of Mountain Avenue and College Avenue, and expects to continue that place as its transfer point.

That by the abandonment of this portion of its line, it believes it can give better service to the vast majority of the people of Fort Collins, without any detriment to the particular locality at present served by this line.

If your petitioner is permitted to abandon this portion of its road, it agrees that it will replace in good condition the portion of the streets at present covered by its tracks so to be abandoned, and where, upon Jefferson Street, the highway has been paved, it will replace such paving. All work to be done in a manner satisfactory to the City.

Your petitioner further agrees, that inasmuch as a paving ordinance covering College Avenue, between Mountain Avenue and LaPorte Avenue has been passed, and such Ordinance was enacted upon the theory that The Denver & Interurban Railroad Company would be called upon to pay for the paving of such portion of the street as is covered by its track, and therefore the estimate of expense to abutting property owners on such street was based upon a proportion of the cost of paving, after deducting The Denver & Interurban Railroad Company's proportion, your petitioner agrees to pay the same proportion of such cost of paving between Mountain Avenue and LaPorte Avenue, as it would have been called upon to pay were its tracks still upon said street.

Your petitioner respectfully requests that this petition be granted, and the consent of the City of Fort Collins be given:

First: To the change of line connecting College Avenue and Whedbee Street in the southern portion of the City; and

Second: To the abandonment of that portion of its line on North College Avenue and Jefferson Street, as hereinbefore set forth.

THE DENVER & INTERURBAN RAILROAD CO.,
By E. S. Koller."

The City Council of Fort Collins, at a regular meeting on the 22nd day of May, 1916, voted favorably on the matters presented by The Denver & Interurban Railroad Company in the above petition.

The Commission convened the above cause at Fort Collins, Colorado, at the County Court House, at 10:00 o'clock a. m., on the 31st day of May, 1916, at which time the demurrer of The Denver & Interurban Railroad Company to the complaint of the petitioners was temporarily overruled.

Paul W. Lee, representing all the petitioners, with the exception of those located on Jefferson Street, requested a continuance of the above cause for a period of sixty days, stating that representatives of The Denver & Interurban Railroad Company had held an informal conference with representatives of the petitioners, and that it was the desire of the petitioners represented by Lee & Shaw, and The Denver & Interurban Railroad Company, to present to the Commission at a future date a contemplated compromise of the matters involved.

There being no objection to the request for a continuance of the above cause for a period of sixty days, the hearing was adjourned until the 25th day of July, 1916, unless the Commission should upon due notice order the cause to be heard at an earlier date.

An order also was entered that The Denver & Interurban Railroad Company should remove no tracks or abandon no service within the City of Fort Collins until the cause was heard and determined by the Commission.

The Commission having received notice that a compromise had been agreed upon, gave notice to the public, petitioners and The Denver & Interurban Railroad Company, that the cause would be heard at the County Court House in the City of Fort Collins, Colorado, at the hour of 1:30 p. m., on the 26th day of June, 1916.

On the 10th day of June, 1916, there was filed with the Commission a written petition signed by owners of property located on Jefferson Street between Pine and Linden Streets, within the City of Fort Collins, protesting against the removal of the street car tracks of the Defendant corporation on Jefferson Street between Pine and Linden Streets, for the reason that the said,—

> "removal and abandonment of the service thereon would be a detriment to the business in that part of the City and would cause considerable depreciation in the value of the real estate."

This petition was made a part of the record of the Commission.

The hearing of the above cause was convened at the County Court House in the City of Fort Collins, Colorado, on the 26th day of June, 1916, at the hour of 1:30 p. m.

The Denver & Interurban Railroad Company operates an interurban line of railway between Denver, Colorado, and Boulder, Colorado, and a street railway at Fort Collins, Colorado. It was

the apparent intention of The Denver & Interurban Railroad Company to ultimately construct an interurban railroad from the City of Denver to the City of Fort Collins, serving intermediate points. It is now operating and has heretofore operated the lines owned by it under one general management and control.

Evidence submitted by witnesses for The Denver & Interurban Railroad Company tends to show that the portion of its line of railway operating within the City of Fort Collins, and crossing the boundary line of the city limits of Fort Collins at several points, never has earned operating expenses, and the corporation now desires to economize in the operation of its system located at Fort Collins to the end that the net operating revenues of the company may be increased and at the same time preserve the adequacy of its service within the City of Fort Collins. Fort Collins is a city of about 11,000 inhabitants, and it appears at this time to be adequately served by the Defendant corporation with a complete system of street railway lines, with cars operating on a 20-minute schedule.

The Defendant corporation, in its demurrer and answer filed with the Commission on the 24th day of May, 1916, challenges the jurisdiction of the Commission over the issues of this cause, and takes the position that the City Commissioners of Fort Collins may authorize an abandonment of service within the City limits of Fort Collins, which is binding upon this Commission, and which is a complete defense to the petition of the petitioners filed with this Commission on the 13th day of April, 1916.

(1) The Commission has held many times that it has original and exclusive jurisdiction over every public utility defined by the Public Utilities law to be a public utility, operating within the State of Colorado, and that the jurisdiction of the Commission extends to all matters pertaining to the service and rates of all public utilities specifically designated by the Legislature as public utilities, street railways having been so designated.

It is not necessary, however, for further discussion of this question as the Honorable Supreme Court of the State of Colorado on the 3rd day of July, 1916, in the case of *Denver & South Platte Railway Company vs. City of Englewood,* fully sustained the position heretofore taken by the Commission, and in the opinion of the Court, written by Mr. Justice Scott, we find the following:

> "This act is very broad and seems to confer the absolute power to regulate, both as to rates and otherwise, all public utilities within the state, at least all such as are specified in the act, and among which are street railways." * * *
>
> "From the sections quoted, and from other provisions of the act, it fully appears that the Legislature intended to delegate to the Public Utilities Commission the admin-

istration, supervision and regulation of all service rendered to the public throughout the state, including municipalities. Rates and regulations fixed by contract are specifically included within the powers of the Commission."
* * *

"It follows therefore, that the power to regulate the rates of the public utility in question, is vested by the act exclusively in the Public Utilities Commission. The law fully provides that every order or decision made by the Commission, may be reviewed by the Supreme Court upon the application of either party, or of any person pecuniarily interested in the utility, for the purpose of having the lawfulness of the order or revision determined."

It was the original intention of the Defendant corporation to abandon street car service and remove its tracks from a point located at the intersection of Mountain and College Avenues north two blocks along College Avenue, and east two blocks on Jefferson Street. The compromise agreed to by the Defendant corporation and all of the petitioners, with the exception of those owning property on Jefferson Street between Pine and Linden Streets, contemplates that the Defendant corporation will maintain its present schedule of service and operate its street car line from the intersection of Mountain and College Avenues one block north on College Avenue, and thence east on Walnut Street to Linden Street, thus forming a loop from the intersection of Mountain and College Avenues north on College Avenue to Walnut Street, east on Walnut Street to Linden Street, and south on Linden Street to the intersection of College and Mountain Avenues, still operating its cars and maintaining its line of railway on Linden Street between Mountain Avenue and Jefferson Street, and abandoning its service and removing its street car tracks from the intersection of College Avenue and Walnut Street north on College Avenue to Jefferson Street and thence east on Jefferson Street to Linden Street.

The Commission therefore has had presented to it the proposition of the abandonment of service and the removal of street car tracks for three blocks within the City of Fort Collins and the construction of street car track on one block on Walnut Street between College Avenue and Linden Street.

It is the contention of the Defendant corporation that the proposed change in service will shorten the Lindenmier Lake line of the Defendant corporation within the City of Fort Collins, thereby shortening the longest line of the Defendant corporation, and also permitting the installation of lighter cars, operated by one man, which plan, according to the evidence, is contemplated by the Defendant corporation.

The proposed compromise adjustment will result in the

abandonment and removal of three long blocks of railway tracks, and it is apparent from the evidence that the service of the Defendant corporation upon College Avenue from Walnut Street to Jefferson Street, and on Jefferson Street from College Avenue to Pine Street is in no way necessary to adequate service, unless the fact be true, as contended by the Union Pacific Railroad Company, that this service is necessary to accommodate the patrons of the Union Pacific Railroad Company, whose station is located on the line of the street railway of the Defendant corporation at Pine and Jefferson Streets. It is alleged by the owners of property on Jefferson Street between Pine and Linden Streets that the abandonment and removal of tracks on this portion of Jefferson Street will depreciate the value of such property, although it is not seriously contended by these objectors that the Defendant corporation should operate its line of railway on Jefferson Street between Pine and Linden Streets to make the service of the Defendant corporation within the City of Fort Collins adequate.

It is apparent that, even in the most disagreeable weather, few of the residents of Fort Collins take advantage of the service offered by the Defendant corporation to the Union Pacific depot, and that the incoming patrons of the Union Pacific Railroad Company and of the Defendant corporation would not be injured by the abandonment of the service now rendered by the Defendant corporation from the Union Pacific depot at Fort Collins, for the reason that the cars of the Defendant corporation passing the Union Pacific depot have as their destination Lindenmier Lake, and this portion of the Defendant corporation's line of railway serves practicallly an unsettled part of the City of Fort Collins and vicinity and would in no way be of benefit to the patrons of the Union Pacific Railroad Company. In the event the proposed compromise adjustment is permitted the Union Pacific depot will be located only one block from the car line.

On the 22nd day of May, 1916, the City Commissioners of Fort Collins voted to permit the Defendant corporation to abandon its service and remove its railway tracks from the intersection of College Avenue and Mountain Avenue north on College Avenue to Jefferson Street and east on Jefferson Street to Linden Street. This Commission is of the opinion that such removal of tracks and abandonment of service would result in inadequate service, in that the territory from Mountain Avenue on College Avenue to Walnut Street is an important commercial center and should be served by the Defendant corporation, but the proposed compromise, which is agreeable to the Defendant corporation and all of the petitioners with the exception of those located on Jefferson Street between Pine and Linden Streets, contemplates an extension of street railway lines and service on

Walnut Street, between College Avenue and Linden Street, upon which is located the City Hall of Fort Collins and other important business buildings, and does not contemplate the abandonment of service and the removal of the tracks of the Defendant corporation on College Avenue from Mountain Avenue to Walnut Street. It is true that business buildings are located on the south side of Jefferson Street, between Pine and Linden Streets, but, due to the nature of the service of the Defendant corporation, as well as the kinds of business conducted in this block, it is apparent to the Commission that the service of the Defendant corporation in this block is of no particular importance to the patrons of the Defendant corporation.

On the 19th day of June, 1916, the Defendant corporation applied to the City Council of the City of Fort Collins for a permit to The Denver & Interurban Railroad Company to construct and maintain a railroad track upon Walnut Street between College Avenue and Linden Street, the petition having attached thereto the consent of a majority in frontage of the owners of the property abutting on Walnut Street between College Avenue and Linden Street in the City of Fort Collins, and on the 19th day of June, 1916, the City Council of the City of Fort Collins granted a revocable permit to the Defendant corporation to construct a line of railway on Walnut Street between College Avenue and Linden Street in accordance with the prayer of the petition of the Defendant corporation. A resolution also was adopted by the City Council of the City of Fort Collins reaffirming the position of the City Council in permitting the Defendant corporation to remove its tracks and abandon its service on College Avenue for one block north of Walnut Street and two blocks east of College Avenue on Jefferson Street, and rescinding the action theretofore taken by the City Council which permitted the Defendant corporation to remove its tracks and abandon its service on College Avenue between Mountain Avenue and Walnut Street.

(2) Evidence introduced by property owners to the effect that abandonment of street car service and the removal of street railway tracks will depreciate the value of property, or to the effect that an extension of street railway tracks will appreciate the value of property, cannot be considered by the Commission. Every public utility under the jurisdiction of the Commission must furnish, provide and maintain such service, instrumentalities, equipment and facilities as shall promote the health, comfort and safety of its patrons, employes and the public, and as shall in all respects be adequate, efficient, just and reasonable, but the Commission has no authority to order an extension of a street railway line because it will enhance the value of property, nor has it the authority to prohibit the removal of street railway tracks for the reason that the removal of said tracks will depreciate the value of property. This Commission is not an instrument to aid

in increasing real estate values, nor to lend assistance to property owners to maintain the present value of their property.

(3) It is the conclusion of the Commission that The Denver & Interurban Railroad Company should be permitted to remove that portion of its line of railway and abandon that portion of its service within the City of Fort Collins on College Avenue north of Walnut Street to Jefferson Street and thence east on Jefferson Street to Pine Street, and that accompanying the removal of said tracks and the abandonment of said service the Defendant corporation, having received the consent of a majority in frontage of the owners of property abutting on Walnut Street between College Avenue and Linden Street, and having received a revocable permit to construct its line of railway along Walnut Street between College Avenue and Linden Street, shall construct a line of railway on Walnut Street between College Avenue and Linden Street which shall connect with its system of street railway on College Avenue and Linden Street, and which shall be efficiently operated by the Defendant corporation in connection with its street railway system in Fort Collins, Colorado.

It is further understood that any agreements which the Defendant corporation may have had with the City Council of the City of Fort Collins in regard to the apportioning of the expense in paving streets in Fort Collins shall not be disturbed or be affected by this order.

It Is Therefore Ordered, That The Denver & Interurban Railroad Company may remove its railway tracks and discontinue its street car service on College Avenue between Walnut Street and Jefferson Street, thence east on Jefferson Street to Linden Street.

It Is Further Ordered, That The Denver & Interurban Railroad Company shall construct a line of railway on Walnut Street between College Avenue and Linden Street and connect and operate the same as a part of its line of railway on College Avenue and Linden Street, in the event the Defendant corporation decides to remove its tracks and abandon its service in accordance with this order.

It Is Further Ordered, That the Defendant corporation shall not remove its railway tracks or discontinue its service on College Avenue between Mountain Avenue and the intersection of College Avenue with Walnut Street.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 11th day of July, 1916.

THE GRAND JUNCTION MINING & FUEL COMPANY, et al.

v.

THE DENVER & RIO GRANDE RAILROAD COMPANY; THE COLORADO MIDLAND RAILWAY COMPANY, GEORGE W. VALLERY, RECEIVER, INTERVENOR.

(Case No. 41.)

Reasonableness of rates—Railroads—Comparisons.

(1) The Commission, in determining the reasonableness of freight rates, must be governed in arriving at the reasonableness of the rates in question by a comparison of the rates in effect over the carrier's line and over other and distinct carrier's lines as voluntarily established and maintained by the carriers, and also the rates as found reasonable by the Commission in previous cases before it, holding in view, however, that the rates used for comparisons must be for transportation under substantially similar conditions.

Reasonableness of rates—Railroads—Local shipments.

(2) The fact that the expense to the carrier is greater on short haul shipments in proportion to the mileage than on long distance shipments justifies a higher proportionate rate for the short haul than for the long.

Reasonableness of rates—Railroads—Coal.

(3) Lignite coal is an entirely different commodity from bituminous coal and there are certain conditions surrounding its transportation which justify a somewhat higher rate on the bituminous than on the lignite.

Reasonableness of rates—Railroads—Competitive rates.

(4) While a carrier is not required to meet rates under competitive conditions, it should not make competitive rates to one point and refuse to make rates to another point under substantially similar circumstances.

Discrimination—Railroad rates.

(5) The Commission, in determining the reasonableness of the rates on coal from Cameo and Palisade to points on the Denver & Rio Grande Railroad, found that the operators at such places were being discriminated against in favor of the operators located at Bowie and Somerset.

Reasonableness of rates—Railroads—Competitive rates.

(6) Where rates were in effect between certain points via a short line at somewhat less than via a longer line the Commission refused to reduce the rates via the longer line simply to meet competition, as the shippers were able to make their shipments over the short line at the

lower rate, and while a railroad may meet rates via shorter lines for competitive reasons the Commission will not require the establishment of such rates.

(July 25, 1916.)

COMPLAINT against the rates on coal from Cameo and Palisade to points on the Denver & Rio Grande Railroad; rates found unreasonable to certain points and reasonable rates prescribed.

APPEARANCES: Whitehead & Vogl and Guy D. Duncan, Esq., for the complainants; E. N. Clark, Esq., J. G. McMurry, Esq., and W. M. Lampton, Esq., for the defendant; L. A. Rafert, Esq., and G. A. H. Fraser, Esq., for the intervenor.

STATEMENT.

By the Commission:

On the 8th day of October, 1915, a complaint was filed by the above named corporations, duly organized and existing under and by virtue of the laws of the State of Colorado, stating that the complainant, The Grand Junction Mining & Fuel Company, operates a coal mine at Cameo, Colorado, and the complainant, The Palisade Coal & Supply Company, operates a coal mine at Palisade, Colorado, both of which stations are located on the Denver & Rio Grande Railroad in Mesa County; that the rates charged by the defendant for the transportation of coal in carloads from such stations to all points of destination as shown in the defendant's freight tariff No. 5406, Colorado P. U. C. No. 268, and supplements thereto, which territory may be described as follows:

> The main line of the defendant running west from Salida to and including Mack;
>
> The line from Salida to and including Montrose, and
>
> The line south from Grand Junction to and including Ouray,

are, and each of them is, unjust and unreasonable and in violation of the provisions of Section 15 of the Public Utilities Act; that the defendant refuses to publish through rates for the transportation of coal from its mines to stations on its line east of Salida to and including Denver, Colorado, and by reason thereof the complainants are prevented from marketing their coal at said stations; and that the aforesaid alleged unreasonable rates, together with the absence of rates to points east of Salida, subject the complainants to undue and unfair prejudice and disadvantage, and give to the coal operators located in the Bowie, Somerset and

Crested Butte Districts in Colorado, and the Thompson District in Utah, an unfair and unlawful preference and advantage over the complainants; and complainants pray for the establishment of just and reasonable rates.

The defendant, in its answer, denies that the rates complained of are unreasonable and that the rates subject the complainants to any undue and unfair prejudice and disadvantage and give operators in other localities an unfair and unlawful preference and advantage over the complainants; and admits that there are no rates published from defendant's mines to stations east of Salida, but denies that it has refused to publish such rates and, on the contrary, alleges that it is willing to make a fair and reasonable basis of rates to such points.

Pursuant to notice duly given to the parties in interest, this cause came on for hearing before the Commissioners *en banc* on the 15th day of December, 1915.

The complainants' mines at Cameo and Palisade are located on the tracks of the Rio Grande Junction Railway Company, which railway extends from Rifle to Grand Junction, and upon which The Denver & Rio Grande Railroad Company and the Colorado Midland Railway Company have joint use of the tracks and each pays to the Rio Grande Junction Railway Company 30% of the gross earnings accruing therefrom.

Due to its interest in this cause, The Colorado Midland Railway Company, though not a defendant to the present complaint, was allowed to intervene at the hearing.

The present rates charged by The Denver & Rio Grande Railroad Company for transportation of coal in carloads from Cameo and Palisade to all points of destination included in this cause, with the exception of stations east of Salida to Denver, to which points there are no through rates, are as follows:

FROM CAMEO AND PALISADE
Rates are in cents per ton

To	Mileage	Lump Coal Rate	Lump Coal Per ton mile Mills	Nut Coal Rate	Nut Coal Per ton mile Mills	Slack Coal Rate	Slack Coal Per ton mile Mills
Salida	220	250	11.3	250	11.3	250	11.3
Buena Vista	195	250	12.8	225	11.5	200	10.3
Granite	178	250	14.1	225	12.6	200	11.2
Leadville	169	250	14.8	225	13.3	175	10.3
Red Cliff	141	250	17.7	225	16.0	175	12.4
Minturn	133	240	18.0	215	16.2	175	13.2
Wolcott	116	215	18.6	195	16.8	170	14.7
Eagle	106	205	19.3	185	17.4	160	15.1
Gypsum	99	190	19.2	175	17.7	150	15.2
Dotsero	92	175	19.0	175	19.0	150	16.3
Shoshone	84	150	17.8	150	17.9	150	17.9
Glenwood Springs	75	110	14.6	110	14.6	110	14.6
Carbondale	88	150	17.0	150	17.0	150	17.0
Aspen	116	175	15.1	175	15.1	150	12.9

FROM CAMEO AND PALISADE
Rates are in cents per ton

To	Mileage	Lump Coal Rate	Lump Coal Per ton mile Mills	Nut Coal Rate	Nut Coal Per ton mile Mills	Slack Coal Rate	Slack Coal Per ton mile Mills
New Castle	62	110	17.7	110	17.7	110	17.7
Silt	55	110	20.0	110	20.0	110	20.0
Antlers	52	110	21.1	110	21.1	110	21.1
Rifle	48	110	22.9	110	22.9	110	22.9
Grand Valley	31	110	35.5	110	35.5	110	35.5
De Beque	18	100	55.5	100	55.5	100	55.5
Grand Junction	14	60	42.9	60	42.9	50	35.4
Durham	16	70	43.6	70	43.6	55	34.4
Ute	19	85	44.7	85	44.7	60	31.6
Fruita	26	100	38.4	95	35.6	70	27.0
Loma	31	100	32.3	95	30.6	85	27.4
Mack	34	100	29.3	95	28.0	90	26.4
Whitewater	26	100	38.8	95	35.5	90	34.6
Delta	65	185	28.5	160	24.6	150	23.1
Olathe	76	200	26.3	175	23.0	150	19.7
Montrose	86	200	23.3	175	20.4	150	17.5
Cimarron	109	300	27.5	275	25.2	200	18.4
Sapinero	124	310	25.0	285	23.0	225	18.2
Gate View	138	315	22.8	290	21.0	250	18.1
Lake City	159	325	20.4	300	18.9	275	17.3
Uncompahgre	94	225	24.0	200	21.3	175	18.6
Dallas	108	250	23.1	225	20.8	175	16.2
Ridgway	111	250	22.5	225	20.2	175	15.8
Ouray	121	300	24.8	275	22.7	200	16.5

From the above table it will be noted that in no case do the rates result in giving to the carrier less than 1 cent per ton per mile, while in some instances the revenue per ton per mile is as high as 5 cents.

The production of coal for the years 1911 to 1915, inclusive, at the mines of the complainants at Cameo and Palisade, as well as at the mines of the Juanita Coal & Coke Company, at Bowie (King Mine), and the Utah Fuel Company, at Somerset, in tons of 2,000 pounds, has been as follows:

Year	Cameo	Palisade	King	Somerset
1911	46,457	12,011	54,695	274,528
1912	62,226	10,313	56,733	266,504
1913	89,521	7,248	69,662	223,393
1914	114,899	6,866	78,037	271,602
1915	62,141	6,652	61,955	293,877
Average	75,048	8,618	64,216	265,981

The coal produced at the Cameo and Palisade mines is classified as semi-bituminous and that of the King and Somerset mines as bituminous. The average number of days worked at the Cameo mines per year during the five-year period was 200; the Palisade mine, 131; the King mine, 161; and the Somerset mine, 245; which gives an average daily output at the Cameo mine of

375 tons, the Palisade mine 66 tons, the King mine 399 tons, and the Somerset mine 1,086 tons. No evidence was submitted at the hearing of the cause as to the amount of the above tonnage that moved over the rails of the carrier, and any conclusion as to the ultimate destination of the coal on the part of the Commission would be but a surmise and consequently of little value.

Involved in the case before the Commission are rates for transportation through valley territory, where the operating conditions are advantageous to the carrier, in that the line is standard gauge with practically no extreme grades or curves, and through mountainous territory, where the conditions are exactly the reverse, the line being narrow gauge with very severe grades and extreme curves, and a transfer from standard to narrow gauge cars being necessary. The lines from Glenwood Springs to Mack and from Grand Junction to Montrose are standard gauge and lie entirely in valley and comparatively level territory, and in no place does the grade exceed 1%, either ascending or descending, as applicable to shipments moving from the Cameo-Palisade District or from the Bowie-Somerset District.

(1) From the evidence in this case, and from rates established by the Commission and its predecessor, the State Railroad Commission, between other points, the Commission has drawn comparisons as applicable to the rates from Cameo and Palisade. Comparison of rates, to be of value in the establishment of reasonable rates, must be for substantially the same kind of service. Section 2 of the Interstate Commerce Act, as amended, uses the term "contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions." The term "kinds of service" involves not only methods of handling, such as the hauling of the commodity in the same kind of cars, with the same character of engines, and on the same kind of a track, but also involves character, location, general circumstances and conditions. The courts and the Interstate Commerce Commission have pointed out clearly many circumstances and conditions that may create a dissimilarity.

Exhibits were submitted in this case by the complainants, showing comparisons of the rates from Cameo and Palisade with the rates from other mines located on the lines of the defendant, and, as the defendant carrier furnished no exhibits, the Commission must be governed in arriving at the reasonableness of the rates in question by a comparison of the rates in effect over the carrier's lines from other mines and the complainants', as voluntarily established and maintained by the carrier, and also the rates as found reasonable by the Commission in other cases before it, holding in view, however, that the rates used for comparisons must be for transportation under substantially similar conditions.

"Transportation rates in force on lines of rival carriers or on different branches of lines of the same carrier have a bearing upon and are entitled to consideration in connection with the question of reasonable charges for transportation service rendered under like conditions." *Morrell v. U. P. Ry. Co.*, 4 I. C. R., 469; 6 I. C. C. R., 121.

"Where the reasonableness of rates is in question, comparison may be made not only with rates on another line of the same carrier, but also with those on the lines of other and distinct carriers,—the value of the comparison being dependent in all cases upon the degree of similarity of circumstances and conditions attending the transportation for which the rates compared are charged." *Freight Bureau of Cincinnati v. C. N. O. & T. P. Ry. Co.*, 4 I. C. R., 592; 6 I. C. C. R., 195 (234).

"Comparisons may be resorted to, of course, as evidence of unreasonable rates, but to be effective their elements must have, as a common basis, similarity of conditions." *Commercial Club of Sioux Falls v. Pullman Company*, 31 I. C. C., 654.

The Commission is convinced that the operating conditions on traffic moving from the Cameo and Palisade mines are practically similar to the conditions in connection with traffic moving from the Bowie and Somerset mines, and that the conditions are not greatly dissimilar on traffic moving into or over the mountainous district to those of traffic moving between other points on the lines of the defendant over mountainous territory. The traffic in most instances must move over the same lines; encountering the same grades and curves, and where the traffic does not move over the same rails it still must encounter relative extreme grades and curves and conditions that are very similar, and, therefore, the Commission has confined all of its comparisons to rates for similar kinds of service.

Palisade is located 12 miles, and Cameo 16 miles, from Grand Junction, to which point the present rate on lump coal is 60 cents per ton, and on slack coal 50 cents.

(2) The rates to Grand Junction are local short haul rates and should be sufficiently high to include the terminal charges, which generally are as high for a short haul as for a long haul. Local shipments are more expensive to handle in proportion to the mileage than long distance shipments, as more expense is incurred to the carrier in handling a local shipment, due principally to terminal costs, and this fact therefore justifies a higher proportionate charge. This has been well exemplified in the case of *Northern Pacific Ry. Co. v. Keyes*, 91 Fed., 47. The court said:

"The operating expenses of a railroad consist of two principal items: (1) cost of maintenance of plant; (2)

cost of conducting transportation. The former item is constant, and can justly be divided between the different kinds of traffic in proportion to their volume. As to the second item, however, such a division cannot properly be made; for it is agreed, by all who have had occasion to consider the subject, railroad commissioners as well as railroad officials, that the cost of conducting transportation is, relative to income, much higher for local business than for the general business of a road. The causes of this added cost are chiefly three: (1) the shortness of the haul; (2) the lightness of the train loads; (3) the expense of billing and handling the traffic."

In the case of *Consumers' League of Colorado v. C. & S. Ry. Co., et al.* (Case No. 6), 1st Annual Report, pages 163, this Commission established rates of 65, 60 and 55 cents per ton, for the transportation of lump, mine run and slack coal, respectively, from the Northern Colorado coal fields to Denver, to which point the average distance from all of the mines is 22 miles. These rates result in rates per ton per mile of 3.0 cents on lump coal, 2.7 cents on mine run coal and 2.5 cents on slack coal. In the case of *Consumers' League of Colorado v. C. & S. Ry. Co., et al.* (Case No. 23), before the Railroad Commission of Colorado, decided by that body April 4, 1910, a rate of 50 cents per ton was established for the transportation of coal from Denver to Littleton. The distance involved was 10 miles, and the rate ordered by that Commission resulted in 5 cents per ton per mile. The Commission stated (Biennial Report 1909-1910, page 76):

"We believe that there is nearly as much expense attached to this haul, though it be only ten miles, as is attached to the haul from Louisville to Denver, a distance of twenty miles. After a train is made up it requires but little more expense to haul it twenty miles than ten. We believe, also, that there should be some allowance made for switching and terminal expenses, and that a rate of 50 cents would be a fair rate to the shipper and a remunerative rate to the carrier."

The rate on lump coal to Grand Junction produces 4.3 cents per ton per mile. The density of traffic from the Northern Colorado coal fields to Denver is, of course, infinitely greater than that from Cameo and Palisade to Grand Junction. The average coal tonnage moving into Denver from the northern fields per year for the four-year period ending 1913 was 662,549 tons. No figures were presented by the defendant carrier in this case to show the volume of traffic moving from the Cameo and Palisade mines; in fact, no exhibits whatsoever were submitted in this case by the defendant carrier. All of the coal produced in the north-

ern Colorado fields is lignite, while that produced in the Cameo and Palisade Districts is bituminous.

(3) The rates on bituminous coal may properly be somewhat higher than the rates on lignite, as lignite coal is an entirely different commodity from bituminous coal, and there are certain conditions surrounding its transportation which justify a difference in the rates. The North Dakota Board of Railroad Commissioners, in a very extensive investigation as to the reasonableness of lignite rates in the State of North Dakota, stated that

> "lignite coal * * * is a low grade product and has not more than about one-half of the heat-giving qualities of ordinary bituminous coal, and for that reason it should be transported under a materially lower basis of rates than bituminous coal." *In re Lignite Coal Rates,* P. U. R. 1915 F. 190 (211).

The Commission, taking into consideration the foregoing facts, is of the opinion that the rates on bituminous coal from Cameo and Palisade to Grand Junction are reasonable.

The rates to points west of Grand Junction are somewhat in excess of what the Commission believes to be reasonable rates. The rates to Durham and Ute produce a higher revenue per ton per mile than the rates to Grand Junction, which is contrary to the general principle of rate making, and the Commission is unable to find any circumstances to warrant such a condition. Much stress was laid by the complainants upon the fact that the defendant carrier carries a rate of $1.00 per ton on lump coal from the Bowie mines to Grand Junction, a distance of 89 miles, and it was urged by the complainants that this rate must be assumed by the Commission to be a reasonable rate and a fair standard of comparison for the measure of other rates, inasmuch as it is a voluntary rate. The following was cited in support of their contention:

> "The local rates voluntarily established by each of these carriers from the mines on their respective lines can fairly be taken as a measure of what they consider as reasonable, and if these rates should be prescribed for other hauls under substantially similar conditions, the carriers could not very well object to them." *Sheridan Chamber of Commerce v. C. B. & Q. R. R. Co.,* 26 I. C. C. 638 (647).

The Commission does not believe that the rate to Grand Junction from Bowie should be used as a standard upon which to base the rates from Cameo and Palisade. While this rate was established by the carrier voluntarily, it was in order to meet

the competition at the point of destination, which condition does not exist at all of the points of destination involved in this case. As stated in the brief of the defendant,

> "The rate from Bowie to Grand Junction of $1.00 was made to promote the movement of coal from the Bowie mines to Grand Junction, as against local production. There was coal available in Grand Junction from mines within wagon haul distance, and coal came to Grand Junction from Palisade and Cameo. A normal mileage rate from Bowie to Grand Junction would absolutely make it impossible to put Bowie coal into Grand Junction; $1.00 was therefore charged. The local rate from Cameo and Palisade was 60c. This adjustment gave the Cameo and Palisade producers an advantage over Bowie of 40c per ton. Conditions, however, were not equalized, but it was made possible to reach Grand Junction at not too great disadvantage. The condition at Delta was not comparable with the Grand Junction situation. The distance from the local producing mines is much farther, and there is no wagon haul competition to speak of. The rate from Bowie to Delta was $1.00 as against the rate from Cameo and Palisade to Grand Junction of 60c."

The defendant maintains that the use of a blanket rate for comparison with other rates is unreasonable, and objects to the selection of the extreme long haul element (Bowie to Grand Junction) in the blanket as a measure of mileage rates. However, as admitted by the defendant, to use even the shortest haul within the blanket rate as a measure would result in reducing the rate from Cameo to Delta from $1.85 to $1.60, which indicates that the present rates are unreasonable. The position of the defendant in this regard is evidently based on the assumption that the competition at Delta is not so great as at Grand Junction, in that the local producing mines are farther away and "there is no wagon haul competition to speak of."

From the testimony in this case, the Commission is not convinced that the rate from Bowie to Delta is reasonable, nor that there is not the competition at Delta which exists at Grand Junction.

(4) It has been before stated that the rate from Bowie to Grand Junction was put into effect in order to meet competition, and if the competition at Delta exists to any great extent, the converse should be true, and a rate be established from Cameo to Delta which will render a sufficient and just return to the carrier for the service involved, and which will enable the Cameo operators to meet such competition. The testimony of the general freight agent of the defendant carrier contradicts the contention of the carrier in its brief, in reference to the competition

at Delta. The defendant, in its brief, has stated that there is no wagon haul competition at Delta to speak of, whereas, in the testimony of the general freight agent, we find the following:

> "We have positive information that if we make a reduction in our rate from Bowie and Somerset to Delta, we would stop the wagon haul into Delta, *which today supplies fully 75% of the coal consumed at that point.* There are six or seven mines in a radius of ten miles from Delta, and the coal is hauled in by wagon on such a profit that we could stop the coal being hauled in there if we reduced our rate 25c a ton, making a rate of 75c for a distance of 33 miles; *but we have not as yet seen fit to do so up to this time.*"

This would indicate, to a certain extent, that the rate from Bowie to Delta is per se unreasonable. To points south of Delta, the distance from the Cameo and Palisade mines is approximately 25 miles greater than from the Bowie and Somerset mines, the latter two mines being located on a branch, while the former are upon the main line of the defendant. The differential of the Cameo mines over the Bowie mines ranges as high as 75c per ton, which the Commission believes to be quite unreasonable for the small difference in the service rendered.

(5) From all of the facts laid before it, the Commission must come to the conclusion that there has been discrimination against the Cameo and Palisade operators, which it is the duty of this Commission to remove.

The line to points south of Montrose begins to ascend rapidly all the way to Ouray, and traffic moving over such line involves the transportation over a 2.2% adverse grade. A transfer from broad to narrow gauge cars is necessary at Montrose, and this condition exists upon coal moving from both the Cameo District and the Bowie District. To points east of Montrose the same condition exists, with somewhat increased gradient. Between Montrose and Salida the line crosses Cerro Summit, at an altitude of 7,968 feet, making a climb of 2,157 feet in seventeen miles, and must also cross Marshall Pass, at an altitude of 10,856 feet. From Bowie to Salida the present rates are 240, 215 and 175 cents per ton on lump coal, nut coal and slack coal, respectively, the distance being 196 miles; while from Cameo and Palisade, the rates are 250 cents on all classes of bituminous coal, the distance being 220 miles. The distance of 196 miles from Bowie to Salida is that via the narrow gauge lines, via which route the rate was originally published. Subsequent to the publication of the rate, however, and after the completion of the standard gauge line into Bowie, the coal moved over the standard gauge line all the way in order to save transferring the coal to narrow gauge cars at Montrose. The coal is therefore hauled

from Bowie to Salida at the carrier's convenience, over 128 miles farther than the direct narrow gauge line, in order to save the transfer. It was stated, however, by the general freight agent of the defendant carrier, that, if forced to do so by any reduction in rates to Salida, the coal would move as originally, or over the narrow gauge line.

While the line from Cameo to Salida is standard gauge, trains operating upon this line must negotiate adverse grades of 2.3%, encounter extreme curves and cross over Tennessee Pass, at an altitude of 10,239 feet. The Commission has considered the rates to points of destination between Cameo and Salida, with a view to the effect any readjustment would have upon rates from the New Castle District, which is located approximately sixty miles east of Cameo, and upon the rates in effect to points reached also by the Colorado Midland Railway, an intervenor in this case, whose rails also reach the mines of the complainants.

The Commission is of the opinion that the rates from Cameo and Palisade to Leadville and Salida and points intermediate therewith are reasonable, and so finds.

The operating conditions from the southern Colorado fields to points in the San Luis Valley are almost identical with the conditions surrounding the transportation of coal from Cameo and Palisade to Leadville and Salida. While the grades and curves encountered in crossing over La Veta Pass are slightly greater than those encountered over Tennessee Pass, this fact has been taken into consideration in comparing the rates with the rates into the San Luis Valley prescribed by the Commission. The rates to Leadville and Salida and points between will not, therefore, be disturbed by the Commission.

Going west from Leadville, the rates are, in the opinion of the Commission, somewhat in excess of reasonable rates for the service performed. These rates will be readjusted by the Commission at a basis which will be reasonable and not in excess of rates prescribed by the Commission in prior cases for similar traffic moving under substantially the same conditions.

The rate to Glenwood Springs of $1.10 was published to meet the rate via the Colorado Midland Railway. A rate was prescribed by the Commission in Case No. 10, 1 Colo. P. U. C., 48, of 60c per ton from the South Canon District to Glenwood Springs. The established differential for the Cameo District to Glenwood Springs had been 50c, and the Colorado Midland Railway Company therefore reduced the then existing rate from Cameo to Glenwood Springs to $1.10, which was subsequently met by The Denver & Rio Grande Railroad Company. The distance to Glenwood Springs from Cameo is 75 miles, and the Commission is of the opinion that $1.10 is a reasonable rate for the service involved, and therefore allows the same to remain undisturbed. This rate applies, however, as a blanket, to points

located within thirty-one miles of the mines, Grand Valley being located thirty-one miles from Cameo and Palisade. The Commission, in this case, has found a rate of 85c to be reasonable for the transportation of lump coal from Cameo to Mack, a distance of thirty-four miles. The Commission does not believe that the rate should be any higher to Grand Valley and for the same distance in the opposite direction, where the operating conditions are not dissimilar, and a rate of 85c per ton on lump coal will therefore be prescribed by the Commission from Cameo and Palisade to Grand Valley. In like manner, the rate to De Beque, a distance of eighteen miles, of $1.00 is also in excess of a reasonable rate, in the opinion of the Commission, and a rate of 75c will be prescribed. Slight modifications in the nut and slack rates to Rifle have also been made.

The complainants, in their brief filed in this case, are asking for a rate from Cameo and Palisade to Colorado Springs of $2.00, and to Denver, $2.10. The distance from Cameo to Colorado Springs is 362 miles, and to Denver 436 miles. If the rates prayed for by the complainants were established by this Commission, the revenues per ton mile resulting therefrom to the carrier would be 5.5 mills to Colorado Springs, and 4.8 mills to Denver. The complainants advanced the contention that the rate of $1.75 from Cameo to Colorado Springs is a reasonable rate and should be used, to a certain extent, in comparing the rates from Cameo via The Denver & Rio Grande Railroad, while admitting that the rate might be a low rate in order to meet competition.

(6) At the present time The Colorado Midland Railway Company carries a rate on lump coal from Cameo and Palisade to Colorado Springs of $1.75 per ton, on slack coal $1.40; and to Denver, on lump coal $1.85, on slack coal $1.50. The mines of the complainants are located upon the tracks of The Colorado Midland Railway Company, and shipments may be forwarded by this line to both Colorado Springs and Denver. The line of The Denver & Rio Grande Railroad is considerably longer than that of The Colorado Midland Railway to these points, and the Commission does not feel warranted in establishing these rates to Colorado Springs and Denver, but believes that the establishment thereof should be at the option of the carrier operating over the longer line.

A carrier may voluntarily establish a rate, due to competition, at a somewhat lower basis than a commission would be justified in prescribing. As stated in *Oregon & Washington Manufacturers' Association v. U. P. R. R. Co., et al.*, 14 I. C. C. 1 (14), the law permits the carriers to make competitive rates to a greater extent than it requires.

> "In competition with others and in their desire for business, carriers may move a commodity as far as a remunerative rate will permit—that is, if the compensation

is something above the actual cost of the service * * * Competitive rates made by the several carriers serving the different points of production may be lower than they could be compelled to make."

"Whether they (the carriers) will reduce their rates to competitive points or not is a question of business policy, which each carrier is free to determine for itself. Not infrequently it happens that a carrier would increase its rates in order to retire from traffic to competitive points, rather than sacrifice much needed additional revenue on traffic to its intermediate stations. Shippers, therefore, must trust to economic pressure to secure for them low rates at competitive points."(1) *Railroad Rate Regulation, Beale & Wyman,* Second Edition, Section 802.

"As has so often been said, a carrier may, for competitive reasons, do things which it may not lawfully be compelled to do." *Swift & Company v. C. & A. R. R. Co.*, 16 I. C. C., 426 (428).

"A carrier may voluntarily make, under the force of controlling competition, rates which it might not be required to make." *Indianapolis Freight Bureau v. P. R. R. Co.,* 15 I. C. C., 567 (576).

The Commission, therefore, does not feel justified in establishing rates to the above points.

The following table of average revenues in cents per ton per mile received on coal and upon all commodities by the defendant carrier during the years 1912, 1913 and 1914, upon Colorado business and upon the entire line, will be found instructive.

	COAL		ALL TONNAGE	
Year	Colorado	System	Colorado	System
1912	.01029	.01098	.01214	.01208
1913	.01047	.01085	.01200	.01193
1914	.01042	.01051	.01224	.01201

The rates from Bowie and Somerset are closely related to the rates from Cameo and Palisade, but as those rates are not before the Commission in this cause, no opinion can be rendered as to the reasonableness or unreasonableness of such rates. It will be noted, however, that the rates named by the order here are less to certain points of destination than the rates from Bowie and Somerset, although the distance is greater, and will

(1) North Brothers v. C., M. & St. P. Ry. Co., 15 I. C. C., 70; Darling & Co., v. B. & O. R. R. Co., 15 I. C. C., 79; Bainbridge Board of Trade v. L. H. & St. L. Ry. Co., 15 I. C. C., 586; Lindsay Brothers v. B. & O. S. W. Ry. Co., 16 I. C. C., 6; Frederick & Kempe Co. v. N. Y., N. H. & H. R. R. Co., 18 I. C. C., 481; Georgia-Carolina Brick Co. v. So. Ry. Co., 20 I. C. C., 148; Cohen & Co. v. Mallory Steamship Co., 23 I. C. C., 374; Omaha Grain Exchange v. C., M. & St. P. Ry., 24 I. C. C., 122.

result in leaving a great many of the Bowie-Somerset rates out of line. While it is not within the province of this Commission to make the proper adjustment in this case, it is obvious that such a relation of rates cannot be allowed. It is expected that the defendant will make a proper and reasonable adjustment of the rates from Bowie and Somerset. If it should not do so, however, a complaint may be brought before the Commission, or the Commission may institute an investigation on its own motion, as may be necessary.

An order will be entered in conformance with the above findings of the Commission.

ORDER.

IT IS ORDERED, That the defendant, The Denver & Rio Grande Railroad Company, be, and it is hereby, notified and required to cease and desist, on or before August 15th, 1916, and thereafter to abstain, from publishing, demanding or collecting the rates for the transportation of bituminous coal in carloads from Cameo and Palisade in excess of those hereinafter prescribed for such transportation.

IT IS FURTHER ORDERED, That the defendant, The Denver & Rio Grande Railroad Company, be, and it is hereby, notified and required to establish, on or before August 15th, 1916, upon notice to this Commission and to the general public by not less than ten days' filing and posting, in the manner prescribed in Section 16 of the Public Utilities Act, and thereafter to maintain and apply to the transportation of bituminous coal in carloads from Cameo and Palisade rates in cents per ton of 2,000 pounds, which shall not exceed those named in the following table, which said rates have been found to be reasonable and non-discriminatory.

	FROM CAMEO AND PALISADE		
To	Other than Nut and Slack	Nut	Slack
Salida	250	225	200
Buena Vista	250	225	200
Granite	250	225	200
Leadville	250	225	175
Red Cliff	225	200	175
Minturn	215	190	175
Wolcott	195	175	170
Eagle	180	170	160
Gypsum	170	160	150
Dotsero	160	155	150
Shoshone	150	150	150
Glenwood Springs	110	110	110
Carbondale	150	150	150
Aspen	175	175	150
New Castle	110	110	110

To	FROM CAMEO AND PALISADE Other than Nut and Slack	Nut	Slack
Silt	110	110	110
Antlers	110	110	110
Rifle	110	100	90
Grand Valley	85	80	75
De Beque	75	70	60
Grand Junction	60	60	50
Durham	65	65	55
Ute	75	70	60
Fruita	80	75	65
Loma	85	80	75
Mack	85	80	75
Whitewater	80	75	65
Delta	125	120	115
Olathe	140	135	130
Montrose	150	145	140
Cimarron	210	185	160
Sapinero	225	200	175
Gate View	245	225	190
Lake City	260	240	200
Uncompahgre	180	170	150
Dallas	210	180	150
Ridgway	210	180	150
Ouray	235	210	175

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 25th day of July, 1916.

CARPENTER, et al.

v.

THE DENVER & NORTHWESTERN RAILWAY COMPANY.

(Case No. 52)

(July 29, 1916)

PETITION for shelter station at Juchem, on The Denver & Northwestern Ry. Co.; complaint having been satisfied by defendant, cause dismissed.

ORDER OF DISMISSAL.

By the Commission:

On the 13th day of March, 1916, Charles L. Carpenter, and sixty-one others, patrons of The Denver & Northwestern Railway Company and The Denver City Tramway Company, filed with the Commission their written petition requesting the Commission to order the defendant railway company to erect a waiting room or shelter station at Juchem, a station on the line of the defendant railway company.

On the 14th day of March, 1916, the Commission directed its Inspector, Mr. R. D. Mauff, to investigate the matters complained of in the complaint of the complainants. A copy of the report of the Inspector of the Commission was filed with the defendant railway company, and on the 23rd day of March, 1916, the defendant railway company filed with the Commission a "Satisfaction of Complaint" answering the complaint of the complainants and alleging that plans for a shelter station were under consideration and were being prepared, and agreeing to construct a waiting room after first submitting to the Commission the architectural plans therefor.

On the 14th day of July, 1916, Howard S. Robertson, General Attorney for the Defendant Railway Company, filed with the Commission the following statement:

"July 14, 1916.
515

Mr. George F. Oxley,
Secretary, Public Utilities Commission,
Capitol Building, City.

Dear Sir:

The complaint in Case No. 52, Charles L. Carpenter, et al. vs. The Denver and Northwestern Railway Company, for a shelter station at Juchem, has been satisfied by the installation of such a station in accordance with plans submitted to and approved by the Commission.

Yours respectfully,
(Signed) HOWARD S. ROBERTSON."

IT IS THEREFORE ORDERED, That the complaint of the complainants be dismissed.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 29th day of July, 1916.

THE RAMONA TOWNSITE COMPANY, ET AL.

v.

CITY OF COLORADO SPRINGS, ET AL.

(Case No. 39)

Commission—Jurisdiction over "Home Rule Cities."

(1) The Commission holds that it has jurisdiction over municipally owned utilities owned and operated by "Home Rule Cities."

(August 4, 1916)

COMPLAINT of Town of Ramona against City of Colorado Springs for refusal to furnish water; matters complained of having been satisfactorily settled, complaint was dismissed.

APPEARANCES:

Frank L. Wolff, for Complainants.
J. L. Bennett, for City of Colorado Springs.

ORDER.

By the Commission:

On the 23d day of September, 1915, the Ramona Townsite Company filed with the Commission a written complaint directed against the Board of Commissioners of Colorado Springs and the City of Colorado Springs, El Paso County, Colorado, defendants.

On the 5th day of November, 1915, the complainants in the above cause filed with the Commission an amended complaint directed against the Municipality of Colorado Springs, alleging that the Municipality of Colorado Springs is engaged in the business of supplying and maintaining a water system for the purpose of supplying the residents of the Pike's Peak region with water for domestic use, and that the defendants, after accepting the

> "usual water for several terms from a portion of said complainants and for a period of one term from others of the

complainants hereto, did by force dig up and destroy some of the service pipes and absolutely refuse to furnish or supply any or all of the complainants hereto, water at any price; and did shut off and deprive said complainants of all water, and still refuses to furnish water to said complainants, although said complainants have at numerous and various times, through their attorney, tendered the fee for such water service to said defendant's local water representatives, and at this time said complainants are unable to secure any water service of any description."

It is further alleged that the defendant municipality is furnishing water and collecting for the same from certain residents of the Town of Ramona, and that it refuses to furnish other residents of the Town of Ramona with water. The complainants then pray for an order of the Commission directing the defendants to furnish any and all of the residents of the Town of Ramona with water at reasonable rates.

On the 13th day of November, 1915, the City of Colorado Springs filed with the Commission its verified answer, setting forth in substance that the defendant is a municipal corporation organized under the laws of the State of Colorado, and exists under a special charter adopted in accordance with and pursuant to the provisions of the 20th Amendment of the Constitution of the State of Colorado; that the water works and water system referred to in the complaint of the complainants is the property of the City of Colorado Springs; that the ownership, management and control of said water works and water system is and at all times has been a local and municipal matter, and that whether or not water should be supplied to the complainants or any thereof is and at all such times has been a matter of local and municipal concern; and it is alleged that the Public Utilities Commission has no jurisdiction over the water works and water system of the City of Colorado Springs.

For the second and further defense to the complaint of the complainants, the defendant answers that it has never been engaged in the business of supplying and maintaining a water system for the purpose of supplying the residents of the Pike's Peak region with water for domestic or other use, but has supplied water outside the limits of Colorado Springs and Colorado City to a few consumers only as an accommodation to them, and is maintaining its water works and water system, and acquired the same, for the purpose of supplying the needs of its own citizens and the citizens of Colorado City. That on the 3rd day of September, 1913, the City Council of the City of Colorado Springs adopted the following resolution:

"Whereas, an election has been recently held whereby it was voted to ask for articles of incorporation for the

town of Ramona adjacent to the City of Colorado City, Colorado, and

"WHEREAS, it is a fact well known to every one in the Pike's Peak Region that incorporation of said town is for the purpose of selling intoxicating liquor, the City of Colorado City having at the last election held April 13, 1913, voted NOT to allow the sale of intoxicating liquors within its borders, and

"WHEREAS, the incorporation of such a town in this region would be a blight and disgrace to all the residents hereabouts, therefore

"BE IT RESOLVED, That the Superintendent of the water Department of the City of Colorado Springs be instructed and hereby is instructed NOT to extend any water mains or grant or allow any more taps to any person within the so-called town of Ramona, further than those they at present possess for household purposes only."

That on the 20th day of November, 1913, the Water Department of the City of Colorado Springs delivered to all water consumers in the Town of Ramona a notice in words and figures as follows:

"You are notified not to allow any one to carry water from your premises. Read your license. This department is going to strictly enforce our ordinances, rules and regulations; also want to call your attention to the fact that we do not expect to be able to supply your city with water after the first of year. Wish that you would make arrangements to buy water elsewhere after January 1st, 1914, as we do not expect to be able to furnish service to your city."

That upon March 2nd, 1914, the City Council of the City of Colorado Springs adopted a resolution in words and figures as follows:

"WHEREAS, application for permit to use water has been made to the Department of Water and Water Works by certain persons engaged in the business of conducting saloons, for the sale of intoxicating liquors, in the town of Ramona, Colorado, and

"WHEREAS, The Council finds that the town of Ramona is so situated in relation to Colorado Springs that the running of saloons in said town and the unrestricted sale of intoxicating liquors therein will increase the cost of police supervision in Colorado Springs in order to maintain peace and order and enforce the ordinances of the city against drunkenness and disorderly conduct, and

"WHEREAS, The Council is of the opinion that the fur-

nishing of water by the City of Colorado Springs to said saloons would be of financial and moral disadvantage to the City, Therefore, be it

"Resolved by the City Council of the City of Colorado Springs—

"That the Department of Water and Water Works and the respective officers and employes thereof, be and they are hereby ordered and directed to grant no permits and to furnish no water from the water system of the city to any person, firm, association or corporation in the town of Ramona, Colorado, for use in any place of business occupied or used as a saloon for the sale of intoxicating liquors in said town, and said officers and employes of the Water Department are hereby authorized to do whatever is necessary to carry out this resolution.

"Resolved, That no person, firm, association or corporation in the Town of Ramona, Colorado, who is being furnished water from the Colorado Springs water system shall permit or allow any water to be taken, carried or delivered from his or its premises to any place occupied or used as a saloon in said town, and the officers and employes of said Water Department are hereby ordered and instructed to immediately shut the water off from the premises of any person, firm, association or corporation furnishing or supplying, or permitting the supplying of water to saloons contrary to this resolution."

That upon the 4th day of February, 1914, the water was turned off from consumers in the town of Ramona using the same for saloon purposes and that certain consumers or someone acting for them, without authority from the defendant, unlawfully turned on said water, and that upon February 5, 1914, it was turned off by employes of the defendant by digging up the corporation's mains and disconnecting the leads, and that the defendant has not shut off or deprived any consumer of water in the Town of Ramona excepting such consumers as were using water for saloon purposes.

The answer of the municipality prays for an order of the Commission dismissing the complaint of the complainants.

The above cause was heard by the Commission at Colorado Springs on the 29th day of November, 1915, and on the 4th day of December, 1915, briefs were submitted to the Commission. Two questions have been presented to the Commission for determination. First: Has the Public Utilities Commission of the State of Colorado jurisdiction over municipally owned plants in municipalities governed by a charter as provided by Section 6 of Article 20 of the Colorado Constitution, and commonly known as "Home Rule Cities"? Second: If the Commission has

jurisdiction, has it the power and authority to require a municipally owned water plant owned and operated by a municipality governed by a charter in accordance with Section 6 of Article 20 of the Colorado Constitution to furnish water at a reasonable charge to all persons residing in another municipality, namely, Ramona, Colorado, in the event the municipally owned plant furnishes water to a portion of the citizens residing in the municipality of Ramona?

On the 1st day of January, 1916, the State of Colorado, in accordance with provisions of a Constitutional Amendment, became a Prohibition State, and all of the saloons within the Municipality of Ramona were closed in accordance with the law.

Section 3 of the Colorado Laws pertaining to Public Utilities reads as follows:

> "Section 3. The term 'public utility', when used in this act, includes every common carrier, pipe line corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation, water corporation, person or municipality operating for the purpose of supplying the public for domestic, mechanical or public uses, and every corporation, or person now or hereafter declared by law to be affected with a public interest, and each thereof, is hereby declared to be a public utility and to be subject to the jurisdiction, control and regulation of the commission and to the provisions of this act; Provided, that nothing in this act shall be construed to apply to irrigation systems, the chief or principal business of which is to supply water for the purpose of irrigation."

Other sections of the Colorado law pertaining to Public Utilities provides that all charges made by any public utility shall be reasonable, and all unjust and unreasonable charges are prohibited and declared unlawful; and every public utility shall furnish, provide and maintain such service instrumentalities, equipment and facilities as shall promote the safety, health, comfort and convenience of its patrons, employes and the public, and shall in all respects be adequate, sufficient, just and reasonable; and that no public utility shall as to rates, charges, service, facilities or in any other respect make or grant any preference or advantage to any corporation or person or subject any corporation or person to any prejudice or disadvantage. The Commission may, after a hearing had upon its own motion or upon complaint, determine just, reasonable or sufficient rates, fares, tolls, rentals, charges, rules, regulations, practices or contracts, and the Commission may upon its own motion or upon complaint investigate rates, regulations, contracts or practices of any public utility, and if the same be found to be unreasonable, new rates,

fares, tolls, rentals, charges, classifications, rules, regulations, contracts or practices may be established by the Commission.

(1) The Commission is of the opinion that it has jurisdiction over municipally-owned utilities, owned and operated by Home Rule Cities, but as to whether the Commission should require a municipally-owned public utility to extend its service to all prospective consumers residing in another municipality in the event the municipally-owned utility chooses to serve one or more consumers in said municipality is a question which the Commission is not now called upon to decide. No saloons exist within the Municipality of Ramona at this time, and therefore the ordinances passed by the Commissioners of the City of Colorado Springs and the subsequent action of the City Commissioners of Colorado Springs and the City Water Superintendent do not injuriously affect the petitioners. The Commission has also been notified by the Water Superintendent of Colorado Springs that all residents of Ramona who desire water at reasonable charges have been provided with the same by the Municipality of Colorado Springs.

It Is Therefore Ordered, That the complaint of the complainants be dismissed.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 4th day of August, 1916.

In Re: COLORADO SPRINGS GAS RATES.

(Case No. 54.)

Rate of return—Value of property—Reasonableness of rates.

(1) While a public utility is entitled to earn a fair rate of return upon the present fair value of its property in use or useful, yet there must be no charge for service which exceeds the value of the service rendered.

Reasonableness of rates—Value of service.

(2) The best way to determine the value of the service of the product sold by a public utility is to closely watch the development of the business of the utility, as well as the effects of increased rates.

Reasonableness of rates—Segregation of properties.

(3) The Commission was of the opinion that, as already expressed in a prior case, the consumers of electricity should not be compelled to maintain any portion of the gas properties of the utility from which the electricity is purchased and that such method was without justification.

Reasonableness of rates—Gas—Value of service.

(4) In an application to advance the gas rates of a utility the Commission was of the opinion that to allow the utility to establish the rates proposed by such utility would bring about a fair rate of return upon the present fair value of its gas properties, but would result in a charge exceeding the value of the service rendered and would result in decreased revenues through consequent loss of patronage, and, therefore, prescribed rats at somewhat in advance of the former rates, based on the value of the service.

(August 7, 1916.)

APPLICATION of The Colorado Springs Light, Heat & Power Company to increase its rates for gas from $1.10 gross—$1.00 net, per thousand feet, to $1.35 gross—$1.25 net, per thousand feet, for the first 5 m. cu. ft. each month; held that to do so would result in having rates in excess of the value of the service; rates of $1.15 gross—$1.10 net prescribed; increases for quantities over 5 m. cu. ft. allowed as prayed.

APPEARANCES: For The Colorado Springs Light, Heat & Power Company, Rush L. Holland, Esq.; for the City of Colorado Springs, Intervenor, J. L. Bennett, Esq., City Attorney.

ORDER.

By the Commission:

On the 15th day of December, 1915, the Commission decided Case No. 24, *In Re Colorado Springs Light, Heat & Power Co.*, 1 Colo. P. U. C., 159, 2 Colo. P. U. C., 23, and on the 1st day of March, 1916, denied the petition for rehearing of said cause by The Colorado Springs Light, Heat & Power Company. That case was an investigation, upon the motion of the Commission, into the reasonableness of each and every rate or charge and into the adequacy of the service, rules, regulations and practices of The Colorado Springs Light, Heat & Power Company. In the decision in that cause, rendered on the 15th day of December, 1915, the Commission found that The Colorado Springs Light, Heat & Power Company, a public utility engaged in the sale of electricity for lighting, heating and power purposes, and in the sale of gas for lighting and heating, and of steam for heating purposes, was the owner of three properties of the following present fair value for rate making purposes, viz.; electrical property, $1,481,762.00; gas property, $710,917.00; steam property, $122,774.00. The Commission found, by averaging the net earnings of the electrical department of The Colorado Springs Light, Heat, & Power Company for a period of four years, 1911, 1912, 1913 and 1914, that the average annual net earnings of the electric property were $233,875.00, and deducting therefrom the sum of $52,000.00 as the annual depreciation reserve upon the electrical property, as approved by the Commission, found the annual average net return of the electrical property, less depreciation, to be $181,875.00. The Commission thereupon, being of the opinion that the average annual net return earned by the electrical properties of the Defendant corporation, which was in excess of twelve per cent. upon the present fair value of the electrical properties, was excessive, reduced the rates and charges of the electrical department so that the rate of return earned would be slightly in excess of seven and one-half per cent.

The schedules of the corporation pertaining to charges for electricity were so faulty and so discriminatory that the readjusted rates and charges for electric energy, as found to be reasonable by this Commission, were ordered into effect for a period of one year ending March 1, 1917, at which time the Commission will receive reports from its experts upon the revenues earned by the corporation under the new schedule of rates and charges, that it may be determined whether a further readjustment of the corporation's charges for electric energy shall be made by the Commission.

By averaging the net earnings of the gas department for the years 1911, 1912, 1913 and 1914, the Commission found that the average net return was $28,239.90, and, after deducting the sum

of $20,000.00 as the fair amount to be laid aside for the annual depreciation reserve upon the gas property, found the average net return, less depreciation, to be $8,239.90, or an average annual earning of 1.16 per cent. upon the fair and reasonable value of its gas property.

The Commission also stated in its opinion that,

> "the laws of Colorado pertaining to public utilities and the regulation thereof by the Public Utilities Commission of the State of Colorado, enumerate by name all the public utilities which shall be under the jurisdiction of this Commission, and we have come to the conclusion that we are without jurisdiction in the regulation of the sale of steam."

As no request was made by the Defendant corporation for an increase in its rates and charges for gas, the Commission saw no reason for readjusting these rates.

In the Commission's decision in Case No. 24, *supra*, the following statement was made:

> "The Commission has devoted much time to the question of fair and reasonable rates and charges for gas to be sold by the Defendant corporation to consumers in Colorado Springs and Colorado City. It found the present fair value of the gas property of The Colorado Springs Light, Heat & Power Company to be $710,917.00, with an average annual return, less depreciation, of $8,239.09, which results in a 1.16 per cent. rate of return per annum on the fair and reasonable value of this gas property.
>
> "The present schedule of rates and charges for the sale of gas by the Defendant corporation shows that this defendant is receiving $1.00 per 1,000 cubic feet of gas, net, with a minimum guarantee of fifty cents per meter per month, which appears to be not unduly high, and, in fact, a fair average rate for gas sold by other utilities in cities somewhat similar to Colorado Springs in size and location. After a thorough investigation the Commission has been forced to come to the conclusion that the Defendant company manufactures gas at about the average cost, and has been unable to arrive at a satisfactory conclusion for the low return on the present fair value of the gas properties of the Defendant company. It is ascertainable from the evidence that the representatives of the Defendant corporation were aware at the beginning of this hearing that the gas property of The Colorado Springs Light, Heat & Power Company was not earning a reasonable return upon the present fair value of the property, and with this knowledge the representatives of the Defendant company did not

request, or even intimate, that the Commission should permit the Defendant corporation to increase the rates and charges as shown in the present schedule of the corporation. In the event we should permit an increase in the charges and rates for gas sold by the Defendant corporation it would be solely for the purpose of increasing the revenues of this Company, and we are not at all convinced that these revenues would be increased by an increase in the rates and charges, but, on the other hand, are of the opinion that an increase in the rates and charges would result in decreased earnings. While the public utility is entitled to earn a reasonable return upon the present fair value of these properties, the consuming public is required to pay only the reasonable value for the service or commodity furnished. We shall entertain a complaint from the corporation in the form of a request for an increase, in its rates and charges covering the sale of gas, accompanied by evidence sufficient to justify this Commission in ordering an increase in such rates and charges."

On the 31st day of January, 1916, the Colorado Springs Light, Heat & Power Company filed with the Commission its petition for a rehearing in Case No. 24 and on the 1st day of March, 1916, the Commission denied the application. One of the grounds for a rehearing of the cause, as alleged in the petition by The Colorado Springs Light, Heat & Power Company was an alleged error of the Commission in segregating the various properties of the public utility for the purpose of rate making. Denying the application for a rehearing the Commission stated:

"In its application for a rehearing of this cause the Respondent contends that its hydro and electric properties, gas properties, and steam properties, should not be segregated for rate-making purposes, but this Commission is of the opinion that unless the gas property of the Respondent is segregated from the hydro and electric properties the patrons of the hydro and electric properties naturally will be compelled to maintain the gas plant of the Respondent, an arrangement for which there is no apparent authority in law.

"The gas property of this Respondent is physically separate and distinct from the Company's hydro and electric properties, and this Commission is unable to find authority for the proposition that, for rate-making purposes, gas and electric properties owned by one company should be valued as one property and the rate of return based upon the earnings of the entire property. In fact, counsel for Respondent frankly admits that this theory is without precedent."

The rule as announced by this Commission has been announced by commissions throughout the country and is clearly stated in a case entitled:

> *"In the matter of complaints as to rates charged for gas, electric and street railway service in the City of Jacksonville, County of Morgan, State of Illinois,"*

before the State Public Utilities Commission of Illinois, decided July 11, 1916:

> "That, for the purpose of rate making, each of the respondent's departments shall stand by itself in so far as the respective revenues earned by each of the various departments are sufficient (or insufficient) to meet the operating expenses and proper fixed charges of each of the said departments; that an insufficient revenue from one department should not be compensated and equalized by the more adequate revenue of another department; that no part of the property of the electric department should be assigned to the street railway department; and that proper and reasonable charges should be assessed by the electric department against the street railway department for all electrical energy furnished by the former and consumed by the latter."

And,

> "In a case such as the one at bar, where two or more services are furnished under one general management, questions of the allocation of property and operating expenses frequently arise. Equity does not demand that the consumers of one service should be called upon to bolster up the revenues obtained from the users of another class of service. It is axiomatic that, in all fairness, a person should pay for only what he receives, and a user of water, for example, should no more be called upon to help in the upkeep of an electric light plant owned by the same company, than he should be expected to contribute to the revenue of an independently owned electric company whose product he does not use. To hold otherwise would be to countenance one form of unfair discrimination. The principle applies to the distribution of property between the several departments of a combined utility. Since each service must stand upon its own feet, it must be permitted to earn a return upon all property that properly belongs to it. To assign the property of one department arbitrarily to the service of another might result in grave injustice, inasmuch as the department from which the property is

subtracted may thereby be deprived of a return thereon, a result that is clearly confiscation.

"Doubtless, economies may be effected through the combined operation of several plants; but are not the consumers entitled to participate in the resulting benefits? This Commission has before it the determination of rates for property operated under a stated form of management which has been in effect for many years previous to this proceeding, and it is not reasonable to suppose that a rate should be predicated upon a different basis of management merely because such method of operation may be possible. To predicate a finding upon conditions which may be imagined to exist instead of those which are in actual operation is to enter the realms of conjecture, a basis affording no footing upon which to raise a rate structure. Also, so far as the general principle is involved, it would seem an unsound doctrine that the revenues from one class of consumers should be used to increase the earnings of another utility, thus exacting tribute from one class of consumers for the benefit of another. A utility, inherently, should not be the instrument whereby a fee is exacted for services that have not been rendered."

On the 10th day of April, 1916, the Commission received a petition from The Colorado Springs Light, Heat & Power Company praying for an increase in its rates and charges for gas, and alleging in substance that the company is entitled to earn a fair, just and reasonable return on the fair value of its gas properties, as found by the Commission, and that a return thereon of 1.16 per cent. is not fair, just and reasonable. And the corporation further alleges that:

"Since the hearing in Case No. 24 the company has contracted for and is now installing larger mains and other equipment which will improve service conditions in certain parts of the city and which improvements when completed, which will be at an early date, will add approximately $20,000.00 to the company's gas plant and equipment accounts."

It is then prayed that the Commission increase the company's rates and charges covering the sale of gas to the end that fair, just and reasonable rates and charges may be established therefor and that the company thereby be permitted to earn a fair return on its said investment in its gas properties.

The Commission convened the hearing in the above cause at the City Council Chamber in the City Hall in the City of Colorado Springs, Colorado, at 10:00 o'clock a. m., Friday, June 2nd, 1916.

and after receiving the testimony from the petitioning corporation and the various objectors to the increase of rates applied for, the hearing was adjourned until the 8th day of July, 1916, at 10:00 o'clock a. m., in the City Council Chamber of the City of Colorado Springs, Colorado, at which time and place the Commission's witnesses testified.

From the testimony introduced at the hearings in this cause it becomes apparent to the Commission that the service of the petitioning corporation during peak-load periods (July, August and September) has been defective. This defect was admitted by the witnesses for the petitioning corporation, but it was contended that newly installed boosters and booster mains now give adequate service to the consumers in Colorado Springs during peak-load periods. It was contended by the petitioning corporation's witnesses that, while the Commission would not be justified in permitting an increase of rates and charges sufficient to result in a fair rate of return upon present fair value of the corporation's gas properties, a moderate increase of rates and charges is justified and the following schedule was requested:

RATE:

First 5 M. cu. ft. each month, @ $1.25 Net or $1.35 gross.
Next 15 M. cu. ft. each month, @ $1.00 Net per M.
Next 30 M. cu. ft. each month, @ .90 Net per M.
Next 50 M. cu. ft. each month, @ .80 Net per M.
All in excess of
100 M. cu. ft. each month, @ .75 Net per M.

MINIMUM:

Monthly guarantee 50c net, or 60c gross, per meter installed.

DISCOUNT:

Bills to be rendered at the gross rate for the first 5 M. cu. ft. or for the minimum and discounted to net rate if paid within discount period indicated on bill.

Witnesses for the Commission testified that the corporation is improving its service by the installation of boosters and booster mains and that the cost of the manufacture of gas by the petitioning corporation is not excessive, but that peculiar conditions surrounding the manufacture and sale of gas in Colorado Springs, due to the city's wide streets and its unusually large population during peak-load months, has resulted in a very heavy investment in gas properties of the corporation, and while the consumers served use the average amount of gas per meter, the number of consumers within the City of Colorado Springs is far below the average of cities of the same size in various parts of the United States. The evidence developed the fact that the company had used great efforts in increasing the consumption of gas in the City of Colorado Springs, and intends to continue to employ

a force of gas salesmen to market the product of the gas department of the petitioning corporation. From a special report to the Commission made by the Commission statistician, it appears that the income of the gas department of the petitioning corporation from January 1st to July 1st for the year 1916, has increased about $1,800.00 over a similar period in the year 1915, and that the expenses of the gas department have been somewhat reduced.

(1) While it is true that a public utility is entitled to earn a fair rate of return upon the present fair value of its property in use and useful, yet there must be no charge for service which exceeds the value of the service rendered. It is the contention of the public utility in this case that the Commission should increase its rates and charges for gas from $1.10 gross—$1.00 net, per thousand feet, to $1.35 gross—$1.25 net, per thousand feet, for the first 5 M. cu. ft. each month. The Commission is of the opinion that the proposed schedule will result in rates and charges exceeding the value of the service rendered, but the evidence introduced seems to justify an increase in rates and charges which will not exceed the value of the service rendered.

(2) The best way to determine the value of the service or the product sold is to closely watch the development of the business of the public utility, as well as the effect of the increased rate. This rule as announced by the Commission in Case No. 24, that a consumer of electricity should not maintain the gas department of a public utility, certainly is correct. Prior to the decision of the Commission in Case No. 24, electric consumers within the City of Colorado Springs were paying excessive rates to maintain the steam and gas properties of the petitioning corporation.

(3) That method of charging was without justification. The Commission reduced the rates for electricity charged by the petitioning corporation and placed in effect a temporary schedule of rates and charges, effective until March 1, 1917, at which time the Commission will examine the reports presented to it by its Chief Engineer and Chief Statistician from time to time to determine whether the electric rates and charges of the petitioning corporation should be further reduced.

While the Commission realizes that the gas service of this public utility has been defective in the past, the company has demonstrated its willingness to overcome this defect, and has already spent thousands of dollars in the attempt to improve its service. Each of the pressure tests made by the Commission's Engineer in the various districts convinces the Commission that the pressure is vastly improved over that shown in preceding years, and the heat-unit tests compare favorably with the requirements of commissions throughout the country and meet the requirements which will soon become a part of the Commission's rules pertaining to gas service. The Engineer and the Statisti-

cian will report to the Commission from time to time to the end that the service of the gas department of the petitioning corporation shall be adequate.

(4) The Commission is of the opinion that the petitioning corporation should be permitted to increase its rates and charges for gas by charging its present gross rate of $1.10 per thousand cubic feet as a net rate and $1.15 per thousand cubic feet as the gross rate for the first 5 M. cubic feet of gas. In all other respects the application of the petitioning corporation will be granted, as no increase will result in the proposed schedule over the rates charged at this time. The small increase in charges should not be burdensome to the small consumer and will permit the corporation to increase its revenues slightly; but it will not earn a fair rate of return on the present fair value of the gas properties of the petitioning corporation as found by this Commission.

One test as to the reasonableness of a rate is the proper development of the property of the public utility carrying the rate or charge. It will be the purpose of the Commission to obtain reports from the books of the public utility in order that the revenues and the development of the gas department of this corporation may be kept under the close scrutiny of the Commission for the benefit of the consuming public and the stockholders of the utility.

The Commission is of the opinion that in the event permission should be given to the petitioning corporation to make a schedule of rates and charges which would bring about a fair rate of return upon the present fair value of the gas properties, such schedule would result in a charge exceeding the value of the service rendered and would result in decreased revenues through consequent loss of patronage.

It Is Therefore Ordered, That The Colorado Springs Light, Heat & Power Company be permitted to charge the following schedule of rates and charges for the sale of gas:

RATE:

First 5 M. cu. ft. each month,	@	$1.10	Net or $1.15 gross.
Next 15 M. cu. ft. each month,	@	$1.00	Net per M.
Next 30 M. cu. ft. each month,	@	.90	Net per M.
Next 50 M. cu. ft. each month,	@	.80	Net per M.
All in excess of 100 M. cu. ft. each month,	@	.75	Net per M.

MINIMUM:

Monthly guarantee 50c net, or 60c gross, per meter installed.

DISCOUNT:

Bills to be rendered at the gross rate for the first 5 M. cu. ft. or for the minimum and discounted to net rate if paid within discount period indicated on bill.

It Is Further Ordered, That this schedule of rates and charges may be charged and collected by the petitioning corporation for the gas service furnished to consumers during the month of August, 1916.

S. S. Kendall,
(Seal) Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 7th day of August, 1916.

THE STRONTIA SPRINGS SANITARIUM COMPANY

v.

THE COLORADO & SOUTHERN RAILWAY COMPANY.

(Case No. 78.)

Reasonableness of rates—Railroads—Maximum passenger fares.

(1) In passing upon the reasonableness of the particular passenger fares to and from Strontia Springs, upon complaint, the Commission found that none of the passenger rates published to or from Strontia Springs exceeded the maximum rates found to be reasonable by the Commission in Case No. 11, In re Passenger Rates and Rules, 1 Colo. P. U. C. 35.

Discrimination—Railroad passenger fares.

(2) The Commission, in passing upon the reasonableness of the passenger fares to and from Strontia Springs, found that such station was not discriminated against by the mere fact that the excursion and special fares to and from Denver were not any lower than to a point located five miles beyond, and found that no discrimination as to passenger fares existed whatsoever at Strontia Springs.

(August 10, 1916.)

COMPLAINT against the Colorado & Southern Railway Company as to discrimination existing in passenger fares to and from Strontia Springs; no discrimination found to exist in respect to passenger fares; respondent ordered to place in effect the same special train rate and guarantee from Denver as applies to first station beyond Strontia Springs; balance of complaint dismissed.

APPEARANCES: Edwin N. Burdick, Esq., and Mr. W. G. Thompson, for the Petitioner. Messrs. E. E. Whitted and A. S. Brooks, and Mr. George Williams, for the Respondent.

STATEMENT.

By the Commission:

On the 7th day of June, 1916, the Petitioner filed with the Commission its verified petition alleging that,

"it is the owner of a summer resort, named 'Strontia Springs' and located at the mouth of Bear Gulch Canon, about 26.8 miles from the City of Denver on the railway line of the Respondent, and that for a long time past the Respondent has discriminated in and about and against the Petitioner by refusing to sell one-way or round-trip tickets, ten-day tickets, commutation tickets, excursion-rate tickets, or, to deliver freight to said resort or place, and has refused to permit passengers to get off the train at the resort, or to get aboard at said resort in either direction, or to list or schedule said resort as one of the stopping places, or to stop trains at said resort, and has refused to sell tickets at any time except during certain seasons of the year known as the fishing season, and this year has refused to sell any tickets or to place said resort upon its list of stations, or to establish rates and has without right so to do annulled the rates heretofore existing so far as the same were granted.

"That because of the wrongful conduct of the Respondent herein the property and property rights of the petitioner herein has been greatly damaged and impaired and the use and value thereof has been destroyed.

"That while the Petitioner, through its proper officers, has made application to the Respondent and requested it to grant equitable and just arrangements in accordance with the customary usage in relation to distances and in compliance with the regulations for roads for transportation and freight, in accordance with the mileage that said resort is, as compared with other resorts and places along said route for one-way, return trip, fishing excursion, commutation and general excursion rates and all of which said applications were denied and refused."

The Petitioner then prays that the Commission order the said Respondent company to establish a regular tariff rate, according to distance and mileage, from the City of Denver to said resort, and from said resort to Denver, on the same basis as other distances and places along said route are permitted and allowed, and that the Respondent be ordered not to discriminate against the Petitioner, and be compelled to sell tickets of all grades and kinds, and to accept and transport and discharge patrons, passengers, freight and express as applies to any other station along said route, in accordance with the distance and under the same rules applicable to any other resort on said route.

On the 17th day of June, 1916, the Respondent filed with the Commission its answer denying generally the allegations contained in the petition of the Petitioner.

Hearing of this cause was convened at the hearing room of the Commission in the City and County of Denver, State of Colorado, at the hour of 10:00 o'clock a. m., on the 14th day of July, 1916.

It appears from the testimony and the evidence introduced at the hearing that the petitioning corporation is the owner of a summer resort known as "Strontia Springs," located 26.8 miles from the City of Denver, at the mouth of Bear Gulch Canon on the railway line of the Respondent Company, and that it is the contention of the Petitioner that the Respondent Railroad Company has discriminated against the said resort by refusing to sell tickets to and from Strontia Springs and by refusing to allow passengers to board or to alight from the trains of the Respondent company at said resort, and that the fares and charges of the said railroad for passengers and freight carried to and from Strontia Springs are unreasonable and unjust, and that the said Railroad company discriminates in favor of other resorts on its line of railway to the detriment of the Petitioner.

There is no evidence before the Commission that the Railroad Company has refused to carry freight or express to and from the resort of the Petitioner. There is some evidence to the effect that representatives of the Railroad company and of the Petitioner have been quarreling for some years over alleged discriminatory charges and conduct of the Respondent company to and toward the petitioner and its patrons.

(1) On the 8th day of May, 1916, the Commission decided Case No. 11, *In re Passenger Rates and Rules,* 1 Colo. P. U. C. 35, providing for maximum rates to be charged for passenger service upon all railroads in the State of Colorado. After carefully examining the record in this cause the Commission is of the opinion that the Respondent charges no rate to or from Strontia Springs which exceeds the rates provided for by the Commission.

There is some evidence to the effect that attempts have been made in the past to purchase passenger tickets to Strontia Springs —a flag stop—and that agents of the Respondent carrier have stated that no passenger rate had been made to Strontia Springs by the Respondent carrier; and while the Respondent company admits that Strontia Springs is not shown as a station upon some of the company's literature it is stated that this was at the express request of representatives of the Strontia Springs resort, and that through error Strontia Springs was omitted from the summer tariff of the Respondent company.

It is also contended by the Petitioner that the Railroad Company has filed with the Commission a special-train excursion fare of 75 cents from Denver to South Platte and Dome Rock, when 100 passengers are guaranteed, said stations being two and five miles, respectively, farther distant from Denver than the

resort of Strontia Springs, and that the said Respondent refuses to publish an excursion fare rate to Strontia Springs.

The Petitioner prays that the Commission order the Respondent company to file with the Commission a special-train excursion rate from Denver to Strontia Springs which shall be less than that charged from Denver to Dome Rock.

It is admitted that the Respondent company operates the resort at Dome Rock, and it is contended by the Petitioner that the Respondent company for that reason discriminates against Strontia Springs.

It also is contended by the Petitioner that the Commission should order the Respondent company to sell commutation books from Denver to Strontia Springs and return throughout the year, whereas the said commutation books are now sold for only a six months period, covering the summer season.

The witnesses for the Petitioner admit that subsequent to the filing of the complaint by the Petitioner with the Public Utilities Commission of the State of Colorado passengers were permitted to alight from and board the trains of the Respondent carrier at Strontia Springs, and that the Respondent carrier sold passenger tickets to and from Strontia Springs from other points on its line of railway.

It is not contended by the Petitioner that the rates and charges to and from Strontia Springs made by the Respondent company are excessive, but that they are discriminatory against Strontia Springs in favor of other resorts located on the railway lines of the Respondent company.

(2) The Commission is of the opinion that no discrimination exists as to rates and charges for passenger fares.

While it is contended by the Petitioner that a differential should be made between Strontia Springs and Dome Rock for special-train excursion fares and commutation books, because of the difference in distance of five miles, it is the opinion of the Commission that the Petitioner has no grounds for complaint in this regard. Witness Thompson, representing the Petitioner at the hearing, admitted that the Strontia Springs resort could compete favorably with Dome Rock. This being true, and it being admitted that the 75 cent special-train excursion fare from Denver to Strontia Springs is reasonable, the Commission is convinced from an examination of the record that the Petitioner is not discriminated against as to special-train excursion fares and commutation fares.

The Respondent carrier contends that it has been forced into filing with the Commission a schedule of very low fares and rates to points on its branch of railway known as the "South Park branch," and on which is located Strontia Springs, because of street car, railroad and resort competition out of the City of Denver. This statement appears to be correct.

It is the purpose of the Commission to see that no community is discriminated against by any public utility, and the Respondent railroad must designate Strontia Springs in its tariffs as a station, and sell all classes of tickets to and from Strontia Springs, as well as permit the patrons of this resort to board and alight from its trains at that station. However, there appears to be no reason why commutation books should be sold to and from Strontia Springs during the winter months, unless the Respondent railroad company desires to do so. Strontia Springs receives the same service in this respect as do other summer resorts on this branch of the railway lines of the Respondent company.

ORDER.

It Is Therefore Ordered, That the Respondent railroad company shall publish Strontia Springs in its tariffs as a flag station, and provide for passenger and freight fares and charges to and from Strontia Springs, and to furnish to the said Strontia Springs similar service to that provided for other resort stations upon its branch of railway known as the "South Park branch."

It Is Further Ordered, That the Respondent railroad company shall publish in its tariffs a rate of seventy-five (75) cents per person as a special train excursion fare from Denver to Strontia Springs and return, with a guarantee of one hundred passengers.

It Is Further Ordered, That in all other respects the petition of the Petitioner be dismissed.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 10th day of August, 1916.

THE COLORADO SPRINGS AND INTERURBAN RAILWAY COMPANY

v.

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY.

(Case No. 75.)

Service—Abandonment and discontinuance—Branch lines.

(1) While the Commission, in a proper application for the abandonment of a branch line of a street railway company, would permit the introduction of evidence in regard to the operating revenues of the branch line, yet the fact that the branch line was not of itself earning operating expenses would not necessarily justify the Commission in permitting the abandonment of the branch line, and has been so held by the Colorado Supreme Court in the case of The Colorado & Southern Railway Company v. The State Railroad Commission, et al., 54 Colo., 64.

Protections at crossings—Interlocking plants—Contracts for maintenance.

(2) In a case in which a street railway company desired to have an interlocking plant with a steam railway removed owing to the expense entailed, the Commission, while of the view that the crossing was less dangerous than many crossings protected by hand derailers, was of the opinion that where two public utilities had entered into a written agreement providing for an interlocking plant at the intersection of the tracks of the public utilities the Commission should not only consider the adequate protection for the crossing, but must also consider the attitude of the parties as well as the written contract.

Protections at crossings—Removal of interlocking plants—Sufficiency of evidence.

(3) An interlocking plant is the most efficient and safest device that may be installed at the intersection of railway tracks and before the Commission might order the removal of an interlocking plant and the substitution of a device less safe, sufficient evidence to justify such removal must be submitted, and any order of the Commission requiring the removal of an interlocking plant, with one of the carriers objecting to the removal on the ground that it will result in a dangerous crossing, would be a detriment to adequate crossing protection and would no doubt leave the impression with the various public utilities of the state that safety was of less importance than operating revenues.

(August 18, 1916.)

APPLICATION for removal of an interlocking plant at Fontanero Street, Colorado Springs, by The Colorado Springs & Interurban Railway Company on grounds of expense; application resisted by The Atchison, Topeka & Santa Fe Railway Company as proposed removal will make crossing dangerous; held, that evidence was not sufficient to justify the Commission in ordering the removal of the interlocking plant.

APPEARANCES: For the complainant, Messrs. Chinn & Strickler and Mr. B. M. Lathrop; for the defendant company, Henry T. Rogers, Esq., George A. H. Fraser, Esq., Mr. C. H. Bristol and Mr. J. M. McMahon.

ORDER.

By the Commission:

On the first day of June, 1916, the complainant filed a verified complaint, alleging in substance that the defendant railroad company operates a single-track steam railway line over and across a public street in the City of Colorado Springs known as Fontanero Street, which line of railway runs in a general northerly and southerly direction across said Fontanero Street; that the complainant operates a single-track electric street railway line upon said Fontanero Street in a general easterly and westerly direction; that the electric railway line intersects the railway line of the defendant; that the said Fontanero Street is situated in the northerly portion of the City of Colorado Springs on the outskirts thereof, and that said Fontanero Street has but little traffic over the same other than the street railway line of the complainant; that, pursuant to the provisions of a franchise granted to it by the City of Colorado Springs, the complainant constructed the said single-track railway line on Fontanero Street in June, 1910, and entered into a Crossing Agreement with the defendant, a copy of which is attached to the complaint, in which the parties agreed:—that the defendant company should install a standard interlocking plant and erect a tower house with the necessary signals, derails and connections, at the point of intersection of the tracks of the parties, and that the complainant should, upon receipt of a bill therefor, promptly pay to the defendant company one-half of the cost of the interlocking plant and installation thereof; that, while the interlocking plant should be under the exclusive control of the defendant company, one-half of the cost of management, operation, maintenance, repair or renewal should be paid by the complainant; that in case of dispute as to the management and control of the interlocking plant, the same should be submitted to a Board of Arbitration, and that in the event of either party abandoning its railroad at the point

of intersection the agreement should terminate, but that the party abandoning its railroad should pay to the other party one-half of the amount which might be agreed upon between the parties as to the value of the interlocking plant at the time of the abandonment. The parties also agreed as to the placing of the wires and poles of the complainant and the support and maintenance thereof and other matters incidental to the main object of the contract.

It is then alleged that the complainant operates the Fontanero Street car line by connecting the same with the Tejon Street line, said line being one of its main lines, and running thence east over and across the steam railway line of the defendant and past what is known as the Hastings Addition Settlement to what is known as The Colorado Springs Golf Club; that the operating cost of the said Fontanero Street line far exceeds the gross revenue derived therefrom by the complainant—said operating cost including one-half of the maintenance cost of the interlocking plant referred to in the contract, which for the year 1915 was $1,263.82; that the complainant also operates another single-track line in the City of Colorado Springs known as the Wahsatch Line, which connects with Fontanero Street and which the complainant desires to operate in connection with the Fontanero Line for the reason that it can operate its said Wahsatch Line and Fontanero Line together with no increased cost and thus save the expense to the complainant now being incurred by it in operating the Fontanero Line; that if the interlocking plant be eliminated the complainant will be enabled to operate its Wahsatch and Fontanero Lines as one line and by so doing will be enabled to operate the same in conformity with General Order No. 14 made and entered by this Commission on the 26th day of February, 1916, and it is asserted that compliance with the provisions of General Order No. 14 would be sufficient protection to the public from injury at the crossing because of the small amount of traffic on Fontanero Street and the clear view of any approaching train coming either from the north or south which any motorman in charge of a street car approaching said intersection has for a distance of approximately one mile. It is then stated that in the opinion of the City Council of the City of Colorado Springs the maintenance of an interlocking plant at said Fontanero Street crossing is unnecessary for the protection of the public and that the compliance of the complainant with the provisions of said General Order No. 14 would be sufficient regulation for the protection of the public at said street crossing.

The complainant then prays for an order of the Commission cancelling and annulling the contract entered into by the parties in June, 1910, and that such disposition of the interlocking plant and the division of the proceeds arising therefrom be made between the parties as to the Commission may seem just and reasonable, and that the complainant be permitted to operate its cars upon said Fontanero Street across the steam railway track of the

defendant solely subject to the provisions of said General Order No. 14.

On the 12th day of June, 1916, the defendant filed its Answer and Plea to the Jurisdiction of the Commission, and by way of answer denies that the elimination of the interlocking plant would have any effect on the operation of the Wahsatch Avenue and Fontanero Street Lines of the complainant, and denies that compliance by complainant with General Order No. 14 of the Commission would be sufficient protection to the public from injury at said crossing, but avers that the said interlocking agreement was entered into by and between the complainant and the defendant after long and careful consideration, and with the acquiescence and approval of the City Council of Colorado Springs, and that the maintenance of the interlocking plant is necessary for the safety of employes and passengers, both of the complainant and defendant, and of the general public in using and traveling upon said Fontanero Street; that the Fontanero Street crossing is located at a very dangerous point by reason of the fact that there is a curve in the line of the defendant's railway a short distance south of the crossing and that the view thereof by train crews approaching from the south is obstructed by buildings and trees; that there is a considerable grade from north to south on the line of the defendant's railway as it approaches and crosses Fontanero Street; that the defendant frequently runs freight trains of great length and weight down said grade and over said crossing and that it is impossible to bring them to a full stop in less than 300 or 400 yards; that emergency stops are extremely dangerous to passengers and destructive to equipment, and in the event of the failure of brakes or failure of train control in any respect, it would be physically impossible for any such train to stop before reaching the crossing. The defendant then avers that it is impossible to rely upon the obedience of employes of the complainant in operating electric cars over said crossing, and in support thereof states that frequently heretofore the employes of the complainant have disregarded signals of the interlocker with the result that said electric cars have been derailed by the interlocker, and that by reason of the foregoing matters and things, the continued maintenance of said interlocking plant at said crossing is absolutely necessary for the safety of the public and of employes of both the complainant and defendant.

It is further averred that the plans contemplated by the complainant for jointly operating its Wahsatch Avenue Line and its Fontanero Street Line will still require the use of said Fontanero Street crossing and that all of the dangers outlined will continue to exist at said crossing as heretofore.

By way of further answer to the complaint of the complainant it is alleged that the parties entered into the interlocking

contract for the greater safety and security of the persons and classes of persons riding on the trains of the complainant and defendant, and that the same are highly beneficial and consistent with public policy; and that while the Commission is empowered to order additions, extensions, repairs, improvements and changes in the equipment or facilities of any public utility for the purpose of securing greater safety and better service to the public, it is not within the power or the jurisdiction of the Commission to abolish the safety devices and means of protection agreed upon and established by contract between such public utilities for the general safety and security, except in cases where the Commission is of the opinion that such devices are detrimental rather than advantageous to the public.

It is further averred that the Commission is not a judicial body and that its powers are only such as are conferred upon it by the Act creating it and that the Commission has no power or authority to cancel or annul a lawful contract entered into by two public utility corporations or by any person whatsoever, and that such annullment or cancellation can only be made or ordered by a court possessing equity powers.

The above cause convened at the Council Chamber in the City of Colorado Springs on the 23rd day of June, 1916, at 3 o'clock p. m., and the Commission received testimony of witnesses for the complainant and the defendant and the Commission. Many photographs of the crossing, interlocking system and surrounding territory were introduced as exhibits.

As has been announced by the Commission in many preceding cases the Commission is not a court, but is a creature of the Legislature with defined powers, but certainly the Commission may decide facts presented for determination so that the Commission may properly apply the law under the authority delegated to it by the Legislature. In the event that a contract has been made between a public utility and a municipality, person or other public utility, insofar as the same may be contrary to or in conflict with the Public Utilities Law of the State of Colorado, the same may be altered or amended by the decision of this Commission.

There appears to be no question but that the Commission is powerless to order the interlocking plant dismantled and sold and the proceeds divided between the parties. The Commission, no doubt, has the authority to order the removal of a safety device and the installation of another for the purpose of uniformity. It is doubtless true that the Commission may remove the joint property of the public utilities in the event the same interferes with efficient service.

It is contended by the complainant that the Fontanero Line, a branch of its system of street railways within the City of Colorado Springs, does not pay operating expenses, and it is

intimated that the abandonment of its line should be permitted by the Commission because of its financial showing.

(1) While the Commission, in a proper application for the abandonment of a branch line of a street railway company, would permit the introduction of evidence in regard to the operating revenues of the branch line, yet the fact that the branch line was not of itself earning operating expenses would not necessarily justify the Commission in permitting the abandonment of the branch line. It has been so held by the Colorado Supreme Court in the case of *The Colorado & Southern Railway Company v. The State Railroad Commission, et al.*, 54 Colo., 64. However, this is not an application for the abandonment of the Fontanero Line, but for an order which will have the effect of removing the safety device.

It is alleged in the complaint of the complainant that by consolidating the Fontanero Line and the Wahsatch Line a saving of six thousand dollars may be made in the operating expenses of the complainant and that the maintenance of the interlocking system prevents the consolidation, but there does not appear to be sufficient evidence to justify the alleged ground of complaint.

While it is true that on several occasions the street cars of the complainant have been held at this crossing for several minutes due to the operation of the interlocking plant, the evidence introduced is not sufficient to convince the Commission that the delays occasioned by the operation of the interlocking plant can bring about the failure of the proposed consolidation of the two lines of street railway. Evidence was introduced in this cause to show that the cost to the complainant of its share of the maintenance of the interlocking plant was approximately one thousand dollars per annum, which the complainant avers is excessive, and that a hand derailer installed by the complainant will adequately protect the crossing with approximately no cost in maintenance to follow the installation.

It is also contended by the complainant that General Order No. 14 of the Commission, which in substance provides for conductors of a street car, upon the arrival of the street car at an intersection of a railway and the street car line, to cross the railway track and if no train is approaching to permit the street car to proceed, will be sufficient protection to the traveling public in this case. (2) From a careful reading of the record and examination of the exhibits, the Commission is of the opinion that this crossing is less dangerous than many crossings now protected by hand derailers or the protection given by the Commission in General Order No. 14, but where two public utilities have entered into a written agreement providing for an interlocking plant at the intersection of the tracks of the public utilities with other considerations surrounding same as well as the right of the com-

plainant to cross the track of the defendant without proceedings in condemnation, the Commission should not only consider the adequate protection for the crossing, but must also consider the attitude of the parties as well as the written contract. In this case the defendant is resisting the endeavor of the complainant to remove the interlocking plant from the Fontanero Street crossing even though the complainant agrees to maintain a hand derailer at this crossing, and the grounds set forth by the defendant in resisting the position of the complainant take the form of testimony to the effect that the interlocking plant is the safest and most efficient safety device that may be installed at the intersection of railway tracks for the protection of passengers and employes of railways.

(3) It is admitted by the complainant and by the engineer of the Commission that an interlocking plant is the most efficient and safest device that may be installed at the intersection of railway tracks. It would appear, therefore, that before the Commission would be justified in ordering the removal of this device from the Fontanero Street crossing, there must be evidence of a different nature than has been introduced in this case. It is the opinion of the Commission that the record does not disclose sufficient evidence upon which the Commission may base an order eliminating the interlocking plant and substituting therefor a device which is no safer and perhaps less safe. It must be a rare case indeed in which a public utility commission will order the removal of an admittedly efficient crossing protection installed through a written agreement of two public utilities with one of the parties objecting to the removal of the crossing protection on the ground that it will result in a dangerous crossing. Such an order would be a detriment to adequate crossing protection and would no doubt leave the impression with the various public utilities of the state that safety was of less importance than operating revenues.

In the event the evidence introduced in this case was of a nature that the Commission could be convinced that inefficient service to the public was being rendered as the result of an unwise contract between the two public utilities and that a substituted safety device with a much less cost of maintenance together with the elimination of delay at the intersection of the tracks, then the Commission would have before it a different proposition for solution.

It Is Therefore Ordered, that the complaint of the complainant be dismissed.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 18th day of August, 1916.

In Re ADVANCES IN EXPRESS COMMODITY RATES.

(I. & S. No. 5)

Reasonableness of rates—Uniformity—Simplification of tariffs.

(1) Uniformity of rates and simplification of tariffs are greatly to be desired, although it is not to be expected that rates may be advanced or reduced simply for the purpose of having a uniform basis of rates, or simplifying tariff schedules, as the rates must be reasonable in and of themselves in the first instance.

Reasonableness of rates—Express commodity rates.

(2) Where schedules have been filed by express companies changing various commodity rates, the Commission can arrive at a general determination of the reasonableness of the changes involved from a consideration of the tonnage moved between the points where the principal changes are made, from the population of the towns involved, and from a general knowledge of the centers of production of the various commodities.

Reasonableness of express rates—Block system.

(3) The modified intrastate block scale of rates has been in effect in the State of Colorado for a period of two years, and the Commission, from a close observance of the effect of such rates, is of the opinion that the basis is very satisfactory, as only one revision has been necessary since the inauguration of the scale rates, and only one formal complaint filed against the same.

Reasonableness of express commodity rates—Intermediate rate discrimination.

(4) From the numerous informal complaints received against the commodity rates of the express companies, the Commission believes that a readjustment might very properly and necessarily be made without establishing any new discriminations in the rates, and that an intermediate clause, if established by the express companies, would eliminate practically all of the discrimination existing in express commodity rates at the present time.

(August 23, 1916)

INVESTIGATION on the Commission's own motion as to the reasonableness of commodity rates in schedules filed by the express companies; suspension of schedules vacated as to all commodities except laundry, fruits and vegetables upon which further investigation will be held; rights of shippers to bring complaint against individual rates not prejudiced by vacation of suspension.

APPEARANCES:

C. M. Day, Superintendent, Adams Express Company.
L. R. Parry, General Agent, American Express Company.
N. K. Lockwood, Traffic Manager, Wells Fargo & Company Express.
J. C. Harraman, Rate Expert, Wells Fargo & Company Express.
G. F. Johnson, Superintendent, Wells Fargo & Company Express.

STATEMENT.

By the Commission:

This investigation involves the reasonableness of the proposed changes in the commodity rates of the express companies operating within the State of Colorado as set forth in tariffs filed with the Commission to become effective June 1, 1916. While the companies respondent to this investigation are the Adams Express Company, the American Express Company and the Wells Fargo & Company Express, the tariffs were filed only by Mr. F. G. Airy, as joint agent for the carriers, and the Wells Fargo & Company Express.

The Commission, after making a check of the tariffs, being of the opinion that the rights and interests of the public might be injuriously affected by the increases contained in the new schedules, suspended the tariffs until the 30th day of August, 1916, pending a hearing and investigation thereon. On the 18th day of July, 1916, the Commission held a hearing in its hearing room at Denver, Colorado, at which the representatives of the various express companies appeared to make such showing and defense in support of the proposed schedules as they thought necessary.

It would be an impossibility for the Commission to estimate the extent of the changes proposed, due to the elimination of many rates, the establishment of new rates, the change in minima, and other factors of like nature. The schedule filed by Mr. Airy, as agent for the carriers, if allowed to become effective would contain all of the commodity rates previously contained in twenty-five schedules. It was the desire of the express companies, in filing the new schedule, to simplify the existing tariffs, to eliminate all commodity rates that had not been used in the past and of which there was little prospect of future use, and to also eliminate all commodity rates which were so closely related to the second class scale rate as to warrant their elimination. It was stated by the representative of the Wells Fargo & Company Express that that company had inherited many extremely low rates from the Globe Express Company, which company dissolved April 30, 1915, and desired to establish a minimum rate for 100

pounds of 40 cents in lieu of the varying rates as low as 15, 20 and 25 cents per 100 pounds. Under the block system the rate for 100 pounds on second class commodities under scale 1 is 42 cents.

Exhibits were filed by the express companies showing comparisons of the present and proposed rates with rates for similar distances in other states located in the fourth zone territory. The State of Colorado lies partly in the third zone and partly in the fourth zone, the two zones being divided by the 105th meridian. No comparison with third zone rates was made.

(1) Uniformity of rates and simplification of tariffs are greatly to be desired, although it is not to be expected that rates may be advanced or reduced simply for the purpose of having a uniform basis, or simplifying tariff schedules. The rates must be reasonable in and of themselves in the first instance.

The Commission has carefully reviewed the changes proposed and has endeavored to anticipate, in a general way, the ultimate result to the shipping public. There are approximately two thousand changes proposed, of which about sixty per cent are advances and the balance reductions. **(2)** While the amount of the increased rates in cents per hundred pounds is known to the Commission, yet the short time involved has not presented opportunity to check the amount of traffic moving under all of the rates in question. Nor does the Commission deem this to be of prime importance. From the exhibits filed showing the volume of tonnage moved under the majority of the rates; from the population of the towns to and from which the rates apply; and from a knowledge of the centers of production of the various commodities, the Commission has been able to arrive at the conclusion that the new rates, in the main, do result in the elimination of inactive rates, and that there is little probability that the future will develop a need for the maintenance of the same.

The question of a general revision of express rates within the State of Colorado first came before the attention of this Commission on January 9, 1914, at a meeting of the Express Committee of the National Association of Railway Commissioners, held in the office of this Commission at Denver, Colorado. The Interstate Commerce Commission had previously promulgated the order prescribing interstate express rates for the entire United States in *In re Express Rates, Practices, Accounts and Revenues,* 24 I. C. C., 380. It was felt by the various state commissions in the fourth zone, and by the express companies themselves, that the interstate scale should be modified for the application of intrastate traffic, at least in the states located in the fourth and fifth zones. At the meeting of the Commissioners of the fourth zone territory referred to above a modified principle of the interstate basis of express rates for first and second class commodities was adopted and later published by the various express companies. It

was agreed by the express companies at the conference that all special commodity rates would remain without change, subject to future modifications and revisions by the Commissions, pending the trial of the class scale rates.

The adoption of the new interstate and intrastate scales brought about a revolution in express rates, and it was thought best to leave the commodity rates unchanged until the final results of the application of the class scales might be determined. The modified intrastate class rates were published and filed with this Commission, effective upon Colorado state traffic, on April 10, 1914. (3) These rates have, therefore, been in effect for a period extending over two years, and the Commission has thus been given a chance to closely observe the effect of the new rates. Only one revision was necessary by the Commission, and only one formal complaint has been presented to the Commission in that time. The latter is now pending before the Commission. Many informal complaints have been received by the Commission, but all having reference to discrimination caused by the application of the special commodity rates. All such complaints have been readily and speedily adjusted by the express companies when their attention has been called to the discrepancies by the Commission. It would appear from the few complaints registered with the Commission against the block and sub-block rates that the new basis is giving satisfaction throughout the state, and from the numerous informal complaints received in reference to the commodity schedules that the latter might properly be revised and realigned.

(4) Practically all of the complaints against the commodity rates arise from the fact that no intermediate clause is contained in the schedules covering such rates. Many special second class commodity rates are in effect between towns within the state which are lower than the second class scale rate to points located intermediate thereto. It is the opinion of the Commission that the commodity tariffs of the express companies operating within the State of Colorado should, to prevent discrimination, between various localities, contain an intermediate clause providing that the rates contained therein shall not be exceeded to or from any intermediate points. No order will be entered by the Commission in this respect, but the suggestion is made for the earnest consideration of the express companies. Such a clause would obviate the frequent amending of the tariffs to establish individual rates at the intermediate points, and would automatically remove the cause for the many informal complaints received by the Commission.

While the changes proposed cover a great many commodities, the principal ones affected are beer, butter and eggs, laundry, fruit and vegetables, and second class rate exceptions. All of the beer special commodity rates have been eliminated by the

new schedules in view of the fact that the State of Colorado became prohibition territory on January 1, 1916, so no reference need be given to the increases resulting from the application of the class rates.

An exhibit was filed showing the amount of butter and eggs moved during the month of May, 1916, between the points from and to which the rates on those commodities have been changed. As the movement is so small between these points, and as practically all of the shipments made are under 100 pounds each, the increases will affect shipments of butter and eggs but little. Between the points within the state where the greatest movement of this traffic takes place no increases or changes are proposed.

The Commission has been unable to complete its investigation of the changes in the rates on laundry between all points involved, and on fruit and vegetables between the points specified in sections 3 and 4 of F. G. Airy's Colo. P. U. C. No. 73. An order further deferring the operation of the schedules on these commodities will be entered pending the complete investigation by the Commission, after which a supplemental order will be entered in respect to those items.

The rates on other miscellaneous commodities and second class traffic taking special commodity rates are clearly for the purpose of eliminating inactive rates; establishing a more proper relation between express and freight rates; and advancing the low minimum rates per 100 pounds of 15, 20 and 25 cents, which it is contended are unreasonably low. The average operating cost per piece on the entire system of the Wells Fargo & Company Express for the month of April, 1916, was 21.89 cents; the average revenue per piece 53.49 cents, out of which the express company paid the railroad companies for express privileges an average of 52%, or 27.8 cents, making an average total expense to the express company of 49.69 cents per piece.

All of the rates changed are for 100 pounds and, as the majority of the shipments made under express rates are less than 100 pounds, very few, if any, increases will result from the establishment of the proposed rates. At the meeting of the Express Committee referred to above it was found that only eight per cent of the shipments made within the State of Colorado are of 100 pounds or over. The average weight of the merchandise, or first class, shipment shipped over the lines of the Wells Fargo & Company Express in the State of Colorado is twenty-six pounds, and the average of all commodities forty pounds.

The Commission, after carefully examining the rates in the suspended schedules and the testimony and exhibits filed in this case, is of the opinion that if the suspended rates, with the exceptions noted below, are allowed to become effective no increase will result to the shipper in the actual amount of charges, but, on the other hand, the charges on the small packages will decrease,

due to the many reductions contained in the schedules, and that no prejudicial or discriminatory rates will result further than may at present be in effect under the rates in which no change is proposed, although if it develops later than discrimination does result from the application of the new rates, such inequality will promptly be adjusted. The Commission will enter an order further deferring the operation of the schedules on laundry, and on fruits and vegetables as specified in sections 3 and 4 of F. G. Airy's Colo. P. U. C. No. 73, and will enter an order vacating the order of suspension with respect to the rates on all other commodities.

The order of the Commission in this cause does not prejudice the right of any party, entitled to bring action before the Commission under the act, to bring a formal complaint at any time against the reasonableness of any rate or rates contained in the schedules upon which the order of suspension has been vacated.

ORDER.

It Appearing that, by order dated May 6, 1916, the Commission entered upon a hearing and investigation concerning the propriety of the increases and the lawfulness of the rates, rules, regulations and practices stated in schedules enumerated and described as F. G. Airy's Colo. P. U. C. No. 73; supplement 15 to Colo. P. U. C. No. 26 and supplement 6 to Colo. P. U. C. No. 32 of the Wells Fargo & Company Express; supplement 20 to Colo. P. U. C. No. 33, supplement 12 to Colo. P. U. C. No. 69 and supplement 2 to Colo. P. U. C. No. 94 of the Wells Fargo & Company Express (Globe Express Company issues), and ordered that the operation of the said schedules be suspended until August 30, 1916;

It Further Appearing that an investigation of the matters and things involved has been had (with the exception of the investigation of the rates on laundry, and fruits and vegetables as further set forth in this order), and the Commission on the date hereof has made and filed a report containing its findings of fact and conclusions thereon:

It Is Ordered, That the order heretofore entered in this proceeding suspending the operation of said schedules (except insofar as it applies to rates on laundry, and fruits and vegetables as specified in sections 3 and 4 of F. G. Airy's Colo. P. U. C. No. 73) be, and it is hereby, vacated and set aside as of August 30, 1916;

It Is Further Ordered, That the operation of the rates on laundry between all points, and on fruits and vegetables as specified in sections 3 and 4 of F. G. Airy's Colo. P. U. C. No. 73,

contained in said schedules, be further suspended, and that the operation of the rates, rules, regulations and practices therein be further deferred upon intrastate traffic until the 28th day of November, 1916.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 23d day of August, 1916.

THE ROCKY MOUNTAIN FUEL COMPANY

v.

THE DENVER & RIO GRANDE RAILROAD COMPANY, ET AL.

(Case No. 88.)

(August 30, 1916.)

ORDER OF DISMISSAL.

By the Commission:

On the 26th day of July, 1916, there was filed with the Commission the written complaint of the complainant alleging that it is the owner of the Baldwin Mine and that the principal markets in Colorado in which complainant is endeavoring to market the coal produced by the said mine are the stations located on the following lines operated by the Defendants, to-wit:

On the lines of the Defendant, The Denver & Rio Grande Railroad Company, Gunnison, to Grand Junction, Ridgway and Ouray, via Montrose; Sapinero to Lake City; Gunnison, to Leadville via Salida; Poncha Springs to Monarch; Mears to Orient, Cottonwood, Alamosa, Antonito and La Veta Pass, and from Alamosa to Creede; on the lines of the Defendant, The Rio Grande Southern Railroad Company, from Ridgway to Telluride and Dolores; on the line of the Defendant, The San Luis Southern Railway Company, from Blanca to Jaroso, including the stations named; and that the character of the coal produced at the Baldwin Mine is such that it is competitive with Bowie and Somerset coal from those mines located on the line of the Defendant, The Denver & Rio Grande Railroad Company; that the rates published by the Defendants for the transportation of the various sizes of coal from complainant's mine to the aforesaid destinations are unjust, unreasonable, excessive and discriminatory.

The Complainant then prays that the Commission, after hearing and investigation, issue an order fixing just and reasonable rates to be observed by the Defendants as maximum rates for the

transportation of the various sizes of coal from Baldwin to the destinations hereinabove referred to; that in and by said order this Commission shall establish the differentials in the rates as between the different coal districts to be observed and maintained by Defendants, and for such other or further orders as to the Commission may seem meet and proper.

On the 7th day of August, 1916, the Defendants answered the complaint of the Complainant denying that the rates were unreasonable and alleging that the same were not discriminatory.

On the 25th day of July, 1916, the Commission in Case No. 41, *The Grand Junction Mining & Fuel Company, et al. v. The Denver & Rio Grande Railroad Company,* 2 Colo. P. U. C. 181, prescribed reasonable rates for the transportation of coal, carloads, from mines located in the Cameo-Palisade District to various points on the lines of The Denver & Rio Grande Railroad Company. The changes made by the Commission in the rates from the Cameo-Palisade District made necessary a revision of the rates from the Bowie-Somerset and the Baldwin-Crested Butte Districts. At the suggestion of the Commission the revised rates from the latter two districts were published to become effective August 15, the same date as the effective date of the order in Case No. 41, so that the various districts might be on a parity, and that temporary conflict might not result as between the different districts. Tariffs were, therefore, filed with the Commission containing the proposed changes, and the Commission, with tentative approval of the rates submitted, authorized the carrier to make same effective August 15th. Many reductions from the Baldwin-Crested Butte District were brought about by this action.

On the 22nd day of August, 1916, a petition was filed by the Complainants in this cause asking that the proceedings be dismissed without prejudice to their right at any future time to bring complaint against the amended schedule of rates.

In view of the facts cited above, it is the opinion of the Commission that an order of dismissal may properly be entered in this case without prejudice to the rights of the Complainant to institute proceedings against the amended rates as published and filed by the carrier between the points involved in this case, and such an order will therefore be entered.

ORDER.

It appearing that the cause for action in the above entitled proceedings has been voluntarily removed by the Defendant carriers, and a petition for dismissal having been received from the Complainant,

It Is Ordered, That the above entitled proceedings be dis-

missed without prejudice to the rights of the Complainant to bring action in the future against the amended rates as published and filed by the carrier.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 30th day of August, 1916.

In Re: REMOVAL OF THIRD RAIL BETWEEN SALIDA AND LEADVILLE.

(Case No. 96.)

(September 11, 1916.)

APPEARANCES: For The Denver & Rio Grande Railroad Company, E. N. Clark, Esq., and J. G. McMurry, Esq. For the one hundred Breckenridge and Leadville protestants, W. E. Peters, Esq., and C. C. Barker, Esq. For the Mary Murphy Gold Mining Company, Harry W. Robinson, Esq. For The Rocky Mountain Fuel Company, J. V. Sickman, Esq. For the Gunnison protestants, C. R. Duree, Esq., et al.

ORDER OF DISMISSAL.

By the Commission:

On the 2nd day of August, 1916, the Commission received a written notice from The Denver & Rio Grande Railroad Company that it was the intention of the company to remove the middle or third rail from its main track of railway between Mile Post 216.8 near Salida and Mile Post 273 near Leadville, and that after said removal of said third rail The Denver & Rio Grande Railroad Company would discontinue narrow gauge freight service between these points. This notice was filed with the Commission in compliance with the Commission's General Order No. 15, requiring thirty days' notice to the Commission before a railroad company may discontinue its service or abandon any portion of its railway track.

Subsequent to the date of the receipt of this notice by the Commission formal protests directed against the proposed removal of the middle rail and the discontinuance of narrow gauge freight service upon the railway of the Denver & Rio Grande Railroad Company were filed with the Commission by The Rocky Mountain Fuel Company and The Mary Murphy Gold Mining Company.

On the 28th day of August, 1916, the Commission received a formal protest and complaint on behalf of one hundred residents

and citizens of Breckenridge and Leadville and other towns and cities similarly situated, protesting against the removal of the third rail from the main track of The Denver & Rio Grande Railroad Company between Mile Post 216.8, near Salida, and Mile Post 273, near Leadville, and the discontinuance of narrow gauge freight service between said points.

On the 29th day of August, 1916, the Commission decided to investigate the same upon its own motion and issued an order directed against The Denver & Rio Grande Railroad Company to appear before the Commission at its Hearing Room in the State Capitol Building in the City and County of Denver, State of Colorado, on the 15th day of September, 1916, at the hour of 10 o'clock a. m., to make such defense to this cause and to take such part therein and make such showing upon its own behalf as the said railroad company might desire or its interests seemed to require. The protestants were duly notified of the date of said hearing and invited to take such part therein and make such showing as their interests seemed to require. It was further ordered by the Commission that the defendant, The Denver & Rio Grande Railroad Company, should not remove the middle or third rail from its main track between Mile Post 216.8 near Salida and Mile Post 273 near Leadville, nor discontinue narrow gauge freight service between these points until the further order of the Commission.

On the 30th day of August, 1916, the Mary Murphy Gold Mining Company filed its duly verified petition for intervention and complaint with the Commission.

On the 6th day of September, 1916, eighty-five residents and citizens of the Town of Gunnison, State of Colorado, filed with the Commission a written protest against the removal of the said third rail and discontinuance of the narrow gauge freight service as contemplated by The Denver & Rio Grande Railroad Company in its notice to the Commission filed on the 2nd day of August, 1916.

On the 6th day of September, 1916, the Commission received the following communication from The Denver & Rio Grande Railroad Company:

"Denver, Colo., Sept. 6, 1916.

RE LIFTING THIRD RAIL FROM LINE OF THE DENVER & RIO GRANDE RAILROAD COMPANY BETWEEN SALIDA AND LEADVILLE; P. U. C. NO. 96:

The Public Utilities Commission of the State of Colorado,
State House,
Denver, Colorado.

Gentlemen:

The Denver and Rio Grande Railroad Company hereby withdraws notice given under date of August 2, 1916,

of intention of the Rio Grande Railroad to remove the third rail from the portion of its track described in said notice. This withdrawal is without prejudice to the right of The Denver and Rio Grande Railroad Company to renew said notice and to remove said rail at any time it may be so advised.

THE DENVER AND RIO GRANDE RAILROAD COMPANY,

By (SGD.) A. E. SWEET,
Vice-President."

It Is Therefore Ordered, That the above cause be dismissed without prejudice to the right of the defendant, The Denver & Rio Grande Railroad Company, to renew said notice of intention to remove said rail and abandon said service in compliance with the Commission's General Order No. 15.

It Is Further Ordered, That the Secretary of the Commission notify the protestants in the event The Denver & Rio Grande Railroad Company files with the Commission a notice of its intention to remove said rail and discontinue said service as was contemplated in the above cause.

(Seal)

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

Dated at Denver, Colorado, this 11th day of September, 1916.

In Re: CROSSING PROTECTIONS BETWEEN DENVER AND BOULDER.

(Case No. 95.)

Adequate protections at grade crossings—Duty of Commission and railroads to adjust conditions to travel necessities.

(1) Traffic conditions are constantly changing owing to the ever increasing travel due to the improved types of vehicles and to the better roads established throughout the State as a system of permanent good roads under the control and supervision of the State Highway Commission, and on which the various counties and municipalities of the State have spent large sums and the people of the State voted a one-half mill levy, amounting to approximately $500,000.00 per annum, and it is the duty of the Public Utilities Commission and the railroads to bring about readjustments of the grade crossing conditions within the State to conform to the traffic needs to the end that the general public may receive adequate protection.

Jurisdiction of Commission at grade crossings—Recommendations for legislation to control negligent operation of automobiles.

(2) It is not within the power of the Commission to control negligent operation of automobiles at railway crossings, but it has become apparent, from the excessive speed at which automobiles are driven across railway crossings without regard to warnings, that some law must be enacted for the protection of those who will not protect themselves, and it will be the purpose of this Commission to suggest to the Legislature that adequate laws be passed to the end that some supervision may be had by the State over the operators of motor vehicles so that the drivers thereof may be compelled to use reasonable caution upon approaching a railway crossing at grade.

Elimination of grade crossings—Apportionment of expense—Inadequate legislation.

(3) Under the existing laws the Commission has the power to make estimates of the expense of elimination or separation of grades at railway grade crossings and require the railways to bear the entire expense entailed thereby, or to pay a certain portion of the expense in the event the county or municipality in which the crossing is located agrees to pay the remainder, but it is apparent that this method is very unsatisfactory and that some legislation should be enacted giving the Commission the right, in its discretion, to refuse to permit any additional highways to be laid out across a railway at grade and to order the elimination or separation of railway grade crossings, where necessary, with a proper apportionment of the expense between the railway and the county or municipality.

Grade crossings—Estimates of separation expenses—Temporary protection.

(4) In an investigation as to the adequacy of the protections afforded at railway grade crossings the Commission ordered its engineer, in connection with the engineer of the carriers, to prepare and present to the Commission estimates of the expense necessary for the separation of the grade crossings involved, in order that the Commission could determine the feasibility of the separation of grades and apportionment of the expense between the railroads and the counties or State, and, to properly protect the crossings in the meantime, ordered the carriers to install, at their own expense, audible and visual wig-wag electric signals to be operated from the time when the trains reach a point fifteen (1,500) hundred feet distant from the crossing, and ordered the carriers to operate their electric trains at a speed not exceeding ten miles per hour when passing the crossings with the exception of one more dangerous than the rest, at which the trains were to come to a complete stop before proceeding.

(September 16, 1916.)

INVESTIGATION on motion of the Commission as to the necessity and feasibility of adequate crossing protections at the grade crossings of the Colorado & Southern Railway and Denver & Interurban Railroad between electric audible and visual wig-wag signals operating from the time the trains reach a point fifteen hundred feet distant from the crossing; carriers ordered to remove electric bell located at Broomfield to Westminster crossing; Denver & Interurban Railroad Company ordered to operate its electric trains at a speed not exceeding ten miles per hour when passing crossing with exception of Broomfield crossing at which trains shall come to a complete stop before proceeding; Commission's engineer and carriers' engineer ordered to jointly prepare and present to Commission estimates of expense for elimination of crossings at Burns' Junction and Federal Boulevard.

APPEARANCES: For the Defendant companies, The Colorado & Southern Railway Company and The Denver & Interurban Railroad Company, E. E. Whitted, Esq., A. S. Brooks, Esq.

STATEMENT AND ORDER.

By the Commission:

Pursuant to recommendations made to the Commission by its Engineer in charge of railways, and its Railway Inspector, the Commission on the 23rd day of August, 1916, formally began an investigation on its own motion into the feasibility and necessity of the installation by The Colorado & Southern Railway Company and The Denver & Interurban Railroad Company, Defendants herein, of suitable safety devices at a portion or all of the railway crossings at grade on the lines of the Defendant companies between Denver and Boulder, Colorado.

This case was heard before the Commission at its Hearing Room in the State Capitol building in the City and County of

Denver, Colorado, on the 1st day of September, 1916, at the hour of 10:00 o'clock a. m. D. S. Hooker, the Engineer of the Commission in charge of railways, and E. S. Johnson, the Commission's Railway Inspector, testified as to the physical condition of the railway crossings at grade located between Denver and Boulder on the lines of railway of the Defendant companies, and presented their recommendations concerning proper safety devices at certain of these crossings, as well as to vital matters pertaining to the safe operation of electric trains upon the line of The Denver & Interurban Railroad Company. F. J. Rankin, Engineer for the Commission in charge of electrical utilities, testified as to the operation of "automatic flagmen" when operated by storage battery or by electric current taken from transmission lines. Mr. Henry Casaday, representing the Boulder Chamber of Commerce, presented valuable information in regard to certain of the crossings at grade, while H. A. Rennick, Superintendent of the Defendant companies, C. J. Neihaus, Claim Agent, W. H. Edmunds, Trainmaster and Electrical Engineer, and Fred Spencer, Motorman, of The Denver & Interurban Railroad Company, testified in behalf of the Defendant companies.

It appears from the evidence in this case that The Denver & Interurban Railroad Company and The Colorado & Southern Railway Company own and operate lines of railway between Denver and Boulder, Colorado, and that the Lincoln Highway—also known as State Highway No. 1—running from Denver north into Longmont, Loveland, Fort Collins, Colorado, and on into Cheyenne and Laramie, Wyoming, is one of the important highways of the State of Colorado, and has exceptionally heavy automobile traffic at all times. The evidence shows that this highway is also the main thoroughfare to the City of Boulder and the summer resort of Estes Park. This highway is maintained by the State of Colorado and the various counties traversed by it, and is of permanent construction, being gravelled and of such physical condition as to be inducive to high speed. From inspections made by the Inspector of the Commission and officials of the Defendant companies it is quite readily ascertained that this highway is used by many automobile tourists, and one official of the Defendants testified that by actual inspection he gathered the information that certain of these railway crossings at grade are crossed by an automobile every minute of the day.

The Defendant companies operate steam and electric trains between Denver and Boulder, and the record shows that at Federal Boulevard crossing, Broomfield crossing and Burns' Junction crossing an electric railway train is scheduled to pass every thirty minutes, and not less than fifteen steam trains pass each day.

From a point ten miles east of Boulder on the Lincoln Highway automobilists bound for Boulder and Estes Park via Boulder,

traverse a gravel and cement highway due west into the city of Boulder, and on this highway is located a railway crossing at grade on the lines of the Defendant companies which is known as Goodview crossing. At a point located at Burns' Junction on the Lincoln Highway, a gravel highway known as the Marshall road branches off and enters Boulder by the way of Marshall, upon which branch road are located several railway crossings at grade on the lines of the Defendant companies, and more particularly known as Park Avenue, Marshall, an unnamed crossing three-fourths of a mile south of Superior, and an unnamed crossing three-fourths of a mile north of Superior. There are certain other railway crossings between Denver and Boulder, and on highways of less importance, which are now being investigated by the Railway Inspector of the Commission, and concerning which a report will be filed with the Commission in the near future.

The electric trains of The Denver & Interurban Railroad Company have heretofore operated on a schedule of 1 hour, 20 minutes, from Denver to Boulder and from Boulder to Denver, and at times attain a speed of 55 miles per hour, while freight and passenger steam trains attain a speed of from 20 to 45 miles per hour. Eleven people have been killed as a result of automobile collisions with electric and steam trains upon the lines of railway between Denver and Boulder of the Defendant companies since February 1, 1916, and the testimony introduced developed the fact that many other accidents have been narrowly averted during the last summer season.

(1) Traffic conditions upon the highways of the State of Colorado have been revolutionized during the last ten years. The State of Colorado has organized the State Highway Commission, with control and supervision over highways within the State designated as State highways; the people of the State have voted a one-half mill levy, raising about $500,000.00 per annum, for the permanent improvement of Colorado's roads, and the various counties of the State have expended large sums of money and exerted every effort to bring about a system of permanent good roads; thus making it known to residents of other States of the Union, as well as to its own people, the fact that Colorado is a State primarily of good roads; and extending a general invitation to people of other States to traverse the State of Colorado on their journeys west and east and to visit the great resorts of this State. Northern Colorado, through which the Lincoln Highway, or State Highway No. 1, and other important highways, together with the railway lines of the Defendant companies, pass, is known for its extensive agricultural resources, as well as for the Rocky Mountain National Park and other summer resorts, and as a natural result the Lincoln Highway is extensively used by automobilists residing in Colorado

and outside States. Ten years ago the horse-drawn vehicle, traveling at a rate of not to exceed 10 miles an hour, and naturally within a limited radius, did not require the improved highway and the protection at railway crossings at grade that must be given to the traveling public today. While it appears that the State of Colorado, and its counties and municipalities, have expended vast sums of money in constructing and improving its highways, it is apparent that the railroads operating within the State have not entirely kept pace with the changed conditions at their railway crossings at grade and it is the duty of the Commission and the railroads to bring about a readjustment of grade crossing conditions within this State to the end that the general public may receive adequate protection under existing conditions of travel.

On the 27th day of May, 1916, the Commission issued its order "In the matter of an investigation and hearing, on motion of the Commission, into the necessity and feasibility of improving all grade crossings of the following railroads within the State of Colorado, * * *," and known as Case No. 56, *In re Improvement of Grade Crossings in Colorado,* 2 Colo. P. U. C., 128, in which case the Commission ordered all railroads operating within the State of Colorado,

> "at all points where their railroads cross any public highway known as a state highway, whether primary or secondary, at grade, to provide and maintain at each intersection at grade of railroad tracks with such public highways, grade crossings and approaches thereto at least 24 feet in width, the roadway on either side of track or tracks to be constructed and maintained level with the top of rails not less than 20 feet from center line of tracks on either side, and when more than one track is crossed for not less than 20 feet from center line of outside track; the approaches to be constructed on uniform grade of not to exceed 6 per cent. from a point at least 20 feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel or some other suitable paving material and a smooth roadway surface to be maintained on approaches and crossings; all crossings to be planked within city or town limits ten inches on the outside and inside of each rail and the space between the planking in the center of the track shall be filled with gravel or other suitable material, the kind of material to be used to be discretionary with the carrier and under the supervision of the Commission's engineer, and in no case shall the planking or the gravel material be less than sixteen feet in width; that on all crossings not within city or town limits the railroad may use either planking, gravel, slag or other suitable material, provided same be not less

than 16 feet in width, but in no case shall slag or other sharp-edged material be used."

This order slightly modified the specifications as to railway crossings at grade on highways other than State highways, and the railroads were ordered to bear the expense of complying with the requirements of the order.

This order already has been partially complied with by the Defendant companies at their railway crossings at grade between Denver and Boulder, and the full compliance with the same will naturally give to the public much greater protection than now exists.

From a careful examination of the record and the photographic exhibits introduced in evidence by the Inspector for the Commission, the Commission is of the opinion that eight railway crossings at grade upon the railway lines of the Defendant companies between Denver and Boulder are exceptionally dangerous to the general public and should receive immediate consideration at the hands of the Commission.

(2) It is a lamentable fact that, due to the great change in the mode of travel upon the highways and the resultant improvement of the highways, automobiles are driven at a high rate of speed upon and across railway crossings at grade, and many drivers of automobiles should have their licenses revoked by the State for negligent driving. It is not within the power of this Commission to control negligent operation of automobiles at railway crossings, but it has become apparent that some law must be enacted for the protection of those who will not protect themselves. It will be the purpose of the Commission to suggest to the Legislature that adequate laws be passed to the end that some supervision may be had by the State over the operators of motor vehicles so that the drivers thereof may be compelled to use reasonable caution upon approaching a railway crossing at grade. The fact confronts the Commission that it is not only the careless operator of a motor vehicle who may be injured or killed at a railway crossing at grade, but that innocent passengers who are in no way at fault also may be seriously injured or killed.

(3) It has become apparent to the Commission that in the near future many of the important railway crossings at grade must be eliminated, either by separation of the grades or the alteration of the existing highway. It certainly is true that the Legislature should give the Commission the right, in its discretion, to refuse to permit any additional highways to be laid out across a railway at grade. Many existing railway crossings at grade within the State are absolutely unnecessary, and yet an apparent defect exists in the laws of Colorado whereby the same cannot be eliminated. Unfortunately the Commission has not

the right to eliminate a railway crossing at grade by ordering an underground or overhead crossing and apportioning the expense of the same to the railroad and the county and municipality, as has been found advisable in many States and provided for in the laws of those States. This Commission may order the elimination of a railway crossing, but it has not the authority to apportion any part of the expense to the county or municipality, and in a great majority of cases it is apparent that there should be such an apportionment.

It is true that the Commission may make its estimates and order the railroad to separate the grades at the expense of the railroad company, or to pay a certain portion of the expense in the event the county or municipality agrees to pay the remainder, but it is apparent that this is very unsatisfactory, and the existing laws should be amended in this regard. Several of the railroads have volunteered to place "distant signals" on the highways of the State, at a certain distance from railway crossings at grade, if the consent of the State be given, and this, no doubt, will be effective in many instances.

The Commission has already issued an order to the railroads operating within the State of Colorado, requiring that all obstructions shall be removed from the rights-of-way of the railroads at points adjoining or near railway crossings at grade, and this order is being complied with at this time.

It has been suggested by representatives of the Chamber of Commerce of Boulder and operating officials of the Defendant railroads that the railway crossings at grade at Burns' Junction and Marshall may be eliminated by the alteration of the highway, and that the railroad companies stand ready to share the expense of this alteration. If this plan is feasible, naturally the question of the protection of these two crossings will be solved, but as the Commission has no power to bring about these changes it appears to be unwise to await developments at some future and uncertain date.

(4) It is the opinion of the Commission that the Chief Engineer of the Defendant companies and the Commission's Engineer in charge of railways should prepare estimates of the costs of separating the grades of the railway crossings at Federal Boulevard and at Burns' Junction, and present these estimates to the Commission, to the end that the Commission at a later date may determine the feasibility of the separation of grades at these crossings and apportion the expense between the railroads and the counties or State. It becomes necessary, however, for the Commission to take immediate action to the end that eight railway crossings at grade located on the railway lines of the Defendant companies between Denver and Boulder may be adequately protected at the earliest possible moment.

The Commission heretofore has ordered installation of electrically operated "automatic flagmen" signals, otherwise known as wig-wags, at many highway crossings at grade within the State, and the effectiveness of their operation has been carefully investigated by inspectors for the Commission. As has been stated heretofore by the Commission, in Case No. 76, *In re Crossing Protections Between Denver and Pueblo,* 2 Colo. P. U. C.—, in which the Commission ordered The Denver & Rio Grande Railroad Company and The Atchison, Topeka & Santa Fe Railway Company to install and maintain, at their expense, "automatic flagmen"—otherwise known as wig-wags or audible and visual signals—at each of their railway crossings at grade between Denver and Pueblo:

> "When the Commission first began to enforce this important duty, assigned to it by the Legislature, of protecting the traveling public and the railways by the safeguarding of highway crossings at grade, a deplorable condition existed. While the railways operating within the State of Colorado had afforded some protection at highway crossings at grade within the city limits of municipalities within the State of Colorado by the means of flagmen, only a few crossing bells had been installed, and upon some of the railroads no attempt had been made to maintain the same. Consequently a great damage resulted to the traveling public, in that its right to depend upon the warning of a crossing bell, when the same had been installed, was entirely swept away. Today all of the automatic signals of protection at grade crossings within the State of Colorado are operating and are being properly inspected and, while this is due partly to strenuous work of the Commission, much credit is due the railroads for their hearty co-operation.
>
> "The Commission has not become discouraged because of the apparent disregard of the travelers of the danger at railway crossings, but is of the opinion that, as the traveling public becomes aware of the work of this Commission and the large sums of money being expended by the railways for its protection, more attention will be given to careful driving and appreciation of crossing protection.
>
> "Inspectors of the Commission have reported that, at railway crossings where the Commission has ordered installation of audible and visual signals the desired result has been accomplished, and that a large majority of the drivers of vehicles stop their machines, at the time the signal begins to move, to await the passing of the approaching train.

"Electric warning bells at crossings are adequate protection in many cases, but the Commission is of the opinion that where traffic is heavy the protection afforded by the audible and visual type of signal warrants the additional expense.

"The advantage of the audible and visual signal over the ordinary crossing alarm bell is apparent. The latter is an electric bell which sounds a warning upon the approach of a train. The audible and visual signal, commonly known as the 'wig-wag,' is ordinarily an electric motor-driven device, sounding an alarm upon the approach of a train and swinging a red disc of sufficient size, upon which is printed the word 'danger' and in which is enclosed a red electric light, thus affording additional protection at night by calling the attention of travelers to impending danger, even though the traveler is unable to hear the warning of the bell."

At the conclusion of the hearing in the present cause, the Commission ordered The Denver & Interurban Railroad Company to operate its electric trains upon and over the eight railway crossings at grade above set forth at a speed not to exceed 10 miles per hour, with the exception of the railway crossing at grade located at Broomfield, at which point the railway train was to come to a complete stop before crossing the highway at that point. The officials of the Railroad company testified that plans already had been completed for the elimination of the railway crossing located at Park Avenue. It is therefore understood that the order of this Commission for the protection of the Park Avenue crossing shall become of no effect in event of that crossing being eliminated prior to the effective date of this order.

Testimony also was introduced to the effect that the warning signal whistles now installed on the electric trains of The Denver & Interurban Railroad Company are inefficient, and the Commission has been notified by the railroad companies that experiments are now being conducted to the end that the signal whistles may be made efficient and adequate for all purposes.

ORDER.

It Is Therefore Ordered, That The Denver & Interurban Railroad Company and The Colorado & Southern Railway Company install and maintain at their expense audible and visual signals, each of which shall consist of a red disc with the word "stop" painted thereon in white letters, and in the center of

which shall be a red electric light, to be suspended from an arm above the highway and on the right-of-way of the Defendant companies, and which shall begin operating, swinging across the highway, when the trains of the Defendant companies reach a point fifteen hundred (1,500) feet distant from the railway crossing at grade. The signal shall be electrically operated and have attached to it a warning bell, which shall sound continuously during the time the trains of the Defendant companies are within the fifteen hundred (1,500) foot block approaching the railway crossings at grade. The plans for the audible and visual signals shall be filed with the Commission and approved by its Engineer before being installed, and the said signals shall be located at the following crossings, viz.: Federal Boulevard, Broomfield, Burns' Junction, Goodview, Park Avenue, Marshall, an unnamed crossing three-fourths of a mile south of Superior, and an unnamed crossing three-fourths of a mile north of Superior, and shall be installed under the supervision of the Commission's Engineer within ninety (90) days from the date of this order.

It Is Further Ordered, That the Defendant companies shall remove the electric bell now located at Broomfield and install the same at their railway crossing at grade at Westminster, Colorado.

It Is Further Ordered, That the electric trains of The Denver & Interurban Railroad Company shall cross the nine railway crossings at grade above named at a speed of not to exceed ten (10) miles per hour, with the exception of the railway crossing at grade at Broomfield, at which point the railway trains of said company shall come to a complete stop before crossing the highway.

It Is Further Ordered, That the motorman of the electric trains operated by The Denver & Interurban Railroad Company shall sound an audible signal before proceeding across the nine railway crossings at grade above named.

It Is Further Ordered, That D. S. Hooker, the Commission's Engineer in charge of railways, together with E. F. Vincent, Chief Engineer of the Defendant companies, prepare for the Commission estimates of the cost of the elimination of the railway crossings at grade located at Burns' Junction and Federal Boulevard, together with reports on the feasibility of the elimination of said crossings by separation of grades and the proper apportioning of the expense between the Defendant companies and the county or state, or county and state, in which the said railway crossings at grade are located.

It Is Further Ordered, That Mr. Hooker and Mr. Vincent confer with the county commissioners of Boulder County and the State Highway Commission, and report upon the feasibility and the cost of altering State Highway No. 1 to the end that the

course of said highway may be altered in such a manner as to eliminate the two railway crossings at grade located at Burns' Junction and Broomfield.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 16th day of September, 1916.

*In Re: ELECTRIC, GAS AND WATER SERVICE RULES.

(Case No. 84.)

INVESTIGATION on the Commission's own motion, as to the reasonableness of rules regulating gas, electric and water service, within the State of Colorado; uniform rules prescribed for use of all utilities.

ORDER.

By the Commission:

On the 7th day of July, 1916, at the hour of 10 o'clock a. m., after due notice to all gas, electric and water utilities operating in the State of Colorado, including municipally owned or operated utilities, the Commission held a hearing as to the reasonableness of a code prepared by the Commission prescribing rules regulating gas, electric and water service of all gas, electric and water public utilities, including municipally owned or operated utilities, operating within the State of Colorado. Prior to that date copies of the proposed code had been served upon all gas, electric and water utilities, both privately owned and municipally owned, operating within the State of Colorado, and at the hearing each public utility or municipality, through one or more representatives, was permitted to present evidence in criticism of the proposed code, and at the conclusion of the hearing, the Commission granted additional time to permit the filing with the Commission of additional written criticisms, objections and suggestions to the proposed code of the Commission.

After a careful examination of the proposed code of the Commission, as well as the evidence submitted in the above cause, the Commission has decided upon a reasonable code of rules regulating gas, electric and water service of all privately owned and municipally owned or operated public utilities operating

*For Rules, see Appendix A, page 301.

within the State of Colorado, in accordance with Section 31 of the Laws of the State of Colorado Pertaining to Public Utilities.

It Is Therefore Ordered, That the following code of reasonable rules and regulations pertaining to gas, electric and water service of all privately owned and municipally owned or operated public utilities operating within the State of Colorado, is hereby declared to be reasonable and shall be observed and followed by all gas, electric and water public utilities, including municipally owned or operated utilities, operating within the State of Colorado.

It Is Further Ordered, That this order shall take effect on the 1st day of January, 1917, and shall continue in force until suspended, modified or set aside by this Commission.

M. H. Aylesworth,
Chairman,
S. S. Kendall,
(Seal) Geo. T. Bradley,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

SECTION 2

GENERAL ORDERS

GENERAL ORDER No. 9.

*In the Matter of a Uniform Classification of Accounts for Electric Utilities.

Effective January 1, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, including municipally owned or operated utilities, and in the exercise of the powers conferred upon it by law, and after due notice to all public utilities to be affected thereby, including municipally owned or operated utilities, deeming it advisable, after full investigation, to establish a system of accounts and records to be used and kept by all public utilities engaged in the generation, transmission or sale of electricity, including municipally owned or operated electric utilities, it is therefore,

ORDERED, That the system of accounts and records, fully set forth and described in a pamphlet, identified and designated as "A Uniform Classification of Accounts for Electric Utilities," said pamphlet and all its contents being referred to herein, hereto attached and made a part hereof, be and the same is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

IT IS FURTHER ORDERED, That each such utility shall carry on its books, the accounts and records herein prescribed for such utility, and shall accurately keep such accounts in accordance with the requirements, definitions and instructions contained and set out in this pamphlet.

IT IS FURTHER ORDERED, That this order shall take effect on January 1st, 1916, and shall continue in force until suspended, modified or set aside by this Commission.

(SEAL)

S. S. KENDALL.
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 10th day of January, 1916.

*For Uniform Classification of Accounts for Electric Utilities, see Appendix B, page 325.

GENERAL ORDER No. 10.

*In the Matter of a Uniform Classification of Accounts for Gas Utilities.

Effective January 1, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, including municipally owned or operated utilities, and in the exercise of the powers conferred upon it by law, and after due notice to all public utilities to be affected thereby, including municipally owned or operated utilities, deeming it advisable, after full investigation, to establish a system of accounts and records to be used and kept by all public utilities engaged in the manufacture, furnishing, distribution or sale of gas, including municipally owned or operated gas utilities, it is therefore,

ORDERED, That the system of accounts and records, fully set forth and described in a pamphlet, identified and designated as "A Uniform Classification of Accounts for Gas Utilities," said pamphlet and all its contents being referred to herein, hereto attached and made a part hereof, be and the same is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

IT IS FURTHER ORDERED, That each such utility shall carry on its books, the accounts and records herein prescribed for such utility, and shall accurately keep such accounts in accordance with the requirements, definitions and instructions contained and set out in this pamphlet.

IT IS FURTHER ORDERED, That this order shall take effect on January 1st, 1916, and shall continue in force until suspended, modified or set aside by this Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 28th day of January, 1916.

*For Uniform Classification of Accounts for Gas Utilities, see Appendix C. page 385.

GENERAL ORDER No. 11.

*In the Matter of a Uniform Classification of Accounts for Water Utilities.

Effective January 1, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, including municipally owned or operated utilities, and in the exercise of the powers conferred upon it by law, and after due notice to all public utilities to be affected thereby, including municipally owned or operated utilities, deeming it advisable, after full investigation, to establish a system of accounts and records to be used and kept by all public utilities engaged in the collection, pumping and sale of water, including municipally owned or operated water utilities, it is therefore,

ORDERED, That the system of accounts and records, fully set forth and described in a pamphlet, identified and designated as "A Uniform Classification of Accounts for Water Utilities," said pamphlet and all its contents being referred to herein, hereto attached and made a part hereof, be and the same is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

IT IS FURTHER ORDERED, That each such utility shall carry on its books, the accounts and records herein prescribed for such utility, and shall accurately keep such accounts in accordance with the requirements, definitions and instructions contained and set out in this pamphlet.

IT IS FURTHER ORDERED, That this order shall take effect on January 1st, 1916, and shall continue in force until suspended, modified or set aside by this Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 28th day of January, 1916.

*For Uniform Classification of Accounts for Water Utilities, see Appendix D, page 435.

GENERAL ORDER No. 12.

In the Matter of Maintenance and Use of Bulletin Boards in Steam Railroad Passenger Stations.

Effective April 1, 1916.

IT IS ORDERED, That on and after April 1, 1916, it shall be the duty of every Steam Railroad Company operating a steam railroad within the State of Colorado to maintain a bulletin board in a conspicuous place at each of its passenger stations in the State of Colorado, upon which shall be bulletined the time that each train upon which passengers are carried is due to arrive and depart under its published schedule.

IT IS FURTHER ORDERED, That it shall be the duty of each Steam Railroad Company, at each station where telegraphic or telephonic train orders are received upon its line, at least one hour before the time that each passenger train is due to arrive at such station, or earlier if its train dispatcher has received such information, to bulletin the fact upon said board as to whether said passenger train is on time or not, and, if behind schedule time, to state, as nearly as may be approximated, the time of its arrival, and to restate on said bulletin board the approximate time of arrival of such train every thirty (30) minutes until its arrival at said station.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 26th day of February, 1916.

GENERAL ORDER No. 13.

In the Matter of Maintenance of Safety Devices at Railway and Highway Crossings; also in the Matter of the Installation of Safety Devices at Railway and Highway Crossings.

Effective March 1, 1916.

IT IS ORDERED, That all safety devices, whether electrically operated or otherwise, and of whatsoever nature, which have heretofore been installed at railway and highway crossings in the State of Colorado, shall be efficiently maintained and kept in good operating condition by the railroad or railroads having heretofore installed said safety devices at said railway and highway crossings.

IT IS FURTHER ORDERED, That, prior to the installation in the future of any safety devices or other protection, to render railway and highway crossings safe within the State of Colorado, the plans of the proposed railway or highway crossing protection shall be submitted to this Commission for its approval, accompanied by a plat or sketch of the location of said crossing and such further information as may be necessary for the information of the Commission.

IT IS FURTHER ORDERED, That all steam and electric railroads shall immediately remove from their rights of way all obstructions of every kind, except buildings, which in any way interfere with the view of approaching trains at railway and highway crossings in the State of Colorado.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 26th day of February, 1916.

GENERAL ORDER No. 14.

In the Matter of Cars or Trains of Street Railroads Crossing Railroad Tracks or Grades.

Effective March 1, 1916.

IT IS ORDERED, That any corporation, company, or person operating a street railroad shall, before crossing with its cars or trains the tracks of any other street railroad company at grade, cause such cars or trains to stop at the crossing, and ascertain by signal or otherwise that a way is clear before proceeding.

IT IS FURTHER ORDERED, That any corporation, company, or person shall, before crossing with its cars or trains the tracks of any railroad at grade, other than a street railroad, cause its cars or trains to stop at the crossing, and such cars or trains shall not proceed to move upon or over the crossing until the conductor or motorman has stepped off his car, viewed the tracks of the crossing road in both directions, and knows that the way is clear before proceeding.

IT IS FURTHER ORDERED, That the term "street railroad," as used in this order, includes every railroad operated by electrical power for public use in the transportation of passengers or property for compensation, upon, along, above, or below, any street, avenue, road, highway, bridge, or public place in any city or incorporated town.

IT IS FURTHER ORDERED, That the term "railroad," as used in this order, has the same meaning as that given to it in the Act creating the Public Utilities Commission of the State of Colorado, and includes every railroad other than a street railroad.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 26th day of February, 1916.

GENERAL ORDER No. 15.

In the Matter of Abandonment and Discontinuance of Tracks and Service of Steam and Electric Carriers.

Effective April 13, 1916.

IT IS HEREBY ORDERED, By the Public Utilities Commission of the State of Colorado that no electric street railroad, interurban railroad or steam railroad shall discontinue its service or abandon its line of railroad, or any part thereof, or remove its tracks, or any part thereof, without first having filed with this Commission a written notice of its intention to discontinue, abandon or remove its service or tracks, or any part thereof, within the State of Colorado; said notice to be filed with the Commission thirty (30) days prior to the discontinuing of its service, or the abandonment or removal of its tracks or any part thereof.

Nothing contained in this order shall exempt any electric street railroad, interurban railroad, or steam railroad from any of the provisions of the Law of the State of Colorado pertaining to public utilities, or of any orders heretofore issued by this Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 13th day of April, 1916.

GENERAL ORDER No. 16.

In the Matter of Penalty for the Granting or Accepting Free or Reduced Transportation in Violation of the Law.

Effective July 3, 1916.

Any person, public utility or corporation, or person acting as an officer, agent or employee of a corporation or utility, who furnishes or accepts free or reduced transportation over or upon any line of railway of any public utility operating within the State of Colorado, in violation of subdivision A of Section 17 of the Public Utilities Law of the State of Colorado, shall be deemed guilty of a misdemeanor and shall be punishable by a fine not exceeding one thousand dollars, or by imprisonment in a county jail not exceeding one year, or by both such fine and imprisonment, in accordance with the provisions of Sections 62, 63, 64 and 65 of the Public Utilities Act of the State of Colorado.

IT IS FURTHER ORDERED, That every person, public utility or corporation, or any person acting as an officer, agent or employe of a corporation or utility, who shall violate this order, shall be deemed to be in contempt of the Commission, according to Section 66 of the Public Utilities Act of the State of Colorado, and shall be punishable by the Commission in the same manner and to the same extent as contempt is punished by courts of record.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 3rd day of July, 1916.

GENERAL ORDER No. 17.

In the Matter of Filing Monthly Passenger Train Movement Reports.

Effective October 1, 1916.

IT IS ORDERED, That each steam railroad corporation operating between points in the State of Colorado shall file with the Commission each month a statement of the delays occurring during the month to all of their first and second class passenger and mixed trains, first sections only, upon the blank forms furnished for that purpose by the Commission.

IT IS FURTHER ORDERED, That these reports shall be filed in the office of the Commission within fifteen days after the end of the month for which the report is compiled, the first report to be for the month of September, 1916.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 29th day of August, 1916.

At a General Session of the PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO, held at its office in Denver, Colorado, on the 5th day of October, 1916, the following order was entered.

GENERAL ORDER No. 18.

In the Matter of Applications of Utilities to Grant Informal Reparation.

Effective November 1, 1916.

Upon the filing of a complaint on the formal docket petitioning for reparation, the Commission is authorized by Section 56 of the Act to order a public utility to grant reparation, with interest from the date of collection, to the complainant after it has been found upon investigation that the rates collected were excessive or discriminatory, provided the complaint shall have been filed with the Commission within two years from the time the cause of action accrues, and provided further, no discrimination will result from such reparation. It is also authorized by Section 17 (c) of the Act to permit public utilities to make reparation, upon application from the utility in the manner prescribed in Rule XIII of the Rules of Practice and Procedure, when the Commission shall deem such reparation to be just and reasonable and result in no discrimination.

The Commission, to simplify the procedure in reparation applications from public utilities, enters all such applications on a special reparation docket, which is informal only in respect to the form of pleadings, and orders in such cases must be regarded as formal orders as fully in all respects as orders in formal cases.

The instances in which the Commission will authorize refund or reparation in an informal way will be confined to those in which the informal showing develops plainly a case in which the Commission would award reparation on formal hearing and in which an adjustment agreeable to shippers or consumers and the public utilities, and in conformity with the provisions of the law is reached.

When an informal or formal reparation order has been made by the Commission, the principle upon which it is based extends to all like service, but no refunds may be made by the carrier upon such like service except upon specific authority from the Commission therefor.

In cases involving refund of alleged overcharges and in which the lawful tariff rates have been applied, reparation will be authorized under informal proceedings only when the utility admits the unreasonableness of the rate charged and it is shown that within a reasonable time, not exceeding six months, after the service has been rendered it has incorporated in its tariffs the rate upon the basis of which adjustment is sought and has thus made that rate lawfully applicable. Adjustment of an application of this character that is filed with the Commission six months after the service has been rendered may, however, be authorized, even if more than six months have elapsed between the date of the service rendered and the effective date of the tariff rate or regulation that forms the basis of such adjustment.

Authority for refund on account of reduced rates or changed tariff regulations shall include a clause providing that the new rate or regulation upon the basis of which reparation is granted shall not be exceeded for a period of at least one year, which shall run from the date of the authorization and not from the date when the reduced rate or new regulation became effective.

The Commission will not recognize as a basis for reparation any rate, rule or regulation which is not on file with it.

While it is the policy of the Commission to entertain complaints instituted on behalf of shippers or consumers by traffic or credit bureaus, in all such cases where reparation is awarded, the order will require payment to be made by the utility either to the consignor or consignee, as their interest may appear, in the case of common carriers and to the consumer in the case of other utilities.

All informal applications for reparation filed with the Commission on or after the effective date of this order, shall be filed within two years from the time the cause of action accrues.

Reparation will not be awarded on the formal or special docket in any case where the utility has reduced a rate simply in order to meet the lower rate of a competitor. Any other course of action not only deprives the competitor of the natural benefit of its lower rate, but tends to destroy the inducements for making a lower rate. Moreover, any other course of action is demoralizing, in that it enables the utility, before its own lower rate has become effective, to assure shippers or consumers that they may take advantage of the service rendered by that utility notwithstanding its higher rate and afterwards secure reparation on the basis of the lower rate of its competitor. Where there is a difference in rates between two utilities the shippers and consumers

must understand that they may get the benefit of the lower rate only by obtaining the service from the utility publishing the lower rate.

Applications, duly verified, for authority to make reparation shall be addressed to The Public Utilities Commission of the State of Colorado, Denver, Colorado, and in the form below, and must be over the signature of the officer duly authorized to file such applications. In case two or more utilities are involved in the application the proper officer of each such utility shall sign the same.

Before

THE PUBLIC UTILITIES COMMISSION

of the

STATE OF COLORADO.

..... *Complainant,* vs. ..... *Defendant.*	Reparation Application No..... Applicants No..... .....Co. Claim No..... Request for authority to refund $.....

To The Public Utilities Commission
of the State of Colorado,
Denver, Colorado.

The ..... respectfully applies under Section 17 (c) of the Public Utilities Act, and in full compliance with the requirements of General Order No. 18, for an order authorizing the payment of the above-named claimant....., of....., State of....., of the sum of..... ($.....), as special reparation in connection with the following:

(State full reference to shipments made or service rendered.)

The aggregate charges actually collected, $..... date paid....., 19..... By whom paid..... The rates lawfully applicable at the time the service was rendered:

(Give full reference to rates, showing Colo. P. U. C. No., etc.)

The rate sought to be applied:

(Give full reference to rates, showing Colo. P. U. C. No., etc.)

The aggregate charges at the claimed rate would be $.....

Explanations and comments:

(Here may follow such general comments or explanations as the case may require.)

Exhibit 1, attached, is a statement of billing in the standard form, and corresponds to the checked billing of the auditing department. (Applies to common carriers only.)

The undersigned who makes this application in the name of his company certifies that he has familiarized himself with all the facts and figures upon which this application for reparation is made and knows the same to be correct.

.....Co.,
Defendant.

....., 191.... By.....
....., Colo. Its.....
Subscribed and sworn to before me this
.....day of....., 191...
.....
Notary Public.

The undersigned company joins in the foregoing application.

.....Co.,
....., 191... By.....
....., Colo. Its.....
Subscribed and sworn to before me this
.....day of....., 191...
.....
Notary Public.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 19.

In the Matter of Requests for Permission to Amend Schedules on Less than Statutory Notice.

Effective November 1, 1916.

The Public Utilities Act, Section 16, authorizes the Commission, in its discretion and for good cause shown, to permit changes in rates, fares, tolls, rentals, charges or classifications, or any form of contract or agreement, or any rule, regulation or contract relating to or affecting any rate, fare, toll, rental, charge or classification, on less than the statutory notice. It is believed that this authority should be exercised only in instances fully justified by special or peculiar circumstances or conditions. Confusion and complication must follow indiscriminate exercise of this authority.

The matter of a form of application for requests to amend schedules on less than statutory notice being under consideration, the following order was entered:

IT IS ORDERED, That applications for permission to change schedules on less than statutory notice shall be addressed to The Public Utilities Commission of the State of Colorado, in the following form, and that such application must be over the signature of the officer duly authorized to file schedules:

.....
(Name of utility.)

....., 19...
(Place and date.)

To The Public Utilities Commission
of the State of Colorado,
Denver, Colorado.

The....., by.....,
(Name of utility.) (Name of officer.)
its....., does hereby respectfully
(Title of officer)
petition The Public Utilities Commission of the State of Colorado that it be permitted, under Section 16 of the Public Utilities Act, to put in force the following rates or rules

to become effective.....days after the filing thereof with the Commission:

(State fully the rates or rules which it is desired to put into effect.)

Your petitioner further represents that the said rates or rules above mentioned will be published in Colo. P. U. C. No....., and will supersede and take the place of rates or rules for like service which are set forth in Colo. P. U. C. No..... on file with the Commission and which rates or rules are as follows, to wit:

(Here state fully the present rates or rules, or if too numerous, name those which are indicative, or generally describe the rate basis or rules.)

And your petitioner further bases such request upon the following facts, which present certain special circumstances and conditions justifying the request herein made:

(State fully all the circumstances and conditions which are relied upon as justifying the application.)

.....

By.....

(Name and Title of Officer.)

Subscribed and sworn to before me this .....day of....., 19...

.....

Notary Public.

IT IS FURTHER ORDERED, That when a utility, or an agent, issues a schedule for two or more utilities and desires to make application for authority to amend the schedule on less than statutory notice, such requests as to joint schedules must be made by the utility, or agent, authorized to file the schedule, and that in making them, the same form as that prescribed for use of individual utilities shall be used, except that the request must state that it is made in the name and on behalf of all utilities that are parties to the schedule.

All rates and rules published and effective on less than statutory notice under special permission of the Commission cannot be cancelled or changed except on full statutory notice and must, therefore, remain in effect at least thirty days after the effective date thereof, *unless* permission is requested in the application to have the rates expire within thirty days after the effective date, and the authority of the Commission so specifically states.

No authority will be granted upon telephonic request, and all requests by telegraph must be confirmed immediately thereafter by verified application.

Under no conditions will authority be granted to make rates or rules effective upon less than one day's notice to the Commission and to the public.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 20.

In the Matter of Suspension of Intrastate Rates in Tariffs or Schedules Suspended by the Interstate Commerce Commission.

Effective November 1, 1916.

IT IS ORDERED, That when a tariff or supplement to a tariff containing both State and Interstate rates or regulations is suspended by the Interstate Commerce Commission for interstate application, that portion of such tariff or supplement, which contains rates or regulations applicable on intrastate traffic in Colorado may be automatically suspended by the carrier, on less than statutory notice, at the same time and for the same period; this Commission reserving the authority without a formal hearing, to reinstate any fares or regulations so suspended.

Each tariff or supplement issued under authority of this rule must bear notation:

"Issued by authority of General Order No. 20, Colorado Public Utilities Commission."

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 21.

In the Matter of Filing of Annual Reports of Common Carriers.

Effective November 1, 1916.

IT IS ORDERED, That Annual Reports of common carriers to The Public Utilities Commission of the State of Colorado, relating to periods of time subsequent to June 30, 1916, be prepared and submitted in accordance with the following rules:

(a) Every common carrier which is required by The Public Utilities Act to file with the Commission any tariff or schedule of rates, fares or charges, shall be required to keep operating accounts and to file an annual operating report unless specifically excused by the Commission.

(b) Every railway corporation owning but not operating a railway used in Colorado intrastate commerce shall be required to file with the Commission an annual non-operating report unless relieved therefrom under the provision of rule (c) following:

(c) Any actually existing inactive corporation coming within the scope of rule (b) given above may be relieved from the requirements of that rule if it has no outstanding stocks or obligations not held by or for its controlling corporation and the controlling corporation reports for the inactive corporation such facts as the Commission may require to be reported.

(d) Reports of a controlling corporation and its controlled corporations must exclude duplications in respect of investment in railway plant and equipment and in respect of securities outstanding.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 22.

In the Matter of the Adoption of Schedules of Utilities.

Effective November 1, 1916.

IT IS ORDERED, That in case of change of ownership or control of a utility, or when a utility, or portion of utility, is transferred from the operating control of one company to that of another, or when its name is changed, the company which will thereafter operate the utility, if it intends to use the tariff publications and rates of the former operating company, shall unite with the former company in the publication and filing of common supplements to the schedules on file with the Commission, on the one hand withdrawing, and on the other hand accepting and establishing such tariffs. Such common supplements shall be executed jointly by the tariff issuing officers of both the old and the new companies, shall be numbered consecutively as supplements to the schedules to which they are directed, and may be made effective on *immediate* notice to the public and to the Commission, by noting thereon reference to this order.

New schedules reissuing or superseding the then effective schedules shall be numbered in the Colo. P. U. C. series of the new company.

The company surrendering control of the property has no lawful right to abandon its schedules except on lawful notice, i. e., thirty days, and when it surrenders control of the property it surrenders all right to publish rates applicable thereto except under proper authority from the company to whose control the property passes.

The public has a right to the existing available and lawfully applicable rates of that property.

The adoption notice shown on the common supplements issued under this order shall read substantially as follows:

> The (name of new company) hereby adopts, ratifies and makes its own in every respect as if the same had been originally filed and posted by it, all schedules, contracts or other instruments whatsoever, filed with the Public Utilities Commission of the State of Colorado by the (name

of old company) prior to (date) the beginning of its possession.

Similar adoption notice must be filed by a receiver when assuming possession and control of a utility.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 23.

In the Matter of Uniform System of Accounts, Classification of Employes and Their Compensation, Uniform System for the Issuing and Recording of Passes, and Regulation to Govern the Destruction of Records, of Steam Roads.

Effective January 1, 1917.

The subject of a uniform system of accounts, a classification of employes and their compensation, a uniform system for the issuing and recording of passes, and regulations to govern the destruction of records, to be prescribed and kept by carriers being under consideration,

IT IS ORDERED, That the existing regulations of the Interstate Commerce Commission prescribing the general manner and detail of keeping such accounts and records are hereby adopted as a uniform system of rendering accounts of transacting business within the State of Colorado.

IT IS FURTHER ORDERED, That any supplements to, or superseding issues of, the existing regulations of the Interstate Commerce Commission, or any new regulations coming within the scope of the above heading, prescribing the general manner and detail of keeping such accounts and records shall be considered, by the terms of this order, to be adopted and prescribed for the use of steam carriers within the State of Colorado as the regulations of this Commission:

The current said regulations of the Interstate Commerce Commission are contained in the following named classifications prescribed by the said Interstate Commerce Commission in accordance with Section 20 of the Act to Regulate Commerce, as amended, namely:

> Classification of Income, Profit and Loss, and General Balance Sheet Accounts for Steam Roads, Issue of 1914, effective July 1, 1914.
>
> Classification of Operating Revenues and Operating Expenses of Steam Roads, Issue of 1914, effective July 1, 1914.
>
> Condensed Classification of Operating Expenses of Steam Roads, Issue of 1914, condensed, effective July 1, 1914.

Index to the Classification of Operating Expenses of Steam Roads, 1914.

Classification of Investment in Road and Equipment of Steam Roads, Issue of 1914, effective July 1, 1914, with amendment of July 19, 1915.

Classification of Train-miles, Locomotive-miles, and Car-miles for Steam Roads, Issue of 1914, effective July 1, 1914.

Rules Governing the Classification of Steam Railway Employes and their Compensation, effective July 1, 1915.

Regulations to Govern the Destruction of Records of Steam Roads, Issue of 1914, effective July 1, 1914, with supplement of July 1, 1915.

Regulations to Govern the Issuing and Recording of Passes of Steam Roads, Issue of 1917, effective January 1, 1917.

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

(SEAL)

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 24.

In the Matter of Uniform System of Accounts and Regulations to Govern the Destruction of Records of Electric Railway Companies.

Effective January 1, 1917.

The subject of a uniform system of accounts and regulations to govern the destruction of records to be prescribed and kept by electric railway carriers being under consideration,

IT IS ORDERED, That the existing regulations of the Interstate Commerce Commission prescribing the general manner and detail of keeping such accounts and records are hereby adopted as a uniform system of rendering accounts of transacting business within the State of Colorado.

IT IS FURTHER ORDERED, That any supplements to, or superseding issues of, the existing regulations of the Interstate Commerce Commission, or any new regulations coming within the scope of the above heading, prescribing the general manner and detail of keeping such accounts and records shall be considered, by the terms of this order, to be adopted and prescribed for the use of electric carriers within the State of Colorado as the regulations of this Commission.

The current said regulations of the Interstate Commerce Commission are contained in the following named Classifications prescribed by the said Interstate Commerce Commission in accordance with Section 20 of the Act to Regulate Commerce, as amended, namely:

> Uniform System of Accounts for Electric Railways, Issue of 1914, effective July 1, 1914.
>
> Index to the Uniform System of Accounts for Electric Railways, 1914.
>
> An Order of the Interstate Commerce Commission dated July 19, 1915, in the Matter of Uniform System of Accounts to be Kept by Electric Railways.

Regulations to Govern the Destruction of Records of Electric Railway Companies, First Issue effective May 1, 1913.

S. S. KENDALL,
(SEAL) GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 25.

In the Matter of Uniform System of Accounts and Regulations to Govern the Destruction of Records of Express Companies.

Effective January 1, 1917.

The subject of a uniform system of accounts and regulations to govern the destruction of records to be prescribed and kept by express companies being under consideration,

IT IS ORDERED, That the existing regulations of the Interstate Commerce Commission prescribing the general manner and detail of keeping such accounts and records are hereby adopted as a uniform system of rendering accounts of transacting business within the State of Colorado.

IT IS FURTHER ORDERED, That any supplements to or superseding issues of, the existing regulations of the Interstate Commerce Commission, or any new regulations coming within the scope of above heading, prescribing the general manner and detail of keeping such accounts and records shall be considered, by the terms of this order, to be adopted and prescribed for the use of express companies within the State of Colorado as the regulations of this Commission.

The current said regulations of the Interstate Commerce Commission are contained in the following named Classifications prescribed by the said Interstate Commerce Commission in accordance with Section 20 of the Act to Regulate Commerce, as amended, namely:

Uniform System of Accounts for Express Companies, Issue of 1914, effective July 1, 1914.

Regulations to Govern the Destruction of Records of Express Companies, effective July 1, 1915.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 26.

In the Matter of Uniform System of Accounts and Regulations to Govern the Destruction of Records of Sleeping Car Companies.

Effective January 1, 1917.

The subject of a uniform system of accounts and regulations to govern the destruction of records to be prescribed and kept by sleeping car companies being under consideration,

IT IS ORDERED, That the existing regulations of the Interstate Commerce Commission prescribing the general manner and detail of keeping such accounts and records are hereby adopted as a uniform system of rendering accounts of transacting business within the State of Colorado.

IT IS FURTHER ORDERED, That any supplements to, or superseding issues of, the existing regulations of the Interstate Commerce Commission, or any new regulations coming within the scope of the above heading, prescribing the general manner and detail of keeping such accounts and records shall be considered by the terms of this order, to be adopted and prescribed for the use of sleeping car companies within the State of Colorado as the regulations of this Commission.

The current said regulations of the Interstate Commerce Commission are contained in the following named Classifications presribed by the said Interstate Commerce Commission in accordance with Section 20 of the Act to Regulate Commerce, as amended, namely:

> Classification of Revenues and Expenses of Sleeping Car Operations or Auxiliary Operations and Other Properties for Sleeping Car Companies, First Revised Issue, Effective July 1, 1912.
>
> An Order of the Interstate Commerce Commission dated June 8, 1911, In the Matter of the Destruction of Records of Sleeping Car Companies, effective October 1, 1911.

An Order of the Interstate Commerce Commission dated July 24, 1915, In the Matter of the Destruction of Records of Sleeping Car Companies.

S. S. KENDALL,
(SEAL) GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

GENERAL ORDER No. 27.

In the Matter of Uniform System of Accounts and Regulations for the Destruction of Records of Telephone and Telegraph Companies.

Effective January 1, 1917.

The subject of a uniform system of accounts and regulations to govern the destruction of records, to be prescribed and kept by telephone and telegraph companies being under consideration,

IT IS ORDERED, That the existing regulations of the Interstate Commerce Commission prescribing the general manner and detail of keeping such accounts and records are hereby adopted as a uniform system of rendering accounts of transacting business within the State of Colorado.

IT IS FURTHER ORDERED, That any supplements to, or superseding issues of, the existing regulations of the Interstate Commerce Commission, or any new regulations coming within the scope of the above heading, prescribing the general manner and detail of keeping such accounts and records shall be considered, by the terms of this order, to be adopted and prescribed for the use of telephone and telegraph companies within the State of Colorado as the regulations of this Commission.

The current said regulations of the Interstate Commerce Commission are contained in the following named Classifications prescribed by the said Interstate Commerce Commission in accordance with Section 20 of the Act to Regulate Commerce, as amended, namely:

> Uniform System of Accounts for Telephone Companies, First Issue, effective January 1, 1913.
>
> Supplement to First Issue of the Uniform System of Accounts for Telephone Companies, effective January 1, 1915.
>
> Uniform System of Accounts for Telephone Companies, Class C, Issue of 1915, effective January 1, 1915.
>
> Uniform System of Accounts for Telegraph (and Cable) Companies, First Issue, effective January 1, 1914.

Regulations to Govern the Destruction of Records of Telephone, Telegraph (and Cable) Companies, First Issue, effective February 1, 1914.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 5th day of October, 1916.

SECTION 3

SPECIAL ORDERS

SPECIAL ORDER No. 1.

Exempting The San Luis Central Railroad Company from the Requirements of the "Switch Light Law."

Effective February 16, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, and exercising the power specifically granted to it under Section 29 of the Act, having investigated the contention of officials of The San Luis Central Railroad Company that, inasmuch as that company operates trains only between sun-up and sun-down, compliance with the requirements of the "Switch Light Law" in the general statutes would work an unnecessary hardship upon that road, hereby enters the following order:

ORDERED, That The San Luis Central Railroad Company be exempted from the requirements of the "Switch Light Law" (Chapter 121, Page 405, Session Laws of Colorado, 1903), now in force and effect under the jurisdiction of this Commission.

IT IS FURTHER ORDERED, That this order shall take effect from this date, and shall continue in force until suspended, modified or set aside by the Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 16th day of February, 1916.

SPECIAL ORDER No. 2.

Exempting The Crystal River and San Juan Railroad Company from the Requirements of the "Switch Light Law."

Effective March 2, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, and exercising the power specifically granted to it under Section 29 of the Act, having investigated the contention of officials of The Crystal River and San Juan Railroad Company that, inasmuch as that company operates trains only between sun-up and sun-down, compliance with the requirements of the "Switch Light Law" in the general statutes would work an unnecessary hardship upon that road, hereby enters the following order:

ORDERED, That The Crystal River and San Juan Railroad Company be exempted from the requirements of the "Switch Light Law" (Chapter 121, Page 405, Session Laws of Colorado, 1903), now in force and effect under the jurisdiction of this Commission.

IT IS FURTHER ORDERED, That this order shall take effect from this date, and shall continue in force until suspended, modified or set aside by the Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 2nd day of March, 1916.

SPECIAL ORDER No. 3.

Exempting The San Luis Southern Railway Company from the Requirements of the "Switch Light Law."

Effective March 10, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, and exercising the power specifically granted to it under Section 29 of the Act, having investigated the contention of officials of The San Luis Southern Railway Company that, inasmuch as that company operates trains only between sun-up and sun-down, compliance with the requirements of the "Switch Light Law" in the general statutes would work an unnecessary hardship upon that road, hereby enters the following order:

ORDERED, That The San Luis Southern Railway Company be exempted from the requirements of the "Switch Light Law" (Chapter 121, Page 405, Session Laws of Colorado, 1903), now in force and effect under the jurisdiction of this Commission.

IT IS FURTHER ORDERED, That this order shall take effect from this date, and shall continue in force until suspended, modified or set aside by the Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 10th day of March, 1916.

SPECIAL ORDER No. 4.

Exempting Specific Branches of the Atchison, Topeka and Santa Fe Railway System Within the State of Colorado, from the Requirements of the "Switch Light Law."

Effective May 29, 1916.

The Commission, acting under the laws of Colorado relating to public utilities, and exercising the power specifically granted to it under Section 29 of the Act, having investigated the contention of officials of the Atchison, Topeka and Santa Fe Railway Company that inasmuch as the company operates trains only between sun-up and sun-down on the so-called "A. V. Line" running from Swink to Holly with branches from that line to the main line at Las Animas and Lamar, or on the "Canon Branch" running from Pueblo to Canon City, compliance with the requirements of the "Switch Light Law" in the general statutes would work an unnecessary hardship upon that company, hereby enters the following order:

ORDERED, That the Atchison, Topeka and Santa Fe Railway Company be exempted from the requirements of the "Switch Light Law" (Chapter 121, Page 405, Session Laws of Colorado, 1903), now in force and effect under the jurisdiction of this Commission, insofar as the so-called A. V. Line running from Swink to Holly with branches from that line to the main line at Las Animas and Lamar, and the Canon Branch running from Pueblo to Canon City, are concerned.

IT IS FURTHER ORDERED, That this order shall take effect from this date, and shall continue in force until suspended, modified or set aside by the Commission.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 29th day of May, 1916.

SECTION 4

ACCIDENT REPORTS

ACTION AND RECOMMENDATIONS OF THE COMMISSION ADOPTING THE REPORT OF INSPECTOR E. S. JOHNSON ON THE WRECK OF TRAIN NO. 2 ON THE DENVER & RIO GRANDE RAILROAD, KNOWN AS THE "ATLANTIC COAST LIMITED," MAY 30TH, 1916.

On the 30th day of May, 1916, the Commission was notified by telegram that Denver & Rio Grande train No. 2, known as the "Atlantic Coast Limited," was wrecked by derailment on the Rio Grande Junction Railway, near Grand Valley, Colorado, causing the injury of twenty passengers and four employes. E. S. Johnson, Railway Inspector for the Commission, was ordered by the Commission to proceed immediately to the scene of the wreck and to file a report with the Commission as to the cause of same. The following is the report of Inspector Johnson, filed with the Commission on June 12th, 1916:

"June 12, 1916.

To the Public Utilities Commission of the State of Colorado.

State Capitol, Denver, Colo.

Gentlemen:—

On May 30, 1916, there was a derailment of a Denver & Rio Grande passenger train on the Rio Grande Junction Railway near Grand Valley, Colorado, resulting in the injury of twenty (20) passengers and four (4) employes. This accident was investigated jointly with Messrs. A. D. Hamilton and R. S. Gardner, Inspectors, Division of Safety, Interstate Commerce Commission, and a hearing was held at the office of the railway superintendent, Mr. J. T. Nedwideck, at Grand Junction, Colo., June 3, 1916. As a result of the investigation, I beg to submit the following report:

"The Denver & Rio Grande Railroad and the Colorado Midland Railway operate trains over the single track, standard gauge, line of the Rio Grande Junction Railway, which extends from New Castle, Colo., to Grand Junction, Colo., a distance of 76.9 miles.

"The train involved in this accident was the Denver & Rio Grande passenger train No. 2, eastbound, known as the 'Atlantic Coast Limited,' en route from San Francisco, California, to Denver, Colorado. It was hauled by engine No. 782, and consisted of the following equipment in the order named:

D. & R. G. Baggage No. 691, Steel.
D. & R. G. Coach No. 911, Steel.
D. & R. G. Coach No. 892, Steel.
Pullman Tourist No. 1532, Steel exterior and steel underframe.
Pullman Tourist No. 1531, Steel exterior and steel underframe.
D. & R. G. Diner, Pando, Steel underframe.
Pullman Standard Sleeper, Chipana, Steel.
Pullman Standard Sleeper, Merriton, Steel.
Pullman Standard Sleeper, Owrmoore, Steel.
Pullman Standard Observation, Boca Grande, Steel.

"The train was in charge of Conductor F. Gilmore and Engineman H. Fahrmeyer.

"Train No. 2 passed Una, its last station, about thirteen (13) minutes late, and was derailed at a point 1,900 feet east of mile post 34, approximately 2½ miles east of Una, about 4:48 o'clock a. m. The speed at time of derailment was from 40 to 45 miles per hour. The derailment occurred at the east end of tangent track about three fourths of a mile long, on a level grade.

"The forward trucks of tender were the first to leave the rails. Engine and tender ran for a distance of 528 feet before turning over, resting in a forward position on their right side, parallel to south side of rail. Baggage car did not turn completely over at the time, but later, in order to clear the temporary track, was pushed over on its right side, lying about a car length beyond tender. The next two, the smoker and chair car, came to rest on opposite side of track in an inverted V shaped manner, the smoking car turning over on its side. The forward vestibule of this car and the rear vestibule of the chair car faced the track. The four vestibules of these cars were badly crushed, showing the terrific impact they received. The majority of passengers injured were riding in these two cars. The fact that no deaths or more serious injuries resulted was due to the all steel construction of the coaches. The two following cars, steel underframe, were derailed, but remained upright outside of and parallel to north side rail. The dining car following had only the forward trucks derailed, while the last four cars, remained on track undamaged. With the exception of the smashed vestibules on smoker

and chair car, none of the train equipment was badly damaged.

"As a result of the derailment the track was badly torn up for a distance of 500 feet; rails bent and broken, ties crushed, necessitating the building of a temporary track. Service was resumed at 4:30 o'clock p. m., 11 hours and 40 minutes after accident.

"The engineman and fireman having stated that the tender was the first to leave the rails, a careful examination was made of the trucks and wheels of engine and tender; nothing was found which could have caused or contributed to this derailment. The two left brake shoes on front truck and the front left brake shoe on rear truck of tender were missing. I do not consider their absence of any special significance, the tender having traveled over the ties for some distance, turning over and partly burying itself in the ground. A careful search at and near point of derailment failed to disclose them or any other broken train equipment.

"Engine was built September, 1909, by the American Locomotive Co., type 4-6-0; weight 184,000 lbs., weight of tender loaded, 141,000 lbs. Total weight 325,000 lbs. At the time of derailment tender contained about 2,000 gallons of water and 6 tons of coal, its normal capacity being 7,000 gallons of water and 12 tons of coal.

"In a thorough examination of the track immediately back and west of the wreck, the first visible indication of the derailment was a flange mark on the ball of the south side rail, located about 1,900 feet east of mile post 34. It began at a point about one inch from the inside edge of rail and extended outward diagonally across the ball of same, then was visible on outer edge of rail, finally showing on base of rail. The spike at this point was jammed deep into tie where wheel had struck it. Opposite to this point and between the rails a deep flange mark showed where the other wheel had struck the tie.

"Track is laid with 85-lb. rails, which appeared to be in good condition. They were rolled by the Colorado Fuel & Iron Co., in 1904, and were marked 'Section 850.' Rails were 33 feet in length with from 17 to 19 untreated red spruce ties under each rail. Ties were single spiked and with few exceptions no tie plates were used. At and near point of derailment track is cinder ballasted to a depth of 6 to 8 inches, resting on a 6 foot fill of natural adobe soil.

"For a distance of 70 feet immediately back of first visible derailment point the track was found to be in excellent condition; considerable work in the way of surfacing and tie renewal had been done the same day, after accident occurred. Gauge was good, varying from 4 ft. 8½ inches,

to 4 ft. 8¾ inches. The old ties which had been replaced at this section were found to be in a badly decayed condition; so were many of the ties which had been replaced on temporary track.

"A detailed examination was made of the track from point of derailment west to mile post 34, a distance of 1,900 feet. Found 15 broken and rotten ties; 5 broken tie plates; 144 spikes missing; 46 loose spikes, and 4 ties with end missing. Under one rail at and near joint 7 spikes were pulled out by hand; this joint had only one spike. From point of temporary track eastward to mile post 33, about 2,800 feet, 21 broken and rotten ties were found, 3 broken tie plates, 344 spikes missing, and 65 loose spikes. In many of the places two and three rotten ties were found in succession. In one place the ends of three ties were bunched, leaving a space under rail of 40½ inches from tie to tie. Another place was found having 29 inches of unsupported rail, a condition conducive to broken rails. Many of the joints were low and resting upon a poor foundation with many missing and loose spikes. Joints are placed opposite to one another suspended between the same ties.

"The annual average tie renewal is 12 per cent. The number of men allowed on each section of six (6) miles is, one foreman and four helpers. However, at this time, and for some time previous, no foreman was employed on this section, the foreman of the adjoining section attending to this as well as his own.

"While the direct cause of this derailment cannot be stated definitely, I am convinced that the high speed of this train, in connection with the bad track at and near point of derailment, caused the tender, with its approximate half load of coal and water, to rock and roll to such an extent that the right wheels of the front truck mounted the rail, the flanges riding the top of same for a distance, then dropping off on the outside, thus derailing the tender, engine, and six of the cars following.

"The investigation of this accident developed the fact that unless the speed of trains be greatly reduced, or the present track conditions improved, similar accidents may be expected on this line. While the scheduled average speed of this train was only 29.77 miles per hour, it was found that when trains were late the train crew endeavored and was expected to make up as much lost time as possible. I do not favor the issuing of slow orders where the existing conditions necessitating them can be corrected, as slow orders can be, are, and will be violated.

"In view of the defects noted in the body of my report, which shows that adequate provision is not made to main-

tain a safe track on this division, I hereby recommend the following improvements:

"A greater percentage of tie renewal; all broken ties to be replaced; no two decayed ties in succession to be allowed; ties where bunched to be relaid and surfaced.

"Rail fastened firmly by spikes on both sides to each tie, whether on tangent or curve.

"Surface of track, where irregular, corrected. Joints where low raised and fully spiked to sound ties resting on a firm foundation.

"A sufficient number of section men provided for carry-out the above improvements, each foreman to be held responsible for his particular section.

"That the above improvements be made over the entire line of this division from New Castle, Colo., to Grand Junction, Colo., within a reasonable time; the section between Grand Valley and Una stations to be improved at the earliest possible time.

"The heavy traffic over this line justifies the expenditures necessary for these improvements, and the safety of both its patrons and employes requires it.

Respectfully submitted,

E. S. JOHNSON,
Inspector."

Subsequent to a careful examination of the report of Inspector Johnson, the Commission accepted and approved the same, and recommends to The Denver & Rio Grande Railroad Company strict compliance, within a reasonable time, with the recommendations contained therein. The improvements on the railway line of The Rio Grande Junction Railway, operated by The Denver & Rio Grande Railroad Company, to be made upon its line of railway from New Castle, Colorado, to Grand Junction, Colorado, shall begin immediately and reports of the progress of said work shall be made to The Public Utilities Commission of the State of Colorado from time to time. The Commission anticipates that the improvements recommended by the inspector for the Commission shall be completed within a reasonable time, thus relieving the Commission from initiating an investigation upon its own motion and making a formal order in the premises.

(SEAL)

S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

Dated at Denver, Colorado, this 17th day of June, 1916.

SECTION 5

APPENDIX A

Gas, Electric and Water Service Rules.

RULES REGULATING GAS, ELECTRIC AND WATER SERVICE.

GENERAL RULES.

APPLYING TO ALL GAS, ELECTRIC AND WATER UTILITIES.

RULE 1.

Application of Rules: (a) The following rules shall apply to any person, firm, corporation or municipality now or hereafter engaged as a public utility in the business of furnishing gas, electricity or water for domestic or commercial consumers within the State of Colorado.

(b) The adoption of these rules shall in no way preclude the Commission from altering or amending same in whole or in part or from requiring any other additional service, equipment, facility or standard, either upon complaint or upon its own motion, or upon the application of any utility. Furthermore, these rules shall not in any way relieve any utility from any of its duties under the laws of this State.

RULE 2.

Definitions: (a) The word "Utility" as used in these rules shall be construed to mean any person, firm or corporation engaged as a public utility, either municipally or privately owned, in the business of furnishing gas, electricity or water for domestic or commercial consumers within the State of Colorado.

(b) The word "Commission" as used in these rules shall be construed to mean The Public Utilities Commission of the State of Colorado.

(c) The word "Consumer" as used in these rules shall be construed to mean any person, firm or corporation supplied by any utility with gas, electricity or water.

RULE 3.

Operating Schedules and Interruptions of Service: (a) Each utility shall adopt an operating schedule, and shall report

the same, or any changes therein, to this Commission, indicating in any case where service is not rendered continuously, the time at which service is commenced, and the time at which it is discontinued. Any changes in such operating schedules shall be made only with the approval of this Commission.

(b) Each utility shall keep a record of all interruptions of service upon its entire system or major divisions thereof, including a statement of the time, duration and cause of any such interruption. Each utility shall, except for stations operated without attendants, also keep a record of the time of starting up or shutting down the central station or sub-station generating, transforming or pumping equipment, and the period of operation of all regulators used for the maintenance of constant gas or water pressure, or constant voltage of electricity supplied. This record shall include the readings taken periodically of station meters and switchboard instruments, which readings shall be taken with such frequency as the utility or the Commission may from time to time require.

(c) The record of interruptions of service and a statement of the operating schedules of the utility shall be open at all times to the inspection of the duly authorized representatives of this Commission.

RULE 4.

Inspection of Plant and Equipment: Each utility shall inspect its plant and distributing equipment and facilities in such manner and with such frequency as is in accord with good practice, in order that the same may be maintained in proper condition for use in rendering safe and adequate service.

RULE 5.

Testing Facilities: (a) Each utility shall provide such laboratory, meter testing shop and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of this Commission. The apparatus and equipment so provided shall be of a form acceptable to this Commission, and it shall at all times be available for the inspection and use, on the premises of the utility, of the authorized representatives of this Commission.

(b) Each utility shall make such tests as are prescribed under these rules with such frequency and in such manner and at such places as may be approved by this Commission.

RULE 6.

Records of Tests and of Meters: A complete record of the tests made under these rules of the quality and condition of

service shall be kept by each utility. The record so kept shall contain full information concerning each test, including the date, and the place where the test was made, the name of the employe conducting the test, the result of the test, and such other information as may be required by these rules, or as this Commission may from time to time direct, or as the utility making the test may deem desirable.

(b) Whenever any service meter is tested the original test record shall be preserved, including the information necessary for identifying the meter, the reason for making the test, the reading of the meter if removed from service, and the result of the test, together with all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the methods employed and the calculations made.

(c) A record shall also be kept indicating for each meter owned or used by any utility, the date of purchase, manufacturer's serial number, record of the use, and tests to which it has been subjected, and its present location.

RULE 7.

Accidents: Each utility shall as soon as possible report to this Commission each accident happening in connection with the operation of its property, facilities or service, wherein any person shall have been killed or seriously injured, or whereby any serious property damage shall have resulted; such first report shall later be supplemented by as full a statement as is possible of the cause and details of the accident, and the precautions, if any, which have been taken to prevent similar accidents. Each utility shall further give all reasonable assistance to the Commission in the investigation of the cause and suitable means for the prevention of any such accidents in the future.

RULE 8.

Complaints: Each utility shall make a full and prompt investigation of all complaints made to it by its consumers, either directly or through the Commission, and it shall keep a record of all written complaints received, which shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof. This record shall be open at all times to the inspection of the duly authorized representatives of this Commission.

RULE 9.

Information for Consumers: (a) Each utility shall at any time, on request, give its consumers such information and assistance as is reasonably possible in order that consumers may secure

safe and efficient service and may secure lamps and appliances properly adapted to the service furnished. Each utility shall inform each consumer of any such change made or proposed to be made in any condition as to its service as would affect the efficiency of the service or the operation of the appliances or equipment which may be in use by said consumer.

(b) Each utility supplying metered service shall adopt some means of informing its consumers as to the method of reading meters, either by printing on its bills a description of the method of reading meters, or a notice to the effect that the method will be explained upon application. It is recommended that an exhibition meter be kept on display in each commercial office maintained by a utility.

RULE 10.

Meter Readings and Bill Forms: (a) Each service meter shall indicate clearly the cubic feet, kilowatt hours, gallons or other units of service for which charge is made to the consumer. In cases where the dial reading of a meter must be multiplied by a constant to obtain the units consumed, the proper constant to be applied shall be clearly marked on the face or dial of the meter.

(b) Each utility shall, upon written request of any consumer, cause the meter reader reading the meter installed upon the premises of such consumer, to leave upon such meter a card or slip showing the date and time such reading was taken, and either the total reading expressed in cubic feet, kilowatt hours, gallons or other unit of service recorded by the meter read, or showing the position of the hands upon the dial of such meter at the time the reading was taken.

(c) All bills rendered periodically to consumers for metered service furnished shall show, in addition to the net amount due, the dates on which the readings were taken, the meter readings at the beginning and end of the period for which the bill is rendered, when requested by the consumer or deemed necessary by the utility, and all other essential facts upon which the bill is based.

RULE 11.

Meter Rentals, and Consumer's Deposits: (a) No meter rental, as distinguished from a minimum charge for service, shall be charged by any utility for any service meter installed by it for measurements upon which bills are rendered; provided, however, that in cases where service meters are used as sub-meters to a main meter, a rental charge for such sub-meter may be established with the approval of this Commission. The utility shall keep such sub-meters in good operating condition, but will not be required to keep a record of the monthly readings of these meters.

(b) Any utility may require at any time from any consumer or prospective consumer, a cash deposit intended to guarantee payment of current bills. Such required deposit shall not exceed the amount of an estimated ninety days' bill of such consumer, or in the case of a consumer whose bills are payable in advance, it shall not exceed an estimated sixty days' bill for such consumer. Interest shall be paid by the utility upon such deposits at the rate of six per cent. per annum, payable upon the return of the deposit, or annually upon request of the consumer, for the time such deposit was held by the utility and the consumer was served by the utility, unless such period be less than six months; provided, further, that the rate of interest on such cash deposits shall be only four per cent. per annum if the utility keep such cash deposits in a separate and distinct trust fund and deposited as such in some bank or trust company, and not used by the utility in the conduct of its business. Interest payments may, at the option of the utility, be made either in cash, or by a credit to the consumer's account. In computing interest no consideration need be given to fractional parts of months or dollars.

(c) Each utility having on hand such deposits from consumers, or hereafter receiving such deposits from consumers, shall keep records to show: (1) the name of each consumer making a deposit; (2) the premises occupied by the consumer when making the deposit and each successive premises occupied while the deposit is retained by the utility; (3) the amount and date of making the deposit; and (4) a record of each transaction, such as the payment of interest, interest credited, etc., concerning such deposit.

(d) Each utility shall issue to every consumer from whom such deposit is received a certificate of deposit.

(e) Each utility shall provide ways and means whereby a depositor who makes application for the return of his deposit or any balance to which he is entitled, but is unable to procure the original certificate of deposit, may not upon reasonable proof be deprived of his deposit or balance.

RULE 12.

Filing of Rate Schedules, Rules and Regulations: (a) Copies of all schedules of rates for service, forms of contracts, charges for service connections and extensions of lines and of all rules and regulations covering the relations of consumer and utility, shall be filed by each utility in the office of this Commission. Complete schedules, contract forms, rules and regulations, etc., as filed with the Commission shall also be on file in the local office of the utility and shall be open to the inspection of the public.

(b) A copy of this order shall likewise be on file in the office of the utility and open to the inspection of the public.

(c) The attention of the public shall be called to these files of schedules, rules and regulations, and orders, by placing a suitable placard in the office of the utility.

(d) If the reasonableness of any charge, rule, regulation or practice of any utility with reference to service connections or extensions, or of any rule covering the relations between consumer and utility, is challenged, the Commission will, upon complaint and investigation, prescribe the proper charge, rule, regulation or practice which shall thereafter be followed.

RULE 13.

Discontinuance of Service: No utility shall discontinue the service of any consumer for violation of any rule of such utility except upon written notice of at least forty-eight hours, advising the consumer in what particular such rule has been violated for which service will be discontinued. This rule may be waived where a by-pass is discovered on a consumer's service meter, or in the event of the discovery of dangerous leakage or short circuit on a consumer's premises, or in the case of a consumer utilizing the service in such a manner as to make it dangerous for occupants of the premises, thus making an immediate discontinuance of service to the premises imperative.

RULE 14.

Meters and Service Connections: (a) All meters used in connection with metered service shall be furnished, installed and maintained at the expense of the utility. Any appliance furnished at the expense of the utility shall remain its property and may be removed by it at any time after the discontinuance of service.

(b) Service connections to the consumer's premises in the case of electric utilities, and to the consumer's property line in the case of gas and water utilities, shall be installed and maintained at the expense of the utility. This rule shall not apply when unusual conditions are encountered, or to very long service connections. When such special cases arise, the Commission will, if necessary, prescribe the proper charge.

(c) Any utility may require through its Rules and Regulations that prospective consumers advance the full cost of service connections, the amount so advanced to bear no interest, and to be applied on the consumer's bills until such time as the amount of service furnished under the prescribed schedule of rates shall equal the amount so deposited. Such deposits shall not cover the cost of meters, since these may be recovered by the utility upon

the discontinuance of service by the consumer. Any utility may likewise require such deposits from consumers whose service connections are replaced for any cause. It is further provided that no consumer's deposit or advance payment for service shall be required from consumers making deposits for service connections until such time as the amount so deposited for service connections shall have been exhausted.

(d) No utility shall require from any consumer or prospective consumer a deposit intended to pay for all or any part of the cost of extension of mains or the installation of service connections, except under Rules and Regulations set down in the public schedules of the utility on file with this Commission.

RULE 15.

Pratice Under These Rules to be Filed: Each utility shall file with this Commission within four months after receipt of this order, a statement, typewritten, properly identified and dated, on 8½x11 sheets, describing its practice under these rules as follows:

(a) Description of test methods employed and frequency of tests or observations for determining quality, voltage, and pressure of gas, electric, and water service furnished.

(b) Description of meter testing equipment, including methods employed to ascertain and maintain accuracy of all testing equipment.

(c) Rules covering testing and adjustment of service meters when installed and periodic tests after installation.

Revisions in any portion of this statement after filing will necessitate the filing of an entire new statement, properly identified and dated, cancelling the one on file.

RULE 16.

Reports to Commission: Each utility shall make special reports at such time and in such form as the Commission may from time to time require.

Note: The term "service connection" refers to that portion of the distribution system which is installed for the use of individual consumers or small groups of consumers and does not refer to mains installed on the streets or public highways. The Commission has not attempted to lay down rules governing the extension of mains, but desires that each utility file its practice regarding such extensions.

SPECIAL RULES.

GAS.

RULE 17.

Definition of a Cubic Foot of Gas: When the gas itself is to be tested under these rules, a cubic foot of gas shall be taken to be that amount of gas which occupies the volume of one cubic foot, saturated with water vapor, at sixty (60) degrees Fahrenheit, and under a pressure of thirty (30) inches of mercury. For the purpose of measurement of gas to a consumer, a cubic foot of gas shall be taken to be that amount of gas which occupies a volume of one cubic foot under the conditions existing in such consumer's meter as and where installed.

RULE 18.

Heating Value of Gas: Each utility furnishing manufactured gas shall supply gas which when tested within one mile of the manufacturing plant, shall give a monthly average total heating value of not less than 575 British thermal units per cubic foot and at no time shall the total heating value of the gas at such point fall below 525 British thermal units per cubic foot.

To obtain the monthly average total heating value of gas the results of all tests of the heating value made on any day during the calendar month shall be averaged, and the average of all such daily averages shall be taken as the monthly average. It is understood that gas of the heating value thus defined has a heating value per cubic foot as registered by the consumer's meter proportionately as much less than said 575 British thermal units per cubic foot as the total pressure of the gas in the consumer's meter is less than equivalent to thirty (30) inches of mercury pressure.

RULE 19.

Calorimeter Equipment: Each utility whose gas output exceeds twenty million cubic feet per annum, shall equip itself with a complete standard calorimeter outfit and all necessary accessories acceptable to this Commission, by which it shall determine the heating value of manufactured gas at least four days of each week. A complete record of these tests shall be kept for a period of not less than two years from the date of such tests.

RULE 20.

Purity of Gas: (a) All manufactured gas distributed in this state shall not contain more than a trace of hydrogen sulphide. The gas shall be considered as containing not more than

a trace of hydrogen sulphide when a strip of white filter paper moistened with a solution containing five per cent. by weight of lead acetate is not distinctly darker than a second filter paper freshly moistened with the same solution after the first paper has been exposed to the gas for one minute in an apparatus of approved form through which the gas is flowing at the rate of approximately five cubic feet per hour, the gas not impinging directly from a jet upon the test paper.

(b) All manufactured gas distributed in this state shall contain in each one hundred cubic feet not more than thirty grains of total sulphur and not more than five grains of ammonia.

(c) Each utility supplying manufactured gas shall daily test the gas leaving its holders for the presence of hydrogen sulphide in the manner above specified. Each utility selling more than 75,000,000 cubic feet of manufactured gas per year shall provide and maintain such apparatus and facilities as are necessary for the determination of total sulphur and ammonia in gas, and each such utility shall regularly determine the amount of total sulphur and ammonia in the gas distributed by it; provided that any such utility supplying only water gas or oil gas or a mixture of these, shall not be required to provide apparatus or make determination of the amount of ammonia in gas.

RULE 21.

Pressure of Gas: (a) Subject to the approval of this Commission each gas utility may divide its distributing system into as many districts as it shall consider desirable, and it shall fix for each such district or for its distributing system as a whole, the normal pressure of gas which it proposes to maintain.

Except by special permission from this Commission for the maintenance of a higher service pressure, gas shall not be furnished at less than equivalent to two inches, nor more than equivalent to eight inches of water pressure as measured at the outlet of the service connection to any consumer. The maximum pressure on any day at any consumer's service shall never exceed twice the minimum pressure at that outlet on that day.

(b) Each utility furnishing gas service in cities of 2,500 inhabitants or over shall maintain a graphic recording pressure gauge at its plant, down-town office, or at some central point in the distributing system, or each sub-division thereof, where continuous records shall be made of the service pressure at that point.

Utilities operating in cities of 5,000 or more inhabitants shall equip themselves with one or more graphic recording pressure gauges in addition to the foregoing, and shall make frequent records, each covering intervals of at least 24 hours duration, of the gas service pressure at various points on the system. All

records or charts made by these meters shall be identified, dated and kept on file available for inspection for a period of at least two years.

RULE 22.

Gas Meter Accuracy and Testing: (a) Every gas service meter whether new, repaired or removed from service for any cause, shall be in good order and shall be adjusted to be correct to within one per cent. when passing gas at six cubic feet per hour per rated light capacity before being installed for the use of a consumer.

(b) No gas service meter hereafter installed shall be allowed to remain in service more than five years from the time when last tested without being re-tested and if necessary re-adjusted to be correct to within one per cent.

(c) During each period of twelve months after these rules take effect and until all meters now in service shall have been tested, each gas utility shall remove not less than twenty per cent. of all meters now in service, those longest in service to be removed first; such meters shall not again be placed in service until tested and made to comply with all provisions of this rule.

RULE 23.

Meter Testing on Request: Each gas utility furnishing metered gas service shall at any time when requested by a consumer make a test of the accuracy of any gas service meter free of charge; provided, first, that such meter has not been tested within the twelve months period prior to such request, and second, that the consumer will agree to accept the result of such test made by the utility as the basis for settling the difference claimed. No charge shall be made to the consumer for any such test except as may be allowed by the Commission in special cases. A written report giving the result of every such test shall be made to the consumer who requested it, the original record being kept on file at the office of the utility for a period of at least two years.

RULE 24.

Tests by Commission: (a) Any gas service meter will be tested by an employe of the Commission upon written application by the consumer. The application for such test shall be accompanied by a remittance of the amount fixed below as the fee for such test. If the meter is found to be fast beyond the limits prescribed in Rule 25, this fee shall be paid to the consumer by the utility; otherwise, these expenses shall be borne by the consumer requesting the test. The Commission's fees for gas meter tests are:

Not exceeding 10 lights capacity, each	$2.00
Exceeding 10 lights capacity but not exceeding 45 lights capacity, each	4.00
Exceeding 45 lights capacity, each	8.00

(b) Upon written application to the Commission by any gas utility the Commission will make a test on any of the utility's service meters upon payment of the scheduled fee.

RULE 25.

Adjustment of Bills for Meter Error: (a) If on test of any gas service meter, on request of the consumer, either by the utility or the Commission, it be found more than two per cent. fast, the utility shall refund to the consumer such percentage of the amount of the bills of the consumer for the period of six months just previous to the removal of such meter from service, or for the time the meter was in service, not exceeding six months, as the meter shall have been shown to be in error by such test.

(b) If on test of any gas service meter, on request of a consumer, either by the utility or the Commission, it be found to be more than two per cent. slow, the utility may collect from the consumer the amount estimated to be due for gas not charged for in bills rendered for not to exceed the six months period prior to such test.

(c) If a gas service meter is found not to register for any period the utility shall estimate a charge for the gas used but not metered by averaging the amounts used over similar periods preceding or subsequent thereto, or over corresponding periods in previous years.

RULE 26.

Meter Testing Facilities: Each utility having more than 200 gas meters in service shall maintain one or more suitable gas meter provers of standard design, and shall keep the same in proper adjustment so as to register the condition of meters tested within one-half of one per cent. Each meter prover must be accompanied by a certificate of calibration indicating that it has been tested with a standard which has been certified by the National Bureau of Standards or some testing laboratory of recognized standing. Meter provers must be located in a large, comfortable working space, free from excessive temperature variations, equipped with all necessary facilities and accessories, and at all reasonable hours accessible for inspection and use by the duly authorized representatives of this Commission.

SPECIAL RULES.

ELECTRICITY.

RULE 27.

Accepted Good Practice: The generating and distributing system including generating equipment, transmission lines, substations, overhead system poles, lines, transformers, underground system, manholes, conduits, etc., street lighting systems, service wires and attachments, meters and instruments, shall be constructed, installed and maintained in accordance with accepted good practice.

RULE 28.

Pole Identification: (a) In the case of two or more utilities jointly owning or using a pole or pole line structure, each of these utilities shall mark each such pole or structure with the initials of its name, abbreviation of its name, corporate symbol, or other distinguishing mark by which the ownership of such structure may be readily and definitely determined.

(b) Each utility shall in the future mark each such pole, post or other structure used for supporting electrical conductors with "dating nails" or other approved devices which will indicate the year in which such structures were installed. It is suggested that a different type of dating nail be used for new poles or structures and for poles re-used. All poles or structures known to have been installed or replaced during the preceding year shall likewise be so marked.

(c) The requirements herein shall apply to all existing and future erected structures and to all changes in ownership.

RULE 29.

Pole Inspection: Each pole, post, tower or other structure used for the support or attachment of electrical conductors, guys or lamps, must be inspected by the utility owning or using it with sufficient frequency to determine the necessity for replacement or repair.

RULE 30.

Grounding of Low-Potential Circuits: The rules currently in force contained in the National Electric Safety Code regarding grounding of low-potential circuits shall be followed for all new construction. Each utility shall adopt a plan whereby existing circuits will be grounded in conformity with this rule, and submit the same to this Commission for approval not later than June 1, 1917.

RULE 31.

Standard Voltage and Permissible Voltage Variation: (a) Each utility shall adopt a standard average voltage or standard average voltages, as may be required by its distribution system, for its entire constant-voltage service, or for each of the several districts into which the system may be divided, and shall file with this Commission a statement as to the standard average voltage or average voltages adopted.

Every reasonable effort shall be made by the use of proper equipment and operation to maintain such voltage practically constant at all times. The suitability and adequacy of these service voltages may be determined at any time by this Commission. The voltage maintained at the utility's main service terminals* as installed for individual consumers or groups of consumers shall be reasonably constant as follows:

(1) For service rendered under a lighting contract or primarily for lighting purposes the voltage between 6:00 o'clock p. m. and 11:00 o'clock p. m., shall be within five per cent., plus or minus of the standard adopted, and the total variation of voltage from minimum to maximum during the hours above specified shall not exceed seven per cent. of the average voltage in cities and other incorporated places having a population in excess of 2,500, nor nine per cent. of the average voltage in all other places.

(2) For service rendered under a power contract or primarily for power purposes the voltage variation shall not exceed ten per cent. above or ten per cent. below the standard average voltage at any time when the service is furnished.

(3) A greater variation of voltage than that specified above may be allowed when service is furnished directly from a transmission line or in a limited or extended area where consumers are widely scattered and the business done does not justify close voltage regulation. In such cases the best voltage regulation should be provided that is practicable under the circumstances. This clause refers particularly to individual consumers or small groups of consumers whose service from a transmission line is incidental, and does not refer to the voltage regulation in communities, cities or towns for which the transmission line was primarily built.

(b) Variations in voltage in excess of those specified caused (1) by the operation of power apparatus on the consumer's premises, which necessarily requires large starting currents, (2) by the action of the elements, (3) by infrequent and unavoidable fluc-

*The term "service terminal" refers to the point at which the utility's service connections terminate, at which point connection is made with the consumer's wiring, and beyond which the utility has no responsibility.

tuations of short duration due to necessary station or line operations, shall not be considered a violation of this rule.

(c) Utilities supplying power to one or more other electric utilities may make application to the Commission for a specific ruling applicable to each particular case.

RULE 32.

Voltage Surveys and Records: Each utility shall provide itself with one or more portable indicating volt-meters and each utility serving more than 200 consumers shall have one or more recording volt-meters of the curve drawing type suitable for the service voltages furnished. Each utility shall make a sufficient number of voltage surveys to indicate the character of service furnished from each center of distribution and to satisfy this Commission, upon request of its compliance with the above voltage requirements. Utilities having curve drawing volt-meters shall keep at least one of these instruments in continuous service at the plant, office or some consumer's premises. All volt-meter records shall be available for inspection by the authorized representatives of this Commission for a period of at least two years from the date of such records.

RULE 33.

Location of Meters: (a) It is recommended that all meters hereafter installed on consumer's premises should be located in the cellar or on the first floor or as nearly as possible at the point of entrance of service to the premises, in a clean dry, safe place not subject to great variations in temperature, and on a support free from vibration. When it is necessary to install meters out of doors they should be suitably protected from the elements and other sources of damage.

(b) Meters should not be placed in coal or wood bins or on the partitions forming such bins, nor on any unstable partitions or supports. Unless unavoidable, meters should not be installed in attics, sitting rooms, bath rooms, bed rooms, restaurant kitchens, over doors, windows, or in any location where the visits of the meter reader or tester will cause annoyance to or inconvenience the consumers.

(c) Meter locations should be such that they are easily accessible for reading, testing and making necessary adjustments and repairs. When a number of meters are placed on the same meter board the distance between centers should not be less than fifteen inches, and each meter loop should be so tagged or marked as to indicate the circuit metered. Meters should preferably be not less than four feet nor more than seven feet above the floor or a suitable platform.

(2 Colo. PUC)

RULE 34.

Meter Testing Facilities and Equipment: (a) Each utility furnishing metered electric service shall, unless specifically excused by the Commission, provide such meter laboratory, standard meters, instruments, and other equipment and facilities as may be necessary to make the tests required by these rules. Such equipment and facilities shall be acceptable to the Commission and shall be available at all reasonable times for the inspection of its authorized representatives.

(b) (1) Each utility furnishing metered electric service shall provide such portable indicating electrical testing instruments or watt-hour meters of suitable range and type for testing service watt-hour meters, switchboard instruments, recording voltmeters, and other electrical instruments in use, as may be deemed necessary and satisfactory by the Commission.

(2) For testing the accuracy of portable watt-hour meters, commonly called "rotating standards," and other portable instruments used for testing service meters, each utility not specifically excused by the Commission, as provided for in Section (a) of this rule, shall provide as reference or check standards suitable indicating electrical instruments, watt-meters, watt-hour meters, or any or all of them hereafter called "reference standards." Such reference standards may be of the service type of watt-hour meters, but if so, such watt-hour meters shall be permanently mounted in the meter laboratory of the utility and be used for no other purpose than for checking rotating standards.

Reference standards of all kinds shall be submitted at least once each year to the Standardizing Laboratory of the University of Colorado, or to some laboratory of recognized standing, for the purpose of test and adjustment. Utilities maintaining standardizing laboratories will be permitted to make their own tests and certifications of reference standards, provided the instruments and methods in use are acceptable to the Commission.

(3) All portable watt-hour meters (rotating standards) shall be compared with the reference standards at least once a week for commutator types, and once in two weeks for induction types, during the time such portable standards are being regularly used. Unless accompanied by a calibration card, if such check shows any portable watt-hour meter to be in error more than one per cent. plus or minus at any load at which the standard will be used, the meter shall be tested, adjusted and certified in the Standardizing Laboratory of the University of Colorado or at some standardizing laboratory of recognized standing. Each portable watt-hour meter (rotating standard) shall at all times be accompanied by a certificate or calibration card signed by the proper authority, giving the date when it was last certified and adjusted. Records of certifications and calibrations shall be kept on file in the office of the utility.

(2 Colo. PUC)

(4) All portable indicating electrical testing instruments, such as voltmeters, ammeters and wattmeters, when in regular use for testing purposes, shall be checked against suitable reference standards at least once a week when continually in use, and if found appreciably in error at zero, or more than one per cent. of full scale value at commonly used scale deflections, shall, unless accompanied by a calibration card, be adjusted and certified in some laboratory of recognized standing.

RULE 35.

Accuracy Requirements for Service Watt-hour Meters: (a) No service watt-hour meter that has an incorrect register constant, test constant, gear ratio or dial train, or that registers upon no load ("creeps"), shall be placed in service or allowed to remain in service without proper adjustment and correction.

(b) No service watt-hour meter that has an error in registration of more than plus two or minus three per cent. at light load, or plus or minus two per cent. at heavy load, shall be placed in service. Whenever on installation, periodic or any other tests, a meter is found to exceed these limits, it must be adjusted. A meter creeps when, with all load wires disconnected, the moving element makes one complete revolution in ten minutes or less.

(c) Light load shall be construed to mean approximately five to ten per cent. of the rated capacity of the meter. Heavy load shall be construed to mean not less than sixty per cent. nor more than one hundred per cent. of the rated capacity of the meter.

(d) Meters installed with instrument transformers or shunts shall be tested jointly with such transformers or shunts; otherwise the ratio of transformation of the transformers and the resistance of the shunts must have been previously determined within five years and be on file at the office of the utility for use in calculating the results of tests made. All such calibration tests must have been made by a laboratory of recognized standing or by the utility using apparatus and methods approved by this Commission.

RULE 36.

Installation Tests: All service watt-hour meters shall be tested and adjusted to register accurately to within the limits specified in Rule 35 and to otherwise conform with the requirements of that rule, either before installation or within sixty days after installation. Each commutator meter and direct-current meter shall be tested and adjusted within sixty days after installation. Whenever possible all meters should be tested after being installed for service, at which time they should be checked for correct connection, suitable location and proper mechanical condition.

RULE 37.

Periodic Tests: (a) All types of watt-hour meters installed upon consumers' premises shall be periodically tested according to the following schedule:

SCHEDULE FOR PERIODIC TESTING OF WATT-HOUR METERS.

	Rated capacity of meter in amperes or kilovolt amperes	To be tested at least once in every
Direct-current Meters	Exceeding 500 amperes	12 months
	15 amperes to 500 amperes	18 months
	15 amperes and less	24 months
Alternating-current Meters:		
1. Single phase	Exceeding 25 amperes	24 months
	25 amperes and less	36 months
2. Polyphase	Exceeding 50 kilovolt amperes	12 months
	50 kilovolt amperes and less	24 months

(b) All watt-hour meters in service on and after January 1st, 1917, for which there is no record on file at the utility's office of tests made within the period of time specified for that class and rating of meter shall be tested as soon as possible. In no case shall the time subsequent to such test exceed the period of test for meters of that class and rating as specified in this rule.

RULE 38.

Request Tests: Each utility furnishing metered electric service shall make a test of the accuracy of any electric service meter free of charge upon request of a consumer; provided that the meter has not been tested within the twelve months period prior to such request, and provided that the consumer will accept the results of such test as a basis for the settlement of the difference claimed. A written report giving the result of such test shall be made to the consumer requesting same, the original record being kept on file at the office of the utility for a period of at least two years.

RULE 39.

Tests by Commission: (a) Any service watt-hour meter will be tested by an employe of the Commission upon written application by the consumer. For such test a fee shall be forwarded to the Commission by the party making application for the test, which fee shall be refunded to the consumer by the utility if the meter be found fast beyond the limits prescribed in Rule 40. The schedule of fees for Commission tests of watt-hour meters is as follows:

(1)	For continuous current and single phase meters operating on 600 volts or less, up to and including 25 amperes rated capacity of the meter element, each	$2.00
(2)	For each additional 50 amperes or fraction thereof	0.50
(3)	For single phase meters above 600 volts and for polyphase meters with or without instrument transformers up to and including 25 kilowatts rated capacity	3.00
(4)	For each additional 25 kilowatts rated capacity or fraction thereof	3.00

(b) Upon written application to the Commission by any electric utility, the Commission will make a test on any of the utility's service meters upon payment of the scheduled fee.

RULE 40.

Adjustment of Bills for Meter Errors: (a) If on test of any service watt-hour meter, made upon the request of the consumer, by either the utility or the Commission, it is found to be more than three per cent. fast at any load, additional tests shall be made to determine the average error of the meter.

(b) Average Error: The average error of a meter in tests made by the Commission or the utility at the request of the consumer shall be defined as one-half the algebraic sum of (1) the error at light load, and (2) the error at heavy load.

(c) When a meter is found to have a positive average error; that is, is fast in excess of three per cent. in tests made at the request of the consumer by either the Commission or the utility, the utility shall refund to the consumer an amount equal to the excess charged for the kilowatt-hours incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, but not to exceed six months.

(d) When a meter is found to have a negative average error—that is, is slow—in excess of three per cent. in tests made at the request of the consumer by either the Commission or the utility, the utility may make a charge to the consumer for the kilowatt hours incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, but not to exceed six months.

(e) If a meter is found not to register for any period the utility shall estimate a charge for the kilowatt-hours used by averaging the amounts registered over similar periods preceding or subsequent thereto, or over corresponding periods in previous years.

RULE 41.

Inspection of Incandescent Lamps: Each utility supplying electricity for incandescent lighting shall inspect in a general way the incandescent lamps of each consumer, to whom free lamp renewals are supplied, at least once every two years, and render its consumers reasonable assistance in securing incandescent lamps and other appliances best adapted to the service furnished. It should also see that lamps furnished consumers without charge or at prices less than the open market prices, shall be of such efficiency in watts per candle when used on the utility's circuits of standard voltage as defined in Rule 31, that the cost of light per candle power hour to consumers will not exceed the cost per candle power hour when incandescent lamps of like type are bought in the open market.

RULE 42.

Station Instruments and Watt-Hour Meters: Each utility shall install such curve drawing wattmeters, indicating instruments or watt-hour meters as may be necessary to obtain a daily record of the load, and a monthly record of the output of its plants. Each utility purchasing electrical energy shall install such instruments or watt-hour meters as may be necessary to furnish full information as to the monthly purchases.

SPECIAL RULES.

WATER.

RULE 43.

Purity of Water Supply: (a) All water furnished by any utility for human consumption and general household purposes should be free from disease producing organisms, injurious chemical or physical substances, and agreeable to the sight and smell.

(b) Water which rarely shows the presence of the "B. Coli Group" and which has a reasonably low "Bacterial Count" under the usual standard test methods will ordinarily be considered safe from the standpoint of disease producing organisms.

RULE 44.

Chemical and Bacteriological Analyses: (a) Each utility furnishing water for human consumption or household purposes shall take a sample monthly, or as much oftener as this Commission or the State Board of Health may require, from the source of supply or any point in the service designated by this Commis-

sion or the State Board of Health, in accordance with the rules for sampling water as prescribed by the State Board of Health, and shall forward same to the State Chemist at Boulder, Colorado for test and analysis. Such test and analysis shall be made free of charge. The result of such test and analysis shall be recorded in triplicate, one copy to be furnished to this Commission, one to the State Board of Health and one to the utility.

(b) Each utility supplying water to a town or city of five thousand (5,000) inhabitants or more, according to the last census of the United States, shall provide and use suitable testing equipment for making proper tests for bacillus coli and other bacteria, and tests for turbidity and quantity of matter in suspension, whereby the water furnished by it to consumers shall be tested at least once a week and at such other times and whenever required by this Commission. The results of such tests shall be recorded in triplicate, one copy to be sent to the State Board of Health, one copy to be sent to this Commission and one copy to be retained by the utility.

The Commission reserves the right to require, under its supervision, an extended bacteriological as well as physical and chemical examination, when deemed advisable for any particular water furnished.

(c) The results of all tests made, either by the State Chemist or by the utility, shall be kept on file and available for public inspection for a period of at least two years. These records must indicate when, where and by whom each test was made. The standard methods of water analysis recommended by The American Public Health Association for 1912, except as hereinbefore provided, should be followed as regards chemical, physical and bacteriological examinations and collection of water, and any departure therefrom should be specifically stated.

(d) Whenever tests made by the State Chemist, by the utility, or for any other purpose disclose the presence of bacillus coli or a high bacterial count, the utility shall employ all reasonable means to make its water supply safe for human and domestic purposes.

RULE 45.

Operation of "Dead Ends": "Dead Ends" in the distributing mains should be avoided as far as possible. Where such "dead ends" exist, they should be flushed at least once each week. To insure compliance with this requirement, it is suggested that where feasible all "dead ends" be equipped with hydrants.

RULE 46.

Adequate Pressure Required: Every effort shall be made to maintain a steady pressure which will not at any time fall below

the fixed minimum for domestic service. In addition to furnishing commercial service, each utility furnishing fire hydrant service must be able at any time within reasonable notice to supply added fire service in accordance with the best standard practice covering service to local fire fighting equipment and facilities.

When the foregoing pressure requirements are outlined in a reasonable manner by the ordinances under which the utility operates, they should be complied with as set forth therein.

RULE 47.

Pressure Surveys: Each utility furnishing water service in cities of 1,000 inhabitants or more shall maintain a graphic recording pressure gauge at its plant, down-town office, or at some central point in the distributing system or each subdivision thereof, where continuous records shall be made of the pressure in the mains at that point.

Utilities operating in cities of five thousand or more inhabitants shall equip themselves with one or more graphic recording pressure gauges in addition to the foregoing and shall make frequent records, each covering intervals of at least 24 hours duration, of the water pressure at various points on the system. All records or charts made by these meters shall be identified, dated and kept on file, available for inspection for a period of at least two years.

RULE 48.

Meters: No service water meter shall be allowed in service which has an incorrect gear ratio or dial train, or is in any way mechanically defective, or shows an error in measurement in excess of three per cent., plus or minus, when registering water at stream flow, equivalent to approximately one-tenth, one-half and full normal rating under average service pressure. When adjustment is necessary, such adjustment should be made as accurately as practicable for average rate of flow under actual conditions of installation. Tests for accuracy shall be made with suitable testing devices in accordance with the best modern water meter practice.

RULE 49.

Periodic Tests: Unless otherwise ordered by the Commission each service water meter installed shall be periodically removed, inspected and tested in accordance with the following schedule, or as much oftener as the results obtained may warrant to insure compliance with the provisions of Rule 48.

Five-eighths inch meters, ten years, or for each 100,000 cubic feet of registration.

(2 Colo. PUC)

Three-fourths inch meters, eight years, or for each 150,000 cubic feet of registration.

One inch meters, six years, or for each 300,000 cubic feet of registration.

All meters above one inch, every four years.

RULE 50.

Request Tests: Each utility furnishing metered water service shall make a test of the accuracy of any service water meter free of charge upon the request of a consumer; provided that the meter has not been tested within the twelve months period prior to such request, and provided that the consumer will agree to accept the result of such test as a basis for the adjustment of the difference claimed. A written report giving the result of such request test shall be made to the consumer requesting same, the original record being kept on file at the office of the utility for a period of at least two years.

RULE 51.

Tests by Commission: (a) Any service water meter will be tested by an employe of the Commission upon written application of the consumer for such test. For such test a fee shall be forwarded to the Commission by the consumer when making application, which fee shall be refunded to the consumer by the utility if the meter be found fast beyond the limits prescribed in Rule 52. The schedule of fees for Commission tests of water service meters is as follows:

For each meter not exceeding 1 inch capacity	$2.50
For each meter exceeding 1 inch but not exceeding 2 inches capacity	4.00
For meters exceeding 2 inches capacity	8.00

(b) Upon written application to the Commission by any water utility, the Commission will make a test on any of the utility's service meters upon payment of the scheduled fee.

RULE 52.

Adjustment of Bills for Meter Errors: (a) If on test of any service water meter, made upon the request of the consumer, by either the utility or the Commission, it is found to be more than four per cent. fast, additional tests shall be made to determine the average error of the meter.

(b) Average error: The average error of a water meter in tests made by the Commission or the utility at the request of the

consumer shall be defined as one-third of the algebraic sum of the errors when tested in accordance with Rule 47.

(c) When a meter is found to have a positive average error —that is, is fast—in excess of four per cent. on tests made at the request of the consumer by either the Commission or the utility, the utility shall refund to the consumer an amount equal to the excess charged for the water incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, provided that this period does not exceed one year.

(d) When a water meter is found to have a negative average error—that is, is slow— in excess of four per cent. in tests made at the request of the consumer of either the Commission or the utility, the utility may make a charge to the consumer for the water incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, provided that this period does not exceed one year.

(e) If a meter is found not to register for any period the utility shall estimate a charge for the water used by averaging the amounts registered over similar periods preceding or subsequent thereto, or over corresponding periods in previous years.

RULE 53.

Meter Testing Equipment: Each utility furnishing metered water service in cities of 1,500 or more inhabitants shall maintain suitable water meter testers and keep same in proper adjustment so as to accurately register the condition of the meters at all times.

Each water meter tester must be accompanied by a certificate of calibration indicating that the volumes or weighing devices used have been referred to proper standards, which standards have been certified by the National Bureau of Standards, or some testing laboratory or other authority of recognized standing.

Meter testers must be located in a large comfortable working space, easily accessible, and equipped with all necessary facilities and accessories. They must be available for inspection and use at all reasonable hours by the authorized representatives of this Commission.

APPENDIX B

Classification of Accounts for Electric Utilities.
(First Issue, effective January 1, 1916.)

INTRODUCTION.

LIST OF ACCOUNTS.

DEFINITION OF ACCOUNTS.

INTRODUCTION.

The uniform system of accounts contained in this circular is established and issued by The Public Utilities Commission under the provisions of the Public Utilities Act, particularly Section 33.

> "Section 33. The Commission shall have power to establish a system of accounts to be kept by all public utilities or to classify said public utilities, and to establish a system of accounts for each class, and to prescribe the manner in which such accounts shall be kept."

The system of accounts and records, fully set forth in this pamphlet and designated as "A Uniform Classification of Accounts for Electric Utilities," is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

Each such utility shall carry on its books the accounts and records herein prescribed, and shall accurately keep such accounts in accordance with the requirements, definitions, and instructions contained and set out in this pamphlet.

The utility shall keep its records in such a manner as to show the full facts connected with matters covered by the accounts provided herein. When, for the purpose of improving the efficiency of administration and operation it is desirable to further refine or allocate the general accounts, the same may be supported by other records in which the details shall be fully stated, and the entries in the general accounts, as specified in this classification, shall contain such references to the detailed records as will enable a ready identification and verification of the facts therein recorded, but no change shall be made in the general classification accounts herein prescribed without permission of the Commission having been first obtained.

This system of accounts and records, herein prescribed, shall be used and kept by all public utilities engaged in the generation, transmission or sale of electricity, including municipally owned or operated electric utilities.

When the same utility plant supplies service in different localities, so far as practicable, the accounts of such utility shall be so kept that the operating expense and operating revenue in each locality may be easily determined. Any utility in doubt as

to whether in its case separate accounts should be kept, and to what extent, should confer with the Commission.

This classification has been prepared with a view of making it applicable to varied localities and conditions, and to all electric utilities. In order that uniformity may be secured in the application of the provisions of this classification, the accounting officers of the utilities are urged to correspond with the Commission should any difficulties arise with regard to the interpretation of any account or rule herein prescribed.

The Commission does not bind itself to approve any item set out in any account, either as to amount or character, for rate-making purposes. The classification of accounts is designed to set out the facts in connection with the income, expenses, etc., that the Commission may determine therefrom, for rate-making purposes, just what consideration shall be given to the various items in the several accounts.

Upon this classification will be based the annual report to be made to the Public Utilities Commission.

All records and accounts, including enlargements, subdivisions or refinements of these prescribed accounts, are to be open at all times to the examination of this Commission.

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

LIST OF BALANCE SHEET ACCOUNTS.

ASSETS.

PLANT INVESTMENT.

CURRENT ASSETS.

Quick Assets.

Business Assets.

OTHER ASSETS.

SUSPENSE.

LIABILITIES.

CAPITAL STOCK.

FUNDED DEBT.

CURRENT LIABILITIES.

ACCRUED LIABILITIES.

PERMANENT AND CORPORATE RESERVES.

PROFIT AND LOSS.

LIST OF PLANT INVESTMENT ACCOUNTS.

INTANGIBLE.

TANGIBLE.

POWER PLANT EQUIPMENT.

TRANSMISSION AND TRANSFORMATION.

DISTRIBUTION.

MISCELLANEOUS.

LIST OF INCOME ACCOUNTS.

OPERATING ACCOUNTS.

Transmission.

Storage Battery.

Distribution.

Utilization.

Commercial Expense.

New Business.

General Expense.

LIST OF NON-OPERATING ACCOUNTS.

NON-OPERATING REVENUES.

NON-OPERATING EXPENSES.

LIST OF DEDUCTIONS FROM INCOME.

LIST OF APPROPRIATION ACCOUNTS.

BALANCE SHEET ACCOUNTS.

ASSETS.

PLANT INVESTMENT.

101-190. Plant Investment

All tangible and intangible property having a life of more than one year is included in this account.

For details and definitions of the various accounts coming under this heading see pages 346 to 354, inclusive.

CURRENT ASSETS.

This is a broad generalization of all property devoted to the purposes of the business other than plant investment and these are divided under separate headings. Owing to the difference in character of the items they should be separately listed on the balance sheet, as only by this means can the immediate cash status of the business be ascertained.

Quick Assets.

201. Cash

Charge to this account all money coming into the possession of the corporation and in which the corporation has the beneficial interest. This includes coin of the United States, United States treasury notes, gold and silver certificates and greenbacks and bank bills payable to bearer. Also charge to it all bank credits, checks and drafts receivable, subject to satisfaction or transfer upon demand (whether payable to bearer or to order). Credit this account with all cash disbursements of the corporation.

202. Notes Receivable

Charge to this account the cost of all notes receivable (except as below provided) which are the property of the corporation and upon which solvent concerns and individuals are liable or which are sufficiently secured to be considered good. This account includes demand notes, drafts, etc., issued by others than banks, and time notes, drafts, etc., by whomever issued. This account does not include investments (account No. 226), nor does it include interest coupons.

203. Accounts Receivable.

Charge to this account all amounts owing to the corporation upon open book accounts with solvent concerns and individuals (other than cash deposited in banks); also the cost of all accounts and claims upon which responsibility is acknowledged by solvent concerns or which are sufficiently secured to be considered good, and of all judgments against solvent concerns where the judgment is not appealable or suspended through appeal. This account does not include notes receivable.

204. Other Quick Assets

Charge to this account the cost of all current assets of the corporation which are not included under any of the three preceding accounts.

Business Assets.

205. Materials and Supplies

Charge to this account the cost, including transportation, of all materials and supplies purchased, regardless of whether the same are intended to be consumed in construction or in operation, or later to be sold. Where the original invoices are charged to this account or its sub-accounts, and discounts are later recovered for prompt payment, such discounts shall be credited to the accounts charged by the original invoice.

When any materials or supplies, the cost of which is charged to this account, are issued for use, the net cost of the same shall be credited to this account and debited to the proper construction or operating expense account. Inventories of materials and supplies shall be taken periodically and any shortage or overages disclosed by such inventories shall be credited or debited to this account, and debited or credited to the account "Inventory Adjustments," in case they cannot be assigned to specific accounts.

When the use of any tangible property is discontinued it shall be treated as retired; the original cost of such property shall be credited to the plant investment account in which it is carried, and its value, if any, as second-hand material or junk shall be charged to this account. If such value is not known and cannot readily be determined, it shall be estimated, and errors in such estimates, when determined, shall be adjusted through the accounts involved during the year in which the estimates were made; if later, then through the account "Inventory Adjustments."

Sub-accounts may be opened to this account for the different classes of materials and supplies.

206. Prepaid Accounts

When payments are made in advance of actual accrual thereof, the amount of the advance payment should be charged to this account, or appropriate sub-accounts.

206a. Prepaid Insurance

Charge to this account all premiums on insurance policies when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As premiums thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Insurance" account.

206b. Prepaid Taxes

Charge to this account all taxes when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As taxes thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Taxes" account.

206c. Prepaid Interest

Charge to this account all interest when paid in advance of its accrual, on any obligations of the utility. As the interest thus prepaid accrues, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Interest" account.

207. Miscellaneous Current Assets

Charge to this account the cost of all current assets of the utility not included under any of the preceding current assets accounts. Property readily convertible into money and which is being held with the intent of being so converted into money will be considered as a current asset and charged to this account when it cannot be charged to one of the preceding accounts.

OTHER ASSETS.

226. Investments

By investments, as here used, are meant all properties or securities acquired not for use in present operations, as a means of obtaining or exercising control over other corporations, or for income to be derived from them, or for a rise in value, or for devotion to future operations at a time when it seems probable that they cannot be so advantageously acquired as at the time of actual acquisition. The cost of the corporations' title to any property or securities held as an investment for other than the Sinking Fund should be charged to this account.

227. Reacquired Securities

When securities, whether funded debt or stocks, have been actually issued to bona fide holders for value (or after such issue by another corporation has been assumed by the accounting corporation), and after such issue (or assumption) has been acquired by the corporation under circumstances which require that they should not be treated as paid or retired, they should be charged at their cost to this account.

228. Sinking Funds—Invested

To this account should be charged the cost of live securities in the hands of trustees for the purpose of redeeming outstanding obligations.

229. Sinking Funds—Uninvested

To this account should be charged the amount of cash set aside for investment for the Sinking Funds.

230. Special Deposits

By Special Deposits, as here used, are meant amounts of money and bank credits in the hands of fiscal or other agents of the corporation for the payment of coupons, dividends or other special purposes.

Charges to this account should specify the purpose for which the deposit is made. When such purposes are satisfied this account should be credited with the amount specially deposited to provide such satisfaction.

231. Treasury Securities

Charge to this account the par value of all stocks and bonds which have been authorized and issued by the corporation, held by the treasurer or by a fiscal agent for its benefit, but which have not been sold. When such securities are sold their par value should be credited to this account.

SUSPENSE ACCOUNTS.

251. Debt Discount and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and of the interest thereon accrued at the time the transfer takes place (if it is not proper to charge the difference to "Plant Investment"), the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account.

To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to Account Unamortized Debt Discount and Expense. Such discount and expense may, if desired, be extinguished more rapidly through charges of all or any part of it, either at the time of issue or later, to the year's Profit and Loss Account.

252. Abandoned Property

To this account may be charged the cost of property abandoned because of replacement operations or destroyed as the result of an extraordinary casualty, less salvage recovered, the net loss on such abandoned property because of the financial condition of the company, it may be necessary to spread over a series of years.

The amount so charged to this account should be credited to the plant investment account interested.

253. Jobbing Accounts

Charge to this account the cost of labor and material on all work in progress for account of the customers of the company or others. This account, as work is completed and charges made, should be cleared by a charge through accounts receivable and credited to this account.

254. Clearance, Equalization or Apportionment Accounts

These accounts are designed to carry, temporarily, the cost of operating such facilities as garages, stables, storehouses, etc., and also overhead or burden costs such as it is desirable should be spread uniformly over the construction and operating transactions interested.

The charges to the construction and operating accounts and the contemporaneous credits to these accounts should, unless there is some good reason to the contrary, be so distributed that the costs for any one year will be absorbed by the transactions occurring during that year.

255. Other Suspense

Charge to this account all debits not elsewhere provided for and concerning which the final disposition thereof is uncertain.

256. Open Accounts

Charge may be made to open accounts which are of a temporary nature, and which are held subject to adjustment. When proper location of such accounts is known, this account should be credited and charge made to proper account.

LIABILITIES.

CAPITAL STOCK.

In the accounts of stocks outstanding a separate account shall be opened for each class of stock issued and no two stocks shall be considered of the same class unless they are equal in their interest or dividend rates, voting rights and conditions under which they may be retired, if the right to retire them is contained in the contract of issue. The characteristics of any class of stock in these regards shall be designated in the title of

the accounts opened to cover such stocks and shall be clearly expressed in the first entries to such account. To the account for any class of stocks shall be credited when issued the par value of the amount of such stock issued. If such issue is for money that fact shall be stated, and if for any other consideration than money the persons to whom issued shall be designated and the consideration for which issued shall be described with sufficient particularity to admit of identification; if such issue is to the treasurer or other fiscal agent of the corporation or if by him disposed of for the benefit of the corporation that fact and the name of such agent shall be shown and such agent shall in his account of the disposition thereof show like details concerning the consideration realized thereon, which account, when accepted by the corporation, shall be preserved as a corporate record.

301. Preferred Stock

305. Common Stock

FUNDED DEBT.

311. Funded Debt or Bonds

The funded obligations of the utility shall be divided into classes according to their characteristics, as to the security for the same, the rate of interest, interest dates, and date of their maturity. A separate sub-account shall be opened for each such class of funded indebtedness and no accounts or debts not agreeing in the characteristics mentioned shall be included in the class of funded indebtedness and no accounts or debts not the same sub-account. The titles of each sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the par value of the amount of the evidences of funded indebtedness issued. The entry shall show not only the amount issued but the purpose for which issued, and shall make clear and intelligent reference to the corporate records showing all details connected with such transactions. If the consideration received for the issue is anything other than money, the entries shall show further to whom issued and shall describe with sufficient particularity to identify it the actual consideration received for it. If the issue is to the agent of an undisclosed principal, the name and business address of such agent and the fact of his agency shall be shown in the entry.

315. Unfunded Debt

The mortgage obligations of the utility shall be divided into classes according to their characteristics, as to the security for the issue, the rate of interest, interest dates, and the date of maturity. A separate sub-account shall be opened for each mortgage. The title of each such sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the total receipts from the sale of evidences

of indebtedness secured by the mortgage. The entries shall show the amount of the mortgage debts, the purpose for which such debt was incurred and shall show by intelligent reference all the details connected with such transactions. If the consideration received for the indebtedness is anything other than money the entry shall show the person to whom issued and shall describe with sufficient particularity to identify it the actual consideration received. If the indebtedness is to an agent of an undisclosed principal, the name and business address of such agent and the fact of his agency, shall be stated in the entry.

320. Other Mortgages or Funded Debt

This account shall be raised to show all mortgage indebtedness and transactions pertaining thereto in regard to mortgages other than real estate mortgages as defined in the preceding account Unfunded Debt.

CURRENT LIABILITIES.

321. Notes and Bills Payable

When any note, draft or other bill payable, which matures not later than one year after date of issuance or of demand or assumption by the utility of primary liability thereon, is issued or assumed, the par value thereof shall be credited to this account and when it is paid it shall be charged to this account and credited to Cash or other appropriate account.

322. Accounts Payable

Credit this account, when incurred, with all liabilities of the utility upon open accounts not includible in any of the other current liabilities accounts.

323. Matured Interest on Funded Debt Unpaid.

When interest owing by the electric utility upon any of its funded indebtedness matures and is unpaid, whether the cause of failure is on the part of the coupon holder to present coupons for payment or for other reasons, it shall be credited to this account and charged to the account Unmatured Interest on Funded Debt Accrued to which it had heretofore been credited.

324. Matured Interest on Notes and Bills Payable, Unpaid.

When interest owing by the utility upon any of its notes and bills payable matures and is unpaid, whether the cause of failure is on the part of the holder of the paper to present it for payment or for other reasons. It shall be credited to this account and charged to the account Unmatured Interest on Notes and Bills Payable Accrued to which it had heretofore been credited.

325. Dividends Unpaid

When dividends declared by the corporation become payable they shall be credited to this account and charged to the account Dividends.

330. Deposits.

Credit to this account, as such deposits are made, all cash deposited with the utility by consumers as security for the payment of electric bills. Deposits refunded shall be charged to this account and credited to Cash. Deposits applicable to uncollectible electric bills shall, at the close of the fiscal year or earlier, at the option of the accounting utility, be credited to the account of the consumer involved and debited to this account. Deposits made by employes or others shall also be credited to this account. Detailed records of deposits as between customers and employes will be required by the Commission.

331. Sundry Current Liabilities

Credit to this account at their face value all unfunded obligations upon which the utility is liable and which are not elsewhere provided for.

ACCRUED LIABILITIES.

341. Unmatured Interest on Funded Debt Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon the funded indebtedness of the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Funded Debt Unpaid. When paid, the interest shall be charged to the account Matured Interest on Funded Debt Unpaid and credited to Cash or to the coupon deposit account.

342. Unmatured Interest on Notes and Bills Payable, Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon all notes and bills payable by the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Notes and Bills Payable, Unpaid. When the interest is paid, it shall be charged to the account Matured Interest on Notes and Bills Payable, Unpaid, and credited to Cash or other appropriate account.

343. Taxes Accrued

To this account shall be credited at the close of each month all taxes accrued during the month and corresponding charges shall be made to the Taxes account. Credits to the account Taxes Accrued will be based upon estimates until the amount of the taxes levied for the period is definitely ascertained. Such estimates shall be made upon the best data available, and as soon as

the amount of taxes for the period is known, the account involved shall be adjusted to conform. When any taxes become due they shall be charged to this account.

344. Insurance Accrued

Credit to this account at the close of each month the insurance accrued during the period in question, as determined by the policies of all insurance covering the property of the utility. When such premiums are paid they shall be charged to this account and credited to Cash or other appropriate accounts.

The amount set aside as an insurance reserve by the utility carrying its own insurance either in whole or in part shall be charged to this account.

345. Dividends Accrued.

To this account may be credited at the close of each month the amount of dividends accrued on preferred and common stock during such period at the rates of dividend payments established by the corporation. When such dividends become payable they shall be charged to this account and credited to the account Dividends Unpaid, in which account they shall remain until paid, when such amount shall be charged to Dividends Unpaid, making a corresponding credit to Cash or other appropriate account.

346. Sundry Liabilities Accrued

To this account shall be credited at the end of each month as it is accrued, any other unfunded obligation of the utility not provided for in any of the preceding accrued liability accounts, making a corresponding charge to operating expenses or other expense account.

PERMANENT AND CORPORATE RESERVES.

351. Depreciation Reserve

To this account shall be credited monthly, or as they are made, all charges to the Depreciation Account (hereinbefore described), the income from the investment of any money or from any security belonging to the Depreciation Reserve, and any other appropriations which may have been made to it.

When through wear and tear in service, casualty, inadequacy, supersession or obsolescence, any building, structure, facility or unit of equipment originally charged to capital is no longer economically reparable, and in order to keep the productive capacity of the plant up to its original or equivalent state of efficiency it is necessary to make a complete replacement of such building, structure or unit of equipment, the money cost of the original unit replaced and charged to capital (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to the Depreciation Reserve, and

the excess cost of the substituted unit over such original unit shall be charged to the appropriate capital account.

When any building, structure, facility or unit of equipment originally charged to capital is retired from service and not replaced by any other unit of similar nature or equivalent thereto, the original money cost thereof (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to this account and such amount originally entered or contained in the charges to capital in respect to such unit so being retired shall be credited to the capital account to which it was originally charged, and any adjustments necessary made through the Surplus Account.

The Salvage or scrap value of any unit of equipment retired from service or replaced by any other unit will be credited to this account.

Any analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

352. Amortization Reserve

This account shall be raised to provide for the amortization of intangible capital in service. To it shall be credited monthly, or as they are made, all the amounts charged from time to time through operating expenses to the account Amortization Reserve Requirements, which account is to be set up where the nature of the capital occasions the setting up this reserve. Such reserve shall also be credited with all accumulations resulting from the investment of any moneys or the interest or dividends from any securities belonging to it.

For example, a corporation pays $100,000 for a twenty-year franchise to operate a public utility. In order that this amount shall be set aside out of revenue and the actual capital of the corporation not impaired by dividends paid, there shall be charged monthly to the account Amortization Reserve Requirements, crediting the Amortization Reserve, an amount which, invested at current rates of interest, will at the end of the franchise term have created an amount equivalent to the cost of the franchise.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

353. Unamortized Premium on Debt

When funded debt securities or other evidences of indebtedness are disposed of for a consideration whose cash value is greater than the sum of the par value of such securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of the cash value of such consideration received over the sum of the par value of the securities or other evidences of indebtedness and the accrued interest shall be credited to this account. At monthly intervals

thereafter a proportion of such premium based upon the life of the security or other evidence of indebtedness to maturity shall be charged to this account and credited to "Amortization of Premium on Debt" in "Income" account; or at the option of the corporation the charge to this account may be delayed to a time not later than the date of maturity of the debt, in which case the proportion applicable to the period covered by the then current income account shall be credited to the account "Amortization of Premium on Debt," and the remainder of the credit shall be to the account "Other Additions to Surplus."

354. Sinking Fund Reserves

Sinking fund reserves shall be maintained whenever they are required in pursuance of the provisions of mortgage deeds, deeds of trust, contracts or provisions of the law. A separate Sinking Fund Reserve shall be maintained for each contractual requirement, to which reserve shall be credited any appropriation made in pursuance of the terms of the respective mortgage and trust deeds, contracts, etc., and charged to the account Contractual Sinking Fund Requirements and also accumulations resulting from any security belonging to such particular reserve. The title of each reserve shall clearly indicate the purpose for which it is being maintained.

Any analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

355. Other Permanent Reserves

Credit to this account all reserves not heretofore provided for which are to remain intact during the life of the company.

Sub-accounts may be created for each particular reserve and so designated by title.

356. Temporary Operating Reserves

Credit to this account all temporary reserve not hereinbefore provided for.

Sub-accounts may be used under this classification to further refine any reserve which is desired to be taken care of for operating expenses.

357. Unamortized Debt and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account. To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust

deeds, fees and taxes for recording mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness, and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt, and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to account "Amortization of Debt Discount and Expense." Such discount and expense may, if desired, be amortized more rapidly through charges of all or any part of it, either at the time of issue or later, to the account "Other Deductions from Surplus."

358. Maintenance Reserve

This reserve may be raised by those electric utilities which operate equipment, the repairs to which are occasioned only at remote intervals and are then so considerable in amount as to cause wide fluctations in the operating expenses for the division of operation or group of expenses of which the maintenance account in question is a part.

359. Uncollectible Accounts Reserve

Credit this account every month with the charge made to the account Uncollectible Accounts (Reserve Charge) as explained in connection therewith. When any account for electric service, upon which any debtor is liable to the utility, becomes impossible of collection because of the removal of the debtor beyond the jurisdiction of the state, the operation of the Statute of Limitations, discharge in bankruptcy, or for any other good and sufficient reason after diligent effort to collect the same has been made, such account may be charged to this account and credited to Accounts Receivable, to which it was originally charged.

All accounts which have been charged off as uncollectible, but which are afterwards collected, shall be credited to this reserve.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

376. Premium on Capital Stock

If a premium is realized on any issue of stock such premium should be credited to the sub-account for each class of stock.

The excess of the actual money value of the consideration obtained over the par value of the stock should be considered the premium realized.

PROFIT AND LOSS.

400. Profit and Loss

This account is the connecting link between the Income Account and the Balance Sheet. In it are summarized the losses or gains of a corporation during a given fiscal period resulting from the business transactions during that period, as well as those affected by any disposition of net profits made solely at the option of the corporation, by accounting adjustments not properly attributable to the period or by miscellaneous losses or gains not provided for elsewhere. At the end of each fiscal period the net balances as shown by the Income Account and each Appropriation Account should be closed into this (Profit and Loss) account.

PLANT INVESTMENT ACCOUNT.

All tangible and intangible property having a life in service of more than one year is included in Plant Investment. Intangible property consists of organization expenses, franchises, rights and licenses, etc. Tangible property includes land, buildings, equipment, etc.

INTANGIBLE.

101. Organization

Charge to this account all fees paid to governments for the privilege of incorporation, and all office and other expenditure incident to organizing the corporation or other enterprise and putting it in readiness to do business. This includes cost of preparing and distributing prospectuses, cost of soliciting subscriptions for stock (but not for loans nor for the purchase of bonds or other evidence of indebtedness), cash fees paid to promoters, and the actual cash value at the time of organization of securities paid to promoters for their services in organizing the enterprise, counsel fees, cost of preparing and issuing certificates of stock, and cost of procuring certificates of necessity from state authorities, and other like costs. Like costs incident to preparing and filing certificates of authorization of increase of capital stock, and to the negotiation and issue of stock thereunder, shall be classed as addition. Cost of preparing and filing certificates of amendment of articles of incorporation shall be classed as a betterment. Cost of preparing and filing papers in connection with the extension of the term of incorporation or with reincorporation consequent upon reorganization shall be classed as a renewal. This account shall not include any discounts upon stocks or other securities issued, nor shall it include any costs incident to negotiating loans or selling bonds or other evidence of indebtedness.

102. Franchises (Electric)

To this account shall be charged "the amount (exclusive of any tax or annual charge) actually paid to the State or to a political subdivision thereof as the consideration for the grant of such franchise or right" as is necessary to the conduct of the corporation's electric operations. If any such franchise is acquired by mesne assignment, the charge to this account in respect thereof must not exceed the amount actually paid therefor by the corporation to its assignor, nor shall it exceed the amount specified in the statute above quoted. Any excess of the amount actually paid by the corporation over the amount specified in the statute shall be charged to the account "Other Intangible Electric Capital." If any such franchise has a life of not more than one year after the date when it is placed in service, it shall not be charged to this account, but to the appropriate accounts in "Operating Expenses," and in "Prepayments" if extended beyond the fiscal year.

Payments made to the State or to some subdivision thereof as a consideration for granting an extension for more than one year of the life period of a franchise shall be classed as renewals. Those made as a consideration for franchises or extensions thereof covering additional territory to be operated as a part of an existing system shall be classed as betterments. If the franchises cover separate and distinct new enterprises, the payments therefor shall be classed as original.

NOTE.—Annual or more frequent payments in respect of franchises must not be charged to this account, but to the appropriate tax or operating expense account.

103. Royalties, Licenses

Charge to this account the cost of royalties or licenses paid to licensors and payments to city, town or State (exclusive of taxes) for franchises.

104. Other Intangible Electric Capital

Charge to this account the cost of all other property coming within the definition of intangible capital and devoted to electric operations. All entries of charges to this account shall describe the acquired property with sufficient particularity clearly to identify it, and shall also show specifically the principal from whom acquired and all agents representing such principal in the transaction; also the term of life of such property, estimated if not known, and if estimated, the facts upon which the estimate is based.

TANGIBLE.

105. Land Devoted to Electric Operations

Charge to this account the cost of the accounting corporation's landed capital which is devoted to electric operations as

hereinbefore defined. This includes land occupied by generating stations and their appurtenances, rights of way for transmission and distribution lines and other electric operations; also those for canal and pipe lines, water rights, and rights of pondage, flowage, and submersion, where such rights have lives in excess of one year from the date when such land is placed in service. Such cost includes, when assumed or paid by the purchaser in its own behalf, cost of registration of title, cost of examination of title, conveyancer's and notary's fees, purchasing agent's commissions or fees, or proportion of purchasing agent's salary, taxes accrued to date of transfer of title, and all lines upon the title acquired; also costs of obtaining consents and payments for abutting damages.

NOTE A.—Cost of buildings and other improvements must not be included in this account.

NOTE B.—If at the time of acquisition of an interest in lands it extends to buildings or other improvements thereon, which improvements are devoted by the corporation to its electric operations, and the contract of acquisition does not determine the price of such improvements, they shall be appraised at their fair cash value for use in such operations, and such appraised value shall be charged to the appropriate structures account and excluded from the account "Land Devoted to Electric Operations." If such improvements are not devoted to electric operations, but are devoted to other operations or held as investments, the cost (or appraised value if the cost is not determined in the contract of acquisition) shall be charged to the appropriate investment account or capital account for other operations. If the improvements are removed or wrecked, the salvage (less the cost of removal or wreckage) shall be excluded from the account "Land Devoted to Electric Operations." The entries in this account must be made in such wise as to enable the corporation to show in its annual report to the Public Utilities Commission the subdivision of the cost of its land devoted to electric operations into the following:

Land Occupied by Generating Stations.
Land Occupied by Outside Sub-stations.
Water Rights.
Right of Way.
Other Land Devoted to Electric Operations.

106. Buildings, Fixtures and Structures

Charge to this account the cost of all buildings and other structures of a permanent character devoted to general corporate purposes, not restricted to electric operations and not includible in any of the departmental accounts; also of all fixtures permanently attached thereto and made a part thereof, such as water pipes and fixtures, steam pipes and fixtures for warming and ventilating, gas pipes and fixtures for lighting, etc., electric wiring and fixtures for lighting, signaling, etc.; elevators, etc., and the engines and motors specially provided for operating them; furnaces, boilers, etc., specially provided for producing steam for such engines and for heating, electric generators specially provided for producing current for lighting such buildings, etc. This account includes such piers and other foundations for machinery and apparatus as are designed to be as permanent as the buildings

in (or in connection with) which they are constructed, and to outlast the first machinery or apparatus mounted thereon.

NOTE A.—Among such buildings may be mentioned general office buildings, general shop buildings, general storehouses, general stable buildings, etc. This account is provided for structures of a general or miscellaneous character not assignable to any particular department.

NOTE B.—When furnaces and boilers are used primarily for furnishing steam for some particular department and only incidentally for furnishing steam for heating a general building and operating the equipment therein, the entire cost of such furnaces and boilers shall be charged to the appropriate departmental capital account, and no part to the account "General Structures."

POWER PLANT EQUIPMENT.

Accounts shall be opened as indicated below, to which shall be charged the cost of all equipment and apparatus used in the generation of electric energy, up to and including the station switchboard. It is designed that the cost of all apparatus and equipment shall be so charged and classified that the cost of all apparatus used in connection with the generation of electric energy by any particular motive power will be shown in the account covering such power plant equipment.

The following accounts will be raised:

107. Steam Power Plant and Equipment

Charge this account with the cost of all steam engines and turbines devoted to the production of electric energy, which shall be considered to include steam prime mover accessories as the throttle valve and the governor, also condensers, air and circulating pumps and lubricating systems. Charge also with the cost of all electric generating apparatus driven by steam prime movers together with rotaries and motor-generator sets, exciters, transformers, etc., when not installed in connection with the transmission system. This includes the specially provided foundations and settings of such apparatus. Charge also with all accessory and auxiliary equipment in the steam power generating station, including belts and other transmission equipment, line and counter shafting, pulleys, bus-bars, regulators, station switchboards and equipment such as circuit breakers, switches, meters and their settings, together with special high tension current transformers, high tension lightning arresters, high tension potential transformers, high tension reactive coils, high tension choke coils, high tension grounding devices and resistances, high tension step-up and step-down transformers.

108. Gas Power Plant and Equipment

Charge this account with the cost of all gas engines and turbines devoted to the generation of electric energy, including their foundations and settings, together with such gas prime mover accessories as the inlet valve, governor and igniting and

starting apparatus. Charge also to this account the cost of all electric generating apparatus driven by gas power and rotaries and motor-generator sets, exciters, etc., when not installed in connection with transmission systems. This includes specially provided foundations and settings. Charge also with the cost of all electric equipment of the gas power generating station embracing bus-bars, regulators, station switchboards and equipment as circuit breakers, switches, meters and settings and special high tension transmission equipment at such power station, as high tension bus-bars, high tension switchboards, high tension switches, high tension transformers, high tension lightning arresters, high tension potential transformers, high tension reactive coils, high tension choke coils, high tension grounding devices and resistances and high tension step-up and step-down transformers. Belts, shafting, pulleys and other power transmission equipment in the gas power plant will be charged to this account.

109. Hydraulic Power Works Equipment

Charge to this account the cost of all dams, canals and flumes devoted to the production of hydraulic power and the delivery of water to the head-gate of the water wheels or turbines. Also charge with the cost of wasteways from the outlet of the draft tube to the point of final discharge, including the cost of all gates, valves and other accessories, wasteways, sluices, forebays, etc., in the development of hydraulic power and all accessory canals and aqueducts.

110. Hydraulic Power Plant Equipment

Charge this account with the cost of all water wheels and turbines devoted to the generation of electric energy, including foundations and settings of such hydraulic equipment, their governors and all apparatus appurtenant thereto from the head-gates and governors to the wasteways. Charge also with the cost of all electric generating apparatus driven by hydraulic power and rotaries and motor generator sets, exciters, etc., when not installed in connection with transmission systems, together with their specially provided foundations and settings. Also charge this account with the cost of all electric equipment of the power plant embracing bus-bars, regulators, station switchboards and equipment as circuit breakers, switches, meters and their settings, head-gates, motors and other electric apparatus and special high tension transmission equipment at the power plant, such as high tension bus-bars, high tension switchboards, high tension switches, high tension transformers, high tension lightning arresters, high tension potential transformers, high tension reactive coils, high tension choke coils, high tension grounding devices and resistances and high tension step-up and step-down transformers. Belts, pulleys, shafting and other power transmission apparatus in the hydraulic power plant will be charged to this account.

111. Boiler Plant Equipment

Charge to this account the cost of all equipment devoted to the generation of steam. Charge with the cost of furnaces, boilers, their foundations and settings, boiler fittings, iron and steel smokestacks, feed pump, water feed pipe, injectors, economizers, water heaters, superheaters, valves, flues, steam pipes from the boilers to the engine throttle valves, steam exhaust system, boiler water purification equipment mechanical stokers, cranes, coal and ash conveyors, steam traps, crushers, belt links, wheels, chutes and gates, conveyor cars, winches, motors, buckets, shafts, chains and similar auxiliary equipment in the boiler plant.

112. Gas Producer Equipment

Charge to this account the cost of all equipment devoted to the production of power gas for the purpose of generating electric energy, including the foundations and settings of such producers and their accessories, embracing gas producers, economizers, regenerators, vaporizers, steam injectors, scrubbers, exhauster outfits, seals, appurtenant boilers and pumps, flues and piping, blower engines, gas piping from producers to gas prime movers and to holders, producer gas holders, exhaust piping, etc.

113. Miscellaneous Power Plant Equipment (see 168)

TRANSMISSION AND TRANSFORMATION.

120. Transmission System

Charge this account with the cost of the transmission system, embracing all towers, poles, cross-arms, insulator pins, braces, brackets and other pole fixtures and appliances, guys and other tower and pole supports, and all cables, wires, insulators and insulator material, etc., constituting the transmission system between the point of electric generation or purchase to the point where it is lowered in voltage or changed as to kind of frequency for the purpose of commercial distribution.

121. Sub-Station Equipment and Transformer Station Equipment

Charge to this account the cost of all sub-station and transformer station equipment and apparatus, including the electrical equipment as transformers, motor-generator sets, rotaries, boosters, switchboards, furniture, etc.

130. Storage Battery Equipment

Charge to this account the cost of all storage batteries and storage battery equipment. Where separate buildings and structures have been provided for storage batteries, there will be charged to this account not only the cost of the electrical equipment, but also such other equipment as is a necessary and incidental part of the operation of such battery and included in tangible capital.

DISTRIBUTION.

140. Distribution System

Charge to this account the cost of the distribution system, embracing all towers, poles, cross-arms, insulator pins, braces, brackets, and other pole fixtures and appliances, guys, and other tower and pole supports, and all cables, wires, insulators, and insulating material constituting the distribution system between the central station switchboard or the sub-station or transformer station to the consumers' premises, including the service wiring.

141. Transformers

Charge this account with the cost of all distribution line transformers, both those placed on the premises of the consumer and upon the poles or other supports adjacent thereto. The cost of the original setting of each transformer shall be charged to this account. Transformers and transformer devices operated in connection with the transmission system will not be charged to this account but to the account Sub-Station and Transformer Station Equipment.

MISCELLANEOUS.

142. Meters

Charge to this account the cost of all meters when purchased including all transportation. If it is the policy of the utility to capitalize the first cost of setting the meter in consumers' premises the said cost should be charged to account No. 166, "Customers' Installation." Subsequent removing and resetting of meters will not be charged to this account but to operating expenses.

150. Commercial Lamps and Lamp Equipment

Charge to this account the cost of all arc lamps, Nernst lamps, incandescent lamps and all lamp fixtures and equipment devoted to commercial lighting and included in the tangible capital of the utility. Lamps and lamp equipment having an expectancy of life in service of less than one year will not be charged to this account, but will be considered an operating charge.

160. Municipal Contract Lighting System

Charge to this account the cost of all lighting equipment operated and maintained under the contracts for public lighting entered into with the municipality, embracing public arc light, and incandescent lamps provided for in the contract and all circuits and poles, cross-arms, pins, braces, insulators, arc supports and accessory equipment required under the terms of such con-

tract. There will not be charged to this account the cost of any equipment properly chargeable to Distribution System, this account being designed to cover only the cost of the lighting system devoted to the municipal contract service. Where the terms of the contract or an ordinance of the municipality require extension of mains and services for lighting under the terms of the contract, the cost of such extension as long as used solely for public lighting under such contract will be charged to this account. Entries to this account in respect to such extensions shall be so made as to admit of a detailed statement when called for by the Commission.

162. General Office Equipment

Charge to this account the cost of all equipment of the general office of the electric utility, embracing such items as office furniture and furnishings, movable safes, filing cases and devices, typewriters, adding machines, addressographs and sundry office equipment having an expectancy of life in service exceeding one year.

166. Customer's Installation

Charge to this account the cost of the first setting of meters; also the cost of connecting arc lamps, glower lamps and the first installation of incandescent lamps, provided it is the policy of the corporation to capitalize such costs, otherwise the cost should be charged to the appropriate operating account.

168. Miscellaneous Equipment

Charge to this account all equipment not includible in any of the preceding classified capital accounts, embracing such items as shop appliances, shop and laboratory tools, work tools and instruments, street department work tools and instruments, and other miscellaneous equipment.

169. Utility Equipment

Charge this account with the cost of all utility equipment. This includes wagons, drays, trucks, harnesses, horses, automobiles, bicycles, motorcycles, industrial tramways, etc.

180. Miscellaneous Construction and Equipment Expenditures

Accounts shall be opened as indicated below to which shall be charged all expenditures incurred during construction and before the operation of the electric utility, of the character indicated by the title of the accounts. If expenditures are incurred for the service of engineers, superintendents and other technical skill of an advisory character during the process of construction and such items are not chargeable to any of the following ac-

counts, there may be opened the account Engineering and Superintendence.

NOTE.—Auxiliary accounts.
Salaries during construction.
Office supplies and expenses during construction.
Stationery and printing during construction.
Legal expenses during construction.
Injuries and damages during construction.
Insurance during construction.
Taxes during construction.
Interest during construction.
Discount on bonds during construction.
Miscellaneous expenditures during construction.

190. Cost of Plant Purchased (in Lieu of Plant Constructed)

Charge to this account the cost of the electric plant purchased in case the plant of the utility is obtained by purchase instead of being constructed by it. The entry to this account should show with sufficient detail the name of the parties from whom purchased, the purchase price and all other facts pertinent to such sale, which details will be called for by the Commission.

195. Property in Other Departments

Charge to this account the cost of all property of the corporation coming within the definition of tangible property devoted to other than electrical operation.

200. Unfinished Plant Investment

Charge to this account the amounts expended under plant and equipment in process of construction under estimate or work orders, but not yet ready for service, including such proportion of plant supervision expenses, engineering expenses, tool expenses, supply expenses and general expenses, as may be properly chargeable to the construction work included under this account. As soon as such work is completed the cost of same should be credited to this account and charged to the appropriate Plant Investment Account.

INCOME ACCOUNT.

OPERATING ACCOUNTS.

OPERATING REVENUES.

501. Commercial Lighting

Credit to this account all revenues derived from consumers other than municipal corporations, for electric lighting at flat rates per year, per month, per night, per hour, or other time unit, or on any basis independent of the quantity of energy supplied.

To include also all revenues derived from all consumers, except municipal corporations, for measured electrical energy sup-

plied for electric lighting where the total receipt is dependent on the quantity of energy supplied.

NOTE.—For the purpose of further defining this account, the revenues should be so credited as to be easily designated under the following subdivisions:

(a) Business Lighting.
(b) Domestic Lighting.

NOTE.—Where electrical energy flowing through any meter is used by any other consumer than a municipal corporation for both arc and incandescent lighting, or for arc and incandescent lighting and incidentally for power purposes, such as running fans, sewing machines, etc., the revenues derived therefrom shall be credited to this account.

502. Municipal Lighting—Arc

Credit to this account all revenues derived from lighting streets for municipal corporations by means of arc lamps.

Incandescent

Credit to this account all revenues derived from lighting streets for municipal corporations by means of incandescent electric lights.

NOTE.—In the two foregoing accounts, the word "streets" is to be interpreted to include parks, plazas, and all other public places not classified as buildings.

(a) Municipal Building Lighting

Credit to this account all revenues from lighting municipal buildings by electric lamps.

503. Commercial Power

Credit to this account all revenues derived from all consumers, except municipal, railroad, and other electrical corporations, for electrical energy supplied for heat or power at special flat rates per year, per month, per night, per hour, or other time unit, or on any basis independent of the quantity of energy supplied.

To include also all revenues derived from all consumers, except municipal, railroad, and other electrical corporations, for measured electrical energy supplied for heat or power at special heat or power rates, where the total receipt is dependent on the quantity of energy supplied.

NOTE.—For the purpose of further refining this account, sub-accounts should be used to designate different classes of power, under sub-headings as (a), (b), (c), etc.

504. Municipal Power

(a) Municipal Building Power

Credit to this account all revenues derived for heat or power in municipal buildings where such energy is supplied at power rates and metered separately.

(b) Municipal Utilities Power

Credit to this account all revenues derived from electrical energy supplied municipal corporations for power in operating water works, bridges, stone crushing plants, or other municipal utilities, except municipal buildings, under a division as follows:

To include all revenues derived from energy supplied at a special flat rate dependent only upon a time element and independent of the quantity consumed.

To include all revenues derived from energy supplied at a rate dependent upon the quantity of energy consumed.

505. Sales to Other Public Service Corporations

Credit to this account all revenues derived from electrical energy sold to other electrical corporations, including railroads, to be by them distributed over their own lines to consumers. If any portion of such energy is incidentally consumed by such corporations for their own benefit, whether for light, heat or power, it shall be included herein, if not separately measured or if included under the same contract with that which is distributed by them to consumers.

506. Electric Merchandise and Jobbing Revenue

Under this head credit all revenues from the sale of electric merchandise and from electric jobbing.

Charge under this head the cost to the accounting corporation of electric merchandise sold, such cost including transportation charges paid on such goods.

Also credit under this head the profit or commission accruing to the corporation on all jobbing work performed by it as agent under agency contracts, whereby it undertakes to do jobbing work for another, for a stipulated profit or commission upon its actual expense for labor, material and supplies.

507. Miscellaneous Electric Revenue

Credit to this account all revenues derived from pole and attachment rents and from electrical operations not includible in any of the foregoing accounts.

OPERATING EXPENSES.

Steam Power Generation.

Operation.

601. Superintendence

Salaries of superintendents and assistants, chemists, clerks, elevator men and also that portion of the engineering staff chargeable to the generating plant operations.

602. Wages

(a) Boiler Labor

Labor in boiler room and elsewhere in and about the premises having to do with making steam.

Principal items: Fire room engineer and assistants; water tenders, firemen, coal handlers, ash handlers, boiler cleaners, and feed pumpmen.

(b) Engine Labor

Labor on prime movers.

Principal Items: Chief engineer and assistants, engineers, oilers, wipers and machinists.

(c) Electrical Labor

All labor in connection with the electrical apparatus and devices, beginning with the dynamos direct connected or belted to the prime movers and including the switchboard, feeder terminal board and to where the electric current leaves the station for the transmission or distribution system.

Principal items: System operators or load despatchers; foremen regulators, regulators and assistants, switchboard men, brushmen, wipers, wiremen.

(d) Miscellaneous Labor

Salaries and wages of all employees in and about the steam power generating plant, engaged in operating the plant, including the watchmen, labor of cleaning buildings and yards, janitors, messengers, and general labor not chargeable to any of the foregoing steam power plant labor accounts, excluding maintenance labor.

603. Fuel

Charge to this account the cost of all fuel used for steam, whether coal, oil, gas or other fuel, at the cost f. o. b. station or storage pile. This will include the invoice cost of fuel, freight, switching, rent of railroad sidings, demurrage, cost of unloading from cars or boats to wagons, and cartage to point of delivery at plant for storage, or unloading from scows or cars and conveying to place of storage. In case coal is transferred from one place of storage to another, this cost should also be included; also any discrepancy between the actual amount of coal on hand and that recorded on the books of the company should be taken care of in this account.

604. Water

Charge to this account the cost of water for boilers, for condensers, and for cooling engines. Water used for general station purposes should not be included. Include also boiler compound.

If water is purchased, charge at the contract price or the meter rate.

If water is pumped by the company, charge here the cost of pumping.

This account shall include all labor cost and expense in connection with the handling of water, such as operating the pumping station, and chemicals used in purification and filtration.

605. Lubricants

Charge to this account the cost of lubricants for the moving of machinery in the generating plant. This does not include oil for transformers, grease for wagons, or oil for lanterns, etc.

Oil used in pumping station should be charged against account No. 604—Water.

606. Station Supplies and Expenses

Charge to this account the cost of all supplies, tools, etc., used in the generating plant which are consumed in the operating process, also the general and miscellaneous expenditures in the plant not specifically chargeable to other accounts, as follows:

(a) Production Supplies

All supplies, tools, etc., used in the generating plant which are consumed in the operating process, the replacement of which does not constitute a repair or renewal.

Principal items: Waste, packing, wipers, gauge glasses, gauge washers, manhole gaskets, handhole gaskets, fire room tools, steam and air hose, bolts, screws, nails, tools, dynamo brushes.

(b) Station Expenses

The general and miscellaneous expenditures in the generating plant not specifically chargeable to other accounts.

Principal items: Lighting, heating and cleaning system, fire protection system, janitors' supplies, ice water, meals and car fares, stationery, telephone and toilet service, care of streets, yards, sidings.

This does not include Miscellaneous Labor, which is cared for under account No. 602—Sub-section (d)—Miscellaneous Labor.

607. Steam Purchased

Charge to this account the cost of all purchased steam consumed in the power plant of the electric department.

Maintenance.

611. Station Buildings

Charge to this account the cost of repairs to buildings and permanent fixtures therein, including furniture, as follows:

(a) Repairs—Sundries

Repairs to furniture, fixtures and such other property in and about the generating plant not specifically provided for elsewhere. Modifications, if not provided for by a reserve fund, should be charged under this classification.

(b) Repairs—Station Structure

Repairs to building and permanent fixtures therein.

Principal items: Plumbing, windows, sashes, roof, doors and walls; heating and lighting systems; grounds and streets, vaults, sheds, pits, sidewalks, elevators, lockers, fire protection system, painting.

612. Steam Equipment

Charge to this account the cost of repairs to boilers, boiler apparatus, piping, engines, turbines and mechanical apparatus, as follows:

(a) Repairs—Boilers

Repairs to boilers, including foundations and settings.

Principal items: Brick work, bridge, wall, arches, jumps, grate bars, stoker bars and webs, furnaces, valves, superheaters, damper regulators, tubes.

(b) Repairs—Boiler Apparatus

Repairs to feed water, coal and ash handling systems and to auxiliary apparatus in fire room.

Principal items: Feed pumps, blower engines, coal conveyor; digger, trolley and cable tower, crusher and belt links, brackets, wheels, chutes and gates. Ash conveyor, cars, winches, buckets, shaft, chain, motors and wheels; filters, boiler compound injector and pump, heaters, primary and secondary, economizers, water meters and wells.

(c) Repairs—Piping

Repairs to piping system in connection with the making of steam and delivery thereof to the prime movers.

Principal items: Water-feed piping, cold main, hot main, salt-water suction, valves, joints, jackets, ash-pit drains and ash-pocket siphons, oil drains from engine crank pits, receiving tanks, filter pumps to engine valve, steam and exhaust line systems, sewer connections, air line.

(d) Repairs—Engines and Turbines

Repairs to prime movers. If plant contains both reciprocating engines and turbines, the cost may be further sub-divided accordingly.

(e) Repairs—Mechanical Apparatus

Repairs to apparatus connected with or auxiliary to the prime movers.

Principal items: Condensers and cooling towers, packing tubes, renewing tubes, heads, doors and miscellaneous. Pumps: air and circulating, wet vacuum, dry vacuum, oil systems; belting, motors, hoists and cranes, shafting, pulleys, etc.

(f) Repairs—Tools and Implements

Repairs and replacement of tools (except fire tools provided for elsewhere).

Principal items: Blacksmiths', machinists', and pipe fitters' tools; pump room tools, engine tools, cutting tools.

613. Electrical Equipment

Charge to this account the cost of all repairs, including labor, to the Electric Generating Plant, Steam, operated generators, station cables, switchboards and instruments and station terminal boards (not including wiring for station lighting) as follows:

(a) Repairs—Main Generators.

(b) Repairs—Exciting Apparatus, including exciters, exciter, motors, motor generators, boosters, regulators and exciting battery.

(c) Repairs—Control and Protective Equipment, including switches, circuit breakers, buses, current and potential transformers, relays, indicating and recording instruments and switchboard panels, lightning arresters, reactances and ground resistances, wires and cables used in conjunction with the foregoing.

(d) Repairs—Transformers and Converting Apparatus other than those used as auxiliary to apparatus under (b) and (c), and other than those included as part of sub-station, if such is operated in conjunction with generating plant.

Hydraulic Generation.

Operation.

625. Superintendence

Charge to this account the salaries and expenses of the Superintendent and General Foreman of the Water Power Generating Plant. This includes also the salaries and expenses of draftsmen and clerical help upon records and accounts directly

chargeable to the water power generating plant, whether at the general office or at the plant.

Charge also with the proportion of the salaries and expenses of the engineering staff chargeable to the water power generating plant operations.

626. Wages

(a) Hydraulic Labor

Charge to this account the wages of all employes operating the hydraulic works, including foremen, intake operators, flume patrolmen, cleaners at reservoirs and screens and all other employes whose duties concern the operation of the hydraulic development outside of the generating station.

(b) Station Labor

Charge to this account the wages of station operators, helpers and oilers engaged in operating the station equipment, beginning at end of penstock, and ending where the electric current leaves the generating station.

The operation of sub-station apparatus and equipment occupying the same building with water power and generating plant shall be charged to account No. 675—Sub-Station Wages (Transmission).

(c) Miscellaneous Labor

Charge to this account the wages of employes in and about the water power generating plant engaged in miscellaneous operating work, including watchmen, labor cleaning buildings and yards, janitors, messengers, and general labor not chargeable to any of the foregoing water power generating plant labor accounts.

627. Water Purchased for Power

Charge to this account the cost of water purchased for water power generation.

628. Lubricants

Charge to this account the cost of lubricants for hydraulic prime movers, machinery connected therewith and auxiliary pumping and exciting machinery. This does not include transformer oil, wagon grease or oil for lanterns.

Charge also to this account the cost of recovering oil from waste and the cost of filtering and handling.

629. Station Supplies and Expenses

Charge to this account all operating supplies consumed and all expenses incurred in the water power generating plant not properly chargeable to other account, as follows:

(a) Production Supplies

All supplies used in the water power generating plant which are consumed in the operating process, the replacement of which does not constitute a repair or a renewal.

Principal items: Waste, packing, wiping supplies, gauge glasses, gaskets, bolts, screws, nails, dynamo and motor brushes, cans for containing rags and waste, transformer oil and hand oil cans.

(b) Station Expenses

The general and miscellaneous expenditures in the water power generating plant not properly chargeable to other account.

Principal items: Operation of lighting, heating, cleaning and fire protection systems, janitors' supplies; ice, meals and car fares; stationery, including station report forms; toilet service. Charge also to this account the proportion of stable and vehicle expense chargeable to water power generation.

Maintenance.

635. Reservoirs, Dams, Canals and Pipe Lines

(a) Repairs—Dams and Intakes

Charge to this account the cost of repairing dams and intakes with their appurtenant gates, valves, weirs, spillways, screens, etc.

(b) Repairs—Flumes and Canals

Charge to this account the cost of repairing flumes, canals, tunnels or other conduits between the intake gates and the forebay, together with the apparatus appurtenant thereto.

(c) Repairs—Reservoirs and Forebays

Charge to this account the cost of repairing storage reservoirs and forebays. This includes repairs to linings of walls and bottoms, gate houses and headgate equipment at the head of penstocks.

(d) Repairs—Penstocks and Tailraces

Charge to this account the cost of repairing and renewing penstocks or other pressure pipes between the forebay gates and the water wheels, and also all waste ways or channels conducting water from the outlet of the draft tubes to the point of final discharge.

(e) Repairs—Way and Cars

Charge to this account the cost of repairing and renewing rolling stock, roadbed and steel in connection with spur tracks, tramways, inclines, freight car barges, etc., which are a part of the hydraulic development.

(f) Repairs—Telephone System

Charge to this account the cost of repairing and renewing telephone lines, telephone apparatus and switchboards of the telephone system in the water power generating station and between the station and the headworks. The cost of repairing and renewing telephone apparatus and switchboards used jointly for production and transmission should be apportioned between this account and account No. 684 (d) Telephone System Transmission.

636. Wheels and Governors

Charge to this account the cost of repairing and renewing water wheels, governors and their accessories. This includes all equipment from penstocks to tailraces, such as gates, valves, pumps, piping, etc., used in connection with water wheels and governors.

Principal items: Water wheels and housings, needle valves, nozzles, deflecting hoods, relief valves, air compressors for surge tanks, pumps for governors and necessary piping in connection therewith.

637. Electrical Equipment

(a) Generators and Transformers

Charge to this account the cost of repairing generators, exciters and other electric generating apparatus driven by hydraulic power; motor-generator exciter sets, transformers used for transmission purposes.

NOTE.—Maintenance of motors and transformers for driving auxiliary apparatus shall be charged to the appropriate equipment accounts.

(b) Switchboards, Switching Apparatus and Wiring

Charge to this account the cost of repairing switchboards and switching apparatus, meters and equipment. This includes such items as bus bars, oil switches, disconnecting switches, instrument transformers, grounding protecting devices, static relief equipment inside the station, remote control and signaling apparatus, storage batteries for operating station equipment, and all high tension and low tension wiring except that for local lighting.

NOTE.—When apparatus as listed in this account receives power from the generators, or from transmission lines, and transforms or converts it for delivery to the distribution system, the maintenance of such apparatus shall be charged to the appropriate sub-station equipment maintenance accounts under Transmission.

638. Miscellaneous Station Equipment

Charge to this account the cost of repairing all miscellaneous equipment in and about the water power generating station which is not properly included in one of the regular maintenance accounts.

Principal items: Shafting, belting, rope and cable drives, clutches, pulleys, idler wheels, hoists, cranes, tools and all other accessory equipment.

639. Station Buildings

Charge to this account the cost of repairing water power generating plant buildings and fixtures and maintaining grounds.

Principal items: Permanent foundations for equipment; furniture, fixtures and other property in and about the water power generating plant not specifically provided for elsewhere; plumbing for water, sewage and drainage; apparatus for heating, lighting and ventilating; fire protection system; grounds, streets and sidewalks; lockers; paintings; employes' dwellings and other miscellaneous buildings used in connection with the water power generating plant.

NOTE.—Permanent foundations are those designed as a part of the permanent construction of the building and independent of their use in connection with any particular unit of equipment. The maintenance of foundations prepared especially for certain units of equipment and designed to last no longer than such units, shall be charged under the appropriate Maintenance of Equipment accounts.

Gas Generation.

Operation.

651. Superintendence

Charge to this account the salaries of superintendents and assistants, chemists, clerks, elevator men and also that portion of the engineering staff chargeable to the generating plant operations.

652. Wages

(a) Fuel Labor

Charge this account with all operating labor engaged in the production of power gas, including the handling of fuel from the storage pile to the gas generators, building and handling of residuals from said building to the point where residuals are placed when removed from the building. Exclude maintenance labor.

(b) Engine Labor

Labor on prime movers.

Principal items: Chief engineer and assistants, engineers, oilers, wipers and machinists.

(c) Electrical Labor

All labor in connection with electrical apparatus and devices, beginning with the dynamos direct connected or belted to the prime movers and including the switchboard, feeder terminal board and to where the electric current leaves the station for the transmission or distribution system.

Principal items: System operators or load dispatchers, foreman regulators, regulators and assistant switchboard men, brushmen, wipers and wiremen.

(d) Miscellaneous Labor

Salaries and wages of all employes in and about the gas power generating plant, engaged in operating the plant, including the watchmen, labor of cleaning buildings and yards, janitors, messengers and general labor not chargeable to any of the foregoing gas power plant labor accounts excluding maintenance labor.

653. Producer Fuel

Charge to this account the cost of all fuel used for producing gas for power purposes at the cost f. o. b. station storage pile. This will include the invoice cost of fuel, freight, switching, rent of railroad sidings, demurrage, cost of unloading from cars or boats to wagons, and cartage to point of delivery at plant for storage, or unloading from scows or cars and conveying to place of storage. In case coal is transferred from one place of storage to another, this cost shall also be included; also any discrepancy between the actual amount of coal on hand and that recorded on the books of the company shall be taken care of in this account.

654. Water

Charge to this account the cost of water used in the production of gas for power purposes and water used for cooling gas prime movers. If water is purchased, charge at the contract price or the meter rate. If water is pumped by the company, charge here the cost of pumping. This account shall include all labor cost and expense in connection with the handling of water, such as operating the pumping station, and chemicals used in purification and filtration.

655. Lubricants

Charge to this account the cost of lubricants for the moving of machinery in the generating plant. This does not include oil for transformers, grease for wagons, or oil for lanterns, etc. Oil used in pumping station should be charged against account No. 654—"Water."

656. Station Supplies and Expenses

Charge to this account the cost of all supplies, tools, etc., used in the generating plant which are consumed in the operating process, also the general and miscellaneous expenditures in the plant not specifically chargeable to other accounts, as follows:

(a) Production Supplies

All supplies, tools, etc., used in the generating plant which

are consumed in the operating process, the replacement of which does not constitute a repair or renewal.

(See account No. 606 for principal items.)

(b) Station Expenses

The general and miscellaneous expenditures in the generating plant not specifically chargeable to other accounts.

Principal items: Lighting, heating and cleaning system, fire protection system, janitors' supplies, ice water, meals and car-fares, stationery, telephone and toilet service, care of streets, yards, sidings, etc. This does not include miscellaneous labor, which is carried under sub-account No. 652 (d)—Miscellaneous Labor.

657. Power Gas Purchased

Charge this account with the cost of all gas purchased for the operation of gas prime movers in the generation of electric energy by gas power.

Maintenance.

661. Station Buildings

Charge to this account the cost of repairs to buildings and permanent fixtures therein, including furniture as follows:

(a) Repairs—Sundries

Repairs to furniture, fixtures and such other property in and about the generating plant, not specifically provided for elsewhere by a reserve fund, should be charged under this classification.

(b) Repairs—Station Structure

Repairs to building and permanent fixtures therein:

Principal items: Plumbing, windows, sashes, roof, doors, and walls, heating and lighting systems, grounds and streets, vaults, sheds, pits, sidewalks, elevators, lockers, fire protection system, painting.

662. Gas Equipment

(a) Producer Equipment

Charge to this account the expenses of all labor and material incurred in repairing apparatus used for the production of gas to be used for power purposes in the generation of electric energy. Also charge with the cost of repairing gas conductor, exhaust pipe, and other auxiliary gas productive apparatus. This includes producers, economizers, regenerators, vaporizers, steam injectors, scrubbers, exhauster outfit, as well as specially provided boilers, pumps, flues and pipes, coal and ash conveyors and accessory equipment, blower engines, holders, and all similar auxiliary equipment.

(b) Engines and Turbines

Charge to this account the expenses of all labor and supplies incurred in repairing gas engines and turbines devoted to the production of electric energy, including valves, governors, ignition and starting apparatus. The maintenance of power apparatus, as shafts, belts, etc., will not be charged to this account.

(c) Mechanical Apparatus.

Charge to this account the expenses of all labor and supplies incurred in repairs to auxiliary equipment, equipment in gas power generating plant, including power transmission equipment, such as shafting, belting, rope, and cable drives, clutches, pulleys, and idlers, wheels, movers, hoists, cranes, blacksmiths' and machinists' tools. All other goods, power plant auxiliary equipment, other than hand tools, the cost of which is to be included in operating expenses. Where electric energy is also generated at the same plant by similar or hydraulic power, repairs to auxiliary equipment, operated for the joint benefit of all methods of current generation, will be apportioned from the respective classes of power accounts.

663. Electrical Equipment.

Charge to this account the cost of all repairs, including labor, station cable, switchboards and instruments, and station terminal boards (not including wiring for station lighting) as follows:

(a) Repairs—Main Generators.

(b) Repairs—Exciting Apparatus, including exciters, motors, motor generators, boosters, regulators and exciting battery.

(c) Repairs—Control and Protective Equipment, including switches, circuit breakers, buses, current and potential transformers, relays, indicating and recording instruments and switchboard panels, lightning arresters, reactances and ground resistances, wires and cables, used in conjunction with the foregoing.

(d) Repairs—Transformers and Converting Apparatus, other than those used as auxiliary to apparatus under (b) and (c) and other than those included as part of sub-station, if such is operated in conjunction with generating plant.

670. Purchased Power

Charge to this account the cost at the point of delivery to the company, of all electric energy purchased including that produced for the company by another corporation under any joint arrangement for the sharing of expense (upon the basis of the relative amounts of benefit to the several participants).

Transmission.

Operation.

675. Sub-Station Wages

(a) Superintendence

Charge to this account the cost of salary of superintendents and clerks, and also that proportion of the salaries of the engineering staff of the company which is chargeable to transmission.

(b) Wages

Charge to this account the wages of regulators, brushmen, etc., employed in the sub-station in connection with the apparatus.

676. Sub-station Supplies and Expenses

Charge to this account the cost of carfares, meals, telephone, stationery, etc., and all expenses in the sub-stations not specifically provided for elsewhere.

677. Subway Rental

Charge to this account the rental of ducts leased from other companies and municipalities.

678. Operation of Transmission Lines

Charge to this account the cost of operating transmission trunk lines between generating and sub-stations, as follows:

(a) Labor and Expense—Subways

Wages and expenses in connection with inspection and cleaning of subway ducts, manholes and sewer connections.

(b) Labor and Expense—Overhead Conductors

Wages and expenses of patrolmen, testers, etc.

(c) Labor and Expense—Underground Conductors

Wages and expenses of patrolmen, testers, etc.

(d) Labor and Expense—Telephone System

Wages and expenses of operators, etc.

Maintenance.

681. Sub-Station Buildings

Charge to this account the cost of all repairs to sub-station buildings, fixtures and grounds, together with all permanent fixtures therein, and appurtenant thereto, including work on streets, drives, sidewalks, vaults, pits, sheds and permanent foundations of apparatus.

682. Sub-Station Equipment

Charge to this account the cost of all repairs to apparatus in sub-station, including sub-station cables, switchboards and instruments, station terminal board, etc.

NOTE.—This does not include the cost of repairing any storage battery equipment, for which see account No. 692.

683. Underground Conduits

Charge to this account the cost of maintaining subways and underground conduits, including repairs of ducts, manholes, sewer connections and traps, paving over such subways, but not any repairs of conductors or the installation thereof.

NOTE.—The cost of repairing conduits, which carry both transmission and distribution conductors should be apportioned between this account and account No. 710.

684. Transmission Lines

Charge to this account the cost of maintaining transmission trunk lines between generating and sub-stations as follows:

(a) Repairs—Overhead Conductors

Wages, expenses and supplies repairing damages to overhead conductors.

(b) Repairs—Pole Lines

Wages, expenses and supplies, repairing, renewing and removing poles, cross arms, braces, guys and other poles, fixtures, towers, painting poles, repaving streets and repairing sidewalks.

(c) Repairs—Underground Conductors

Wages, expenses and supplies used in repairing damages to underground conductors.

(d) Repairs—Telephone System

Repairing and renewing telephone equipment and telephone lines used for the operation of the transmission system. This includes repair parts for telephones, telephone switchboards, wires, insulators, poles and cross arms used in connection with telephone system.

Storage Battery.

Operation.

687. Wages

(a) Superintendence

Charge to this account the cost of salaries of superintendents and clerks, and also that portion of the salaries of the engineering staff of the company which is chargeable to storage batteries.

(b) Wages

Wages of battery men, including inspectors and testers.

688. Supplies

Charge to this account the cost of acid and distilled water in cells, soda, sponges, brooms, mops, waste, rags, hydrometers, thermometers, automatic cell fillers, rubber hose, gloves, shoes, paint, etc., and brushes for boosters and compensators.

Maintenance.

692. Batteries

Charge to this account the cost of all repairs to storage battery equipment, such as storage battery tanks, switches, regulating apparatus, boosters, compensators, renewal of worn out cells, including diaphragms, negative and positive plates, lead in strip, spelter, dry boards, tin bands, sheet lead, glass plates, glass covers, hydrogen generators, jumpers, clamps, lamp black, and items of a similar nature.

693. Accessories

Charge to this account the cost of all repairs to tanks, battery room floor, switches, regulating apparatus, boosters and compensators.

694. Buildings

Charge to this account the cost of all repairs and maintenance of storage battery buildings.

Distribution.

Operation.

701. Wages

(a) Superintendence

Charge to this account salaries of superintendent, assistants and clerks; also that portion of the salaries of the engineering staff of the company assignable to the distribution system.

(b) Wages

Labor under operations not elsewhere provided for.

702. Supplies and expenses

Charge to this account the cost of all supplies consumed and expense incurred in connection with the operation of the distribution system not elsewhere provided for. There will be charged to this account the cost of maps and records, distribution office supplies and expenses, and distribution office rental where such expense is directly chargeable.

(a) Maps and Records

Salaries and expenses for making maps and records of underground and overhead lines, including stationery, drawing material, etc.

(b) Office Expenses

Carfares, meals, stationery, telephone, postage and similar expense in the office of the superintendent of the distribution department.

(c) Miscellaneous Expenses

Expenses not elsewhere provided for and not included under the above sub-sections.

703. Subway Rental

Charge to this account the amount of rental paid for underground conduits leased from other companies and municipalities.

This account should not include the rental paid for conduits used by transmission lines, which is provided for under account No. 677.

704. Distribution Lines.

Charge to this account the cost of operating distribution system as follows:

(a) Labor and Expense—Subways

Wages and expenses inspecting and cleaning subway ducts, manholes and sewer connections.

(b) Labor and Expense—Overhead Conductors

Wages and expenses of patrolmen, testers, etc.

(c) Labor and Expense—Underground Conductors

Wages and expenses of patrolmen, testers, etc.

705. Meters

Charge to this account the cost of salaries and expenses of superintendent and clerks in meter department, testers and inspectors, office expenses, etc., as follows:

(a) Salaries and Expense

Salaries and expenses of superintendent and clerks, and also that portion of the salaries of the engineering staff chargeable to this account.

(b) Testing

Wages and expenses testing and inspecting meters in consumers' premises or in meter shops.

(c) Miscellaneous Expense

Stationery, postage, telephone, light, fuel, testers' tools and supplies, etc.

706. Setting and Removing Meters and Transformers

Charge to this account the cost of setting and removing meters and transformers, connecting and disconnecting services as follows:

(a) Meters

Wages, expenses and supplies resetting, changing and removing meters in consumers' premises; also the cost of connecting and disconnecting services.

NOTE.—If it is the rule of the utility to capitalize the first cost of setting meters, the cost should be charged to account No. 166.

(b) Transformers

Wages, expenses and supplies resetting, inspecting, testing, replacing and removing transformers, either in consumers' premises, on poles or in manholes.

Maintenance

710. Underground Conduits

Charge to this account the cost of maintaining subways and underground conduits, including repairs of ducts, manholes, sewer connections and traps, paving over such subways and all ducts and conduits, but not any repairs of conductors or the installation thereof.

NOTE.—The cost of maintaining underground conduits and subways, which carry both transmission and distribution conductors, should be apportioned between this account and the account No. 683.

711. Overhead Lines

Charge to this account the cost of maintenance of overhead conductors and pole lines as follows:

(a) Repairs—Conductors

Wages, expenses and supplies repairing damages to overhead conductors.

(b) Repairs—Pole Lines

Wages, expenses and supplies repairing, renewing and removing poles, cross-arms, braces, guys and other pole fixtures, towers, painting poles, repaving streets and repairing sidewalks.

712. Underground Conductors

Charge to this account the cost of wages, expenses and supplies repairing damaged underground conductors.

713. Services

Charge to this account the cost of wages, expenses and supplies repairing, services, both underground and overhead, leading from the mains to the consumers' premises.

714. Transformers

Charge to this account the cost of all labor and material employed in repairing transformers, including renewing oil, repainting, rewinding, removing and replacing; also repairs to switches and cutouts—the property of the company in consumers' premises.

715. Meters

Charge to this account the cost of wages, expenses and supplies repairing meters, including new parts, new jewels, cleaning and painting.

716. Buildings and Grounds

Charge to this account the cost of all labor and material expended in the repair and maintenance of distribution buildings and grounds.

Utilization.

Operation.

721. Commercial Arc Lamps

Charge to this account the cost of trimming and inspecting arc lamps on customers' premises. Principal items: Trimming, inspecting, installing and removing lamps.

722. Incandescent Lamps

Charge this account with the cost of first installation of incandescent lamps on consumers' premises and the subsequent renewal thereof, including cartage and delivery expenses, cost of photometering incandescent lamps, as follows:

(a) Installation

Cost of the first installation of incandescent lamps on consumers' premises, unless consumer is charged for the first installation, or unless it is the policy of the company to capitalize the first installation under account Income.

(b) Renewal

Cost of renewing incandescent lamps on consumers' premises, including cartage and delivery expense, cost of photometering incandescent lamps. This account shall be credited with any rebate received for the return of stubs, or allowances relating thereto.

723. Inspection—Customers' Premises

Charge this account with the cost of inspection of customers' premises, including such matters as the charge for municipal certificates, charge for Board of Fire Underwriters' inspection certificates, and that portion of the salaries and expenses of the engineering staff, or of any other departments than distribution

department, engaged in technical work properly assignable to this account.

724. Customer's Installation

Charge to this account the cost of all labor and material furnished gratuitously to consumers for inside work.

Principal items: Attention to complaints or to improving the character of service, replacing or repairing wiring fixtures or electrical appliances, moving appliances from place to place in house, reconnecting same.

725. Municipal Street Arc Lamps

Charge to this account the cost of all labor and material in trimming, inspecting and operating municipal street arc lamps.

726. Municipal Street Incandescent Lamps

Charge this account with the cost of first installation of incandescent lamps in the municipal street lighting system, and the subsequent renewal thereof, including cartage and delivery expenses, cost of photometering incandescent lamps, as follows:

(a) Installation

Cost of first installation of incandescent lamps, unless it is the policy of the company to capitalize the first installation under account No. 160.

(b) Renewals

Cost of renewing incandescent lamps, including cartage and delivery expense, cost of photometering incandescent lamps. This account shall be credited with any rebate received for the return of stubs, or allowances relating thereto.

Maintenance.

731. Commercial Arc Lamps

Charge to this account the cost of keeping in repair private consumers' arc lamps and those in municipal buildings, including such matters as setting and removing lamps for repairs and adjustment, repair parts, testing during the adjustment and after repairs; also that portion of the arc lamp shop expense chargeable thereto.

732. Municipal Arc Lamps

Charge to this account the cost, including labor and material in changing lamps for repairs and adjustments, renewals, repairs of mast arms, hangers, poles, ropes, etc., painting poles; also that proportion of arc lamp shop expense chargeable thereto.

733. Municipal Incandescent Lamps

Charge to this account the cost, including labor and material, of repairing municipal incandescent street lamps and fixtures.

NOTE.—This does not include items chargeable to maintenance of poles and their fixtures, or of subways, or conductors.

Commercial Expense.

741. Office Salaries and Expenses

Charge to this account the proportion of salaries and expenses of general officers and assistants in charge of commercial department and salaries of bookkeepers and all clerks in the accounting and collection departments having to do with consumers' accounts, as follows:

(a) Salaries and Expenses—Meter Indexers

Salaries and expenses of meter indexers, including indexers' lamps.

(b) Salaries and Expenses—Accounting Department

Proportion of salaries and expenses of general officer and assistants in charge of commercial department, and salaries of bookkeepers and all clerks in the accounting department having to do with consumers' accounts.

(c) Salaries and Expenses—Collection Bureau

Salaries and expenses of chief and assistants in bureau; collectors' salaries, badges, carfares, delivering bills.

(d) Salaries and Expenses—Contract Department

Salaries and expenses incurred in the contract department, including attention to bill questions; but should not include any item chargeable to New Business.

742. Office Supplies and Expenses

Charge to this account the cost of stationery, meals, carfare, heat, janitor, telephones, rents for commercial offices, and all other incidental expenses.

New Business.

747. Salaries and Expenses

Charge to this account the salaries of the heads of the department maintained for the promotion or development of electrical consumption, including that portion of the salaries of the management and clerks in agency and contract departments assignable to new business.

748. Miscellaneous Supplies and Expenses

Charge to this account the expense of the New Business Department, including the proportion of office rent chargeable thereto, and expenses not provided for in other accounts.

749. Soliciting

Charge to this account all of the amounts paid out for salaries and expense of canvassers, as follows:

(a) Salaries—Canvassers

Salaries and commissions in soliciting new business, preparing estimates, engineering advice, etc.

(b) Expenses—Canvassers

Personal expenses of staff incurred in soliciting new business; also all office sundries in connection therewith.

750. Advertising

Charge to this account all the payments for advertising, as follows:

(a) Salaries and Expenses

Salaries and expenses of advertising manager and clerks.

(b) Sundries

Advertising sundries, including booklets, dodgers, newspaper advertisements, posters, bulletins and all related items.

751. Wiring and Appliances

Charge to this account the cost of all work or devices furnished to consumers without charge, in connection with new business, as follows:

(a) Promotion Wiring

This covers the cost of wiring in consumers' premises furnished without special charge in order to induce new business.

(b) Promotion Signs and Devices

This covers the cost of electric signs and other devices (including delivery and connection charges, and expenses in connection therewith), supplied to consumers without special charge in order to induce new business.

General Expense.

761. Salaries and Expenses of General Officers

Charge to this account the salaries and expenses of the Chairman of the Board, President, Vice-President, Secretary, Treasurer, General Manager, Assistant General Manager, Comptroller, General Auditor, Chief Engineer, General Superintendent, Purchasing Agent and all other officers with jurisdiction extending over the entire system, whose services cannot be satisfactorily allocated to the several departments (also include directors' fees).

762. Salaries and Expenses of General Office Clerks

Charge to this account all of the amounts paid out for salaries of all employes in the general office, as follows:

(a) Accounting Department Expenses

Proportion of salaries of general officer and assistants in accounting department—cashiers, bookkeepers, and clerks—chargeable to this account.

(b) Purchasing Department Expenses

Salaries and expenses of Purchasing Agent and staff.

(c) General Service Expenses

Salaries and expenses of general service in office including mail clerks, stenographic department, telephone operators, etc.

763. Printing and Stationery—General

Charge to this account the cost of all stationery and office supplies in the general office.

764. General Office Expenses

Charge to this account all of the amounts paid out for sundry expense in general office postage, telephones and telegrams, as follows:

(a) Office Sundries

Sundry expenses in general office.

Principal items: Advertising stockholders' meetings, maps, exchange on remittances, post-office box, safe deposit box, traveling expenses, rentals, janitors' supplies, bond and stock expenses.

(b) Postage, Telephone, Telegrams

All expenses of this nature in the general office.

765. Repairs to General Office Buildings

Charge to this account the cost of all labor and material expended in the repairs and maintenance of general office buildings.

766. Expense—General

Charge to this account all of the amounts paid out for salaries and expense of the technical staff which may not be charged to any of the foregoing operating or construction accounts. Include also any expense general to the business not chargeable specifically to general office accounts.

767. Law Expense—General

Charge to this account all law expenses, except those incurred in the defense and settlement of damage claims. This includes salaries and expenses of all counsel, solicitors and attorneys, their

clerks and attendants, and expenses of their offices; cost of law books, printing briefs, legal forms, testimony reports, etc., fees and retainers for services of attorneys not regular employes; court costs and payment of special, notarial and witness fees, not provided for elsewhere; expense in connection with taking depositions, and all law and court expenses not provided for elsewhere.

NOTE.—The compensation of the General Solicitor or Counsel, or other attorneys engaged partially in the defense or settlement of damage suits, or partially in legal work, should be properly proportioned between this account and account Injuries and Damages.

768. Injuries and Damages (Unless the Cost is Chargeable to Plant Investment)

Charge to this account all expenses (other than law expenses provided for in account No. 767) relating to persons killed or injured and property damaged in connection with the operation of the plant, as enumerated under the following heads:

(a) Claim Department Expenses

This head includes salaries and expenses of claim agent, investigators, adjusters, and others engaged in the investigation of accidents and adjustment of claims, including legal expense.

(b) Medical Expenses

This head includes salaries, fees and expenses of surgeons, nursing, hospital attendants, medical and surgical supplies; fees and expenses of coroners and undertakers, and contributions to hospitals.

(c) Injuries to Employes

This head includes amounts paid in settlement of claims of employes for injuries arising in the course of their employment; also wages paid to disabled employes while off duty.

(d) Injuries to Others

This head includes amounts paid in settlement of claims for injuries to individuals other than employes of the Company, including amounts paid for damages to property to those other than employes.

769. Insurance

Charge to this account premiums paid to insure against fire, fidelity, boilers, casualty, burglary, and all other insurance; also amount set aside as an insurance reserve.

770. Relief Department and Pensions

Charge to this account all amounts expended for Pension and Relief Department work and all expenses in connection therewith.

771. Electric Franchise Requirements

Charge to this account at current rates the service furnished in compliance with franchise requirements and for which no payment is received by the corporation; also all direct expense, such as paving and other like matters incurred in compliance with such requirements and for which no reimbursement is received by the corporation. Amounts charged to this account representing free service shall be credited to the below provided account No. 774—Duplicate Electric Charges—Cr.

773. Inventory Adjustments

Charge or credit to this account any shortages or overages shown by the inventory of Materials and Supplies which cannot be distributed to the proper construction or operating expense account.

774. Duplicate Electric Charges—Credit

Credit to this account all charges made to any accounts in electric operating expenses in respect of any electrical energy or other product of electric operations of the utility consumed therein or furnished free to the municipality under franchise requirements.

(a) Rebates and Allowances

Charge to this account all rebates allowed for corrections, error in billing, fast meters, etc.

775. Depreciation Account

Charge to this account at monthly intervals the monthly proportion of the estimated annual depreciation of the tangible property due to wear and tear, obsolescence and inadequacy. The estimate here required shall be made upon a rule designed to effect by its uniform application during the life of the tangible property in service, a charge into operating expenses of the total original cost of such property, less its salvage or scrap value upon retirement. The amount charged to this account shall be concurrently credited to the reserve account No. 351, "Depreciation Reserve."

NOTE.—Until otherwise ordered the amount estimated to cover such wear and tear and obsolescence and inadequacy shall be determined by the accounting utility, based on the utility's knowledge and experience during the preceding years of operation.

This account does not include ordinary repairs and replacements, the extent of which does not amount to a substantial change of identity. All ordinary repairs and replacements must be charged to the property maintenance accounts.

776. Real Estate Rentals

Charge to this account all rentals paid and expenses incurred for buildings or space used for the purposes of the business, unless the premises are used solely for construction purposes, or in

connection with a clearing or apportionment account, in which latter events the rentals should be charged accordingly.

779. Taxes

Charge to this account the amount paid or accrued for taxes of every description applicable to the property of the company devoted to electrical operations including taxes on poles, real estate, buildings, capital stock, franchises, gross receipts, easements and Federal (income) tax.

780. Uncollectible Bills

When after a reasonably diligent effort to collect any account due for electrical energy sold has proved impracticable of collection, it shall be charged to this account and credited to the account receivable in which theretofore charged.

NOTE.—Where no reserve for uncollectible bills is kept, cash received on account of items previously charged off should be credited directly to this account.

NON-OPERATING ACCOUNTS.

NON-OPERATING REVENUES.

782. Rents from Lease of Real Estate and Buildings

Credit to this account monthly, as they accrue, all miscellaneous rent revenues flowing to the corporation as a return upon leased property other than electric plant and equipment.

783. Interest and Dividends from Investments

(a) Interest from Bond and Other Investments

Credit to this account monthly, as it accrues, all interest from bond and other investments; that is to say, all interest accruing to the corporation upon all such of its interest-bearing investments as are liabilities of solvent concerns and individuals.

(b) Dividends from Stock Investments

Credit to this account at their cash values, and as of the date when declared, all dividends declared by solvent concerns upon stocks held by the corporation among its investments.

784. Steam and Heating Department Revenue

Credit to this account all revenues derived from heating buildings by means of exhaust or live steam and hot water at special flat rates; also all revenue derived from the sale of exhaust and live steam for heating and power purposes at metered rates.

785. Miscellaneous Non-Operating Revenues

Credit to this account all non-operative revenues accruing to the company and not provided for in any of the foregoing accounts.

NON-OPERATING EXPENSES.

786. Steam and Heating Department Expenses

Charge to this account all items of operating expenses which can be segregated and originate directly from the production and sale of steam for power and heating purposes, or from the furnishing of heat energy by the medium of steam or hot water.

Charge to this account also the proportion assignable to Steam and Heating Department of all operating expenses (including commercial, promotion and general expenses) which are common to the production and sale of electric energy and the production and sale of steam and heat energy and cannot be directly segregated and assigned to the heat and electric departments respectively. Such proportion shall be determined pro rata upon the basis of steam units utilized in the respective departments, or upon such other basis as will be most equitable for the distribution of the items involved. The proportions of such expenses so charged shall be likewise credited to the respective operating expense accounts of the electric department involved in such division of expense, provided the entire expense has been carried in those accounts in the first instances.

787. Other Non-Operating Expenses

Charge to this account all matters provided for under the following sub-accounts and not included elsewhere.

(a) Rent Expense

This sub-account includes all expense arising in connection with the procuring of revenues from property let out to others, including the cost of negotiating contracts, advertising for tenants, fees paid conveyancers, collector's commissions, cost of enforcing payment of rent, cost of ousting tenants, etc., and all other expense arising in connection with such property. This applies only to leases conveying the property out of the possession of the corporation, and it includes the expense accruing while the property is idle and awaiting an occupant. This sub-account includes cost of maintenance of the property when such cost is borne by the corporation. Such maintenance includes depreciation as well as repairable wear and tear. It does not include taxes.

(b) Interest Expense

This sub-account includes all expense arising in connection with procuring interest upon investments, such as expense of collection, expense of investigating delay in payment, expense of enforcing payment, and the like. It does not include taxes on such investments.

(c) Dividend Expense

This sub-account includes all expense rising in connection with the collection of dividends on stocks of other corporations; also all expense incurred in the investigation of the affairs of the corporation whose stocks are held, whether for the purpose of detecting mismanagement or for the purpose of inducing the declaration of dividends, and all expense connected with enforcing payment of dividends when declared. It does not include taxes on such investments.

(d) Non-Operating Taxes

This sub-account includes all taxes accruing upon non-operating property and all assignable to non-operating revenues.

(e) Uncollectible Non-Operating Revenues

When any non-operating revenues are judged by the corporation to be uncollectible, the amount thereof shall be credited to the account in which theretofore carried, and charged to this sub-account.

(f) Miscellaneous Non-Operating Expense

This sub-account includes all non-operating expense which is not provided for in the foregoing sub-accounts.

DEDUCTIONS FROM INCOME.

788. Interest on Funded Debt

Charge to this account all interest accruing absolutely on the outstanding funded debt of the corporation.

This includes mortgage bonds, income bonds (if interest on such be payable), debentures and mortgages and ground rents.

789. Interest on Unfunded Debt

Charge to this account all interest paid or accrued on promissory notes or other unfunded debt of the utility.

790. Extinguishment of Discount on Securities

Charge to this account at the close of each year the proportion of the unextinguished discount on securities applicable to the period. This proportion shall be such an amount as will completely wipe out the discount on the debt during the interval between issue and maturity of the same. The amount so charged shall be concurrently credited to account No. 251.

The corporation may, if it so desire, wipe out such discount earlier by charging all or any portion thereof to Year's Profit and Loss Account.

791. Sinking Fund Accruals

Charge to this account and credit Sinking Fund Reserves the amount of all accruals required to be made to Sinking Fund

in accordance with the provisions of mortgages or other contracts requiring the establishment of sinking funds.

792. Miscellaneous Deductions from Income

Charge to this account all income deductions not provided for in any of the foregoing accounts.

793. Extinguishment of Premium on Debt—Credit

Credit to this account at or after the close of any fiscal period the proportion of the premium received on outstanding debt at time of issue which is applicable to the period. This proportion is to be determined according to a rule, the uniform application of which during the interval between the issue and the maturity of any debt will completely amortize or wipe out the premium so received. The amount so credited shall be concurrently charged to account No. 353. Such amortization may, at the option of the corporation, be effected by crediting all or any portion of such premium to Profit and Loss account only upon the maturity of the debt.

APPROPRIATIONS.

795. Dividends Declared

Immediately upon the declaration of a dividend, this account should be charged the amount of such dividend and credit made to the account Dividends Payable.

796. Miscellaneous Appropriations

(a) Expenses Elsewhere Unprovided For

Charge to this account all expenses not chargeable as a part of operating expenses or of non-operating expenses, such as fines levied on the corporation for violation of law, for misfeasance, for non-feasance, etc., fines levied on directors, officers and other employes and assumed by the corporation, donations of funds to churches and other associations, and other like expenses and outgoings.

(b) Adjustments of Accounts for Previous Years

Charge or credit to this account all adjustments, affecting previous years' Profit and Loss not applicable to the current fiscal year.

APPENDIX C

Classification of Accounts for Gas Utilities.
(First Issue, Effective January 1, 1916.)

CONTENTS.

INTRODUCTION.

The uniform system of accounts contained in this circular is established and issued by The Public Utilities Commission under the provisions of the Public Utilities Act, particularly Section 33.

> Section 33. The Commission shall have power to establish a system of accounts to be kept by all public utilities or to classify said public utilities, and to establish a system of accounts for each class, and to prescribe the manner in which such accounts shall be kept.

The system of accounts and records, fully set forth in this pamphlet and designated as "A Uniform Classification of Accounts for Gas Utilities," is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

Each such utility shall carry on its books the accounts and records herein prescribed, and shall accurately keep such accounts in accordance with the requirements, definitions, and instructions contained and set out in this pamphlet.

The utility shall keep its records in such a manner as to show the full facts connected with matters covered by the accounts provided herein. When, for the purpose of improving the efficiency of administration and operation it is desirable to further refine or allocate the general accounts, the same may be supported by other records in which the details shall be fully stated, and the entries in the general accounts, as specified in this classification, shall contain such references to the detailed records as will enable a ready identification and verification of the facts therein recorded, but no change shall be made in the general classification accounts herein prescribed without permission of the Commission having been first obtained.

This system of accounts and records, herein prescribed, shall be used and kept by all public utilities engaged in the manufacture, transmission or sale of gas, including municipally owned or operated gas utilities.

When the same utility plant supplies service in different localities, so far as practicable, the accounts of such utility shall be so kept that the operating expense and operating revenue in each locality may be easily determined. Any utility in doubt as

to whether in its case separate accounts should be kept, and to what extent, should confer with the Commission.

This classification has been prepared with a view of making it applicable to varied localities and conditions, and to all gas utilities. In order that uniformity may be secured in the application of the provisions of this classification, the accounting officers of the utilities are urged to correspond with the Commission should any difficulties arise with regard to the interpretation of any account or rule herein prescribed.

The Commission does not bind itself to approve any item set out in any account, either as to amount or character, for rate making purposes. The classification of accounts is designed to set out the facts in connection with the income, expenses, etc., that the Commission may determine therefrom, for rate making purposes, just what consideration shall be given to the various items in the several accounts.

Upon this classification will be based the annual report to be made to the Public Utilities Commission.

All records and accounts, including enlargements, subdivisions or refinements of these prescribed accounts, are to be open at all times to the examination of this Commission.

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

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All tangible and intangible property having a life of more than one year is included in this account.

For details and definitions of the various accounts coming under this heading see pages 406 to 413, inclusive.

CURRENT ASSETS.

This is a broad generalization of all property devoted to the purposes of the business other than plant investment and these are divided under separate headings. Owing to the difference in character of the items they should be separately listed on the balance sheet, as only by this means can the immediate cash status of the business be ascertained.

Quick Assets.

201. Cash

Charge to this account all money coming into the possession of the corporation and in which the corporation has the beneficial interest. This includes coin of the United States, United States treasury notes, gold and silver certificates and greenbacks and bank bills payable to bearer. Also charge to it all bank credits, checks and drafts receivable, subject to satisfaction or transfer upon demand (whether payable to bearer or to order). Credit this account with all cash disbursements of the corporation.

202. Notes Receivable

Charge to this account the cost of all notes receivable (except as below provided) which are the property of the corporation and upon which solvent concerns and individuals are liable or which are sufficiently secured to be considered good. This account includes demand notes, drafts, etc., issued by others than banks, and time notes, drafts, etc., by whomever issued. This account does not include investments (account No. 226), nor does it include interest coupons.

203. Accounts Receivable

Charge to this account all amounts owing to the corporation upon open book accounts with solvent concerns and individuals (other than cash deposited in banks); also the cost of all accounts and claims upon which responsibility is acknowledged by solvent concerns or which are sufficiently secured to be considered good, and of all judgments against solvent concerns where the judgment is not appealable or suspended through appeal. This account does not include notes receivable.

204. Other Quick Assets

Charge to this account the cost of all current assets of the corporation which are not included under any of the three preceding accounts.

Business Assets.

205. Materials and Supplies

Charge to this account the cost, including transportation, of all materials and supplies purchased, regardless of whether the same are intended to be consumed in construction or in operation, or later to be sold. Where the original invoices are charged to this account or its sub-accounts, and discounts are later recovered for prompt payment, such discounts shall be credited to the accounts charged by the original invoice.

When any materials or supplies, the cost of which is charged to this account, are issued for use, the net cost of the same shall be credited to this account and debited to the proper construction or operating expense account. Inventories of materials and supplies shall be taken periodically and any shortage or overages disclosed by such inventories shall be credited or debited to this account, and debited or credited to the account "Inventory Adjustments," in case they cannot be assigned to specific accounts.

When the use of any tangible property is discontinued it shall be treated as retired; the original cost of such property shall be credited to the plant investment account in which it is carried, and its value, if any, as second-hand material or junk shall be charged to this account. If such value is not known and cannot readily be determined, it shall be estimated, and errors in such estimates, when determined, shall be adjusted through the accounts involved during the year in which the estimates were made; if later, then through the account "Inventory Adjustments."

Sub-accounts must be opened to this account as follows:

(a) Coal

Charge to this account the cost of all coal purchased for gas-making purposes at the cost delivered in coal shed or place of storage. Credit this account with coal used, charging the same to the appropriate operating expense account.

(b) Oil

Charge this account with all oil or naphtha purchased for enricher at its cost delivered in the company's storage tanks, including invoice cost, the cost of pumping and piping with the proper proportion for loss by evaporation or leakage. Credit this account with oil as used, charging the same to the appropriate operating expense account.

(c) Coke

Charge this account with the amount of coke produced each month. Credit this account with all sales of coke to the public, and the amount used by the company.

(d) Tar

Charge this account with the total amount of tar made monthly. Credit this account with all sales of tar to the public and the amount used by the company.

NOTE.—Utilities making both coal gas tar and water gas tar should subdivide this account in order to show debits and credits for each kind of tar separately.

(e) Ammonia

Charge this account with all ammonia made each month. Credit this account with all sales of ammonia to the public, and the amount used by the company.

(f) Purifying Material

Charge this account with all labor and cost of material used in making purifying material. Credit this account with the amount of purifying material used and charge to the appropriate operating expense account.

(g) Appliances

Charge to this account the cost, including freight, cartage and handling, of all appliances purchased.

206. Prepaid Accounts

When payments are made in advance of actual accrual thereof, the amount of the advance payment should be charged to this account, or appropriate sub-accounts.

206a. Prepaid Insurance

Charge to this account all premiums on insurance policies when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As premiums thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Insurance" account.

206b. Prepaid Taxes

Charge to this account all taxes when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As taxes thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Taxes" account.

206c. Prepaid Interest

Charge to this account all interest when paid in advance of its accrual, on any obligations of the utility. As the interest thus prepaid accrues, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Interest" account.

207. Miscellaneous Current Assets

Charge to this account the cost of all current assets of the utility not included under any of the preceding current assets accounts. Property readily convertible into money and which is being held with the intent of being so converted into money will be considered as a current asset and charged to this account when it cannot be charged to one of the preceding accounts.

OTHER ASSETS.

226. Investments

By investments, as here used, are meant all properties or securities acquired not for use in present operations, as a means of obtaining or exercising control over other corporations, or for income to be derived from them, or for a rise in value, or for devotion to future operations at a time when it seems probable that they cannot be so advantageously acquired as at the time of actual acquisition. The cost of the corporation's title to any property or securities held as an investment for other than the Sinking Fund should be charged to this account.

227. Reacquired Securities

When securities, whether funded debt or stocks, have been actually issued to bona fide holders for value (or after such issue by another corporation has been assumed by the accounting corporation), and after such issue (or assumption) has been acquired by the corporation under circumstances which require that they should not be treated as paid or retired, they should be charged at their cost to this account.

228. Sinking Funds—Invested

To this account should be charged the cost of live securities in the hands of trustees for the purpose of redeeming outstanding obligations.

229. Sinking Funds—Uninvested

To this account should be charged the amount of cash set aside for investment for the Sinking Funds.

230. Special Deposits

By Special Deposits, as here used, are meant amounts of money and bank credits in the hands of fiscal or other agents of the corporation for the payment of coupons, dividends or other special purposes.

Charges to this account should specify the purpose for which the deposit is made. When such purposes are satisfied this account should be credited with the amount specially deposited to provide such satisfaction.

231. Treasury Securities

Charge to this account the par value of all stocks and bonds which have been authorized and issued by the corporation, held by the treasurer or by a fiscal agent for its benefit, but which have not been sold. When such securities are sold their par value should be credited to this account.

SUSPENSE ACCOUNTS.

251. Debt Discount and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and of the interest thereon accrued at the time the transfer takes place (if it is not proper to charge the difference to "Plant Investment"), the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account.

To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to Account Unamortized Debt Discount and Expense. Such discount and expense may, if desired, be extinguished more rapidly through charges of all or any part of it, either at the time of issue or later, to the year's Profit and Loss Account.

252. Abandoned Property

To this account may be charged the cost of property abandoned because of replacement operations or destroyed as the result of an extraordinary casualty, less salvage recovered, the net loss on such abandoned property because of the financial condition of the company, it may be necessary to spread over a series of years.

The amount so charged to this account should be credited to the plant investment account interested.

253. Jobbing Accounts

Charge to this account the cost of labor and material on all work in progress for account of the customers of the company or others. This account, as work is completed and charges made, should be cleared by a charge through accounts receivable and credited to this account.

254. Clearance, Equalization or Apportionment Accounts

These accounts are designed to carry, temporarily, the cost of operating such facilities as garages, stables, storehouses, etc., and also overhead or burden costs such as it is desirable should be spread uniformly over the construction and operating transactions interested.

The charges to the construction and operating accounts and the contemporaneous credits to these accounts should, unless there is some good reason to the contrary, be so distributed that the costs for any one year will be absorbed by the transactions occurring during that year.

255. Other Suspense

Charge to this account all debits not elsewhere provided for and concerning which the final disposition thereof is uncertain.

256. Open Accounts

Charge may be made to open accounts which are of a temporary nature, and which are held subject to adjustment. When proper location of such accounts is known, this account should be credited and charge made to proper account.

LIABILITIES.

CAPITAL STOCK.

In the accounts of stocks outstanding a separate account shall be opened for each class of stock issued and no two stocks shall be considered of the same class unless they are equal in their interest or dividend rates, voting rights and conditions under which they may be retired, if the right to retire them is contained in the contract of issue. The characteristics of any class of stock in these regards shall be designated in the title of the accounts opened to cover such stocks and shall be clearly expressed in the first entries to such account. To the account for any class of stocks shall be credited when issued the par value of the amount of such stock issued. If such issue is for money that fact shall be stated, and if for any other consideration than money the persons to whom issued shall be designated and the consideration for which issued shall be described with sufficient particularity to admit of identification; if such issue is to the treasurer or other fiscal agent of the corporation or if by him disposed of for the benefit of the corporation that fact and the

name of such agent shall be shown and such agent shall in his account of the disposition thereof show like details concerning the consideration realized thereon, which account, when accepted by the corporation, shall be preserved as a corporate record.

301. Preferred Stock

305. Common Stock

FUNDED DEBT.

311. Funded Debt or Bonds

The funded obligations of the utility shall be divided into classes according to their characteristics, as to the security for the same, the rate of interest, interest dates, and date of their maturity. A separate sub-account shall be opened for each such class of funded indebtedness and no accounts or debts not agreeing in the characteristics mentioned shall be included in the class of funded indebtedness and no accounts or debts not the same sub-account. The titles of each sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the par value of the amount of the evidences of funded indebtedness issued. The entry shall show not only the amount issued, but the purpose for which issued, and shall make clear and intelligent reference to the corporate records showing all details connected with such transactions. If the consideration received for the issue is anything other than money, the entries shall show further to whom issued and shall describe with sufficient particularity to identify it the actual consideration received for it. If the issue is to the agent of an undisclosed principal, the name and business address of such agent and the fact of his agency shall be shown in the entry.

315. Unfunded Debt

The mortgage obligations of the utility shall be divided into classes according to their characteristics, as to the security for the issue, the rate of interest, interest dates, and the date of maturity. A separate sub-account shall be opened for each mortgage. The title of each such sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the total receipts from the sale of evidences of indebtedness secured by the mortgage. The entries shall show the amount of the mortgage debts, the purpose for which such debt was incurred and shall show by intelligent reference all the details connected with such transactions. If the consideration received for the indebtedness is anything other than money the entry shall show the person to whom issued and shall describe with sufficient particularity to identify it the actual consideration received. If the indebtedness is to an agent of an undisclosed principal, the name and business address of such agent and the fact of his agency, shall be stated in the entry.

320. Other Mortgages or Funded Debt

This account shall be raised to show all mortgage indebtedness and transactions pertaining thereto in regard to mortgages other than real estate mortgages as defined in the preceding account Unfunded Debt.

CURRENT LIABILITIES.

321. Notes and Bills Payable

When any note, draft or other bill payable, which matures not later than one year after date of issuance or of demand or assumption by the utility of primary liability thereon, is issued or assumed, the par value thereof shall be credited to this account and when it is paid it shall be charged to this account and credited to Cash or other appropriate account.

322. Accounts Payable

Credit this account, when incurred, with all liabilities of the utility upon open accounts not includible in any of the other current liabilities accounts.

323. Matured Interest on Funded Debt Unpaid

When interest owing by the utility upon any of its funded indebtedness matures and is unpaid, whether the cause of failure is on the part of the coupon holder to present coupons for payment or for other reasons, it shall be credited to this account and charged to the account Unmatured Interest on Funded Debt Accrued to which it had heretofore been credited.

324. Matured Interest on Notes and Bills Payable, Unpaid

When interest owing by the utility upon any of its notes and bills payable matures and is unpaid, whether the cause of failure is on the part of the holder of the paper to present it for payment or for other reasons, it shall be credited to this account and charged to the account Unmatured Interest on Notes and Bills Payable Accrued to which it had heretofore been credited.

325. Dividends Unpaid

When dividends declared by the corporation become payable they shall be credited to this account and charged to the account Dividends.

330. Deposits

Credit to this account, as such deposits are made, all cash deposited with the utility by consumers as security for the payment of bills. Deposits refunded shall be charged to this account and credited to Cash. Deposits applicable to uncollectible bills shall, at the close of the fiscal year or earlier, at the option of the accounting utility, be credited to the account of the consumer involved and debited to this account. Deposits made

by employes or others shall also be credited to this account. Detailed records of deposits as between customers and employes will be required by the Commission.

331. Sundry Current Liabilities

Credit to this account at their face value all unfunded obligations upon which the utility is liable and which are not elsewhere provided for.

ACCRUED LIABILITIES.

341. Unmatured Interest on Funded Debt Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon the funded indebtedness of the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Funded Debt Unpaid. When paid, the interest shall be charged to the account Matured Interest on Funded Debt Unpaid and credited to Cash or to the coupon deposit account.

342. Unmatured Interest on Notes and Bills Payable, Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon all notes and bills payable by the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Notes and Bills Payable, Unpaid. When the interest is paid, it shall be charged to the account Matured Interest on Notes and Bills Payable, Unpaid, and credited to Cash or other appropriate account.

343. Taxes Accrued

To this account shall be credited at the close of each month all taxes accrued during the month and corresponding charges shall be made to the Taxes account. Credits to the account Taxes Accrued will be based upon estimates until the amount of the taxes levied for the period is definitely ascertained. Such estimates shall be made upon the best data available, and as soon as the amount of taxes for the period is known, the account involved shall be adjusted to conform. When any taxes become due they shall be charged to this account.

344. Insurance Accrued

Credit to this account at the close of each month the insurance accrued during the period in question, as determined by the policies of all insurance covering the property of the utility. When such premiums are paid they shall be charged to this account and credited to Cash or other appropriate accounts.

The amount set aside as an insurance reserve by the utility carrying its own insurance either in whole or in part shall be charged to this account.

345. Dividends Accrued

To this account may be credited at the close of each month the amount of dividends accrued on preferred and common stock during such period at the rates of dividend payments established by the corporation. When such dividends become payable they shall be charged to this account and credited to the account Dividends Unpaid, in which account they shall remain until paid, when such amount shall be charged to Dividends Unpaid, making a corresponding credit to Cash or other appropriate account.

346. Sundry Liabilities Accrued

To this account shall be credited at the end of each month as it is accrued, any other unfunded obligation of the utility not provided for in any of the preceding accrued liability accounts, making a corresponding charge to operating expenses or other expense account.

PERMANENT AND CORPORATE RESERVES.

351. Depreciation Reserve

To this account shall be credited monthly, or as they are made, all charges to the Depreciation Account (hereinbefore described), the income from the investment of any money or from any security belonging to the Depreciation Reserve, and any other appropriations which may have been made to it.

When through wear and tear in service, casualty, inadequacy, supersession or obsolesence, any building, structure, facility or unit of equipment originally charged to capital is no longer economically reparable, and in order to keep the productive capacity of the plant up to its original or equivalent state of efficiency it is necessary to make a complete replacement of such building, structure or unit of equipment, the money cost of the original unit replaced and charged to capital (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to the Depreciation Reserve, and the excess cost of the substituted unit over such original unit shall be charged to the appropriate capital account.

When any building, structure, facility or unit of equipment originally charged to capital is retired from service and not replaced by any other unit of similar nature or equivalent thereto, the original money cost thereof (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to this account and such amount originally entered or contained in the charges to capital in respect to such unit so being retired shall be credited to the capital account to which it was originally charged, and any adjustments necessary made through the Surplus Account.

The salvage or scrap value of any unit of equipment retired

from service or replaced by any other unit will be credited to this account.

Any analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

352. Amortization Reserve

This account shall be raised to provide for the amortization of intangible capital in service. To it shall be credited monthly, or as they are made, all the amounts charged from time to time through operating expenses to the account Amortization Reserve Requirements, which account is to be set up where the nature of the capital occasions the setting up this reserve. Such reserve shall also be credited with all accumulations resulting from the investment of any moneys or the interest or dividends from any securities belonging to it.

For example, a corporation pays $100,000 for a twenty-year franchise to operate a public utility. In order that this amount shall be set aside out of revenue and the actual capital of the corporation not impaired by dividends paid, there shall be charged monthly to the account Amortization Reserve Requirements, crediting the Amortization Reserve, an amount which, invested at current rates of interest, will at the end of the franchise term have created an amount equivalent to the cost of the franchise.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

353. Unamortized Premium on Debt

When funded debt securities or other evidences of indebtedness are disposed of for a consideration whose cash value is greater than the sum of the par value of such securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of the cash value of such consideration received over the sum of the par value of the securities or other evidences of indebtedness and the accrued interest shall be credited to this account. At monthly intervals thereafter a proportion of such premium based upon the life of the security or other evidence of indebtedness to maturity shall be charged to this account and credited to "Amortization of Premium on Debt" in "Income" account; or at the option of the corporation the charge to this account may be delayed to a time not later than the date of maturity of the debt, in which case the proportion applicable to the period covered by the then current income account shall be credited to the account "Amortization of Premium on Debt," and the remainder of the credit shall be to the account "Other Additions to Surplus."

354. Sinking Fund Reserves

Sinking fund reserves shall be maintained whenever they are required in pursuance of the provisions of mortgage deeds, deeds

of trust, contracts or provisions of the law. A separate Sinking Fund Reserve shall be maintained for each contractual requirement, to which reserve shall be credited any appropriation made in pursuance of the terms of the respective mortgage and trust deeds, contracts, etc., and charged to the account Contractual Sinking Fund Requirements and also accumulations resulting from any security belonging to such particular reserve. The title of each reserve shall clearly indicate the purpose for which it is being maintained.

Any analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

355. Other Permanent Reserves.

Credit to this account all reserves not heretofore provided for which are to remain intact during the life of the company.

Sub-accounts may be created for each particular reserve and so designated by title.

356. Temporary Operating Reserves

Credit to this account all temporary reserve not hereinbefore provided for.

Sub-accounts may be used under this classification to further refine any reserve which is desired to be taken care of for operating expenses.

357. Unamortized Debt and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account. To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, fees and taxes for recording mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness, and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt, and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to account "Amortization of Debt Discount and Expense." Such discount and expense may, if desired, be amortized more rapidly through charges of all or any part of it, either at the time of issue or later, to the account "Other Deductions from Surplus."

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358. Maintenance Reserve

This reserve may be raised by those utilities which operate equipment, the repairs to which are occasioned only at remote intervals and are then so considerable in amount as to cause wide fluctuations in the operating expenses for the division of operation or group of expenses of which the maintenance account in question is a part.

359. Uncollectible Accounts Reserve

Credit this account every month with the charge made to the account Uncollectible Accounts (Reserve Charge) as explained in connection therewith. When any account for service, upon which any debtor is liable to the utility, becomes impossible of collection because of the removal of the debtor beyond the jurisdiction of the state, the operation of the Statute of Limitations, discharge in bankruptcy, or for any other good and sufficient reason after diligent effort to collect the same has been made, such account may be charged to this account and credited to Accounts Receivable, to which it was originally charged.

All accounts which have been charged off as uncollectible, but which are afterwards collected, shall be credited to this reserve.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

376. Premium on Capital Stock

If a premium is realized on any issue of stock such premium should be credited to the sub-account for each class of stock.

The excess of the actual money value of the consideration obtained over the par value of the stock should be considered the premium realized.

PROFIT AND LOSS.

400. Profit and Loss

This account is the connecting link between the Income Account and the Balance Sheet. In it are summarized the losses or gains of a corporation during a given fiscal period resulting from the business transactions during that period, as well as those affected by any disposition of net profits made solely at the option of the corporation, by accounting adjustments not properly attributable to the period or by miscellaneous losses or gains not provided for elsewhere. At the end of each fiscal period the net balances as shown by the Income Account and each Appropriation Account should be closed into this (Profit and Loss) account.

PLANT INVESTMENT ACCOUNT.

All tangible and intangible property having a life in service of more than one year is included in Plant Investment. In-

tangible property consists of Organization expenses, franchises, rights and licenses, etc. Tangible property includes land, buildings, equipment, etc.

INTANGIBLE.

101. Organization

Charge to this account all fees paid to governments for the privilege of incorporation, and all office and other expenditure incident to organizing the corporation or other enterprise and putting it in readiness to do business. This includes cost of preparing and distributing prospectuses, cost of soliciting subscriptions for stock (but not for loans nor for the purchase of bonds or other evidence of indebtedness), cash fees paid to promoters, and the actual cash value at the time of organization of securities paid to promoters for their services in organizing the enterprise, counsel fees, cost of preparing and issuing certificates of stock, and cost of procuring certificates of necessity from state authorities, and other like costs. Like costs incident to preparing and filing certificates of authorization of increase of capital stock, and to the negotiation and issue of stock thereunder, shall be classed as addition. Cost of preparing and filing certificates of amendment of articles of incorporation shall be classed as a betterment. Cost of preparing and filing papers in connection with the extension of the term of incorporation or with reincorporation consequent upon reorganization shall be classed as a renewal. This account shall not include any discounts upon stocks or other securities issued, nor shall it include any costs incident to negotiating loans or selling bonds or other evidence of indebtedness.

102. Franchises

To this account shall be charged "the amount (exclusive of any tax or annual charge) actually paid to the State or to a political subdivision thereof as the consideration for the grant of such franchise or right" as is necessary to the conduct of the corporation's gas operations. If any such franchise is acquired by mesne assignment, the charge to this account in respect thereof must not exceed the amount actually paid therefor by the corporation to its assignor, nor shall it exceed the amount specified in the statute above quoted. Any excess of the amount actually paid by the corporation over the amount specified in the statute shall be charged to the account "Other Intangible Capital." If any such franchise has a life of not more than one year after the date when it is placed in service, it shall not be charged to this account, but to the appropriate accounts in "Operating Expenses," and in "Prepayments" if extended beyond the fiscal year.

Payments made to the State or to some subdivision thereof as a consideration for granting an extension for more than one year of the life period of a franchise shall be classed as renewals. Those made as a consideration for franchises or extensions thereof

covering additional territory to be operated as a part of an existing system shall be classed as betterments. If the franchises cover separate and distinct new enterprises, the payments therefor shall be classed as original.

NOTE.—Annual or more frequent payments in respect of franchises must not be charged to this account, but to the appropriate tax or operating expense account.

103. Royalties, Licenses

Charge to this account the cost of royalties or licenses paid to licensors and payments to city, town or State (exclusive of taxes) for franchises.

104. Other Intangible Capital

Charge to this account the cost of all other property coming within the definition of intangible capital and devoted to gas operations. All entries of charges to this account shall describe the acquired property with sufficient particularity clearly to identify it, and shall also show specifically the principal from whom acquired and all agents representing such principal in the transaction; also the term of life of such property, estimated if not known, and if estimated, the facts upon which the estimate is based.

TANGIBLE.

105. Lands Used in Operation of Property

Charge to this account the cost of all land used and useful in the operation of the gas utility whose term of enjoyment is over one year from the grant thereof. Such cost includes, when assumed or paid by the purchaser in its own behalf, cost of registration of title, cost of examination of title, conveyancer's and notary's fees, purchasing agent's commissions or fees, or proportion of purchasing agent's salary, taxes accrued to date of transfer of title, and all liens upon the title acquired; also costs of obtaining consents and payments for abutting damages.

NOTE A.—Cost of buildings and other improvements must not be included in this account.

NOTE B.—If at the time of acquisition of an interest in lands it extends to buildings or other improvements thereon, which improvements are devoted by the corporation to its operations, and the contract of acquisition does not determine the price of such improvements, they shall be appraised at their fair cash value for use in such operations, and such appraised value shall be charged to the appropriate structures account and excluded from the account "Land Used in Operation of Property." If such improvements are not devoted to gas operations, but are devoted to other operations or held as investments, the cost (or appraised value if the cost is not determined in the contract of acquisition) shall be charged to the appropriate investment account or capital account for other operations. If the improvements are removed or wrecked, the salvage (less the cost of removal or wreckage) shall be excluded from the account "Land Used in Operation of Property." The entries in this account must be made in such wise as to enable the corporation to show in its annual

report to the Public Utilities Commission the subdivision of the cost of its land devoted to gas operations into the following:

Land Occupied by Coal Gas Plant.
Land Occupied by Water Gas Plant.
Right of Way.
Other Land Devoted to Gas Operations.

106. Buildings, Fixtures and Structures

Charge to this account the cost of all buildings, structures and improvements in the lands used and useful in the production of the gas and all processes performed upon it.

Such buildings, structures and fixtures include retort houses, purification and condensing houses, steam production structures, coal and other fuel sheds, and other storage buildings and structures, barns, stables, garages and all fixtures attached to such buildings and a permanent part thereof, together with fences, walks, trestles, drives, grading, and improvement of grounds.

This account includes such piers and other foundations for machinery and apparatus as are designed to be as permanent as the buildings in (or in connection with) which they are constructed, and to outlast the first machinery or apparatus mounted thereon.

This account shall also include general office buildings, shop buildings, storehouses, laboratories, etc., and all buildings of a general or miscellaneous character.

GAS PRODUCTION APPARATUS.

Accounts shall be opened as indicated below to which shall be charged the cost of all apparatus used in the production of gas by all methods, and including all apparatus used in connection with any process performed upon such gas prior to its entrance into the storage holders. The following accounts shall be kept:

108. Coal Gas Apparatus

Charge this account with the cost of all coal gas apparatus. This account includes retorts, gas and steam engines and turbines at works devoted to the production of coal gas, purifying apparatus, such as washers, scrubbers, purifiers and other auxiliary equipment, condensers, exhausters, station meters, apparatus for charging retorts, apparatus for handling coal gas making supplies and residuals therefrom and storage holders at works, holder accessory apparatus, together with foundations and settings of such apparatus.

NOTE.—If water gas is also produced or the apparatus is also used in connection with the production processes performed upon purchased gas, the cost of such apparatus will be apportioned accordingly.

NOTE.—If district holders are also operated, a sub-account should be opened, to which the cost of all holders will be charged.

109. Water Gas Apparatus

Charge this account with the cost of all water gas production apparatus. This account shall include the cost of all water gas generators, gas and steam engines and turbines at works devoted to the production of water gas, purifying apparatus, such as washers, scrubbers, purifiers and other auxiliary equipment, condensers, exhausters, station meters, apparatus for handling water gas making supplies and the residuals therefrom, storage holders at works and holder accessory apparatus, together with the foundations and settings of such apparatus.

NOTE.—If coal gas is also produced at the works, or part of the apparatus is used in connection with the production processes performed upon purchased gas, the cost of such jointly used apparatus will be apportioned accordingly.

NOTE.—If district holders are operated, a sub-account should be opened to which should be charged the cost of all holders.

110. Purchased Gas Apparatus

Charge this account with the cost of apparatus used in connection with production processes performed upon purchased gas. This includes the cost of collecting and pumping apparatus, gas and steam engines and turbines at works devoted to such production processes in connection with purchased gas, purifying apparatus such as washers, scrubbers, purifiers and other auxiliary equipment, condensers, exhausters, station meters, storage holders at works and holder accessory apparatus, together with the foundations and settings of such apparatus.

NOTE.—If coal gas and water gas are also produced at the works and a part of the apparatus above referred to is used jointly, the cost of such jointly used apparatus will be apportioned accordingly.

NOTE.—If district holders are operated, a sub-account should be opened to which will be charged the cost of all holders.

111. Boilers and Boiler Plant Equipment

Charge to this account the cost of all equipment devoted to the generation of steam. Charge with the cost of furnaces, boilers, their foundations and settings, boiler fittings, iron and steel smoke-stacks, feed pump, water feed pipe, injectors, economizers, water heaters, super-heaters, valves, flues, steam pipes from the boilers to the engine throttle valves, steam exhaust system, boiler water purification equipment, mechanical stokers, cranes, coal and ash conveyors, steam traps, crushers, belt links, wheels, chutes and gates, conveyor cars, winches, motors, buckets, shafts, chains and similar auxiliary equipment in the boiler plant.

DISTRIBUTION.

121. Mains

Charge to this account the cost of all mains in place. This includes all mains from the yard connections to district holders and from the works governor to the beginning of services, including the cost of all trenching, bracing, main pipe, special cast-

ings, lead packing, shut-offs, manholes, gates, valves and the cost of filling trenches and restoring the surface to its former condition or that required by the municipal authorities at the time the main is installed.

NOTE.—Utilities desiring to do so may open sub-accounts showing the construction cost of low pressure street mains, booster mains and pumping mains separately.

122. Services

To this account shall be charged the cost of the utility's property in services in or leading to consumer's premises. This includes the cost of material in place, the cost of trenching for placing services, service pipe, service boxes, stop-cocks, etc., and the cost of filling trenches and restoring the surface to its proper condition. When consumers are required to pay some or all of the cost of services only that portion of the cost not chargeable to the consumer is chargeable to this account, and in all cases where only a portion of the cost of the service is chargeable to this account, the entry to this account shall show the entire cost of services as well as the amount charged to this account. Where services extending only from the main to the curb or to the lot line are placed before actually required for the purpose of supplying the consumer, the entry of cost should show that fact. Such services will be required to be separately reported in the annual report to the Commission.

MISCELLANEOUS.

123. Meters

Charge to this account the cost of all meters when purchased including all transportation. If it is the policy of the utility to capitalize the cost of setting the meter in consumers' premises the said cost should be charged to account No. 124, "Customers' Installation." Subsequent removing and resetting of meters will not be charged to this account but to operating expenses.

124. Customer's Installation

Charge to this account the cost of the first setting of the meter, including the first set of meter fittings and connections in the premises of the consumer, or such portion of such cost as is borne by the utility.

130. Municipal Contract Lighting System

Charge to this account the cost of the utility's property used and useful in supplying gas for lighting under the municipal contract for lighting. This includes the cost of lamps, posts and all accessory apparatus and appliances, including the first cost of setting and installation. The cost of removal or changing positions of any lighting equipment will not be charged to this account, but to the appropriate maintenance account. Where the terms of the contract require an extension of mains and services

which are to be used exclusively for street lighting, such extensions may as long as they are used solely for the use defined in the contract in question be charged to this account. Entries to this account in respect to such extension shall be so made as to admit of a detailed statement when called for by the Commission.

140. General Office Equipment

Charge to this account the cost of all equipment of the general office of the gas utility, embracing such items as office furniture and furnishings, movable safes, filing cases and devices, typewriters, adding machines, addressographs and sundry office equipment having an expectancy of life in service exceeding one year.

142. Utility Equipment

Charge this account with the cost of all utility equipment. This includes wagons, drays, trucks, harnesses, horses, automobiles, bicycles, motorcycles, industrial tramways, etc.

143. Miscellaneous Equipment

Charge to this account all equipment not includible in any of the preceding classified capital accounts, embracing such items as shop appliances, shop and laboratory tools, work tools and instruments, street department work tools and instruments, and other miscellaneous equipment.

145. Miscellaneous Construction and Equipment Expenditures

Accounts shall be opened as indicated below to which shall be charged all expenditures incurred during construction and before the operation of the utility, of the character indicated by the title of the accounts. If expenditures are incurred for the service of engineers, superintendents and other technical skill of an advisory character during the process of construction and such items are not chargeable to any of the following accounts, there may be opened the account Engineering and Superintendence.

NOTE.—Auxiliary accounts.
Salaries during construction.
Office supplies and expenses during construction.
Stationery and printing during construction.
Legal expenses during construction.
Injuries and damages during construction.
Insurance during construction.
Taxes during construction.
Interest during construction.
Discount on bonds during construction.
Miscellaneous expenditures during construction.

146. Cost of Plant Purchased (in Lieu of Plant Constructed)

Charge to this account the cost of the plant purchased in case the plant of the utility is obtained by purchase instead of being constructed by it. The entry to this account should show with

sufficient detail the name of the parties from whom purchased, the purchase price and all other facts pertinent to such sale, which details will be called for by the Commission.

147. Property in Other Departments

Charge to this account the cost of all property of the corporation coming within the definition of tangible property devoted to other than gas operation.

150. Unfinished Plant Investment

Charge to this account the amounts expended under plant and equipment in process of construction under estimate or work orders, but not yet ready for service, including such proportion of plant supervision expenses, engineering expenses, tool expenses, supply expenses and general expenses, as may be properly chargeable to the construction work included under this account. As soon as such work is completed the cost of same should be credited to this account and charged to the appropriate Plant Investment Account.

INCOME ACCOUNT.

OPERATING ACCOUNTS.

OPERATING REVENUES.

501. Commercial Earnings

Credit this account with all earnings from the sale of gas to commercial consumers for both lighting and fuel purposes when sold separately or through the same meter. Commercial consumers embrace residences, offices, retail mercantile establishments, etc., where the gas purchased is not used primarily for power or industrial purposes. Where, however, some manufacturing or industrial processes are performed in any residence or store, but such process being merely incidental to the broader use of the premises as a commercial consumer and the gas consumed not being separately metered, the total consumption at such premises shall be credited to this account. Where gas is sold at a different rate per M cubic feet for lighting purposes than for fuel purposes, the earnings from each such division shall be credited to subdivisions of this account and reported separately to the Commission as follows:

a. Earnings from Sales for Commercial Lighting.
b. Earnings from Sales for Commercial Fuel.

Gas sold to manufacturing establishments for lighting, fuel and industrial purposes will not be credited to this account.

Where it is the custom of the utility to charge a minimum amount in cases where the consumption during the month is less than a prescribed amount, the total amount of such minimum

charge shall be credited to this account or to its appropriate sub-account. Where it is the custom of the utility to grant a discount from the gross bill or to add a penalty to the bill where payment is not made on or before a prescribed date, such discounts or penalties shall be charged or credited to this account. Utilities desiring to do so may open sub-accounts to show the *Minimum Bill* and the *Discount* or *Penalty* items.

502. Industrial Earnings

Credit this account with all earnings from the sale of gas for lighting, fuel and industrial purposes sold to manufacturing and industrial establishments. Do not credit this account with sales of gas for power purposes. Where gas is sold at a different rate per thousand cubic feet for any particular kind of industrial use, as light, fuel, etc., the earnings from such separate sources shall be credited to appropriate subdivisions of this account and reported separately to the Commission.

Where it is the custom of the utility to charge a minimum amount in cases where the consumption during the month is less than a prescribed amount, the total amount of such minimum charge shall be credited to this account or to its appropriate sub-account. Where it is the custom of the utility to grant a discount from the gross bill or to add a penalty to the bill where payment is not made on or before a prescribed date, such discounts or penalties shall be charged or credited to this account. Utilities desiring to do so may open sub-accounts to show the *Minimum Bill* and the *Discount* or *Penalty* items.

503. Power Earnings

Credit this account with the earnings from all sales of gas for power purposes.

Where it is the custom of the utility to charge a minimum amount in cases where the consumption during the month is less than a prescribed amount, the total amount of such minimum charge shall be credited to this account or to its appropriate sub-account. Where it is the custom of the utility to grant a discount from the gross bill or to add a penalty to the bill where payment is not made on or before a prescribed date, such accounts or penalties shall be charged or credited to this account. Utilities desiring to do so may open sub-accounts to show the *Minimum Bill* and the *Discount* or *Penalty* items.

504. Municipal Contract Lighting Earnings

Credit this account with the earnings from the sale of gas to the municipality for public lighting service, embracing the lighting of streets, alleys, bridges, viaducts, parks, commons, etc., but not the lighting of public buildings unless such are particularly included in the contract. Where municipal buildings are not so

included in the contract for public lighting, they are to be regarded as commercial consumers.

505. Earnings from the Sale of Gas to Other Utilities

Credit to this account all earnings derived from supplying gas to other companies engaged in the production, distribution or sale of gas. Sub-accounts are to be opened for each company to which gas is furnished, the account showing the name of the purchasing gas company, the amount of gas purchased, and the total earnings from such sales, which details will be called for in the annual report to the Commission.

509. Earnings from Residuals

Credit to this account all gross earnings derived from the sale of residuals and by-products. Separate accounts are to be opened for each class of residuals or by-products, showing the earnings from the sale of each as follows:

a. Earnings from the sale of coke.
b. Earnings from the sale of coal gas tar.
c. Earnings from the sale of water gas tar.
d. Earnings from the sale of ammonia.
e. Earnings from the sale of other residuals or by-products.

The amount of earnings from the sale of any residual or by-product is to be determined by the price received at the point of delivery to the purchaser. All expenses incurred in connection with the preparation of residuals or by-products for commercial use, the expenses of their handling, sale and delivery are to be charged to appropriate and corresponding *Residual Expense Accounts* opened for that purpose. The net earnings from the sale of residuals will be carried to the *Income Account.*

510. Profit on Merchandise Sales

Credit to this account the receipts derived from the sale of gas appliances or gas merchandise as lamps, stoves, engines, fixtures and all other appliances used in the consumption or utilization of gas. Profit, as used in this account, is defined as being the excess of the sales price over the cash cost, including the invoice cost, cost of handling, storage, etc. Charge this account with all expenses for labor and material in connection with the sale of such appliances or merchandise. The net amount only, or the profit on merchandise sales is to be carried to the *Income Account.* The credits and charges to this account shall be made in such a manner as to admit of a detailed analysis when called for by the Commission.

NOTE.—Receipts from the sale of superseded apparatus, junk or salvage will not be credited to this account, but to the *Depreciation Reserve.*

511. Profit on Piping and Connections

Credit this account with all earnings derived from piping and connection work performed by the utility. This includes earnings

from services performed on the consumer's premises, such as piping consumer's premises, connecting and disconnecting stoves, engines and other appliances, the re-location of piping or apparatus and other gas-fitting work. If prospective consumers are charged for services performed by the utility in connecting the house piping with the service connection or for laying the service piping, such earnings shall be credited to this account. Where the cost of laying the service is charged to the property owner, such work shall not be included in tangible capital.

Charge to this account all expenses for labor and materials in connection with such operation, the net amount only, or the profit from such piping and connection work, being carried to the *Income Account.* The credits and charges to this account will be made in such a manner as to admit of a detailed analysis when called for by the Commission.

515. Miscellaneous Earnings from Operation

Credit to this account all earnings received from operating transactions not properly includible in the preceding accounts.

OPERATING EXPENSES.

Production.

(A) COAL GAS.

Operation.

601. Superintendence

Charge to this account the total cost of superintendence of the coal gas production plant. This account includes the salaries of the superintendent of works, chemists at works, draftsmen, results man, works foreman, and all clerical help upon all records and accounts pertaining to the production department, whether at the general office or at the works.

NOTE.—If water gas is also produced at the plant, or if a portion of the gas charged to production is purchased, the expense of superintendence will be apportioned over the respective production departments.

602. Retort House Labor

Charge to this account operating labor of all description from the coal in storage to the coke leaving the retort house. This account will include such items as the labor cost of weighing coal, firing benches, operating drawing and charging machines, patching and scurfing retorts, cleaning pipes and lids, weighing and handling coke, etc., including the wages of foremen, firemen, furnace men, retort tenders, patchers, pipe men, lid cleaners, coke wetters, guymen, riggers, shovelers and wheelers of fuel. The cost of bringing coal from storage to charging floor if performed by other than retort house employes will be charged to the cost of coal. The cost of handling coke from outside the retort house

to coke pile or coke yard will be charged to the account *Coke Stock Expense.* Exclude maintenance labor.

603. Purifying Labor

Charge to this account all operating labor in the purification of coal gas. This includes the wages of coal gas purifiers, purifier house foreman, and labor employed in changing purifier boxes, reviving oxide, removing spent oxide, operating conveyors, and general labor employed in the purifier house or in the process of purifying coal gas. Exclude maintenance labor.

NOTE.—If water gas is made and purified by the same employes, or a portion of the gas charged to production is purchased and is purified by the same employes, the total cost of purifying labor at the works will be apportioned over the respective production departments.

604. Miscellaneous Labor

Charge to this account all miscellaneous operating labor in and about the coal gas works not specifically chargeable to any other labor account, such as watchmen, yardmen, laborers engaged in removing snow and refuse, etc. Exclude maintenance labor.

NOTE.—Where water gas is also produced or a portion of the gas charged to production is purchased, the total cost of miscellaneous labor at the works will be apportioned over the respective production departments.

605. Coal Carbonized

Charge to this account as used all coal carbonized at the rate of cost f. o. b. point of delivery at plant for storage. This includes the invoice cost of the fuel, freight, switching, demurrage, cost of unloading and cartage to the point of delivery at the plant for storage. Credit the appropriate stock account with the material as used.

606. Bench Fuel

Charge to this account as used from the *Stock Accounts*, all bench fuel, including the cost per ton of expenses as shown by the *Stock Expense Accounts.* If coke is used, charge at the average net receipts per ton of coke sold for the current year and credit *Coke Stock Account.* If coke is sold under contract, charge the coke used at the contract price.

607. Enricher

If cannel coal is used, charge at the cost of such coal in storage, including the invoice cost, cost of unloading, handling, etc. If oil is used, charge at the cost delivered in storage tanks, including the invoice cost, cost of pumping and piping, with proper proportion for any loss by evaporation or leakage, and credit *Oil Stock Account.*

If water gas is used, charge for the same at the holder cost per thousand cubic feet.

608. Steam

The total expense of generating steam is to be determined through a group of accounts referred to as the *Steam Generation Apportionment Account*. Where a utility is furnishing but one public service from its boiler plant, the details of the steam expense will appear in the *Steam Generation Apportionment Account*, and the total expense as shown therein will be carried to this account in the *Production* group of accounts and so shown in the annual report to the Commission. Where, however, two or more utilities or services are making a demand upon the same boiler equipment, the total steam expense will be apportioned over the departments so using the steam equipment, and the apportioned share of the steam expense incurred for the benefit of coal gas production will be carried to this account. If steam is used in the coal gas plant for other purposes than the production of gas, the expense for steam will be further apportioned, charging the appropriate expense accounts.

609. Miscellaneous Coal Gas Supplies and Expenses

Charge to this account the cost of all operating supplies and expenses incurred at the coal gas works not directly chargeable to any of the preceding production accounts. This includes such items as gas and electricity used at the works for general lighting, water for general purposes, laboratory apparatus and supplies, ice, brooms, lubricants, etc., and works stationery, telephones, etc., if it is desired to distribute such items. Exclude maintenance supplies and expenses.

Maintenance.

611. Repairs of Coal Gas Buildings, Fixtures and Grounds

Charge this account with the expense of all labor and material incurred in repairing buildings and structures used exclusively for the manufacture of coal gas, as condensing and purifying buildings, retort houses, out-buildings, tool houses, etc.

Charge this account also with a proper proportion of the repairs to all buildings which are used for the joint benefit of the coal gas production department and any other department, as for example, buildings, fixtures and grounds also used in the production of water gas, production processes in connection with purchased gas or the generation of steam. The repairs to jointly used buildings, fixtures and grounds will be apportioned, charging to the appropriate maintenance accounts the proportion properly chargeable thereto.

612. Repairs of Benches

Charge this account with the expense of all labor and material used in repairing and renewing benches, including retorts and settings, together with all piping and mains which are a part of the retorts.

613. Repairs of Coal Gas Apparatus

Charge to this account all expenses for labor and material incurred in repairing coal gas machinery and apparatus, embracing such items as purifying apparatus, exhausters, condensers, piping at works, electric and compressed air equipment, pumps, gas holders at works, etc.

NOTE.—If water gas is also produced, or if a part of the gas charged to production is purchased, the cost of repairing equipment or apparatus which is used for the joint benefit of the different kinds of gas will be apportioned to the maintenance accounts of the respective production departments.

(B) WATER GAS.

Operation.

621. Superintendence

Charge this account with the total cost of superintendence of the water gas plant. The account will be charged with the salaries of the superintendent of works, chemists, works draftsmen, results man, works foreman, and all clerical help upon records and accounts pertaining to the water gas production department, whether at the general office or works.

NOTE.—If coal gas is also produced at the works or a portion of the gas charged to the production department is purchased gas, the total cost of superintendence will be apportioned over the respective production departments.

622. Generator House Labor

Charge this account with all operating labor from the coke or coal in storage to the outlet of the seal box. This includes labor employed in measuring and pumping oil to generators, wages of gas makers and assistants; operating, charging, clinkering and cleaning generators; cleaning out seals and wash boxes; and the necessary attention to apparatus, tanks, motors, pumps, blowers and engines while making water gas. Exclude maintenance labor.

623. Purifying Labor

Charge to this account all operating labor in the purification of water gas. This includes the wages of water gas purifiers, house foreman, labor employed in changing purifying boxes, reviving oxide, removing spent oxide, operating conveyors, and general labor employed in the water gas purifier house or in the process of purifying water gas. Exclude maintenance labor.

NOTE.—If the same employes also have charge of purifying coal gas produced at the works or the purification of purchased gas, the total expense for purifying labor will be apportioned over the corresponding accounts of the respective production departments.

624. Steam for Generating Water Gas

The total expense of generating steam is to be determined through a separate group of accounts known as the *Steam Apportionment Account*. Where a plant is operating but one utility

service from its boiler plant, as for example a water gas production department, and all the steam generated is used in the production of water gas, the details of the steam expense will appear in the *Steam Apportionment Account* and the total of that group will be carried to this account. Where, however, two or more services are making a demand upon the same boiler equipment the total cost of steam, as shown by the *Steam Apportionment Account,* will be apportioned over the corresponding accounts of the respective production departments. If steam is used in the water gas plant for other purposes than the production of water gas, the total expense for steam should be apportioned further, charging the appropriate accounts for the benefit of which the expense was incurred.

625. Miscellaneous Labor

Charge to this account all miscellaneous operating labor on and about the water gas work not specifically chargeable to any other labor account, such as watchmen, yard men, laborers engaged in removing snow and refuse, etc. Exclude maintenance labor.

NOTE.—Where coal gas is also produced or a portion of the gas charged to production is purchased, the total cost of miscellaneous labor at the works will be apportioned over the respective *Production* accounts.

626. Generator Fuel

Charge this account with the cost of all generator fuel. If coke is used, charge at the average net receipts per ton of coke sold during the current year. If coke is sold under contract, charge at the contract price. If coal is used charge at the actual cost per ton, f. o. b. point of delivery at the plant for storage. This includes the invoice cost, freight, unloading, cartage from point of delivery to storage, etc.

627. Water Gas Oil

Charge to the account the cost of gas oil or naphtha used in making water gas. This includes invoice cost of oil used, freight, demurrage charges, and labor and cartage employed in getting oil from point of delivery to storage tanks.

628. Enricher

Charge this account with the storage cost of oil, naphtha or other enricher used, including in such cost the invoice cost, freight, demurrage, pumping, labor employed in handling up to storage, cartage, and the loss by leakage and evaporation, as shown by the *Oil Stock Account.*

629. Water

Charge to this account the cost of water used for gas production.

630. Miscellaneous Water Gas Supplies and Expenses

Charge to this account the cost of all operating supplies and expenses incurred at the water gas works not directly chargeable to any of the preceding *Production* accounts. This includes such items as gas and electricity used at the works for general lighting, water for general purposes, laboratory apparatus and supplies, ice, brooms, lubricants, etc., and works stationery, telephones, etc., if it is desired to distribute such items. Exclude maintenance supplies and expenses.

Maintenance.

631. Repairs of Water Gas Apparatus

Charge this account with all expenses for labor and materials in making repairs to water gas apparatus. This includes the relining of generators, refilling carbureters and super-heaters, repairs to clinkering doors, oil sprays, valves, purifying apparatus, exhausters, condensers, conveying apparatus, piping at works, electric and compressed air equipment, pumps, gas holders at works, etc., used exclusively in the production of water gas.

NOTE.—If coal gas is also produced, or a portion of the gas charged to production is purchased product, repairs to that equipment which is used for the joint benefit of the different production departments will be apportioned over the corresponding accounts of the respective production departments.

632. Repairs of Water Gas Buildings, Fixtures and Grounds

Charge this account with all expenses incurred for labor and material in repairing buildings and structures used exclusively for the manufacture of water gas except the steam structures, the repairs to which are included in sub-account *Maintenance of Boiler Plant Buildings, Fixtures and Grounds.*

NOTE.—If coal gas is also produced and if a portion of the product charged to production is purchased gas, repairs to buildings, fixtures and grounds used for the joint benefit of these respective departments will be apportioned over the corresponding maintenance accounts in the respective production departments.

(C) PURCHASED GAS.

Operation.

640. Superintendence

Charge to this account the total cost of superintendence of the purchased gas production department. This account includes salaries of superintendent of works, chemists, works draftsmen, results man, works foreman and all clerical help upon records or accounts pertaining to the purchased gas production department, whether at the general office or at the works.

NOTE.—If coal gas and water gas are produced at the plant, the expense of superintendence of production will be apportioned over the respective production departments.

641. Collecting and Pumping Purchased Gas Labor

Charge this account with the labor cost of collecting and pumping purchased gas where the gas is purchased at the plant of the producing company and pumped to the works of the purchasing company.

642. Purifying Labor

Charge this account with the operating labor cost of purifying purchased gas. This includes the wages of gas purifiers, purifying house foremen, and labor employed changing purifier boxes, reviving oxide, removing spent oxide, operating conveyors and general labor employed in the purifier house or in the process of purifying purchased gas. Exclude maintenance labor.

NOTE.—If coal gas or water gas or both are also produced at the works and the purification of such gas is performed after their mixture, the total cost of purifying labor at the works will be apportioned over the corresponding accounts of the respective production departments.

NOTE.—Labor making new oxide will be charged to *Purifying Material Stock Account.*

643. Crude Gas Purchased

Charge to this account the purchase price of all crude gas purchased from other producing companies for the purpose of distribution and resale. When gas is purchased from more than one company, separate accounts should be opened with each such company showing the name of the company, the amount in cubic feet of gas purchased, the rate paid per thousand cubic feet and the total amount paid therefor, which details will be called for in the annual report to the Commission.

644. Power for Pumping

Charge to this account the cost of all power, whether steam electricity or other power, used for pumping purchased gas from the plant or plants where purchased to the works of the purchasing utility.

645. Enricher

Charge to this account the cost of enrichers used to enrich purchased gas. If the purchased gas is crude coal gas, charge for enricher as is indicated in the *Coal Gas Enricher Account.* If the purchased gas is crude water gas, charge for enricher as indicated in *Water Gas Enricher Account.*

646. Miscellaneous Purchased Gas Supplies and Expenses

Charge to this account the cost of all operating supplies and expenses incurred at the purchased gas production works not directly chargeable to any of the preceding production accounts. This includes such items as gas and electricity used at the works for general lighting, supplies and materials used at the storage holders at works, water for general purposes, laboratory appa-

ratus and supplies, ice, brooms, lubricants, etc., and works stationery, telephones, etc., if it is desired to distribute such expenses. Exclude maintenance supplies and expenses.

Maintenance.

651. Repairs of Purchased Gas Apparatus

Charge this account with all expenses for labor and material incurred in repairing purchased gas production apparatus, including collection mains and pumping apparatus, purifying apparatus, exhausters, conveying machinery, condensers, piping at works, electric and compressed air equipment, etc.

NOTE.—If coal gas or water gas or both are also produced, the cost of repairing equipment which is used for the joint benefit of the different kinds of gas will be apportioned over the corresponding maintenance accounts of the respective production departments.

652. Repairs of Purchased Gas Buildings, Fixtures and Grounds

Charge this account with the expense of all labor and material incurred in repairs to buildings, fixtures and grounds used exclusively for production processes in connection with purchased gas, as condensing or purifying buildings, outbuildings, tool house, and appurtenant fences, sidewalks, lawns, etc.

NOTE.—If coal gas or water gas or both are also produced at the works, the cost of repairing those buildings, fixtures and grounds which are used for the joint benefit of the different departments will be apportioned over the corresponding accounts of the respective production departments.

Distribution.

Operation.

701. Superintendence

Charge to this account the cost of superintendence on all street work not classified under construction.

702. Miscellaneous Labor

Charge this account with all operating labor employed in the street department. This includes labor pumping drips, taking street pressure, operating district governors, repairing street department tools, clerical salaries for the street department and miscellaneous street department operating labor. Exclude maintenance labor.

703. Customers' Premises Expenses

Charge this account with all labor and material required for adjusting general complaints, clearing out, changing or adjusting house piping, gas fixtures, burners or any portion of the consumers' property beyond the meter, including the cost of new pillars, tips, burners or any appliances or devices put in to better the service, and not properly chargeable to repairs; investigating reports of poor service or large bills, including taking pressure on complaints; labor placing clock meters and changing meters

for request tests; and inspecting and testing new pipe, including car fare, meals, etc., of the inspectors on such work.

NOTE.—Repairing leaks in meters and connections will be charged to *Repairs of Meters Account.*

704. Labor Removing and Resetting Meters

Charge to this account all operating labor employed in removing and resetting meters on the premises of the consumers, and placing meter connections in the course of the regular and periodical inspection of such meters. Where such work is performed by regular meter maintenance men, their time should be apportioned accordingly. Exclude maintenance labor.

NOTE.—The cost of the original setting of each meter, including one set of connections, will be charged to *Account No. 124.* if it is the policy of the utility to capitalize such original setting.

705. Gas Mains, Supplies and Expenses

Charge this account with all operating supplies and expenses of the street department. This includes tools used in such department, pumping drips, office supplies and expenses of this department, expense of taking pressures, expense of operating district governors and miscellaneous street department supplies as gas bags, water hose, lanterns, etc. Exclude maintenance supplies and expenses.

708. Miscellaneous Supplies and Expenses

Charge this account with all operating supplies and expenses incurred in the street department not directly chargeable to any of the preceding distribution accounts.

Maintenance.

711. Repairs of Mains

Charge this account with the expenses for all labor and material used in repairing, overhauling, changing position of or replacing gas mains, including pumping mains, booster mains, and distribution mains. This account covers such items as seeking and repairing leaks, repairing pipes or removing and replacing worn sections and fittings, caulking, protecting exposed parts of undermined mains, digging and bracing in connection with such work, repaving and repairing street governors and man-holes, etc. Credit the proper store room account with store room value of the pipes and fittings charged to this account.

712. Repairs of Services

Charge this account with the expenses for all labor and material incurred in repairing, overhauling and changing positions of gas service connections. This covers such items as seeking and repairing leaks, thawing services, cleaning and blowing out services, repairing and renewing service pipes to meters, including stop-cocks, service boxes and the cost of repairing the

same. Changing and extending old service pipes to put meters in better location will be charged to this account. Extending new services to give better location for meters will be charged to the construction account *Services.*

713. Repairs of Meters

Charge to this account all expenses for labor and material in repairing meters and house governors, including readjusting, painting, new discs, diaphragms, testing and repairing old meters, repairing and replacing old connections, meter fittings, etc., meter unions, cocks and piping, changing meters for routine tests, etc. The average cost of one set of meter connections shall be charged to the construction account *Meters*, if it is the policy of the utility to capitalize such original setting cost.

716. Repairs of Distribution Buildings, Fixtures and Grounds

Charge to this account all expenses for labor and material incurred in repairing buildings, fixtures and grounds devoted exclusively to the distribution system.

Municipal Contract Lighting.

Operation.

721. Labor, Lighting and Extinguishing

Charge this account with the salaries and wages of all persons employed in the lighting and extinguishing of lamps included in the municipal contract lighting system. Where this service is performed by others under contract for the company, this account will be charged with the contractor's bill.

722. Miscellaneous Municipal Contract Lighting Supplies and Expenses

Charge this account with the cost of all operating supplies and expenses other than rentals incurred in the operation of the municipal contract lighting system. Exclude maintenance supplies and expenses.

Maintenance.

725. Maintenance of Municipal Contract Lighting System

Charge this account with all expenses for labor and material incurred in refitting stand-pipes, cleaning service pipes, cutting off services, recaulking columns, removing and resetting decayed and worn posts, painting and refitting columns, straightening posts and all other work of similar character necessary to maintain the municipal contract lighting system to the degree of efficiency required by the municipal ordinances. This account will also be charged with the cost of repaving necessitated by openings in connection with the above work.

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Commercial Expense.

741. Office Salaries and Expenses

Charge to this account the proportion of salaries and expenses of general officers and assistants in charge of commercial department and salaries of bookkeepers and all clerks in the accounting and collection departments having to do with consumers' accounts, as follows:

(a) Salaries and Expenses—Meter Indexers

Salaries and expenses of meter indexers, including indexers' lamps.

(b) Salaries and Expenses—Accounting Department

Proportion of salaries and expenses of general officer and assistants in charge of commercial department, and salaries of bookkeepers and all clerks in the accounting department having to do with consumers' accounts.

(c) Salaries and Expenses—Collection Bureau

Salaries and expenses of chief and assistants in bureau; collectors' salaries, badges, car fares, delivering bills.

(d) Salaries and Expenses—Contract Department

Salaries and expenses incurred in the contract department, including attention to bill questions; but should not include any item chargeable to New Business.

742. Office Supplies and Expenses

Charge to this account the cost of stationery, meals, car fare, heat, janitor, telephones, rents for commercial offices, and all other incidental expenses.

New Business.

747. Salaries and Expenses

Charge to this account the salaries of the heads of the department maintained for the promotion or development of gas consumption, including that portion of the salaries of the management and clerks in agency and contract departments assignable to new business.

748. Miscellaneous Supplies and Expenses

Charge to this account the expense of the New Business Department, including the proportion of office rent chargeable thereto, and expenses not provided for in other accounts.

749. Soliciting

Charge to this account all of the amounts paid out for salaries and expense of canvassers, as follows:

(a) Salaries—Canvassers

Salaries and commissions in soliciting new business, preparing estimates, engineering advice, etc.

(b) Expenses—Canvassers

Personal expenses of staff incurred in soliciting new business; also all office sundries in connection therewith.

750. Advertising

Charge to this account all the payments for advertising, as follows:

(a) Salaries and Expense

Salaries and expenses of advertising manager and clerks.

(b) Sundries

Advertising sundries, including booklets, dodgers, newspaper advertisements, posters, bulletins and all related items.

751. Appliances

Charge to this account the cost of all work or devices furnished to consumers without charge, in connection with new business.

General Expense.

761. Salaries and Expenses of General Officers

Charge to this account the salaries and expenses of the Chairman of the Board, President, Vice-President, Secretary, Treasurer, General Manager, Assistant General Manager, Comptroller, General Auditor, Chief Engineer, General Superintendent, Purchasing Agent and all other officers with jurisdiction extending over the entire system, whose services cannot be satisfactorily allocated to the several departments (also include directors' fees).

762. Salaries and Expenses of General Office Clerks

Charge to this account all of the amounts paid out for salaries of all employes in the general office, as follows:

(a) Accounting Department Expenses

Proportion of salaries of general officer and assistants in accounting department—cashiers, bookkeepers, and clerks—chargeable to this account.

(b) Purchasing Department Expenses

Salaries and expenses of Purchasing Agent and staff.

(c) General Service Expenses

Salaries and expenses of general service in office including mail clerks, stenographic department, telephone operators, etc.

763. Printing and Stationery—General

Charge to this account the cost of all stationery and office supplies in the general office.

764. General Office Expenses

Charge to this account all of the amounts paid out for sundry expense in general office postage, telephones and telegrams, as follows:

(a) Office Sundries

Sundry expenses in general office.

Principal items: Advertising stockholders' meetings, maps, exchange on remittances, post-office box, safe deposit box, traveling expenses, rentals, janitors' supplies, bond and stock expenses.

(b) Postage, Telephone, Telegrams

All expenses of this nature in the general office.

765. Repairs to General Office Buildings

Charge to this account the cost of all labor and material expended in the repairs and maintenance of general office buildings.

766. Expense—General

Charge to this account all of the amounts paid out for salaries and expense of the technical staff which may not be charged to any of the foregoing operating or construction accounts. Include also any expense general to the business not chargeable specifically to general office accounts.

767. Law Expense—General

Charge to this account all law expenses, except those incurred in the defense and settlement of damage claims. This includes salaries and expenses of all counsel, solicitors and attorneys, their clerks and attendants, and expenses of their offices; cost of law books, printing briefs, legal forms, testimony reports, etc., fees and retainers for services of attorneys not regular employes; court costs and payment of special, notarial and witness fees, not provided for elsewhere; expense in connection with taking depositions, and all law and court expenses not provided for elsewhere.

NOTE.—The compensation of the General Solicitor or Counsel, or other attorneys engaged partially in the defense or settlement of damage suits, or partially in legal work, should be properly proportioned between this account and account Injuries and Damages.

768. Injuries and Damages (Unless the Cost is Chargeable to Plant Investment)

Charge to this account all expenses (other than law expenses provided for in account No. 767) relating to persons killed or injured and property damaged in connection with the operation of the plant, as enumerated under the following heads:

(a) Claim Department Expenses

This head includes salaries and expenses of claim agent, investigators, adjusters, and others engaged in the investigation of accidents and adjustment of claims, including legal expense.

(b) Medical Expenses

This head includes salaries, fees and expenses of surgeons, nursing, hospital attendants, medical and surgical supplies; fees and expenses of coroners and undertakers, and contributions to hospitals.

(c) Injuries to Employes

This head includes amounts paid in settlement of claims of employes for injuries arising in the course of their employment; also wages paid to disabled employes while off duty.

(d) Injuries to Others

This head includes amounts paid in settlement of claims for injuries to individuals other than employes of the Company, including amounts paid for damages to property to those other than employes.

769. Insurance

Charge to this account premiums paid to insure against fire, fidelity, boilers, casualty, burglary, and all other insurance; also amount set aside as an insurance reserve.

770. Relief Department and Pensions

Charge to this account all amounts expended for Pension and Relief Department work and all expenses in connection therewith.

771. Gas Franchise Requirements

Charge to this account at current rates the service furnished in compliance with franchise requirements and for which no payment is received by the corporation; also all direct expense, such as paving and other like matters incurred in compliance with such requirements and for which no reimbursement is received by the corporation. Amounts charged to this account representing free service shall be credited to the below provided account No. 774—Duplicate Gas Charges—Cr.

773. Inventory Adjustments

Charge or credit to this account any shortages or overages shown by the inventory of Materials and Supplies which cannot be distributed to the proper construction or operating expense account.

774. Duplicate Gas Charges—Credit

Credit to this account all charges made to any accounts in gas operating expenses in respect of any gas or other product of

gas operations of the utility consumed therein or furnished free to the municipality under franchise requirements.

(a) Rebates and Allowances

Charge to this account all rebates allowed for corrections, error in billing, fast meters, etc.

775. Depreciation Account

Charge to this account at monthly intervals the monthly proportion of the estimated annual depreciation of the tangible property due to wear and tear, obsolescence and inadequacy. The estimate here required shall be made upon a rule designed to effect by its uniform application during the life of the tangible property in service, a charge into operating expenses of the total original cost of such property, less its salvage or scrap value upon retirement. The amount charged to this account shall be concurrently credited to the reserve account No. 351, "Depreciation Reserve."

NOTE.—Until otherwise ordered the amount estimated to cover such wear and tear and obsolescence and inadequacy shall be determined by the accounting utility, based on the utility's knowledge and experience during the preceding years of operation.

This account does not include ordinary repairs and replacements, the extent of which does not amount to a substantial change of identity. All ordinary repairs and replacements must be charged to the property maintenance accounts.

776. Real Estate Rentals

Charge to this account all rentals paid and expenses incurred for buildings or space used for the purposes of the business, unless the premises are used solely for construction purposes, or in connection with a clearing or apportionment account, in which latter events the rentals should be charged accordingly.

779. Taxes

Charge to this account the amount paid or accrued for taxes of every description applicable to the property of the company devoted to gas operations, including taxes on mains, real estate, buildings, capital stock, franchises, gross receipts, easements and Federal (income) tax.

780. Uncollectible Bills

When after a reasonably diligent effort to collect any account due for gas, by-products or appliances sold has proved impracticable of collection, it shall be charged to this account and credited to the account receivable in which theretofore charged.

NOTE.—Where no reserve for uncollectible bills is kept, cash received on account of items previously charged off should be credited directly to this account.

NON-OPERATING ACCOUNTS.

NON-OPERATING REVENUES.

782. Rents from Lease of Real Estate and Buildings

Credit to this account monthly, as they accrue, all miscellaneous rent revenues flowing to the corporation as a return upon leased property other than gas plant and equipment.

783. Interest and Dividends from Investments

(a) Interest from Bond and Other Investments

Credit to this account monthly, as it accrues, all interest from bond and other investments; that is to say, all interest accruing to the corporation upon all such of its interest-bearing investments as are liabilities of solvent concerns and individuals.

(b) Dividends from Stock Investments

Credit to this account at their cash values, and as of the date when declared, all dividends declared by solvent concerns upon stocks held by the corporation among its investments.

784. Steam and Heating Department Revenue

Credit to this account all revenues derived from heating buildings by means of exhaust or live steam and hot water at special flat rates; also all revenue derived from the sale of exhaust and live steam for heating and power purposes at metered rates.

785. Miscellaneous Non-Operating Revenues

Credit to this account all non-operating revenues accruing to the company and not provided for in any of the foregoing accounts.

NON-OPERATING EXPENSES.

786. Steam and Heating Department Expenses

Charge to this account all items of operating expenses which can be segregated and originate directly from the production and sale of steam for power and heating purposes, or from the furnishing of heat energy by the medium of steam or hot water.

Charge to this account also the proportion assignable to Steam and Heating Department of all operating expenses (including commercial, promotion and general expenses) which are common to the production and sale of gas and the production and sale of steam and heat energy and cannot be directly segregated and assigned to the heat and gas departments respectively. Such proportion shall be determined pro rata upon the basis of steam units utilized in the respective departments, or upon such other basis as will be most equitable for the distribution of the items involved. The proportions of such expenses so charged shall be likewise credited to the respective operating expense accounts of

the gas department involved in such division of expense, provided the entire expense has been carried in those accounts in the first instances.

787. Other Non-Operating Expenses

Charge to this account all matters provided for under the following sub-accounts and not included elsewhere.

(a) Rent Expense

This sub-account includes all expense arising in connection with the procuring of revenues from property let out to others, including the cost of negotiating contracts, advertising for tenants, fees paid conveyancers, collector's commissions, cost of enforcing payment of rent, cost of ousting tenants, etc., and all other expense arising in connection with such property. This applies only to leases conveying the property out of the possession of the corporation, and it includes the expense accruing while the property is idle and awaiting an occupant. This sub-account includes cost of maintenance of the property when such cost is borne by the corporation. Such maintenance includes depreciation as well as repairable wear and tear. It does not include taxes.

(b) Interest Expense

This sub-account includes all expense arising in connection with procuring interest upon investments, such as expense of collection, expense of investigating delay in payment, expense of enforcing payment, and the like. It does not include taxes on such Investments.

(c) Dividend Expense

This sub-account includes all expense rising in connection with the collection of dividends on stocks of other corporations; also all expense incurred in the investigation of the affairs of the corporation whose stocks are held, whether for the purpose of detecting mismanagement or for the purpose of inducing the declaration of dividends, and all expense connected with enforcing payment of dividends when declared. It does not include taxes on such investments.

(d) Non-Operating Taxes

This sub-account includes all taxes accruing upon non-operating property and all assignable to non-operating revenues.

(e) Uncollectible Non-Operating Revenues

When any non-operating revenues are judged by the corporation to be uncollectible, the amount thereof shall be credited to the account in which theretofore carried, and charged to this sub-account.

(f) Miscellaneous Non-Operating Expense

This sub-account includes all non-operating expense which is not provided for in the foregoing sub-accounts.

DEDUCTIONS FROM INCOME.

788. Interest on Funded Debt

Charge to this account all interest accruing absolutely on the outstanding funded debt of the corporation.

This includes mortgage bonds, income bonds (if interest on such be payable), debentures and mortgages and ground rents.

789. Interest on Unfunded Debt

Charge to this account all interest paid or accrued on promissory notes or other unfunded debt of the utility.

790. Extinguishment of Discount on Securities

Charge to this account at the close of each year the proportion of the unextinguished discount on securities applicable to the period. This proportion shall be such an amount as will completely wipe out the discount on the debt during the interval between issue and maturity of the same. The amount so charged shall be concurrently credited to account No. 251.

The corporation may, if it so desire, wipe out such discount earlier by charging all or any portion thereof to Year's Profit and Loss Account.

791. Sinking Fund Accruals

Charge to this account and credit Sinking Fund Reserves the amount of all accruals required to be made to Sinking Fund in accordance with the provisions of mortgages or other contracts requiring the establishment of sinking funds.

792. Miscellaneous Deductions from Income

Charge to this account all income deductions not provided for in any of the foregoing accounts.

793. Extinguishment of Premium on Debt—Credit

Credit to this account at or after the close of any fiscal period the proportion of the premium received on outstanding debt at time of issue which is applicable to the period. This proportion is to be determined according to a rule, the uniform application of which during the interval between the issue and the maturity of any debt will completely amortize or wipe out the premium so received. The amount so credited shall be concurrently charged to account No. 353. Such amortization may, at the option of the corporation, be affected by crediting all or any portion of such premium to Profit and Loss account only upon the maturity of the debt.

APPROPRIATION ACCOUNT.

795. Dividends Declared

Immediately upon the declaration of a dividend, this account should be charged the amount of such dividend and credit made to the account Dividends Payable.

796. Miscellaneous Appropriations

(a) Expenses Elsewhere Unprovided For

Charge to this account all expenses not chargeable as a part of operating expenses or of non-operating expenses, such as fines levied on the corporation for violation of law, for misfeasance, for non-feasance, etc., fines levied on directors, officers and other employes and assumed by the corporation, donations of funds to churches and other associations, and other like expenses and outgoings.

(b) Adjustments of Accounts for Previous Years

Charge or credit to this account all adjustments, affecting previous years' Profit and Loss not applicable to the current fiscal year.

APPENDIX D

Classification of Accounts for Water Utilities.
(First Issue, Effective January 1, 1916.)

CONTENTS.

INTRODUCTION.

The uniform system of accounts contained in this circular is established and issued by The Public Utilities Commission under the provisions of the Public Utilities Act, Section 33.

> Section 33. The Commission shall have power to establish a system of accounts to be kept by all public utilities or to classify said public utilities, and to establish a system of accounts for each class, and to prescribe the manner in which such accounts shall be kept.

The system of accounts and records, fully set forth in this pamphlet and designated as "A Uniform Classification of Accounts for Water Utilities," is hereby established and prescribed as the system of accounts and records to be kept and used by each and all of said utilities.

Each such utility shall carry on its books the accounts and records herein prescribed, and shall accurately keep such accounts in accordance with the requirements, definitions, and instructions contained and set out in this pamphlet.

The utility shall keep its records in such a manner as to show the full facts connected with matters covered by the accounts provided herein. When, for the purpose of improving the efficiency of administration and operation it is desirable to further refine or allocate the general accounts, the same may be supported by other records in which the details shall be fully stated, and the entries in the general accounts, as specified in this classification, shall contain such references to the detailed records as will enable a ready identification and verification of the facts therein recorded, but no change shall be made in the general classification accounts herein prescribed without permission of the Commission having been first obtained.

This system of accounts and records, herein prescribed, shall be used and kept by all public utilities engaged in the collection, pumping, or sale of water, including municipally owned or operated water utilities.

When the same utility plant supplies service in different localities, so far as practicable, the accounts of such utility shall be so kept that the operating expense and operating revenue in each locality may be easily determined. Any utility in doubt as

to whether in its case separate accounts should be kept, and to what extent, should confer with the Commission.

This classification has been prepared with a view of making it applicable to varied localities and conditions, and to all water utilities. In order that uniformity may be secured in the application of the provisions of this classification, the accounting officers of the Utilities are urged to correspond with the Commission should any difficulties arise with regard to the interpretation of any account or rule herein prescribed.

The Commission does not bind itself to approve any item set out in any account, either as to amount or character, for rate-making purposes. The classification of accounts is designed to set out the facts in connection with the income, expenses, etc., that the Commission may determine therefrom, for rate-making purposes, just what consideration shall be given to the various items in the several accounts.

Upon this classification will be based the annual report to be made to the Public Utilities Commission.

All records and accounts, including enlargements, subdivisions or refinements of these prescribed accounts, are to be open at all times to the examination of this Commission.

S. S. Kendall,
Geo. T. Bradley,
M. H. Aylesworth,
Commissioners.

LIST OF BALANCE SHEET ACCOUNTS.

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Quick Assets.

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Operation.

Maintenance.

Electric or Gas Power Pumping.

Operation.

Maintenance.

NOTE.—If water is pumped by electric power, use this classification; or, if water is pumped by gas power, use this classification, designating same by erasing the word "electric" or "gas," as used. If water is pumped by both electric and gas power, use this classification for each, designating the same under same code numbers with the addition after code number of "E" for electric power, and "G" for gas power.

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BALANCE SHEET ACCOUNTS.

ASSETS.

PLANT INVESTMENT.

101-146. Plant Investment

All tangible and intangible property having a life of more than one year is included in this account.

For details and definitions of the various accounts coming under this heading, see pages 456 to 463, inclusive.

CURRENT ASSETS.

This is a broad generalization of all property devoted to the purposes of the business other than plant investment and these are divided under separate headings. Owing to the difference in character of the items they should be separately listed on the balance sheet, as only by this means can the immediate cash status of the business be ascertained.

Quick Assets.

201. Cash

Charge to this account all money coming into the possession of the corporation and in which the corporation has the beneficial interest. This includes coin of the United States, United States treasury notes, gold and silver certificates and greenbacks and bank bills payable to bearer. Also charge to it all bank credits, checks and drafts receivable, subject to satisfaction or transfer upon demand (whether payable to bearer or to order). Credit this account with all cash disbursements of the corporation.

202. Notes Receivable

Charge to this account the cost of all notes receivable (except as below provided) which are the property of the corporation and upon which solvent concerns and individuals are liable or which are sufficiently secured to be considered good. This account includes demand notes, drafts, etc., issued by others than banks,

and time notes, drafts, etc., by whomever issued. This account does not include investments (account No. 226), nor does it include interest coupons.

203. Accounts Receivable

Charge to this account all amounts owing to the corporation upon open book accounts with solvent concerns and individuals (other than cash deposited in banks); also the cost of all accounts and claims upon which responsibility is acknowledged by solvent concerns or which are sufficiently secured to be considered good, and of all judgments against solvent concerns where the judgment is not appealable or suspended through appeal. This account does not include notes receivable.

204. Other Quick Assets

Charge to this account the cost of all current assets of the corporation which are not included under any of the three preceding accounts.

Business Assets.

205. Materials and Supplies

Charge to this account the cost, including transportation, of all materials and supplies purchased, regardless of whether the same are intended to be consumed in construction or in operation, or later to be sold. Where the original invoices are charged to this account or its sub-accounts, and discounts are later recovered for prompt payment, such discounts shall be credited to the accounts charged by the original invoice.

When any materials or supplies, the cost of which is charged to this account, are issued for use, the net cost of the same shall be credited to this account and debited to the proper construction or operating expense account. Inventories of materials and supplies shall be taken periodically and any shortage or overages disclosed by such inventories shall be credited or debited to this account, and debited or credited to the account "Inventory Adjustments," in case they cannot be assigned to specific accounts.

When the use of any tangible property is discontinued it shall be treated as retired; the original cost of such property shall be credited to the plant investment account in which it is carried, and its value, if any, as second-hand material or junk shall be charged to this account. If such value is not known and cannot readily be determined, it shall be estimated, and errors in such estimates, when determined, shall be adjusted through the accounts involved during the year in which the estimates were made; if later, then through the account "Inventory Adjustments."

Sub-accounts must be opened to this account for the different classes of materials and supplies.

(a) Fuel.
(b) Pumping Station Supplies.
(c) Main Piping.
(d) Service Piping.
(e) Fittings.
(f) Meters.
(g) Hydrants.
(h) Appliances.

206. Prepaid Accounts

When payments are made in advance of actual accrual thereof, the amount of the advance payment should be charged to this account, or appropriate sub-accounts.

206a. Prepaid Insurance

Charge to this account all premiums on insurance policies when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As premiums thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Insurance" account.

206b. Prepaid Taxes

Charge to this account all taxes when paid in advance of their accrual, regardless of whether the amounts so prepaid are paid in cash or by an issue of notes or other negotiable paper. As taxes thus prepaid accrue, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Taxes" account.

206c. Prepaid Interest

Charge to this account all interest when paid in advance of its accrual, on any obligations of the utility. As the interest thus prepaid accrues, credit to this account at regular intervals the amount applicable to the period and charge same to the appropriate "Interest" account.

207. Miscellaneous Current Assets

Charge to this account the cost of all current assets of the utility not included under any of the preceding current assets accounts. Property readily convertible into money and which is being held with the intent of being so converted into money will be considered as a current asset and charged to this account when it cannot be charged to one of the preceding accounts.

OTHER ASSETS.

226. Investments

By investments, as here used, are meant all properties or securities acquired not for use in present operations, as a means

of obtaining or exercising control over other corporations, or for income to be derived from them, or for a rise in value, or for devotion to future operations at a time when it seems probable that they cannot be so advantageously acquired as at the time of actual acquisition. The cost of the corporation's title to any property or securities held as an investment for other than the Sinking Fund should be charged to this account.

227. Reacquired Securities

When securities, whether funded debt or stocks, have been actually issued to bona fide holders for value (or after such issue by another corporation has been assumed by the accounting corporation), and after such issue (or assumption) has been acquired by the corporation under circumstances which require that they should not be treated as paid or retired, they should be charged at their cost to this account.

228. Sinking Funds—Invested

To this account should be charged the cost of live securities in the hands of trustees for the purpose of redeeming outstanding obligations.

229. Sinking Funds—Uninvested

To this account should be charged the amount of cash set aside for investment for the Sinking Funds.

230. Special Deposits

By Special Deposits, as here used, are meant amounts of money and bank credits in the hands of fiscal or other agents of the corporation for the payment of coupons, dividends or other special purposes.

Charges to this account should specify the purpose for which the deposit is made. When such purposes are satisfied this account should be credited with the amount specially deposited to provide such satisfaction.

231. Treasury Securities

Charge to this account the par value of all stocks and bonds which have been authorized and issued by the corporation, held by the treasurer or by a fiscal agent for its benefit, but which have not been sold. When such securities are sold their par value should be credited to this account.

SUSPENSE ACCOUNTS.

251. Debt Discount and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and of the interest thereon accrued at the time the transfer takes place (if it is not proper to charge the difference

to "Plant Investment"), the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account.

To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to Account Unamortized Debt Discount and Expense. Such discount and expense may, if desired, be extinguished more rapidly through charges of all or any part of it, either at the time of issue or later, to the year's Profit and Loss Account.

252. Abandoned Property

To this account may be charged the cost of property abandoned because of replacement operations or destroyed as the result of an extraordinary casualty, less salvage recovered, the net loss on such abandoned property because of the financial condition of the company, it may be necessary to spread over a series of years.

The amount so charged to this account should be credited to the plant investment account interested.

253. Jobbing Accounts

Charge to this account the cost of labor and material on all work in progress for account of the customers of the company or others. This account, as work is completed and charges made, should be cleared by a charge through accounts receivable and credited to this account.

254. Clearance, Equalization and Apportionment Accounts

These accounts are designed to carry, temporarily, the cost of operating such facilties as garages, stables, storehouses, etc., and also overhead or burden costs such as it is desirable should be spread uniformly over the construction and operating transactions interested.

The charges to the construction and operating accounts and the contemporaneous credits to these accounts should, unless there is some good reason to the contrary, be so distributed that the costs for any one year will be absorbed by the transactions occurring during that year.

255. Other Suspense

Charge to this account all debits not elsewhere provided for and concerning which the final disposition thereof is uncertain.

256. Open Accounts

Charge may be made to open accounts which are of a temporary nature, and which are held subject to adjustment. When proper location of such accounts is known, this account should be credited and charge made to proper account.

LIABILITIES.

CAPITAL STOCK.

In the accounts of stocks outstanding a separate account shall be opened for each class of stock issued and no two stocks shall be considered of the same class unless they are equal in their interest or dividend rates, voting rights and conditions under which they may be retired, if the right to retire them is contained in the contract of issue. The characteristics of any class of stock in these regards shall be designated in the title of the accounts opened to cover such stocks and shall be clearly expressed in the first entries to such account. To the account for any class of stocks shall be credited when issued the par value of the amount of such stock issued. If such issue is for money that fact shall be stated, and if for any other consideration than money the persons to whom issued shall be designated and the consideration for which issued shall be described with sufficient particularity to admit of identification; if such issue is to the treasurer or other fiscal agent of the corporation or if by him disposed of for the benefit of the corporation that fact and the name of such agent shall be shown and such agent shall in his account of the disposition thereof show like details concerning the consideration realized thereon, which account, when accepted by the corporation, shall be preserved as a corporate record.

301. Preferred Stock

305. Common Stock

FUNDED DEBT.

311. Funded Debt or Bonds

The funded obligations of the utility shall be divided into classes according to their characteristics, as to the security for the same, the rate of interest, interest dates, and date of their maturity. A separate sub-account shall be opened for each such class of funded indebtedness and no accounts or debts not agreeing in the characteristics mentioned shall be included in the class of funded indebtedness and no accounts or debts not the same sub-account. The titles of each sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the par value of the amount of the evi-

dences of funded indebtedness issued. The entry shall show not only the amount issued but the purpose for which issued, and shall make clear and intelligent reference to the corporate records showing all details connected with such transactions. If the considerations received for the issue is anything other than money, the entries shall show further to whom issued and shall describe with sufficient particularity to identify it the actual consideration received for it. If the issue is to the agent of an undisclosed principal, the name and business address of such agent and the fact of his agency shall be shown in the entry.

315. Unfunded Debt

The mortgage obligations of the utility shall be divided into classes according to their characteristics, as to the security for the issue, the rate of interest, interest dates, and the date of maturity. A separate sub-account shall be opened for each mortgage. The title of each such sub-account shall express the characteristics above stated. To the proper sub-account shall be credited, when issued, the total receipts from the sale of evidences of indebtedness secured by the mortgage. The entries shall show the amount of the mortgage debts, the purpose for which such debt was incurred and shall show by intelligent reference all the details connected with such transactions. If the consideration received for the indebtedness is anything other than money the entry shall show the person to whom issued and shall describe with sufficient particularity to identify it the actual consideration received. If the indebtedness is to an agent of an undisclosed principal, the name and business address of such agent and the fact of his agency, shall be stated in the entry.

320. Other Mortgages or Funded Debt

This account shall be raised to show all mortgage indebtedness and transactions pertaining thereto in regard to mortgages other than real estate mortgages as defined in the preceding account Unfunded Debt.

CURRENT LIABILITIES.

321. Notes and Bills Payable

When any note, draft or other bill payable, which matures not later than one year after date of issuance or of demand or assumption by the utility of primary liability thereon, is issued or assumed, the par value thereof shall be credited to this account and when it is paid it shall be charged to this account and credited to Cash or other appropriate account.

322. Accounts Payable

Credit this account, when incurred, with all liabilities of the utility upon open accounts not includible in any of the other current liabilities accounts.

323. Matured Interest on Funded Debt Unpaid

When interest owing by the utility upon any of its funded indebtedness matures and is unpaid, whether the cause of failure is on the part of the coupon holder to present coupons for payment or for other reasons, it shall be credited to this account and charged to the account Unmatured Interest on Funded Debt Accrued to which it had heretofore been credited.

324. Matured Interest on Notes and Bills Payable, Unpaid

When interest owing by the utility upon any of its notes and bills payable matures and is unpaid, whether the cause of failure is on the part of the holder of the paper to present it for payment or for other reasons, it shall be credited to this account and charged to the account Unmatured Interest on Notes and Bills Payable Accrued, to which it had heretofore been credited.

325. Dividends Unpaid

When dividends declared by the corporation become payable they shall be credited to this account and charged to the account Dividends.

330. Deposits

Credit to this account, as such deposits are made, all cash deposited with the utility by consumers as security for the payment of bills. Deposits refunded shall be charged to this account and credited to Cash. Deposits applicable to uncollectible bills shall, at the close of the fiscal year or earlier, at the option of the accounting utility, be credited to the account of the consumer involved and debited to this account. Deposits made by employes or others shall also be credited to this account. Detailed records of deposits as between customers and employes will be required by the Commission.

331. Sundry Current Liabilities

Credit to this account at their face value all unfunded obligations upon which the utility is liable and which are not elsewhere provided for.

ACCRUED LIABILITIES.

341. Unmatured Interest on Funded Debt Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon the funded indebtedness of the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Funded Debt Unpaid. When paid, the interest shall be charged to the account Matured Interest on Funded Debt Unpaid and credited to Cash or to the coupon deposit account.

342. Unmatured Interest on Notes and Bills Payable, Accrued

To this account shall be credited at the close of each month all unmatured interest accrued during the month upon all notes

and bills payable by the utility. When such interest matures it shall be charged to this account and credited to the account Matured Interest on Notes and Bills Payable, Unpaid. When the interest is paid, it shall be charged to the account Matured Interest on Notes and Bills Payable, Unpaid, and credited to Cash or other appropriate account.

343. Taxes Accrued

To this account shall be credited at the close of each month all taxes accrued during the month and corresponding charges shall be made to the Taxes account. Credits to the account Taxes Accrued will be based upon estimates until the amount of the taxes levied for the period is definitely ascertained. Such estimates shall be made upon the best data available, and as soon as the amount of taxes for the period is known, the account involved shall be adjusted to conform. When any taxes become due they shall be charged to this account.

344. Insurance Accrued

Credit to this account at the close of each month the insurance accrued during the period in question, as determined by the policies of all insurance covering the property of the utility. When such premiums are paid they shall be charged to this account and credited to Cash or other appropriate accounts.

The amount set aside as an insurance reserve by the utility carrying its own insurance either in whole or in part shall be charged to this account.

345. Dividends Accrued

To this account may be credited at the close of each month the amount of dividends accrued on preferred and common stock during such period at the rates of dividend payments established by the corporation. When such dividends become payable they shall be charged to this account and credited to the account Dividends Unpaid, in which account they shall remain until paid, when such amount shall be charged to Dividends Unpaid, making a corresponding credit to Cash or other appropriate account.

346. Sundry Liabilities Accrued

To this account shall be credited at the end of each month as it is accrued, any other unfunded obligation of the utility not provided for in any of the preceding accrued liability accounts, making a corresponding charge to operating expenses or other expense account.

PERMANENT AND CORPORATE RESERVES.

351. Depreciation Reserve

To this account shall be credited monthly, or as they are made, all charges to the Depreciation Account (hereinbefore described), the income from the investment of any money or from

any security belonging to the Depreciation Reserve, and any other appropriations which may have been made to it.

When through wear and tear in service, casualty, inadequacy, supersession or obsolescence, any building, structure, facility or unit of equipment originally charged to capital is no longer economically reparable, and in order to keep the productive capacity of the plant up to its original or equivalent state of efficiency it is necessary to make a complete replacement of such building, structure or unit of equipment, the money cost of the original unit replaced and charged to capital (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to the Depreciation Reserve, and the excess cost of the substituted unit over such original unit shall be charged to the appropriate capital account.

When any building, structure, facility or unit of equipment originally charged to capital is retired from service and not replaced by any other unit of similar nature or equivalent thereto, the original money cost thereof (estimated if not known, and if estimated the basis thereof shall be shown in the record entry) shall be charged to this account and such amount originally entered or contained in the charges to capital in respect to such unit so being retired shall be credited to the capital account to which it was originally charged, and any adjustments necessary made through the Surplus Account.

The salvage or scrap value of any unit of equipment retired from service or replaced by any other unit will be credited to this account.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

352. Amortization Reserve

This account shall be raised to provide for the amortization of intangible capital in service. To it shall be credited monthly, or as they are made, all the amounts charged from time to time through operating expenses to the account Amortization Reserve Requirements, which account is to be set up where the nature of the capital occasions the setting up this reserve. Such reserve shall also be credited with all accumulations resulting from the investment of any moneys or the interest or dividends from any securities belonging to it.

For example, a corporation pays $100,000 for a twenty-year franchise to operate a public utility. In order that this amount shall be set aside out of revenue and the actual capital of the corporation not impaired by dividends paid, there shall be charged monthly to the account Amortization Reserve Requirements, crediting the Amortization Reserve, an amount which, invested at current rates of interest, will at the end of the franchise term have created an amount equivalent to the cost of the franchise.

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An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

353. Unamortized Premium on Debt

When funded debt securities or other evidences of indebtedness are disposed of for a consideration whose cash value is greater than the sum of the par value of such securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of the cash value of such consideration received over the sum of the par value of the securities or other evidences of indebtedness and the accrued interest shall be credited to this account. At monthly intervals thereafter a proportion of such premium based upon the life of the security or other evidence of indebtedness to maturity shall be charged to this account and credited to "Amortization of Premium on Debt" in "Income" account; or at the option of the corporation the charge to this account may be delayed to a time not later than the date of maturity of the debt, in which case the proportion applicable to the period covered by the then current income account shall be credited to the account "Amortization of Premium on Debt," and the remainder of the credit shall be to the account "Other Additions to Surplus."

354. Sinking Fund Reserves

Sinking fund reserves shall be maintained whenever they are required in pursuance of the provisions of mortgage deeds, deeds of trust, contracts or provisions of the law. A separate Sinking Fund Reserve shall be maintained for each contractual requirement, to which reserve shall be credited any appropriation made in pursuance of the terms of the respective mortgage and trust deeds, contracts, etc., and charged to the account Contractual Sinking Fund Requirements and also accumulations resulting from any security belonging to such particular reserve. The title of each reserve shall clearly indicate the purpose for which it is being maintained.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

355. Other Permanent Reserves

Credit to this account all reserves not heretofore provided for which are to remain intact during the life of the company.

Sub-accounts may be created for each particular reserve and so designated by title.

356. Temporary Operating Reserves

Credit to this account all temporary reserve not hereinbefore provided for.

Sub-accounts may be used under this classification to further

refine any reserve which is desired to be taken care of for operating expenses.

357. Unamortized Debt and Expense

When funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of such sum of the par value and accrued interest over the cash value of the consideration received shall be charged to this account. To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, fees and taxes for recording mortgages and trust deeds, cost of engraving and printing bonds, certificates of indebtedness, and other commercial paper having a life of more than one year, fees paid trustees provided for in mortgages and trust deeds, fees and commissions paid underwriters and brokers for marketing such evidences of debt, and other like expense. At or before the close of each fiscal period thereafter, a proportion of such discount and expense based upon the life of the security to maturity shall be credited to this account and charged to account "Amortization of Debt Discount and Expense." Such discount and expense may, if desired, be amortized more rapidly through charges of all or any part of it, either at the time of issue or later, to the account "Other Deductions from Surplus."

358. Maintenance Reserve

This reserve may be raised by those utilities which operate equipment, the repairs to which are occasioned only at remote intervals and are then so considerable in amount as to cause wide fluctuations in the operating expenses for the division of operation or group of expenses of which the maintenance account in question is a part.

359. Uncollectible Accounts Reserve

Credit this account every month with the charge made to the account Uncollectible Accounts (Reserve Charge) as explained in connection therewith. When any account for service, upon which any debtor is liable to the utility, becomes impossible of collection because of the removal of the debtor beyond the jurisdiction of the state, the operation of the Statute of Limitations, discharge in bankruptcy, or for any other good and sufficient reason after diligent effort to collect the same has been made, such account may be charged to this account and credited to Accounts Receivable, to which it was originally charged.

All accounts which have been charged off as uncollectible, but which are afterwards collected, shall be credited to this reserve.

An analysis of the charges and credits to this reserve will be called for in the annual report to the Commission.

376. Premium on Capital Stock

If a premium is realized on any issue of stock, such premium should be credited to the sub-account for each class of stock.

The excess of the actual money value of the consideration obtained over the par value of the stock should be considered the premium realized.

PROFIT AND LOSS.

400. Profit and Loss

This account is the connecting link between the Income Account and the Balance Sheet. In it are summarized the losses or gains of a corporation during a given fiscal period resulting from the business transactions during that period, as well as those affected by any disposition of net profits made solely at the option of the corporation, by accounting adjustments not properly attributable to the period or by miscellaneous losses or gains not provided for elsewhere. At the end of each fiscal period the net balances as shown by the Income Account and each Appropriation Account should be closed into this (Profit and Loss) account.

PLANT INVESTMENT ACCOUNT.

All tangible and intangible property having a life in service of more than one year is included in Plant Investment. Intangible property consists of organization expenses, franchises, rights and licenses, etc. Tangible property includes land, buildings, equipment, etc.

INTANGIBLE.

101. Organization

Charge to this account all fees paid to governments for the privilege of incorporation, and all office and other expenditure incident to organizing the corporation or other enterprise and putting it in readiness to do business. This includes cost of preparing and distributing prospectuses, cost of soliciting subscriptions for stock (but not for loans nor for the purchase of bonds or other evidence of indebtedness), cash fees paid to promoters, and the actual cash value at the time of organization of securities paid to promoters for their services in organizing the enterprise, counsel fees, cost of preparing and issuing certificates of stock, and cost of procuring certificates of necessity from state authorities, and other like costs. Like costs incident to preparing and filing certificates of authorization of increase of capital stock, and to the negotiation and issue of stock thereunder, shall be classed as addition. Cost of preparing and filing certificates of

amendment of articles of incorporation shall be classed as a betterment. Cost of preparing and filing papers in connection with the extension of the term of incorporation or with reincorporation consequent upon reorganization shall be classed as a renewal. This account shall not include any discounts upon stocks or other securities issued, nor shall it include any costs incident to negotiating loans or selling bonds or other evidence of indebtedness.

102. Franchises

To this account shall be charged "the amount (exclusive of any tax or annual charge) actually paid to the State or to a political subdivision thereof as the consideration for the grant of such franchise or right" as is necessary to the conduct of the corporation's operations. If any such franchise is acquired by mesne assignment, the charge to this account in respect thereof must not exceed the amount actually paid therefor by the corporation to its assignor, nor shall it exceed the amount specified in the statute above quoted. Any excess of the amount actually paid by the corporation over the amount specified in the statute shall be charged to the account "Other Intangible Capital." If any such franchise has a life of not more than one year after the date when it is placed in service, it shall not be charged to this account, but to the appropriate accounts in "Operating Expenses," and in "Prepayments" if extended beyond the fiscal year.

Payments made to the State or to some subdivision thereof as a consideration for granting an extension for more than one year of the life period of a franchise shall be classed as renewals. Those made as a consideration for franchises or extensions thereof covering additional territory to be operated as a part of an existing system shall be classed as betterments. If the franchises cover separate and distinct new enterprises, the payments therefor shall be classed as original.

NOTE.—Annual or more frequent payments in respect of franchises must not be charged to this account, but to the appropriate tax or operating expense account.

103. Royalties, Licenses

Charge to this account the cost of royalties or licenses paid to licensors and payments to city, town or State (exclusive of taxes) for franchises.

104. Other Intangible Capital

Charge to this account the cost of all other property coming within the definition of intangible capital and devoted to the utility operations. All entries of charges to this account shall describe the acquired property with sufficient particularity clearly to identify it, and shall also show specifically the principal from whom acquired and all agents representing such principal in the transaction; also the term of life of such property, estimated if

not known, and if estimated, the facts upon which the estimate is based.

TANGIBLE.

105. Land

Charge to this account the cost of the accounting utility's landed capital which is used and useful in the operation of the water utility whose term of occupation is over one year from the grant thereof. This includes all lands occupied by pumping stations, dams, reservoirs, pipe lines, standpipes, tanks, filtering beds, purification plants, etc.; also lands for water rights, rights of way and general office buildings. Such cost includes when assumed or paid by the purchaser in his own behalf, cost of registration of title, cost of examination of title, conveyancer's and notary fees, purchasing agent's commissions or fees, or proportion of purchasing agent's salary, taxes accrued to date of transfer of title, and all liens upon the title acquired; also costs of obtaining consents and payments for abutting damages.

NOTE A.—Cost of buildings and other improvements must not be included in this account.

NOTE B.—If at the time of acquisition of an interest in lands it extends to buildings or other improvements thereon, which improvements are devoted by the corporation to its operations, and the contract of acquisition does not determine the price of such improvements, they shall be appraised at their fair cash value for use in such operations, and such appraised value shall be charged to the appropriate structures account and excluded from the account "Land Devoted to Operations." If such improvements are not devoted to its operations, but are devoted to other operations or held as investments, the cost (or appraised value if the cost is not determined in the contract of acquisition) shall be charged to the appropriate investment account or capital account for other operations. If the improvements are removed or wrecked, the salvage (less the cost of removal or wreckage) shall be excluded from the account "Land Devoted to Operations." The entries in this account must be made in such wise as to enable the corporation to show in its annual report to the Public Utilities Commission the subdivision of the cost of its land devoted to its operations.

106. Buildings, Fixtures and Structures

Charge to this account the cost of all buildings and other structures of a permanent character devoted to general corporate purposes, not restricted to its operations and not includible in any of the departmental accounts; also of all fixtures permanently attached thereto and made a part thereof, such as water pipes and fixtures; steam pipes and fixtures for warming and ventilating; gas pipes and fixtures for lighting, etc.; electric wiring and fixtures for lighting, signaling, etc.; elevators, etc., and the engines and motors specially provided for operating them; furnaces, boilers, etc., specially provided for producing steam for such engines and for heating; electric generators specially provided for producing current for lighting such buildings, etc. This account includes such piers and other foundations for machinery and apparatus as are designed to be as permanent as the build-

ings in (or in connection with) which they are constructed, and to outlast the first machinery or apparatus mounted thereon.

NOTE A.—Among such buildings may be mentioned general office buildings, general shop buildings, general storehouses, general stable buildings, etc. This account is provided for structures of a general or miscellaneous character not assignable to any particular department.

NOTE B.—When furnaces and boilers are used primarily for furnishing steam for some particular department and only incidentally for furnishing steam for heating a general building and operating the equipment therein, the entire cost of such furnaces and boilers shall be charged to the appropriate departmental capital account.

107. Boiler Plant Equipment

Charge to this account the cost of all equipment devoted to the generation of steam. Charge with the cost of furnaces, boilers, their foundations and settings, boiler fittings, iron and steel smokestacks, feed pump, water feed pipe, injectors, economizers, water heaters, superheaters, valves, flues, steam pipes from the boilers to the engine throttle valves, steam exhaust system, boiler water purification equipment, mechanical stokers, cranes, coal and ash conveyors, steam traps, crushers, belt links, wheels, chutes and gates, conveyor cars, winches, motors, buckets, shafts, chains and similar auxiliary equipment in the boiler plant.

108. Steam Power Pumping Station Equipment

Charge this account with the cost of all steam power pumping equipment. This includes the cost of steam pumps where the steam and water cylinders are placed in the same machine and where the power pump is distinct from the steam prime movers, either reciprocating engines or turbines; condensers, vacuum pumps and oiling systems; power transmission equipment such as shafting, belting, rope and cable drives, gearing, clutches, pulleys and idler wheels; and auxiliary motors, hoists, cranes and pumping station tools, together with necessary valves, governors, etc.

NOTE.—Utilities desiring to do so may subdivide this account into the following:

a. Steam Engines and Turbines.
b. Pumps and Pump Equipment.
c. Steam Power Pumping Station Auxiliary Equipment.

109. Hydraulic Power Pumping Station Equipment

Charge this account with the cost of the hydraulic power works and all equipment of the hydraulic power pumping station. This includes the cost of all dams, canals and flumes devoted to the production of hydraulic power and the delivery of water to the head gates of the water wheels and turbines. Also charge with the cost of waste-ways from the outlet of the draft tube to the point of final discharge, including the cost of all gates, valves and other accessories, sluices, forebays, etc., used in the development of the hydraulic power and all accessory canals and aqueducts. Charge also with the cost of all water wheels and turbines

used in the pumping of water by hydraulic power including their foundations and settings, governors, and all apparatus appurtenant thereto from the head gates and governors to the waste-ways. Charge this account also with the cost of all pumps at the station operated by hydraulic power, together with the power transmission equipment such as shafting, belting, rope and cable drives, gearing, clutches, pulleys and idler wheels, and auxiliary pumping station equipment as motors, hoists, cranes, pumping station tools, valves, etc.

NOTE.—Utilities desiring to do so may subdivide this account as follows:

a. Hydraulic Power Works.
b. Water Wheels and Turbines.
c. Pumps and Pump Equipment.
d. Hydraulic Power Pumping Station Auxiliary Equipment.

110. Electric or Gas Power Pumping Station Equipment

Charge this account with the cost of all equipment of the electric or gas power pumping station. If electric pumping, this includes cost of power pumps and pumping equipments, electric prime movers used for operating such power pumps, together with switchboards and auxiliary electrical equipment, and power transmission equipment. If gas power pumping, this includes cost of all gas engines and turbines used as prime movers for pumping equipment, the cost of all pumping equipment operated by gas power. This account includes all power transmission equipment such as shafting, belting, rope and cable drives, gearing, clutches, pulleys and idler wheels and auxiliary motors, hoists, cranes, blacksmiths' and machinists' tools, etc.

115. Collecting Aqueducts, Intakes and Supply Mains

Charge this account with the cost of all aqueducts, intakes and supply mains used for gathering and collecting water and transmitting the same from the source of supply to the pumping station. This includes the cost of masonry and concrete aqueducts and channels, piping and conduits, together with the necessary bracing, digging and repaving in connection therewith and all necessary valves, screens, wet wells, gratings, submerged and exposed cribs, intake towers, sluice-gates, etc.

116. Purification System

Charge this account with the cost of all apparatus and equipment used for purification of water. This includes settling basins, filter beds, mechanical filters and all auxiliary apparatus for purifying water, whether by plain sedimentation, sedimentation with coagulation, chemical treatment for softening and removal of organic or mineral impurities, together with any protecting structures erected in connection therewith.

120. Transmission Mains

Charge to this account the cost of all transmission mains used for delivering water from the pumping station to the dis-

tribution reservoirs or mains. This includes the cost of all trenching, placing transmission main pipe, special castings, lead packing, shut-offs, manholes, valves and the cost of filling trenches and restoring the surface of the street to its former condition or that required by the municipal authorities at the time such transmission main is installed.

125. Mains

Charge to this account the cost of all distribution mains in place. This includes all mains used in the distribution of water to the beginning of the service connections, including the cost of all trenching, placing distribution main pipe, special work and castings, lead packing, shut-offs, manholes, valves and the cost of filling trenches and restoring the surface of the ground to its former condition or that required by the municipal authorities at the time such main is installed.

126. Services

Charge to this account the cost of the water utility's property in services in or leading to the consumers' premises. This includes the cost of material in place, the cost of trenching for placing services, service pipe, service boxes, stopcocks, etc., and the cost of filling trenches and restoring the surface to its proper condition. Where consumers are required to pay part or all of the cost of services, only that portion of the cost not chargeable to the consumers is chargeable to this account, and in all cases where only a portion of the cost of the services is chargeable to this account the entry thereto shall show the entire cost of the services as well as the cost charged to this account. Where services extending only from the main to the curb or to the lot line are placed before actually required for the purpose of supplying consumers, the entry of the cost should show that fact. Such services will be required to be separately reported in the annual report to the Commission.

127. Hydrants

Charge to this account the cost of water utility's property in all hydrants placed in the distribution system. This includes the cost of all material in place, the cost of trenching for placing hydrants, hydrant connections, etc., and the cost of filling trenches and restoring the surface to its proper condition.

128. Meters

Charge to this account the cost of water utility's property in all meters used in measuring water sold to consumers. This includes the cost of the first setting of the meters including the first set of meter fittings and connections in the premises of the consumers or such portion of the cost as is borne by the utility. The cost of changing the position of the meter or its removal should not be charged to this account.

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129. Fire Cisterns, Basins, Fountains and Troughs

Charge this account with the cost of the utility's property in all fire cisterns, basins, fountains and troughs. This includes the cost of all masonry and concrete work in connection with the construction of any cisterns and basins and all foundations and settings for fountains and troughs, together with the cost of all materials used in construction and digging and trenching in connection therewith and restoring the pavement to its original condition or that required by municipal ordinances.

140. General Office Equipment

Charge to this account the cost of all equipment of the general office of the utility embracing such items as office furniture and furnishings, movable safes, filing cases and devices, typewriters, adding machines, addressographs and sundry office equipment having an expectancy of life in service exceeding one year.

141. Miscellaneous Equipment

Charge to this account all equipment not includible in any of the preceding classified capital accounts, embracing such items as shop appliances, shop and laboratory tools, work tools and instruments, street department work tools and instruments, and other miscellaneous equipment.

142. Utility Equipment

Charge this account with the cost of all utility equipment. This includes wagons, drays, trucks, harness, horses, automobiles, bicycles, motorcycles, industrial tramways, etc.

145. Miscellaneous Construction and Equipment Expenditures

Accounts shall be opened as indicated below to which shall be charged all expenditures incurred during construction and before the operation of the utility of the character indicated by the title of the accounts. If expenditures are incurred for the service of engineers, superintendents and other technical skill of an advisory character during the process of construction and such items are not chargeable to any of the following accounts, there may be opened the account Engineering and Superintendence.

NOTE.—Auxiliary accounts.
Salaries during construction.
Office supplies and expenses during construction.
Stationery and printing during construction.
Legal expenses during construction.
Injuries and damages during construction.
Insurance during construction.
Taxes during construction.
Interest during construction.
Discount on bonds during construction.
Miscellaneous expenditures during construction.

146. Cost of Plant Purchased (in Lieu of Plant Constructed)

Charge to this account the cost of the plant purchased in case the plant of the utility is obtained by purchase instead of being constructed by it. The entry to this account should show with sufficient detail the name of the parties from whom purchased, the purchase price and all other facts pertinent to such sale, which details will be called for by the Commission.

147. Property in Other Departments

Charge to this account the cost of all property of the corporation coming within the definition of tangible property devoted to other than water operation.

150. Unfinished Plant Investment

Charge to this account the amounts expended under plant and equipment in process of construction under estimate or work orders, but not yet ready for service, including such proportion of plant supervision expenses, engineering expenses, tool expenses, supply expenses and general expenses, as may be properly chargeable to the construction work included under this account. As soon as such work is completed the cost of same should be credited to this account and charged to the appropriate Plant Investment Account.

INCOME ACCOUNT.

OPERATING ACCOUNTS.

OPERATING REVENUES.

501. Earnings from Commercial Sales

Credit this account with all revenue from water sales to commercial consumers, both where the revenue is dependent upon the quantity of water taken as recorded by meter and where such water is sold at flat rates and independent of the quantity taken. Commercial consumers, as referred to in this account, embrace residences, offices, apartment houses, retail commercial establishments, etc., where water is not used primarily for power or industrial purposes. Where, however, some manufacturing or industrial processes are performed in any residence, store or other point of commercial consumption, but such process being merely incidental to the broader use of the premises as a commercial consumer, the total consumption at such premises shall be credited to this account. When water is sold both by meter and flat rates, the earnings from each such subdivision shall be credited to subdivisions of this account and reported separately to the Commission as follows:

a. Commercial Earnings—Flat Rate.
b. Commercial Earnings—Metered.

Water sold to the municipality for use in public buildings

and not included in the contract for hydrant rentals and other municipal uses, will be considered as Commercial Earnings.

Where it is the custom of the utility to charge a minimum amount when the consumption during the month is less than the prescribed amount, the total amount of such minimum charge shall be credited to this account or to its appropriate sub-account. Where it is the custom of the utility to grant a discount from the gross bill or to add a penalty to the bill when payment is not made on or before a prescribed date, such discounts or penalties shall be charged or credited to this account. Utilities desiring to do so may open sub-accounts to show the Minimum Bill and Discount or Penalty items.

502. Earnings from Industrial Sales

Credit this account with all earnings from the sale of water for power and industrial purposes to manufacturing and industrial establishments. Where water is sold at a different rate for any particular kind of industrial use, the earnings from such separate sources shall be credited to appropriate subdivisions of this account and reported separately to the Commission. Where water is sold both by meter and flat rates, the earnings from each such division shall be credited to subdivisions of this account and reported separately to the Commission as follows:

a. Earnings from Industrial Sales—Flat Rate.
b. Earnings from Industrial Sales—Metered.

Where it is the custom of the utility to charge a minimum amount in cases where the consumption during the month is less than a prescribed amount, the total amount of such minimum charge shall be credited to this account or to its appropriate sub-account. Where it is the custom of the utility to grant a discount from the gross bill or to add a penalty to the bill where payment is not made on or before a prescribed date, such discount or penalty shall be charged or credited to this account. Utilities desiring to do so may open sub-accounts to show the Minimum Bill and Discount or Penalty items.

503. Earnings from Municipal Hydrant Rentals

Credit to this account all revenues received from the municipality for hydrant service. Where the hydrant rental paid by the municipality includes the use of water for street sprinkling and flushing purposes, and such water not being separately metered, the total revenue collected under such contract for hydrant rental will be credited to this account.

504. Earnings from Sales for Street Sprinkling

Credit this account with all earnings from sales of water for street sprinkling, both to individuals and contractors engaged in sprinkling streets, parks and thoroughfares, and also with sales to the municipality, where such sprinkling is performed by the city.

505. Earnings from Sales to Municipal Departments

Credit this account with all earnings from the sale of water to municipal departments other than for street sprinkling, if such is performed by the municipality. This includes earnings from the sale of water for sewer and street flushing, street construction, filling fire cisterns and basins, etc., by the municipality. Where a special contract is entered into between the municipality and the utility for water service at public buildings, as schools, police and fire stations, city hall, etc., revenue collected under such contract will be credited to this account. A record should be kept also of the revenue received from each separate municipal department.

506. Profit on Merchandise Sales

Credit to this account the receipts derived from the sale of water appliances and plumbing fixtures used in the consumption and utilization of water. Profit, as used in this account, is defined as being the excess of the sales price over the cash cost, including the invoice cost, cost of handling, storage, etc., if such merchandise is passed through the stores department. Charge this account with all expenses for labor and material in connection with the sale of such appliances or merchandise. The net amount only, or the profit on merchandise sales, is to be carried to the Income Account. The credits and charges to this account shall be made in such a manner as to admit of a detailed analysis when called for by the Commission.

NOTE.—Receipts from the sale of superseded apparatus, junk or salvage, are not to be credited to this account, but to the *Depreciation Reserve*.

507. Profit on Piping and Connections

Credit this account with all earnings derived from piping and connection work performed by the utility. This includes earnings from services performed on the consumers' premises, such as piping the consumers' premises, connecting and disconnecting house piping and water fixtures, the re-location of piping or apparatus, and other plumbing and fixture work. If prospective consumers are charged for services performed by the water utility in connecting the house piping and plumbing with the service connection, or for laying such service piping, such earnings shall be credited to this account. Where the cost of laying the service connection is charged to the property owner, such work shall not be included in tangible capital. Charge to this account all expenses for labor and materials in connection with such operation, the net amount only, or the profit from such piping and connection work, being carried to the Income Account. The credits and charges to this account will be made in such a manner as to admit of a detailed analysis when called for by the Commission.

508. Miscellaneous Earnings from Operation

Credit to this account all earnings received from operating transactions not properly includible in the preceding accounts.

OPERATING EXPENSES.

Steam Power Pumping.

Operation.

601. Superintendence

Charge to this account the total cost of superintendence of the steam power pumping plant. This account includes the salaries of superintendent of pumping plant, foreman, draftsmen, chemists and all clerical help upon records and accounts pertaining to steam power pumping, whether such services are performed at the general office or at the plant. Charge also with the proportion of the salaries of engineering staff assignable to the steam power pumping plant.

NOTE.—If water is also pumped by hydraulic, gas or electric power at the same station, the total cost of superintendence will be apportioned over the corresponding *Superintendence* accounts.

602. Pump Labor

Charge this account with the cost of all labor engaged in operating steam power pumping equipment. This includes such labor as that of chief engineer and assistants, engineers, oilers, wipers and all other employes whose duties concern the operation of steam power pumps. Exclude all maintenance labor.

NOTE.—If water is also pumped at the station by other than steam power, pump labor jointly incurred will be apportioned over the corresponding labor accounts in the respective groups of *Pumping* accounts.

603. Purification Labor

Charge this account with the cost of all labor engaged in the purification of water. This includes the salaries and wages of all employes engaged in operating purification equipment, cleaning basins, removing ice, etc., and all processes of water purification brought about by plain sedimentation, sendimentation with coagulation, treatment for softening, removal of iron, algae, etc., purification by slow and rapid sand filtration and other means. Exclude maintenance labor.

NOTE.—If water is also pumped by other than steam power, labor charges jointly incurred will be apportioned accordingly over the respective groups of *Pumping* accounts.

604. Miscellaneous Labor

Charge this account with the salaries and wages of all employes in and about the steam power pumping plant engaged in operating such plant, including watchmen, labor cleaning buildings and yards, janitors, messengers and general labor not charge-

able to any of the foregoing steam power pumping operating labor accounts. Exclude maintenance labor.

NOTE.—If water is also pumped by other than steam power, labor charges jointly incurred will be apportioned accordingly over the respective groups of *Pumping* accounts.

605. Steam

The total expense of generating steam is to be determined through a group of accounts referred to as the Steam Generation Account. Where a utility is furnishing but one public service from its boiler plant, the details of the steam expense will appear in the Steam Generation Account, and the total expense as shown therein will be carried to this account in the Pumping group of accounts and so shown in the annual report to the Commission. Where, however, two or more utilities or services are making a demand upon the same boiler equipment, the total steam expense will be apportioned over the departments so using the steam equipment, and the apportioned share of the steam expense incurred for the benefit of steam power pumping will be carried to this account. If steam is used at the pumping station for other purposes than the pumping of water, the expense for steam will be further apportioned, charging the appropriate expense accounts.

606. Lubricants

Charge to this account the cost of all lubricants for steam power pumping equipment and machinery connected therewith in the steam power pumping plant. This includes cylinder oil, machine oil, graphite and other lubricants, but does not include wagon grease or oil for lanterns.

607. Purification Supplies and Expenses

Charge this account with the cost of all supplies consumed and expenses incurred in the purification of water pumped by steam power, including the cost of chemicals, coagulants and other supplies used in the process of water purification, softening, removal of iron, algae, etc., by the various purification methods. Exclude all maintenance supplies.

NOTE.—If water is also pumped at the plant by other than steam power, the cost of purification supplies and expenses will be apportioned over the corresponding accounts in the different groups of *Pumping* accounts.

608. Miscellaneous Pumping Station Supplies and Expenses

Charge this account with all operating supplies and expenses incurred in the pumping of water by steam power, not chargeable to any of the preceding accounts. This includes such items as waste, packing, wipers, hand tools, gas and electricity for lighting, heating and cleaning pumping station, laboratory apparatus and supplies, ice, water for general use and fire protection, and all

items of similar nature. Charge this account also with stationery, telephones, etc., if it is desired to distribute such expenses.

NOTE.—Where water is also pumped by other than steam power, the total cost of *Miscellaneous Pumping Station Supplies and Expenses* should be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

Maintenance.

611. Repairs of Steam Power Pumping Equipment

Charge this account with all expenses for labor and material used in repairing steam power pumping equipment. This includes repairs both to steam pumps where the steam and water cylinders are placed in the same machine, and where the power pump is distinct from the steam prime mover, either reciprocating engines or turbines. Do not charge this account with repairs to power transmission equipment. Exclude operating labor.

NOTE.—Utilities using power pumps operated by steam prime movers which are distinct from the pumps, may subdivide this account as follows:

a. Maintenance of Pumps.
b. Maintenance of Steam Prime Movers.

612. Repairs of Pumping Station Auxiliary Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the steam power pumping station auxiliary equipment. This includes repairs to condensers, vacuum pumps, oiling systems, power transmission equipment such as shafting, belting, rope and cable drives, clutches, pulleys and idler wheels, and auxiliary motors, hoists, cranes, blacksmiths' and machinists' tools, and all other accessory equipment other than hand tools, the cost of which is to be included in Operating Expenses. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the cost of maintaining pumping station auxiliary equipment used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

613. Repairs of Surface Source of Supply

Charge this account with all expenses for labor and material incurred in making repairs to the surface source of water supply. This includes repairs to river and lake sources, impounding reservoirs, artificial lakes and ponds, etc., together with repairs to impounding embankments, channels, waste-weirs, gates, valves, gate structures, and repairs to works for utilizing the flow from springs. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the cost of maintaining the surface source of supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

614. Repairs of Ground Source of Supply

Charge this account with all expenses for labor and material incurred in making repairs to the ground source of water supply. This includes repairs to large open wells, shallow tubular wells, deep artesian wells, etc., and includes the removal of sand or corroded material, and repairs to well casing, repairs to filter galleries, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the cost of maintaining the ground source of supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

615. Repairs of Collecting Aqueducts, Intakes and Supply Mains.

Charge this account with all expenses for labor and material incurred in making repairs to the collecting aqueducts, intakes and supply mains between the source of supply and the pumping equipment at the station. This includes the periodical scraping to remove organic growth and incrustation, repairs to masonry of aqueducts and channels, seeking and repairing leaks, repairing pipes and removing and replacing worn sections and fittings, calking, protecting exposed parts of undermined supply mains, changing the position of or replacing such mains with the necessary bracing and digging in connection therewith; repaving, and repairs to valves, hatch boxes, manholes, etc.; repairs to regulating valves, screens and wet wells; repairs and renewals of grating, fish screens, and repairs to submerged and exposed cribs, intake towers and other structures, sluice-gates, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the cost of maintaining collecting aqueducts, intakes and supply mains which convey water for the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

616. Repairs of Purification Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the purification equipment. This includes repairs to settling basins, renewing sand, washing sand, and repairs to all equipment used in the purification of water by plain sedimentation, sedimentation with coagulation, treatment for softening and removal of iron, algae, etc., purification by slow and rapid sand filtration, mechanical filters, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the cost of maintaining purification equipment used in purifying all water pumped will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

617. Repairs of Purification Buildings, Fixtures and Grounds

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including

permanent apparatus foundations used exclusively for the purification of water. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power, the total cost of maintaining purification buildings, fixtures and grounds used in the purification of all water pumped will be apportioned accordingly over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

618. Repairs of Pumping Station Buildings, Fixtures and Structures

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including permanent apparatus foundation used exclusively for the pumping of water by steam power. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than steam power and the equipment for such other methods of pumping is housed in the same buildings and structures, the total cost of maintaining such jointly used buildings, fixtures and grounds will be apportioned over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

Hydraulic Power Pumping.

Operation.

625. Superintendence

Charge to this account the total cost of superintendence of the hydraulic power pumping plant. This account includes the salaries of the superintendent of pumping plant, foremen, draftsmen, chemists and all clerical help upon records and accounts pertaining to hydraulic power pumping, whether such services are performed at the general office or at the plant. Charge also with the proportion of salaries of engineering staff assignable to the hydraulic power pumping plant.

NOTE.—If water is also pumped by other than hydraulic power at the same station, the total cost of superintendence will be apportioned over the corresponding *Superintendence* accounts in the respective groups of *Pumping* accounts.

626. Hydraulic Labor

Charge this account with the salaries and wages of all employes operating the hydraulic works, including hydraulic foremen, gatemen, wheelmen, canal men, patrollers of reservoirs, dams and channels and all other employes whose duties concern the operation of hydraulic power equipment. Exclude maintenance labor.

627. Pump Labor

Charge this account with the cost of all labor engaged in operating the hydraulic power pumping equipment. This includes such labor as that of foremen and assistants, oilers, wipers and all other employes whose duties concern the operation of such hydraulic power pumps. Exclude all maintenance labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, pump labor jointly incurred will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

628. Purification Labor

Charge this account with the cost of all labor engaged in the purification of water. This includes the salaries and wages of all employes engaged in operating purification equipment, cleaning basins, removing ice, scraping sand, etc., and all processes of water purification brought about by plain sedimentation, sedimentation with coagulation, treatment for softening, removing iron, algae, etc., purification by slow and rapid sand filtration and other means. Exclude maintenance labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, labor charges jointly incurred in the purification of water will be apportioned accordingly over the appropriate accounts in the respective groups of *Pumping* accounts.

629. Miscellaneous Labor

Charge this account with the salaries and wages of all employes in and about the hydraulic power pumping plant engaged in operating such plant, including watchmen, labor cleaning buildings and yards, janitors, messengers and general labor not chargeable to any of the foregoing hydraulic power pumping operating labor accounts. Exclude maintenance labor.

NOTE.—If water is also pumped by other than hydraulic power, labor charges jointly incurred will be apportioned accordingly over the appropriate classes of *Pumping* accounts.

630. Hydraulic Power Purchased

Charge to this account the cost of all water purchased for the purpose of operating the hydraulic power pumping equipment. It is desired that this account shall be so kept as to indicate the name of the company or individual from whom such water was purchased, the amount of water power purchased and the terms under which it was purchased.

631. Lubricants

Charge to this account the cost of all lubricants for hydraulic power pumping equipment and all machinery connected therewith in the hydraulic power pumping plant. This includes machine oil, pump oil, graphite and other lubricants, but does not include wagon grease or oil for lanterns.

NOTE.—If water is also pumped at the plant by other than hydraulic power, the total cost of lubricants will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

632. Purification Supplies and Expenses

Charge this account with the cost of all supplies consumed and expenses incurred in the purification of water pumped by hydraulic power, including the cost of chemicals, coagulants and other supplies used in the process of water purification, softening, removal of iron, algae, etc., by the various purification methods. Exclude all maintenance supplies and expenses.

NOTE.—If water is also pumped at the plant by other than hydraulic power, the cost of purification supplies and expenses will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

633. Miscellaneous Pumping Station Supplies and Expenses

Charge this account with all operating supplies and expenses incurred in the pumping of water by hydraulic power not chargeable to any of the preceding accounts. This includes such items as waste packing, wipers, hand tools, gas and electricity for lighting, heating and cleaning pumping station, laboratory apparatus and supplies, ice, water for general use and fire protection, and all other items of similar nature. Charge this account also with stationery, telephones, etc., if it is desired to distribute such expenses.

NOTE.—Where water is also pumped at the station by other than hydraulic power, the total cost of miscellaneous pumping station supplies and expenses will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

Maintenance.

635. Repairs of Dams, Canals and Flumes

Charge to this account all expenses for labor and materials incurred in repairing hydraulic structures. Such structures include dams, embankments, etc., for impounding water, and all appurtenant gates, valves, weirs, waste-ways, canals, conduits, and other channels (including riprap, lining walls, etc.), pipe lines, flumes, aqueducts and supporting trestles, forebays and appurtenant sieves and grids, waste-ways, etc., all viaducts, bridges, foot-bridges, etc., over and accessory to or necessitated by such canals, aqueducts and flumes, and also the waste-ways conducting the water from the outlet of the draft tube to the point of final discharge. Exclude operating labor.

636. Repairs of Turbines and Water Wheels

Charge to this account all expenses for labor and supplies incurred in repairing the hydraulic motive power, including head gates, pen-stocks, wheel gates, wheel governors, valves, turbines, water wheels, draft tubes, and connections. The maintenance of power transmission apparatus as shafts, belts, etc., will not be charged to this account. Exclude operating labor.

637. Repairs of Hydraulic Power Pumping Equipment

Charge this account with all expenses for labor and material incurred in repairing hydraulic power pumps and hydraulic power pumping equipment. Do not charge this account with repairs to hydraulic power transmission equipment. Exclude operating labor.

638. Repairs of Pumping Station Auxiliary Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the hydraulic power pumping station auxiliary equipment. This includes repairs to oiling systems, power transmission equipment such as shafting, belting, rope and cable drives, clutches, pulleys, idler wheels, and auxiliary motors,

hoists, cranes, blacksmiths' and machinists' tools, and all other accessory equipment other than hand tools, the cost of which is to be included in operating expenses. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, the cost of maintaining pumping station auxiliary equipment used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

639. Repairs of Surface Source of Supply

Charge this account with all expenses for labor and materials incurred in making repairs to the surface source of water supply. This includes repairs to river and lake sources, impounding reservoirs, artificial lakes and ponds, etc., together with repairs to impounding embankments, channels, waste-weirs, gates, valves, gate structures and repairs to works for utilizing the flow from springs. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, the cost of maintaining the surface source of supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

640. Repairs of Ground Source of Supply

Charge this account with all expenses for labor and material incurred in making repairs to the ground source of water supply. This includes repairs to large open wells, shallow tubular wells, deep artesian wells, etc., and includes the removal of sand or corroded material and repairs to well casings, repairs to filter galleries, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, the cost of maintaining the ground source of water supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

641. Repairs of Collecting Aqueducts, Intakes and Supply Mains

Charge this account with all expense for labor and material incurred in making repairs to collecting aqueducts, intakes and supply mains between the source of supply and the hydraulic power pumping equipment at the station. This includes the periodical scraping to remove organic growth and incrustation, repairs to masonry of aqueducts and channels, seeking and repairing leaks, repairing pipes and removing and replacing worn sections and fittings, calking, protecting exposed parts of undermined supply mains, changing the position of or replacing such mains with the necessary bracing and digging in connection therewith; repaving, and repairs to valves, hatch boxes, manholes, etc.; repairs to regulating valves, screens and wet wells; repairs and renewals of gratings, fish screens and repairs to submerged and

exposed cribs, intake towers, and other structures, sluice-gates, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, the cost of maintaining collecting aqueducts, intakes and supply mains which convey water for the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

642. Repairs of Purification Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the purification equipment. This includes repairs to settling basins, renewing sand, washing sand, and repairs to all equipment used in purification of water by plain sedimentation, sedimentation with coagulation, treatment for softening and removal of iron, algae, etc., purification by slow and rapid sand filtration, mechanical filters, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power, the cost of maintaining purification equipment used in the purifying of all water pumped will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

643. Repairs of Purification Buildings, Fixtures and Grounds

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including permanent apparatus foundations used exclusively for the purification of water. Exclude operating labor.

Note.—If water is also pumped at the station by other than hydraulic power, the total cost of maintaining purification buildings, fixtures and grounds used in the purification of all water pumped, will be apportioned accordingly over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

644. Repairs of Pumping Station Buildings, Fixtures and Grounds

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including permanent apparatus foundations, used exclusively for the pumping of water by hydraulic power. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than hydraulic power and the equipment for such other method of pumping is housed in the same buildings and structures, the total cost of maintaining such jointly used buildings, fixtures and grounds will be apportioned over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

ELECTRIC OR GAS POWER PUMPING.

NOTE.—If water is pumped by electric power, use this classification; or, if water is pumped by gas power, use this classification, designating same by erasing the word "electric" or "gas" as used. If water is pumped by both electric and gas power, use this classification for each, designating the same under same code numbers with the addition after code number of "E" for electric power, and "G" for gas power.

Operation.

651. Superintendence

Charge to this account the total cost of superintendence of the electric or gas power pumping station. This includes the salaries of the superintendent of the pumping station, foremen, draftsmen, chemists and all clerical help upon records and accounts pertaining to electric or gas power pumping, whether such services are performed at the general office or at the station. Charge also with the proportion of salaries of the engineering staff assignable to the electric power pumping station.

NOTE.—If water is also pumped at the station by other than electric or gas power, the total cost of superintendence will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

652. Pump Labor

Charge this account with the cost of all labor engaged in operating electric or gas power pumping equipment. This includes such labor as that of pump foremen and assistants, oilers, wipers, motor attendants and other electrical or gas labor and all other employes whose duties concern the operation of the electric or gas power pumps. Exclude all maintenance labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, pump labor jointly incurred will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

653. Purification Labor

Charge this account with the cost of all labor engaged in the purification of water. This includes the salaries and wages of all employes engaged in operating purification equipment, cleaning basins, removing ice, etc., and all processes of water purification brought about by plain sedimentation, sedimentation with coagulation, treatment for softening, removal of iron, algae, etc., purification by slow and rapid sand filtration and other means. Exclude maintenance labor.

NOTE.—If water is also pumped at the plant by other than electric or gas power, labor charges jointly incurred in purifying all water will be apportioned accordingly over the appropriate accounts in the respective groups of *Pumping* accounts.

654. Miscellaneous Labor

Charge this account with the salaries and wages of all employes in and about the electric or gas power pumping plant engaged in operating such plant, including watchmen, labor cleaning buildings and yards, janitors, messengers and general labor not chargeable to any of the foregoing electric or gas power pumping operating labor accounts. Exclude maintenance labor.

NOTE.—If water is also pumped by other than electric or gas power, labor charges jointly incurred will be apportioned accordingly over the appropriate classes of *Pumping* accounts.

655. Electric Current or Gas Purchased

Charge this account with the cost of all electric current or gas purchased for the operation of electric or gas power pumps. It is desired that the account shall be so kept as to indicate the name of the company or individual from whom such electric energy or gas was purchased, the amount purchased and terms under which it was purchased.

656. Lubricants

Charge to this account the cost of all lubricants for electric or gas power pumping equipment and for all machinery connected therewith in the electric or gas power pumping station. This includes pump oil, machine oil, motor oil, graphite and other lubricants, but does not include wagon grease or oil for lanterns.

NOTE.—If water is also pumped at the station by other than electric or gas power, the total cost of lubricants used in the station will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

657. Purification Supplies and Expenses

Charge this account with the cost of all supplies consumed and expenses incurred in the purification of water pumped by electric or gas power, including the cost of chemicals, coagulants and other supplies used in the processes of water purification, softening, removal of iron, algae, etc., by the various purification methods. Exclude all maintenance supplies.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of purification supplies and expenses will be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

658. Miscellaneous Pumping Station Supplies and Expenses

Charge this account with all operating supplies and expenses incurred in pumping water by electric or gas power not chargeable to any of the preceding accounts. This includes such items as waste, packing, wipers, hand tools, gas and electricity for lighting, heating and cleaning pumping station, laboratory apparatus and supplies, water for general use and fire protection and all items of a similar nature. Charge this account also with stationery, telephones, etc., if it is desired to distribute such expenses.

NOTE.—Where water is also pumped at the station by other than electric or gas power, the total cost of miscellaneous pumping station supplies and expenses should be apportioned over the corresponding accounts in the respective groups of *Pumping* accounts.

Maintenance.

661. Repairs of Electric or Gas Power Pumping Equipment

Charge this account with all expenses for labor and material incurred in repairing electric or gas power pumps and pumping

equipment. Do not charge this account with repairs to power transmission equipment. Exclude operating labor.

NOTE.—Utilities using power pumps operated by electric or gas prime movers which are distinct from the pumps may subdivide this account as follows:

a. Maintenance of Pumps.
b. Maintenance of Electric or Gas Prime Movers.

662. Repairs of Pumping Station Auxiliary Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the electric or gas power pumping station, auxiliary equipment. This includes repairs to oiling systems, power transmission equipment such as shafting, belting, rope and cable drives, clutches, pulleys and idler wheels, and auxiliary motors, hoists, cranes, blacksmiths' and machinists' tools, switchboards and other auxiliary electric or gas equipment, and all other accessory equipment other than hand tools, the cost of which is to be included in operating expenses. Do not charge this account with repairs to electric prime motive power or gas apparatus. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of maintaining pumping station auxiliary equipment used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

663. Repairs of Surface Source of Supply.

Charge this account with all expenses for labor and material incurred in making repairs to the surface source of water supply. This includes repairs to river and lake sources, impounding reservoirs, artificial lakes and ponds, etc., together with repairs to impounding embankments, channels, waste-weirs, gates, valves, gate structures, and repairs to works for utilizing the flow from springs. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of maintaining the surface source of supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

664. Repairs of Ground Source of Supply

Charge this account with all expenses for labor and material incurred in making repairs to the ground source of supply. This includes repairs to large open wells, shallow tubular wells, deep artesian wells, etc., and includes the removal of sand or corroded material and repairs to well casing, repairs to filter galleries, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of maintaining the ground source of supply used for the joint benefit of the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

665. Repairs of Collecting Aqueducts, Intakes and Supply Mains

Charge this account with all expenses for labor and material incurred in making repairs to the collecting aqueducts, intakes and supply mains between the source of supply and the electric or gas pumping equipment at the station. This includes the periodical scraping to remove organic growth and incrustation, repairs to masonry or aqueducts and channels, seeking and repairing leaks, repairing pipes and removing and replacing worn sections and fittings, calking, protecting exposed parts of undermined supply mains, changing the position of or replacing such mains with the necessary bracing and digging in connection therewith; repaving, and repairs to valves, hatch boxes, manholes, etc.; repairs to regulating valves, screens and wet wells; repairs and renewals of gratings, fish screens, and repairs to submerged and exposed cribs, intake towers and other structures, sluice-gates, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of maintaining collecting aqueducts, intakes and supply mains which convey water for the different methods of pumping will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

666. Repairs of Purification Equipment

Charge this account with all expenses for labor and material incurred in making repairs to the purification equipment at the electric or gas power pumping station. This includes repairs to settling basins, washing sand, renewing sand, and repairs to all equipment used in the purification of water by plain sedimentation, sedimentation with coagulation, treatment for softening, and removal of iron, algae, etc., purification by slow and rapid sand filtration, etc. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the cost of maintaining purification equipment used in purifying all water pumped will be apportioned over the appropriate *Maintenance* accounts of the respective classes of *Pumping* accounts.

667. Repairs of Purification Buildings, Fixtures and Grounds

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including permanent apparatus foundations, used exclusively for the purification of water. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, the total cost of maintaining purification buildings, fixtures and grounds used in the purification of all water pumped will be apportioned accordingly over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

668. Repairs of Pumping Station Buildings, Fixtures and Grounds

Charge this account with all expenses for labor and material incurred in repairing buildings, fixtures and grounds, including

permanent apparatus foundations, used exclusively for the pumping of water by electric power. Exclude operating labor.

NOTE.—If water is also pumped at the station by other than electric or gas power, and the equipment for such other method of pumping is housed in the same buildings and structures, the total cost of maintaining such jointly used buildings, fixtures and grounds will be apportioned over the appropriate *Maintenance* accounts of the respective groups of *Pumping* accounts.

GRAVITY SUPPLY.

Operation.

680. Superintendence

Charge to this account the total cost of superintendence of the gravity supply system.

This account includes the salaries of superintendent of the gravity system, foreman, draftsman, chemist, and all clerical help upon the records and accounts, pertaining to the gravity system, whether such services are performed at the general office or out upon the supply system. Also that proportion of the salaries of the engineering staff assignable to the gravity supply system.

NOTE.—If water is also furnished by other than gravity system, the total cost of superintendence will be apportioned over the corresponding *Superintendence* accounts.

681. Gravity Supply Labor

Charge to this account the cost of all labor engaged in patrolling and inspecting the water supply properties, including the caretaking and guarding the drainage area, locating and clearing trouble at intake, removal of sand and corroded material from aqueducts, periodical scraping to remove growth and incrustation, etc.

682. Purification Labor

Charge this account with the cost of all labor engaged in the purification of water. This includes the salaries and wages of all employes engaged in operating purification equipment, cleaning basins, removing ice, etc., and all processes of water purification.

NOTE.—If water is also furnished by other than gravity supply, the total expense of purification labor will be apportioned over the corresponding accounts of the respective water supply departments. Exclude maintenance labor.

683. Miscellaneous Labor

Charge this account with the salaries and wages of all employes about the gravity supply system not chargeable to any of the foregoing operating labor accounts.

NOTE.—If water is also furnished by other than gravity supply, labor charges jointly incurred shall be apportioned over the other classes of water supply accounts.

684. Purification Supplies and Expenses

Charge this account with the cost of all supplies consumed and expenses incurred in the purification of water furnished by gravity supply, including all chemicals, etc., and other supplies used in the various purification methods. Exclude maintenance supplies.

NOTE.—If water is also furnished by other than gravity supply, the cost of purification supplies and expenses shall be apportioned over the corresponding accounts of water supply.

685. Gravity Supply System Supplies and Expenses

Charge to this account all operating supplies and expenses incurred in furnishing water by gravity supply, not chargeable to any of the preceding accounts. This includes waste, packing, hand tools, gas and electricity for lighting the supply structures, heating and cleaning structures, laboratory supplies, and all similar items.

NOTE.—When water is furnished by other than gravity supply, the total cost of supplies and expense herein enumerated shall be apportioned over the corresponding accounts of water supply.

Maintenance.

690. Repairs to Water Supply Structures

Charge to this account all expenses for labor and material incurred in repairing buildings and structures used by gravity supply; also repairs to structures devoted to the purification of water. Exclude operating labor.

NOTE.—If water is also supplied by other than gravity supply, the cost of repairs of maintenance shall be apportioned over the corresponding appropriate maintenance accounts.

691. Repairs to Surface Source of Supply

Charge to this account all expenses for labor and material incurred in making repairs to surface source of water supply.

NOTE.—If water is also supplied by other than gravity supply, the cost of repairs shall be apportioned over the corresponding appropriate maintenance accounts. Repairs to structures of the source of water supply shall not be charged to this account, but to account *Repairs* to water *Supply Structures.*

692. Repairs to Ground Source of Supply

Charge to this account all expenses for labor and material incurred in making repairs to ground source of water supply. This includes open wells, shallow tubular wells, deep artesian wells, well casings, filter galleries, etc.; also supply mains between source of supply and distribution storage reservoirs.

NOTE.—If water is also supplied by other than gravity supply, the cost of repairs shall be apportioned over the corresponding appropriate *Maintenance* accounts. Repairs to structures of the source of water supply shall not be charged to this account, but to the account *Repairs* to *Water Supply Structures.*

693. Repairs to Purification Equipment

Charge to this account all expenses for labor and material incurred in making repairs to the purification equipment.

This includes repairs to settling basins, receiving sand, washing sand, and all equipment in the purification of water by any process. Exclude operating labor.

NOTE.—If water is also supplied by other than gravity supply, the cost of repairs shall be apportioned over the corresponding appropriate *Maintenance* accounts.

WATER PURCHASED.

(In Lieu of Water Pumped.)

695. Commercial Water Purchased

Charge this account with the cost of water purchased for the purpose of redistribution and sale. Accounts are to be opened for each company or individual from whom such water is purchased, the account showing the name of the selling company or individual, the rate and the total cost of such water, and such details will be called for in the annual report to the Commission.

DISTRIBUTION.

Operation.

701. Wages

(a) Superintendence

Charge to this account salaries of superintendent, assistants and clerks; also that portion of the salaries of the engineering staff of the company assignable to the distribution system.

(b) Wages

Labor under operations not elsewhere provided for.

702. Patrolling Storage Facilities

Charge this account with the salaries and wages of all employes engaged in patrolling the distribution storage facilities. This includes the wages of the employes stationed at the distribution storage reservoirs, inspection of tanks and stand pipes, etc. Exclude maintenance labor.

703. Labor Removing and Resetting Meters

Charge this account with all operating labor employed in removing and resetting meters on the premises of the consumers and placing meter connections in the course of the regular and periodical inspection of such meters. Where such work is performed by regular meter maintenance men, their time should be apportioned accordingly. Exclude maintenance labor.

NOTE.—The cost of the original setting of each meter including one set of connections will be charged to the construction account *Meters* if it is the policy of the utility to capitalize such original setting.

704. Meter and Fittings Department Labor

Charge this account with all operating labor employed in the meter shop and fittings department. This includes the salaries and wages of meter shop clerks, employes keeping shop records and all operating labor in the meter shop or department not properly chargeable to the accounts Labor Removing and Resetting Meters and Maintenance of Meters. Exclude maintenance labor.

705. Meter and Fittings Department Supplies and Expenses

Charge this account with all supplies consumed and expenses incurred in the operation of the meter and fittings department. Expenses, such as light, fuel, gas, electricity and water used for operating machinery and for testing in this department, and hand tools of the workmen will be charged to this account. This account should also include all expenses connected with the meter and fittings department not included in the accounts Meters and Fittings Department Labor and Labor Removing and Resetting Meters. Exclude maintenance supplies and expenses.

706. Street Department Labor

Charge this account with all operating labor employed in the street department. This includes the salaries and wages of employes engaged in inspecting the distribution system, flushing mains and hydrants, pumping out hydrants, taking street pressure, repairing street department operating tools, clerical salaries for the street department and miscellaneous street department operating labor. Exclude maintenance labor.

707. Street Department Supplies and Expenses

Charge this account with all operating supplies and expenses of the street department. This includes tools used in such department and supplies used by street department employes, office supplies and expenses of such department and miscellaneous street department supplies. Exclude maintenance supplies and expenses.

708. Miscellaneous Expenses and Supplies

Charge this account with all labor and material required for adjusting house piping, plumbing and water fixtures, including the cost of any new appliances or devices put in to better the service and not properly chargeable to repairs, investigating reports of poor service or large bills, including inspecting and testing of house plumbing, labor changing meters for request tests and inspecting new plumbing, including car fare, meals, etc., of employes engaged in such work.

NOTE.—Repairing meters will be charged to the account *Maintenance of Meters.*

Maintenance.

710. Repairs of Transmission Mains

Charge this account with all expenses for labor and material incurred in repairing, overhauling, changing position of or replacing transmission mains between the pumping station and distribution reservoirs, tanks, etc. This account covers such items as seeking and repairing leaks, repairing pipes and removing and replacing worn sections and fittings, calking, protecting exposed parts of undermined mains, digging and bracing in connection with such work, repaving, and repairing manholes, etc., together with all materials and supplies consumed in thawing pipes and scraping to remove incrustations. Credit the proper stock account with store room value of the materials charged to this account.

711. Repairs of Reservoirs, Tanks and Standpipes

Charge this account with all expenses for labor and material in repairing distribution reservoirs, tanks and standpipes. This includes repairs to masonry and linings due to settlement of underlying material, frost action, or from other causes; calking and repairing with cement grouting, asphalt or other water proof material; painting and calking standpipes and tanks, replacing parts due to decay or excessive corrosion or electrolysis, and replacement of hoops, repairs to valves, etc.

712. Repairs of Distribution Mains

Charge this account with all expenses for labor and material used in repairing, overhauling, changing position of or replacing distribution mains. This account covers such items as seeking and repairing leaks, repairing pipes or removing and replacing worn sections and fittings, calking, protecting exposed parts of undermined mains, digging and bracing in connection with such work, repaving, repairing manholes, and the cost of steam, electricity and other supplies used and expenses incurred in thawing such mains and removing incrustations. Credit the proper stock account with the store room value of the pipes and fittings charged to this account.

713. Repairs of Services

Charge this account with all expenses for labor and materials incurred in repairing, overhauling and changing position of water service connections. This covers such expenses as seeking and repairing leaks, cleaning and scraping out service pipes; repairing and renewing service pipe connections to meters, including stop cocks, service boxes and the cost of repairing the same. Charge this account also with the cost of changing and extending old service pipes to put meters in better location, and the expense for materials and supplies incurred in thawing services. Extending new services to give better location for meters will be charged to the construction account Services.

714. Repairs of Meters

Charge this account with all expenses for labor and material in repairing water meters. This includes readjusting, painting, replacing worn gears, wearing parts and dials, testing and repairing old meters, repairing and replacing connections, meter fittings, etc., meter unions and cocks and changing meters for routine tests, etc.

NOTE.—The average cost of one set of meter connections should be charged to the construction account *Meters* if it is the policy of the utility to capitalize the cost of such original setting.

715. Repairs of Hydrants

Charge this account with all expenses for labor and materials incurred in repairing hydrants. This includes repairs and renewals of parts, including digging and filling in connection with such repairs, painting hydrants, replacing worn fittings, protecting exposed parts of undermined hydrants and connections and changing location of hydrants.

716. Repairs of Fire Cisterns and Basins

Charge this account with all expenses for labor and material in repairing fire cisterns and basins in the distribution system. This includes repairs to masonry and lining due to settlement of underlying material, frost action or from other causes; calking and repairing with cement grouting, asphalt or other water proof material, replacing worn parts due to decay or other causes and repairs and renewals to connecting piping and fittings.

717. Repairs of Fountains and Troughs

Charge this account with all expenses for labor and materials incurred in repairing, overhauling and changing positions of fountains and troughs. This includes repairs and renewals of parts, painting, repairs to foundations and settings, connections, etc.

718. Repairs of Distribution Buildings, Fixtures and Grounds

Charge to this account all expenses for labor and materials incurred in repairing buildings, fixtures and grounds devoted exclusively to the distribution system.

COMMERCIAL EXPENSE.

741. Office Salaries and Expenses

Charge to this account the proportion of salaries and expenses of general officers and assistants in charge of commercial department and salaries of bookkeepers and all clerks in the accounting and collection departments having to do with consumers' accounts, as follows:

(a) Salaries and Expenses—Meter Indexers

Salaries and expenses of meter indexers, including indexers' lamps.

(b) Salaries and Expenses—Accounting Department

Proportion of salaries and expenses of general officer and assistants in charge of commercial department, and salaries of bookkeepers and all clerks in the accounting department having to do with consumers' accounts.

(c) Salaries and Expenses—Collection Bureau

Salaries and expenses of chief and assistants in bureau; collectors' salaries, badges, car fares, delivering bills.

(d) Salaries and Expenses—Contract Department

Salaries and expenses incurred in the contract department, including attention to bill questions.

742. Office Supplies and Expenses

Charge to this account the cost of stationery, meals, car fare, heat, janitor, telephones, rents for commercial offices, and all other incidental expenses.

743. Advertising

Charge to this account all the payments for advertising, advertising manager's salary, clerks of the department, sundries, including booklets, dodgers, newspaper advertising, poster, bulletins, etc.

GENERAL EXPENSE.

761. Salaries and Expenses of General Officers

Charge to this account the salaries and expenses of the Chairman of the Board, President, Vice-President, Secretary, Treasurer, General Manager, Assistant General Manager, Comptroller, General Auditor, Chief Engineer, General Superintendent, Purchasing Agent and all other officers with jurisdiction extending over the entire system, whose services cannot be satisfactorily allocated to the several departments (also include directors' fees).

762. Salaries and Expenses of General Office Clerks

Charge to this account all of the amounts paid out for salaries of all employes in the general office, as follows:

(a) Accounting Department Expenses

Proportion of salaries of general officer and assistants in accounting department—cashiers, bookkeepers, and clerks—chargeable to this account.

(b) Purchasing Department Expenses

Salaries and expenses of Purchasing Agent and staff.

(c) General Service Expenses

Salaries and expenses of general service in office, including mail clerks, stenographic department, telephone operators, etc.

763. Printing and Stationery—General

Charge to this account the cost of all stationery and office supplies in the general office.

764. General Office Expenses

Charge to this account all of the amounts paid out for sundry expense in general office as follows:

(a) Office Sundries

Sundry expenses in general office.

Principal items: Advertising stockholders' meetings, maps, exchange on remittances, post-office box, safe deposit box, traveling expenses, rentals, janitors' supplies, bond and stock expenses.

(b) Postage, Telephone, Telegrams

All expenses of this nature in the general office.

765. Repairs to General Office Buildings

Charge to this account the cost of all labor and material expended in the repairs and maintenance of general office buildings.

766. Expense—General

Charge to this account all of the amounts paid out for salaries and expense of the technical staff which may not be charged to any of the foregoing operating or construction accounts. Include also any expense general to the business not chargeable specifically to general office accounts.

767. Law Expense—General

Charge to this account all law expenses, except those incurred in the defense and settlement of damage claims. This includes salaries and expenses of all counsel, solicitors and attorneys, their clerks and attendants, and expenses of their offices; cost of law books, printing briefs, legal forms, testimony reports, etc., fees and retainers for services of attorneys not regular employes; court costs and payment of special, notarial and witness fees, not provided for elsewhere; expense in connection with taking depositions, and all law and court expenses not provided for elsewhere.

NOTE.—The compensation of the General Solicitor or Counsel, or other attorneys engaged partially in the defense or settlement of damage suits, or partially in legal work, should be properly proportioned between this account and account Injuries and Damages.

768. Injuries and Damages (Unless the Cost is Chargeable to Plant Investment)

Charge to this account all expenses (other than law expenses provided for in account No. 767) relating to persons killed or injured and property damaged in connection with the operation of the plant, as enumerated under the following heads:

(a) Claim Department Expenses

This head includes salaries and expenses of claim agent, investigators, adjusters, and others engaged in the investigation of accidents and adjustment of claims, including legal expense.

(b) Medical Expenses

This head includes salaries, fees and expenses of surgeons, nursing, hospital attendants, medical and surgical supplies; fees and expenses of coroners and undertakers, and contributions to hospitals.

(c) Injuries to Employes

This head includes amounts paid in settlement of claims of employes for injuries arising in the course of their employment; also wages paid to disabled employes while off duty.

(d) Injuries to Others

This head includes amounts paid in settlement of claims for injuries to individuals other than employes of the company, including amounts paid for damages to property to those other than employes.

769. Insurance

Charge to this account premiums paid to insure against fire, fidelity, boilers, casualty, burglary, and all other insurance; also amount set aside as an insurance reserve.

770. Relief Department and Pensions

Charge to this account all amounts expended for Pension and Relief Department work and all expenses in connection therewith.

771. Franchise Requirements

Charge to this account at current rates the service furnished in compliance with franchise requirements and for which no payment is received by the corporation; also all direct expense, such as paving and other like matters incurred in compliance with such requirements and for which no reimbursement is received by the corporation. Amounts charged to this account representing free service shall be credited to the below provided account No. 774—Duplicate Water Charges—Cr.

773. Inventory Adjustments

Charge or credit to this account any shortages or overages shown by the inventory of Materials and Supplies which cannot

be distributed to the proper construction or operating expense account.

774. Duplicate Water Charges—Credit

Credit to this account all charges made to any accounts in water operating expenses in respect of any service or other product of the operations of the utility consumed therein or furnished free to the municipality under franchise requirements.

(a) Rebates and Allowances

Charge to this account all rebates allowed for corrections, error in billing, fast meters, etc.

775. Depreciation Account

Charge to this account at monthly intervals the monthly proportion of the estimated annual depreciation of the tangible property due to wear and tear, obsolescence and inadequacy. The estimate here required shall be made upon a rule designed to effect by its uniform application during the life of the tangible property in service, a charge into operating expenses of the total original cost of such property, less its salvage or scrap value upon retirement. The amount charged to this account shall be concurrently credited to the reserve account No. 351, "Depreciation Reserve."

NOTE.—Until otherwise ordered the amount estimated to cover such wear and tear and obsolescence and inadequacy shall be determined by the accounting utility, based on the utility's knowledge and experience during the preceding years of operation.

This account does not include ordinary repairs and replacements, the extent of which does not amount to a substantial change of identity. All ordinary repairs and replacements must be charged to the property maintenance accounts.

776. Real Estate Rentals

Charge to this account all rentals paid and expenses incurred for buildings or space used for the purposes of the business, unless the premises are used solely for construction purposes, or in connection with a clearing or apportionment account, in which latter events the rentals should be charged accordingly.

779. Taxes

Charge to this account the amount paid or accrued for taxes of every description applicable to the property of the company devoted to its operations including taxes on mains, real estate, buildings, capital stock, franchises, gross receipts, easements and Federal (income) tax.

780. Uncollectible Bills

When after a reasonably diligent effort to collect any account due for water sold has proved impracticable of collection, it shall

be charged to this account and credited to the account receivable in which theretofore charged.

NOTE.—Where no reserve for uncollectible bills is kept, cash received on account of items previously charged off should be credited directly to this account.

NON-OPERATING ACCOUNTS.

NON-OPERATING REVENUES.

782. Rents from Lease of Real Estate and Buildings

Credit to this account monthly, as they accrue, all miscellaneous rent revenues flowing to the corporation as a return upon leased property other than water plant and equipment.

783. Interest and Dividends from Investments

(a) Interest from Bond and Other Investments

Credit to this account monthly, as it accrues, all interest from bond and other investments; that is to say, all interest accruing to the corporation upon all such of its interest-bearing investments as are liabilities of solvent concerns and individuals.

(b) Dividends from Stock Investments

Credit to this account at their cash values, and as of the date when declared, all dividends declared by solvent concerns upon stocks held by the corporation among its investments.

784. Steam and Heating Department Revenue

Credit to this account all revenues derived from heating buildings by means of exhaust or live steam and hot water at special flat rates; also all revenue derived from the sale of exhaust and live steam for heating and power purposes at metered rates.

785. Miscellaneous Non-Operating Revenues

Credit to this account all non-operative revenues accruing to the company and not provided for in any of the foregoing accounts.

NON-OPERATING EXPENSES.

786. Steam and Heating Department Expenses

Charge to this account all items of operating expenses which can be segregated and originate directly from the production and sale of steam for power and heating purposes, or from the furnishing of heat energy by the medium of steam or hot water.

Charge to this account also the proportion assignable to Steam and Heating Department of all operating expenses (including commercial, promotion and general expenses) which are common to the production and sale of water and the production and sale of steam and heat energy and cannot be directly segregated and assigned to the heat and water departments respectively. Such proportion shall be determined pro rata upon the

basis of steam units utilized in the respective departments, or upon such other basis as will be most equitable for the distribution of the items involved. The proportions of such expenses so charged shall be likewise credited to the respective operating expense accounts of the water department involved in such division of expense, provided the entire expense has been carried in those accounts in the first instances.

787. Other Non-Operating Expenses

Charge to this account all matters provided for under the following sub-accounts and not included elsewhere.

(a) Rent Expense

This sub-account includes all expense arising in connection with the procuring of revenues from property let out to others, including the cost of negotiating contracts, advertising for tenants, fees paid conveyancers, collector's commissions, cost of enforcing payment of rent, cost of ousting tenants, etc., and all other expense arising in connection with such property. This applies only to leases conveying the property out of the possession of the corporation, and it includes the expense accruing while the property is idle and awaiting an occupant. This sub-account includes cost of maintenance of the property when such cost is borne by the corporation. Such maintenance includes depreciation as well as repairable wear and tear. It does not include taxes.

(b) Interest Expense

This sub-account includes all expense arising in connection with procuring interest upon investments, such as expense of collection, expense of investigating delay in payment, expense of enforcing payment, and the like. It does not include taxes on such investments.

(c) Dividend Expense

This sub-account includes all expense rising in connection with the collection of dividends on stocks of other corporations; also all expense incurred in the investigation of the affairs of the corporation whose stocks are held, whether for the purpose of detecting mismanagement or for the purpose of inducing the declaration of dividends, and all expense connected with enforcing payment of dividends when declared. It does not include taxes on such investments.

(d) Non-Operating Taxes

This sub-account includes all taxes accruing upon non-operating property and all assignable to non-operating revenues.

(e) Uncollectible Non-Operating Revenues

When any non-operating revenues are judged by the corporation to be uncollectible, the amount thereof shall be credited to

the account in which theretofore carried, and charged to this sub-account.

(f) Miscellaneous Non-Operating Expense

This sub-account includes all non-operating expense which is not provided for in the foregoing sub-accounts.

DEDUCTIONS FROM INCOME.

788. Interest on Funded Debt

Charge to this account all interest accruing absolutely on the outstanding funded debt of the corporation.

This includes mortgage bonds, income bonds (if interest on such be payable), debentures and mortgages and ground rents.

789. Interest on Unfunded Debt

Charge to this account all interest paid or accrued on promissory notes or other unfunded debt of the utility.

790. Extinguishment of Discount on Securities

Charge to this account at the close of each year the proportion of the unextinguished discount on securities applicable to the period. This proportion shall be such an amount as will completely wipe out the discount on the debt during the interval between issue and maturity of the same. The amount so charged shall be concurrently credited to account No. 251.

The corporation may, if it so desire, wipe out such discount earlier by charging all or any portion thereof to Year's Profit and Loss Account.

791. Sinking Fund Accruals

Charge to this account and credit Sinking Fund Reserves the amount of all accruals required to be made to Sinking Fund in accordance with the provisions of mortgages or other contracts requiring the establishment of sinking funds.

792. Miscellaneous Deductions from Income

Charge to this account all income deductions not provided for in any of the foregoing accounts.

793. Extinguishment of Premium on Debt—Credit

Credit to this account at or after the close of any fiscal period the proportion of the premium received on outstanding debt at time of issue which is applicable to the period. This proportion is to be determined according to a rule, the uniform application of which during the interval between the issue and the maturity of any debt will completely amortize or wipe out the premium so received. The amount so credited shall be concurrently charged to account No. 353. Such amortization may, at the option of the corporation, be affected by crediting all or

any portion of such premium to Profit and Loss account only upon the maturity of the debt.

APPROPRIATION ACCOUNT.

795. Dividends Declared

Immediately upon the declaration of a dividend, this account should be charged the amount of such dividend and credit made to the account Dividends Payable.

796. Miscellaneous Appropriations

(a) Expenses Elsewhere Unprovided For

Charge to this account all expenses not chargeable as a part of operating expenses or of non-operating expenses, such as fines levied on the corporation for violation of law, for misfeasance, for non-feasance, etc., fines levied on directors, officers and other employes and assumed by the corporation, donations of funds to churches and other associations, and other like expenses and outgoings.

(b) Adjustments of Accounts for Previous Years

Charge or credit to this account all adjustments, affecting previous years' Profit and Loss not applicable to the current fiscal year.

SECTION 6

INDEX-DIGEST

INDEX-DIGEST

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I. In case of a single utility.

a. In general.

1. In an application of a utility for rehearing in a rate case, in which the Commission had segregated the gas and electric properties for rate-making purposes as the gas property was entirely separate and distinct from the hydro and electric properties and in no way physically connected and where to have combined the properties as one would have compelled the patrons of one class of service to help maintain the other, the Commission was unable to find authority or precedent for combining the properties as one. *In re Colorado Springs Light, Heat & Power Co....*

2. In an application of a utility for rehearing in a rate case, in which the Commission had segregated the electric, gas and steam properties for rate-making purposes, the Commission was unable to accept the view that the electric and steam properties should be combined for the determining of reasonable rates for electricity, although it was difficult to physically segregate certain parts of the steam heating property from the electric generating plant, and was of the opinion that had the electric and steam properties been considered as one, the utility would still earn a fair return on the values of the two properties combined. *Idem.* . . . . . .

3. The Commission was of the opinion that, as already expressed in a prior case, the consumers of electricity should not be compelled to maintain any portion of the gas properties of the utility from which the electricity is purchased and that such method was without justification. *In re Colorado Springs Gas Rates*.....

b. Particular utilities.

I. Electricity.

4. In the valuation of the La Junta properties of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission was of the opinion that an item of $1,626.86, included in the operating expenses as "municipal ownership election expenses" while being a proper charge against the company—for the company has a right to protect its property through any legitimate expenditure—should not be charged against the properties in the City of La Junta as an expense for the year, but should be amortized over a period of years, if charged to the La Junta properties, but the Commission was of the opinion that the amount was more properly chargeable to the entire system of the

company, and ordered the company to so distribute it on the consumer basis, which amounted to 8.08 per cent., or $130.03, as applicable to the La Junta properties. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co.* . . . . . .

5. In determining the cost per kilowatt hour of energy furnished a sub-station by the generating company, the Commission was of the opinion that the exclusion, by the Commission's Engineer in his appraisal of the properties of the company located within a certain city, of the value of arc lighting transformers, motor-generating sets, and rotary converters used in connection with the street railway system of the company, was justified, inasmuch as such properties were simply energy-transforming devices used in the utilization of electrical energy by the different departments of the company, formed no part of the generating plant equipment, and were not used in any way in connection with the supplying of energy to the company's Valley Division sub-stations. *Idem.* . . . . . .

6. In a valuation of the properties of an electric utility within a certain city for rate-making purposes, the Commission's Engineer valued the city properties separately from the system of the utility and treated the city properties as an individual operating company purchasing current delivered at its sub-station by a transmission company, and found a rate of 2.4 cents per kilowatt hour (which figure was variable and subject to decrease as the company's business developed and the consumption of energy increased) to be the amount at which the company could afford to deliver energy to sub-stations located in the "Valley Division," by taking into account and apportioning on an equitable basis the company's investment in its generating plant, the transmission line, step-down transformer sub-station, and the cost of generation at the generating plant. *Idem.* . . . . . .

7. In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the sum of $2,054.88, representing the cost of sub-station labor and miscellaneous supplies and expense, to be properly chargeable to the La Junta properties, as such items were entirely local to the La Junta properties, and found the sum of $2,654.72, representing distribution, to be a proper charge to the La Junta properties, as the entire expense of such distribution occurred within the City of La Junta. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co.* . . . . . .

8. In the valuation of the La Junta properties of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found that the sum of $500 was a proper amount to be deducted from distribution maintenance and included in depreciation, inasmuch as it was ascertained that depreciation was carried under the head of "Maintenance" by the company, and as the Commission ordered the company to set aside an annual depreciation fund the above amount would be a duplication of some of the items set forth under the head of "maintenance" in the company's operating expenses. *Idem* . . . . . .

II. In case of joint enterprise.

a. Jurisdiction of commission.

9. Under the existing laws the Commission has the power to make estimates of the expense of elimination or separation of grades at railway grade crossings and require the railways to bear the entire expense entailed thereby, or to pay a certain portion of the expense in the event the county or municipality in which the crossing is located agrees to pay the remain-

CARRIERS.

See APPORTIONMENT; COMMISSION; CONSTITUTIONAL LAW; CROSSINGS; DISCRIMINATION; EVIDENCE; INTERSTATE COMMERCE; PARTIES; PLEADINGS; RATES; SERVICE.

CHARTERS.

See FRANCHISES generally.

Power of state to alter, revoke or annul, see CONSTITUTIONAL LAW, 4.

CITIES.

See MUNICIPALITIES.

COAL.

Divisions of rates on, see RATES, 32, 33, 34.

Rates on, see RATES, 12, 13, 16, 20, 21, 22, 36, 37, 38.

COMMODITY.

Rates, see RATES, 12, 13, 14, 39, 40, 41.

COMMISSION.

Jurisdiction of, to grant relief, see PLEADINGS, 4.

Jurisdiction of, as to divisions of rates, see RATES, 25, 27.

Power of, as to separation of grade crossings, see APPORTIONMENT, 9.

Power over changes in service of street railways, see SERVICE, 1.

I. Jurisdiction, powers and functions, 1-7.
   a. In general, 1-2.
   b. As affected by prior laws, 3.
   c. Over particular utilities or persons, 4-7.

I. Jurisdiction, powers and functions.

a. In general.

1. The legislature of Colorado has vested in the Public Utilities Commission authority to adequately protect all railway crossings at grade within the state and, if necessary, to eliminate all railway crossings at grade. *In re Improvement of Grade Crossings in Colorado*.....

2. The Commission held that it had no power to order the state to place protective signals on highways not on the rights of way of carriers, but was of the opinion that the State Highway Commission should take some action to co-operate with the carriers in the protection of grade crossings in the state. *Idem*.....

b. As affected by prior laws.

3. It is made the duty of the Commission, by the terms of the Public Utilities Act, to determine the just, reasonable, safe, proper, adequate or sufficient rules, regulations, practices, equipment, appliances facilities, service or method to be observed, furnished, constructed, enforced or employed by carriers; and, while the Commission was uncertain as to whether it was the intent of the Legislature that the "Fencing Act" should be enforced through the action of the Commission, it was the opinion of the Commission that it was plainly the intent of the Legislature to vest in the Commission power and authority to assume jurisdiction over the subject matter contained in a petition presented to require the railroads to fence their rights-of-way, and the Commission therefore allowed the petitioners to present evidence in the cause against the defendant carriers, for the purpose of showing the Commission that additional instrumentalities, equipment, appliances, facilities, apparatus or improve-

ments to the physical property of one or more of the defendant carriers should be made to promote the safety, health, comfort and convenience of its patrons, employes and the public, and to make the same in all respects adequate, efficient, just and reasonable. *Colorado State Board of Stock Inspection Commissioners v. A. T. & S. F. Ry. Co*.....

c. Over particular utilities or persons.

4. The Commission holds that it has jurisdiction over municipally owned utilities owned and operated by "Home Rule Cities." *Ramona Townsite Co. v. City of Colorado Springs*.....

5. The Commission was of the opinion that no court, federal or state, would permit one of its servants or officers over whose acts it had plenary control to merely neglect to obey, much less to openly violate, the terms of a valid law, and that the public utilities operating in the state of Colorado and under the management of receivers appointed by either state or federal courts, were subject to the police power of the state, citing as authorities the Laws of Colorado for 1913, relating to Public Utilities; State v. Flannelly, 152 Pac., 22; Railroad Commission of Alabama v. A. G. S. R. R., 185 Ala., 354; 56 L. R. A. (N. S.) 98, 1915 D. *Colorado State Board of Stock Inspection Commissioners v. A. T. & S. F. Ry*.....

6. The Public Utilities Commission has repeatedly held that it has original, exclusive jurisdiction over every public utility operating within the State of Colorado defined by the Public Utilities Law to be a public utility, and that the jurisdiction of the Commission extends to all matters pertaining to rates and service of all public utilities, and such position is sustained by the decision of the Supreme Court of the State of Colorado in the case of The Denver & South Platte Railway Company v. City of Englewood, decided July 3, 1916. *Thormann v. D. & I. R. R. Co*.....

7. It is not within the power of the Commission to control negligent operation of automobiles at railway crossings, but it has become apparent, from the excessive speed at which automobiles are driven across railway crossings without regard to warnings, that some law must be enacted for the protection of those who will not protect themselves, and it will be the purpose of this Commission to suggest to the Legislature that adequate laws be passed to the end that some supervision may be had by the state over the operators of motor vehicles so that the drivers thereof may be compelled to use reasonable caution upon approaching a railway crossing at grade. *In re Crossing Protections Between Denver and Boulder*.....

COMMON CARRIERS.

See CARRIERS.

COMPARISON.

Of rates, see RATES, 15, 16.
Of ton-mile revenues, as measure of divisions, see RATES, 28.
Of divisions, see RATES, 29.

COMPETENCY.

Of evidence, see EVIDENCE generally.
Of plaintiffs, see PARTIES, 1.

COMPETITION.

General law of, see RETURN, 1.
In rates, see RATES, 17, 18, 19, 36.

COMPLAINT.

See PLEADINGS generally.

I. Impairment of contracts.

1. In determining the reasonableness of rates of utilities the fact that a contract is involved in no respect alters the right of the Commission to revise rates, unless the Constitution or the legislature of the state has expressly delegated to the municipality the power to contract inviolably for rates for the period covered by the franchise. *In re Colorado Springs Light, Heat & Power Co.*

2. A contract between a shipper and a carrier providing for switching charges at other than the tariff rate must be deemed to have been entered into in contemplation of the reserve power of the State of Colorado to regulate the rates of public utility companies, and, while binding upon the parties when made, became null and void when the Legislature of the State of Colorado resumed its police power by the enactment of a Railroad Commission law and, subsequently, a Public Utilities Commission law. *Mullen & Co. v. D. & R. G. R. R. Co.*

3. It is a presumption that contracts between utilities and its consumers are within the scope of the right of regulation, unless the contrary has been expressly set forth, and the state is empowered to regulate and abrogate contracts which purport to cover rate regulation. *In re Colorado Springs Light, Heat & Power Co.*

II. Police power.

4. Sec. 3, Art. XV, of the Constitution, providing that the Legislature shall have the power to alter, revoke or annul the charter of a corporation whenever it may be injurious to the citizens of the State, and Sec. 8, Art. XV, providing that the police power of the State shall never be abridged or so construed as to permit corporations to conduct their business in such a manner as to infringe the equal rights of individuals or the general well-being of the State, constitute an express prohibition against the right of a municipality to contract inviolably for rates and charges of public utilities. *In re Colorado Springs Light, Heat & Power Co.*

I. In general.

1. Traffic conditions are constantly changing owing to the ever increasing travel due to the improved types of vehicles and to the better roads established throughout the State as a system of permanent good roads under the control and supervision of the State Highway Commission, and on which the various counties and municipalities of the State have spent large sums and the people of the State voted a one-half mill levy, amounting to approximately $500,000.00 per annum, and it is the duty of the Public Utilities Commission and the railroads to bring about readjustments of the grade crossing conditions within the State to conform to the traffic needs to the end that the general public may receive adequate protection. *In re Crossing Protections Between Denver and Boulder*.....

2. From the accident reports which the carriers are required to file with the Commission, it was found that the number of accidents occurring at grade crossings had greatly increased during the preceding years, due largely to the increased number and use of automobiles. *In re Improvement of Grade Crossings in Colorado*.....

3. Since the Commission inaugurated its work of ordering railways to properly protect their grade crossings, there has been a marked improvement in the maintenance and operation by the carriers as, prior to that time, no attempt had been made to properly maintain or inspect such appliances, due to the discouragement of the railway officials at the attitude of the public in regard to all signals; and, in all cases where the Commission has ordered the installation of audible and visual signals, all of which are being properly maintained and inspected, it has been noted that the traveling public is co-operating with the carriers and that a large majority of the drivers of vehicles stop their machines at the time the signal begins to move, to await the passing of the approaching train. *In re Crossing Protections Between Denver and Pueblo*.....

II. Grade Crossings.

a. In general.

4. The Commission prepared printed forms for distribution among the carriers, one for each railway crossing at grade, upon which the carriers were ordered by sketch and description to furnish the Commission with information showing, for each railway crossing at grade, the railway alignment and grade location to nearest section line, the rate of grade and all other relevant information, the same to be furnished to the Commission within reasonable time, as definitely set forth in the order. *In re Improvement of Grade Crossings in Colorado*.....

5. The Commission, after investigation and hearing, ordered the carriers within the state to furnish information to the Commission upon forms to be furnished the carriers, showing for each railroad crossing at grade, the railway alignment and grade location. *Idem*.....

6. The commission, after investigation and hearing, ordered the carriers to provide, within a reasonable time, and maintain at their own expense, at each intersection at grade of railroad tracks with public highways, grade crossings and approaches thereto at least twenty-four feet in width when the intersection is with a State Highway, whether primary or secondary, and sixteen feet in width when at intersection with public highways other than State Highways; the roadway on either side of the track or tracks to be constructed and maintained level with the top of rails for not less than twenty feet from the center line of tracks on either side and, when more than one track is crossed, for not less than twenty feet from the center line of outside track; the approaches to be constructed on uniform grade of not to exceed 6% from a point at least twenty feet from center line of track or tracks; the roadway to be well drained and surfaced with gravel or some other suitable paving material and a smooth roadway surface maintained on approaches and crossings; all crossings within city or town limits to be planked ten inches on the outside and inside of each rail and the space between the planking in the center of the track to be filed with gravel or other suitable material, the kind of material used to be discretionary with the carrier and under the supervision of the Commission's engineer, the planking or gravel material to be not less than ten feet in width; that, on all crossings not within city or town limits, the carriers may use either planking, gravel, slag or other suitable material, provided the same be not less than sixteen feet in width, slag or other sharp edged material not to be used unless covered with bonding clay or sand to compact and give a smooth surface. *Idem*.....

b. Elimination of.

7. The Commission's engineer was of the opinion that the elimination of the grade crossings upon The Atchison, Topeka & Santa Fe Railway and The Denver & Rio Grande Railroad between Denver and Pueblo was impracticable, and would be impracticable for many years to

come, but that, due to the traffic on these crossings, the same were dangerous and it was necessary to install such protections as were feasible. *In re Crossing Protections Between Denver and Pueblo*.....

c. Protection at.

8. The Commission is of the opinion that, while electric warning bells at grade crossings are adequate protection in many cases, where traffic is heavy the protection afforded by the audible and visual type of signal warrants the additional expense of same, as the electric bell simply sounds a warning upon the approach of a train, while the audible and visual signal, commonly known as the "wig-wag," is ordinarily an electric motor driven device sounding an alarm upon the approach of a train and swinging a red disk of sufficient size, upon which is printed the word "danger," and in which is enclosed a red electric light, thus affording additional protection at night by calling attention to impending danger, even if the traveler is unable to hear the warning bell. *In re Crossing Protections Between Denver and Pueblo*.....

9. The Commission, after instituting an investigation and hearing as to the sufficiency of grade crossing protections and as to the feasibility of the elimination of the twenty crossings at grade on The Atchison, Topeka & Santa Fe Railway and The Denver & Rio Grande Railroad between Denver and Pueblo, at each of which approximately 300 automobiles and 100 other vehicles passed each day, found the elimination of same to be impracticable and, after making a careful study of the cost of installation of warning devices, as well as the maintenance thereof, ordered the companies to install, within sixty days, audible and visual signals, after first submitting the plans for the same to the Commission for its approval. *Idem*.....

10. While the Commission had ordered certain carriers to protect grade crossings on their lines by the use of audible and visual signals, otherwise known as "wig-wag" signals, as well as by flagmen and other devices of sefety, the Commission had made no rule of uniformity as to designs of safety devices, and before promulgating any uniform rule awaited the report of the American Railway Association upon such matters, if said report were made within a reasonable time. *In re Improvement of Grade Crossings in Colorado*.....

11. From the annual reports of the carriers on file with the Commission, as of June 30, 1915, the Commission found that there were at that time 3,676 railway crossings at grade within the State of Colorado, of which 3,422 were unprotected and 254 protected, the protection consisting of gates, flagmen, bells and other safety devices, in addition to the usual crossing signs. *In re Improvement of Grade Crossings in Colorado*.....

12. The Commission was of the opinion that, while the elimination of all railway crossings at grade was unnecessary and impracticable, the time had arrived to adequately protect grade crossings by automatic signals, electric bells or audible and visual signals. *In re Improvement of Grade Crossings in Colorado*.....

13. The Commission was of the opinion that, due to the improved highways and increased travel at grade crossings, it is the duty of every railroad to afford to the public adequate protection at its railway crossings at grade, and that a uniform rule of improvement and maintenance of these railway crossings at grade should be established by the Commission for permanent improvement and the better protection of the public at large, and that it should be the position of the State of Colorado to assist the carriers in their efforts to protect railway crossings at grade by furnishing and maintaining, at the State's expense, uniform signals of safety on the highways of the State, in addition to the devices

DEPRECIATION.

See VALUATION generally.
See RETURN, 1.
Duplication of accounts, see APPORTIONMENT, 8.
Of property values, by changes in street railway routes and service, see SERVICE, 1.

I. Annual allowances held reasonable, 1-3.

I. Annual allowances held reasonable.

1. In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the proper amount of depreciation to be set aside annually by the company for the La Junta properties to be $2,500, the present fair value of the properties having been found to be $80,000. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co...*

2. In a valuation of a water utility for ratemaking purposes, whose present fair value was found to be $150,000, the Commission found $2,500 to be the proper amount to be set aside annually as a depreciation reserve. *In re Cripple Creek Water Co.....*

3. In a valuation of an electric and gas utility for rate-making purposes the Commission prescribed an annual sum of $52,000 to be set aside by the utility as an annual depreciation reserve on its hydro and electric properties, the value of which was fixed at $1,481,762, and an annual sum $20,000 to be set aside by the utility as an annual depreciation reserve on its gas property, the value of which was fixed at $710,917. *In re Colorado Springs Light, Heat & Power Co.....*

DETERMINATION.

Of causes arising under RAILROAD COMMISSION ACT, see PLEADINGS, 1.

Of specific matters in general petition, see PLEADINGS, 2.

DEVELOPMENT.

Expenses, see VALUATION generally.
Of business, effect on costs, see APPORTIONMENT, 6.
Of business, effect on service, see RATES, 2.

DIFFERENTIALS.

In freight rates, see RATES, 20, 21, 22, 38.

DISCONTINUANCE.

Of service, see SERVICE, 4-6.

DISCRIMINATION.

See RATES generally.

I. As to rates, 1-5.
   a. Contracts affording discriminatory rates, 1, 2.
   b. Graduated scale, 3.
   c. Railroad rates and fares, 4, 5.

I. As to rates.

a. Contracts affording discriminatory rates.

1. Under the law it becomes the duty of the Commission, in fixing reasonable rates of a utility, to establish just and reasonable rates which shall be applicable to all consumers and purchasers under like conditions, although to do so may abrogate contracts entered into between the

ELECTRICITY.

See APPORTIONMENT; COMMISSION; CONSTITUTIONAL LAW; DEPRECIATION; DISCRIMINATION; EVIDENCE; FRANCHISES; RETURN; SECURITY ISSUES; SERVICE; VALUATION.

ELECTRIC RAILWAY.

See CARRIERS generally.
Elimination of grade crossings, see APPORTIONMENT, 9.
Extensions and removals of tracks, see SERVICE, 1, 4, 5, 6.
Maintenance of interlocking plants, see CROSSINGS, 15, 16.
Stipulation for additional routes, see PARTIES, 2.

ELIMINATION.

Of grade crossings, see CROSSINGS generally.

ENERGY.

Reasonableness of rates, see RATES, 4.
Transforming devices, see APPORTIONMENT, 5.

ENGINEERING.

Expenses, allowance for, in valuation, see VALUATION, 11.

ENHANCEMENT.

Of property values, by changes in street railway routes and service, see SERVICE, 1.

EQUALIZATION.

Of rates, see EVIDENCE, 1; RATES, 36, 37, 38.

EQUIPMENT.

Generating plant, see APPORTIONMENT, 5.
Safe and proper, of carriers, duty of Commission to order. see COMMISSION, 3.

EVIDENCE.

As to divisions of rates, see RATES, 24, 26.
In re Fencing Act, see COMMISSION, 3.
On franchises, see RATES, 1.
Presumptions, see CONSTITUTIONAL LAW, 3.

I. Presumptions and burden of proof, 1.

II. Admissibility generally, 2, 3.

I. Presumptions and burden of proof.

1. The burden of proof is upon the carriers to justify increases in rates, although such proposed increased rates were published and filed for the purpose of placing one producing district on an equality with another producing district. *In re Coal Rates Canon City to Cripple Creek*....

II. Admissibility generally.

2. The Commission, in a case involving the reasonableness of the rates of an electric utility within a certain municipality, refused to admit any evidence pertaining to the value and cost of service of a municipally owned and operated electric plant, and would not take any action in regard to estimating the cost of such proposed plant, as such matters were irrelevant to the proceeding before it. *Citizens of La Junta v. Arkansas Valley Ry.* .....

3. In an investigation on the Commission's own motion as to the necessity of the erection and maintenance of a station and agency at a point on a railroad, the Commission refused to admit into the evidence a petition from the railroad to abandon the station and agency at another point located a few miles distant in the event the Commission should

II. Demurrer.

4. Where the defendants in a case before the Commission had filed a petition to vacate the order requiring the defendants to answer the complaint and to have an order issue permitting the defendants to file demurrers, on the ground that the Commission had no power or jurisdiction to grant the relief prayed for in said complaint, the Commission entered an order permitting each of the defendants to demur to the jurisdiction of the Commission, providing the said demurrer be accompanied by an answer admitting or denying the allegations set forth in the complaint. *Colorado State Board of Stock Inspection Commissioners v. A. T. & S. F. Ry.*.....

POLICE POWER.

Of State, over contracts, see CONSTITUTIONAL LAW, 2.

Of State, over corporations, see CONSTITUTIONAL LAW, 4.

Of State, over receivers of State or Federal courts, see COMMISSION, 5.

POWERS.

Of Commission, see COMMISSION.

PRACTICE.

Of Commission, see PLEADINGS generally.

PRACTICES.

Of carriers, duty of Commission to determine, see COMMISSION, 3.

PRESENT VALUE.

See DEPRECIATION generally.

See VALUATION generally.

PRESUMPTIONS.

Contracts within scope of regulation, see CONSTITUTIONAL LAW, 3.

PRIOR LAW.

See COMMISSION, 3; PLEADINGS, 1.

PROCEDURE.

See PLEADINGS generally; PARTIES, 2.

PROFILES.

Requirements for production of, see RECORDS.

PROPERTY.

Appreciation and depreciation of property values caused by changes in street railway routes and service, see SERVICE, 1.
In use or useful, return on, see RETURN, 3.
In use, valuation of, see VALUATION, 13, 14.
Not in use, valuation of, see VALUATION, 15.
Segregation of, in valuation, see APPORTIONMENT, 1, 2, 3, 6.

PROPORTIONS.

Of rates, see RATES, 24-35.

PROTECTION.

At grade crossings, see CROSSINGS generally.

PUBLIC.

Hearings, see PARTIES, 2.
Interest in division of rates, see RATES, 24, 26.

PUBLIC UTILITIES.
See CARRIERS; ELECTRICITY; GAS; TELEPHONES; WATER.

PUBLIC UTILITIES COMMISSION.
See COMMISSION.

RAILROADS.
See CARRIERS generally.

RAILROAD COMMISSION.
See CONSTITUTIONAL LAW, 2; PLEADINGS, 1.

RATES.
Burden of proof to justify increases in, see EVIDENCE, 1.
Complaint against specific rates, see PLEADINGS, 2.
Impairment of contracts, see CONSTITUTIONAL LAW, 1, 2, 3.
Passenger fares, see DISCRIMINATION, 4.
Rates on coal, see DISCRIMINATION, 5.
Switching rates, see CONSTITUTIONAL LAW, 2.

I. In general.

a. As affected by franchises.

1. In ordering a utility to establish reasonable rates and charges fixed by the Commission, the Commission did not fail to recognize any legal rights acquired by the utility through franchise contracts with municipalities, as there were no franchises introduced in the evidence, and in an application for a rehearing, the franchise having been introduced, the Commission found that no definite rates and charges for electricity were set forth therein, with the exception of a maximum rate on municipal street lighting, which was not material in the determination, due to the fact that municipal street lighting rates were not altered in the Commission's order. *In re Colorado Springs Light, Heat & Power Co*.....

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b. Value of service.

2. The best way to determine the value of the service of the product sold by a public utility is to closely watch the development of the business of the utility, as well as the effects of increased rates. *In re Colorado Springs Gas Rates*.....

II. Rates of particular utilities.

a. Electricity.

3. In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found the existing schedule to be unreasonable insofar as it exceeded the schedule of rates set forth and prescribed as reasonable rates in the order of the Commission. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co*.....

4. In a valuation of an electric utility for rate-making purposes it appeared that a charge of 2½ cents per k. w. h. plus a fixed charge of $25.00 per month for energy purchased to be distributed for lighting purposes, and 2 cents per k. w. h. for energy for power purposes, was not unduly high. *Town of Arvada v. Arvada Electric Co*.....

5. The Commission was of the opinion that any action on its part to reduce the rates of the Arvada Electric Company would be illegal, as the company would be unable to earn operating expenses, and such action would bring about a deplorable state of affairs in connection with the ownership and management of the company's property, resulting in temporary benefit only to the consumers. *Town of Arvada v. Arvada Electric Co*.....

6. The Commission, in a valuation of the Arvada Electric Company's properties for rate-making purposes, would not allow the company to increase its rates and charges, although it was found that the company was not earning a fair return upon its properties, for the reason that any increase in rates and charges would result in reduced revenue to the company, and would therefore require the consumer to pay more than the service was really worth. *Town of Arvada v. Arvada Electric Co*.....

b. Express.

7. Uniformity of rates and simplification of tariffs are greatly to be desired, although it is not to be expected that rates may be advanced or reduced simply for the purpose of having a uniform basis of rates, of simplifying tariff schedules, as the rates must be reasonable in and of themselves in the first instance. *In re Advances in Express Commodity Rates*.....

8. Where schedules have been filed by express companies changing various commodity rates, the Commission can arrive at a general determination of the reasonableness of the changes involved from a consideration of the tonnage moved between the points where the principal changes are made, from the population of the towns involved, and from a general knowledge of the centers of production of the various commodities. *Idem*.....

9. The modified intrastate block scale of rates has been in effect in the State of Colorado for a period of two years, and the Commission, from a close observance of the effect of such rates, is of the opinion that the basis is very satisfactory, as only one revision has been necessary since the inauguration of the scale rates, and only one formal complaint filed against the same. *Idem*.....

10. From the numerous informal complaints received against the commodity rates of the express companies, the Commission believes that a readjustment might very properly and necessarily be made without establishing any new discriminations in the rates, and that an intermediate clause, if established by the express companies, would eliminate practically all of the discrimination existing in express commodity rates at the present time. *Idem*.....

c. Gas.

11. In an application to advance the gas rates of a utility, the Commission was of the opinion that to allow the utility to establish the rates proposed by such utility would bring about a fair rate of return upon the present fair value of its gas properties but would result in a charge exceeding the value of the service rendered and would result in decreased revenues through consequent loss of patronage, and, therefore, prescribed rates at somewhat in advance of the former rates, based on the value of the service. *In re Colorado Springs Gas Rates*.....

e. Railroads.

1. Commodities.

12. The Commission, in an investigation as to the reasonableness of the coal rates from the various coal producing districts to points in the San Luis Valley, found the rates from the various districts to be unreasonable and prescribed reasonable rates from the Walsenburg, Trinidad, Canon City, Crested Butte and Somerset District on bituminous coal and from the Crested Butte District on anthracite coal. *In re San Luis Valley Freight Rates*.....

13. Lignite coal is an entirely different commodity from bituminous coal and there are certain conditions surrounding its transportation which justify a somewhat higher rate on the bituminous than on the lignite. *Grand Junction Mining & Fuel Co. v. D. & R. G. R. R. Co*.....

14. The Commission was of the opinion that the rate on ore and concentrates of all kinds, having a value of not over $12.00 per ton, from Breckenridge and points in Summit County to Denver of $3.00 per ton was unreasonable and unjustified and resulted in a charge in excess of the value of the service, and held that a rate of $2.25 per net ton would be a reasonable and just rate. *Breckenridge Chamber of Commerce v. C. & S. Ry. Co.* .....

2. Comparisons.

15. The Commission, in determining the reasonableness of freight rates, must be governed in arriving at the reasonableness of the rates in question by a comparison of the rates in effect over the carrier's line and over other and distinct carriers' lines as voluntarily established and maintained by the carriers, and also the rates as found reasonable by the Commission in previous cases before it, holding in view, however, that the rates used for comparisons must be for transportation under substantially similar conditions.

16. The Commission, in determining the reasonableness of the rates on coal from the various producing districts to points in the San Luis Valley, was of the opinion that the rate on lump coal from the Walsenburg District to Denver was not a fair measure of comparison with the rates from Walsenburg District to the points in the San Luis Valley, due to the difference in grades and the density of traffic. *In re San Luis Valley Freight Rates*.....

3. Competition.

17. While a carrier is not required to meet rates under competitive conditions, it should not make competitive rates to one point and

refuse to make rates to another point under substantially similar circumstances. *Grand Junction Mining & Fuel Co. v. D & R. G. R. R. Co*.....

18. Where rates were in effect between certain points via a short line at somewhat less than via a longer line the Commission refused to reduce the rates via the longer line simply to meet competition, as the shippers were able to make their shipments over the short line at the lower rate, and while a railroad may meet rates via shorter lines for competitive reasons the Commission will not require the establishment of such rates. *Grand Junction Mining & Fuel Co. v. D. & R. G. R. R. Co*....

19. When a carrier puts into effect rates applicable via another line, both carriers being operated under one general management and under a combination in which all of the revenues and expenses of both lines are divided without regard to which road produces the revenue or incurs the expense, the Commission finds that such competition is not forced and that there would be no inducement for either road to enter into competition with the other. *In re Coal Rates Canon City to Cripple Creek*...

4. Differentials.

20. The Commission, in investigating the reasonableness of the coal rates to points in the San Luis Valley, endeavored to ascertain the general practice of making differentials on nut and slack coal under the lump coal rates, but found no established basis in effect, and in the rates as found reasonable a differential of 25 cents per ton on nut coal under the lump coal rate was fixed, without making a fixed differential on slack coal under lump coal. *In re San Luis Valley Freight Rates*.....

21. The Commission, in an investigation as to the reasonableness of the rates on coal from the various producing districts to points in the San Luis Valley, prescribed reasonable rates from the Walsenburg District and used the rates from that district as a base upon which to predicate the rates from the other groups using differentials over the Walsenburg District rates. *Idem*.....

22. The Commission, in prescribing reasonable coal rates from the Palisade-Cameo District to Cripple Creek, ordered that the same differential remain in effect from the South Canon District as existed prior to the effective date of the order. *Grand Junction Mining & Fuel Co. v. C. M. Ry. Co*.....

5. Distance.

23. The fact that the expense to the carrier is greater on short haul shipments in proportion to the mileage than on long distance shipments justifies a higher proportionate rate for the short haul than for the long. *Grand Junction Mining & Fuel Co. v. D. & R. G. R. R. Co*.....

6. Divisions.

24. Unless the proportions of through rates received by carriers are so low as to become a burden upon local traffic, the Commission will not allow the introduction of testimony in reference to divisions, as the public is interested only in the through rates in and of themselves and is not concerned in the matter of the divisions. *Grand Junction Mining & Fuel Co. v. C. M. Ry. Co*.....

25. The Commission will not attempt to establish divisions of through rates prescribed by it, unless the carriers are unable to agree among themselves as to the proper divisions. *Idem*.....

26. The arranging of divisions of through rates between carriers is a matter of bargaining between the carriers, and, where the reasonableness of the through rate is not involved, is a matter in which the shipper and public have no interest. *Denver & Salt Lake v. C. B. & Q R. R. Co*.....

27. While the operating conditions on an originating carrier's line may be much more severe than those on its connections with which it seeks through rates, its operating disabilities are not to be considered as the controlling element in the establishment of divisions of the rates, and the proportioning of divisions on that basis only would place an undue burden on the connecting carriers by requiring them to assume a portion of the disabilities of the originating carrier, and it is doubtful if the Commission could directly, or indirectly, force them to assume any part of that burden. *Idem*.....

28. The amount of revenue per ton per mile received by carriers in the division of through rates is not a fair and equitable comparison, and the mere fact that there may be a wide range in the revenue per ton per mile accruing to each line is not a controlling factor and should not be considered as conclusive that the divisions are unreasonable. *Idem*...

29. The Commission, in establishing divisions of rates between carriers, should have due regard for all the surrounding circumstances and conditions, and the fact that a basis of divisions, which, so far as the Commission was advised, was satisfactory to all carriers concerned, had been in effect for many years from a district, should bear weight and be given careful consideration in the determining of divisions of rates from a district on another line which desires to meet the rates from the former district. *Idem*.....

30. It is a general principle, in establishing divisions of through rates between carriers, that the proportion of a through rate received by a carrier should be somewhat less than its local rate. *Idem*.....

31. That a destination line, in carrying through rates in connection with another line, is required to accept commodities which supplant like commodities produced on its own line and on which it receives the entire haul, is a factor entitling it to certain equities in the determination of divisions of the through rates. *Idem*.....

32. In determining the proper division of through rates on coal from the Oak Hills District on the Denver & Salt Lake R. R. to points in eastern Colorado on the Chicago, Burlington & Quincy R. R. and the Union Pacific R. R., as ordered by the Commission to become effective August 1, 1915, in Case No. 10, the Commission finds that the former basis of divisions was not unreasonable or unfair, and that a prorating of the reduction between the carriers, using the former basis of divisions as factors, is both proper and reasonable. *Idem*.....

33. The fact that the Chicago, Rock Island & Pacific Ry. receives coal from the Walsenburg District at Pueblo is not a valid reason for demanding the same division on coal that it receives at Denver, and the Commission finds that divisions to points east of Limon of the through rates on coal from the Oak Hills District on the Denver & Salt Lake R. R. should be on a parity with divisions made with other lines at Denver. *Idem*.....

34. The Commission, while taking cognizance of the decision of the Interstate Commerce Commission in I. & S. Docket No. 344 (35 I. C. C., 456), establishing a fixed amount to be allowed the Denver & Salt Lake R. R. in division of coal rates to points on the Chicago, Rock Island & Pacific Ry., finds that the conditions to points without the State are dissimilar to those within the State, on account of the fact that the rates in question were blanket rates covering areas, and the division of rates to one point was applicable to many points, and does not prescribe a constant division to be allowed the Denver & Salt Lake R. R. out of the through rates on coal to points on its connections at Denver. *Idem*...

35. The fact that an originating carrier has no terminals is a disability entirely local to that road, and in order to deliver its traffic to other carriers must either secure terminals or expect to pay other carriers for the use of theirs, and may not require its connections to assume any portion of that disability in the division of through rates *Idem.* . . ..

7. Equalization.

36. It was the opinion of the Commission that the rates on coal from the Palisade-Cameo district to Cripple Creek were not such as to afford the coal operators an opportunity to compete for business, and that somewhat lower rates were justified and that the carriers would be fully compensated for their services thereby, and therefore found rates of $3.00, $2.90 and $2.65 per ton on lump, nut and slack coal respectively, to be reasonable. *Grand Junction Mining & Fuel Co. v. C. M. Ry. Co.*.....

37. The fact that certain carriers had filed proposed increased rates on lump coal from a coal producing district in order that such rates might be on a parity with the rates from another district was controverted in part by the fact that no attempt was made to make uniform the rates on other classes of coal than lump. *In re Coal Rates Canon City to Cripple Creek* .....

38. The Commission, in prescribing reasonable coal rates from the Palisade-Cameo district to Cripple Creek, took into consideration the neccessity of maintaining an harmonious relation between such district rates and the rates from the Canon City and Walsenburg districts, and was of the opinion that the Palisade-Cameo district rates should be 50 cents per ton higher than the Canon City and Walsenburg district rates, although the present Canon City and Walsenburg rates were not on a parity, the Walsenburg rates having never been passed upon by the Commission. *Grand Junction Mining & Fuel Co. v. C. M. Ry. Co.*.....

8. Graduated scale.

39. The Commission was of the opinion that the practice of carriers in making a graduated scale of rates on ores, based on valuation, was a reasonable one, and that the scale should be such as to permit the free movement of low grade ore, as well as high grade ores. *Breckenridge Chamber of Commerce v. C. & S. Ry. Co.*.....

9. Increases.

40. In passing upon the reasonableness of the rates on ore from Breckenridge to Denver, it developed that freight rates had been increased, owing to an action of mandamus brought to enforce an order of the State Railroad Commission to compel the railway to operate its line between such points and also due to the heavy operating expenses of the railway in that division; and, as practically all of the ore shipped out of the Breckenridge district was low grade, the advance in the rates thereon amounted to approximately 100%, which made prohibitive the shipment of low grade ore, thereby decreasing the revenues of the carrier. *Breckenridge Chamber of Commerce v. C. & S. Ry. Co.*.....

10. Market conditions.

41. The originating line generally initiates negotiations with its connections for the establishment of through rates and divisions with the view to extending the market for commodities produced on its line, and this is especially true where its commodities come into active competition with like commodities produced on the lines of its connection. *Denver & Salt Lake R. R. Co. v. C., B. & Q. R. R. Co.*.....

11. Passenger fares.

42. In passing upon the reasonableness of the particular passenger fares to and from Strontia Springs, upon complaint, the Commission found that none of the passenger rates published to or from Strontia Springs exceeded the maximum rates found to be reasonable by the Commission in Case No. 11, In re Passenger Rates and Rules, I Colo. P. U. C. 35. *Strontia Springs Sanitarium Co. v. C. & S. Ry. Co*.....

e. Water.

43. The Commission, in an investigation as to the reasonableness of the rates of The Cripple Creek Water Company, after finding the present fair value of the company and the return thereon, found that the rates of the company were unreasonable and ordered a reduction of 10% in the existing rates, with the exception of fire hydrant rentals, upon which specific rates were prescribed. *In re Cripple Creek Water Co*.....

REAL ESTATE.

Appreciation and depreciation of value by changes in routes and service of street railways, see SERVICE, 1.

RECEIVERS.

Of Federal and State courts, subject to State's police powers, see COMMISSION, 5.

RECORDS.

1. In an investigation of the rates of a water utility which kept no books at its office within the state, the utility was ordered to produce before the Commission all books, accounts, papers and records, together with surveys and profiles of reservoirs, and water supply, transmission and distribution systems, hydrants and valve locations. *In re Cripple Creek Water Co*.....

REGULATIONS.

Of carriers, duty of Commission to determine reasonable, see COMMISSION, 3.

RELATION.

Of rates, see RATES, 38.

RENTALS.

Hydrant, see RETURN, 5.

REPORTS.

Requirements for production of, see RECORDS.

REPRODUCTION COST.

See VALUATION generally:

Less depreciation, see VALUATION generally.

RESERVE.

Depreciation, see DEPRECIATION; RETURN, 4.

Power, of State, see CONSTITUTIONAL LAW, 2.

RESERVOIR.

Value of, in valuation, see VALUATION, 13, 16.

RETURN.

See APPORTIONMENT, 2; RATES, 5, 6, 11, 43.

I. In general, 1-5.
II. Efficiency of management, 6-8.

I. In general.

1. A public utility is not subject to the general law of competition, and its position is entirely different from that of a private concern, in that its service must be continuous, uninterrupted and adequate, and should be supplied at the lowest reasonable cost, and the Commission, in fixing reasonable rates of utilities, should, after arriving at the present fair value of the property, permit the utility to earn a fair rate of return upon that present fair value, which should be in excess of a proper annual depreciation reserve to be set aside by the utility under the direction of the Commission, if the rates thus made are not in excess of the value of the service. *In re Colorado Springs Light, Heat & Power Co*.....

2. In an application of a utility for rehearing in a rate case the Commission was of the opinion that the rates and charges for electricity as fixed in its order would produce sufficient revenue to enable the utility to earn a fair return upon the present fair value of its hydro and electric properties, but was also of the opinion that the schedule should be readjusted and remain in effect for a period of one year, at the termination of which the company was to present its books to the Commission and if it appeared at that time that the hydro and electric properties were earning other than a fair return the schedule would be further revised. *Idem*....

3. While a public utility is entitled to earn a fair rate of return upon the present fair value of its property in use or useful, yet there must be no charge for service which exceeds the value of the service rendered. *In re Colorado Springs Gas Rates*.....

4. In a valuation of the Arvada Electric Company's properties for rate-making purposes the Commission found that, with the assumption that the sum of $1,050 charged to bond interest for the year 1914 should not be deducted from the total earnings of the company, and that the Commission should permit the company to set aside a conservative amount as an annual depreciation reserve, the company was not earning a fair return upon its properties, and the Commission, from the evidence presented, was unable to order a reduction in the company's rates and charges. *Town of Arvada v. Arvada Electric Co*.....

5. In a valuation of a water utility for rate-making purposes, it was necessary for the Commission to average the revenues, exclusive of hydrant rentals, for a three year period, in order to arrive at the annual revenues, due to the negligent manner in which the company had kept its books. *In re Cripple Creek Water Co*.....

II. Efficiency of management.

6. In a valuation of a water utility for rate-making purposes, whose present fair value was found to be $150,000, an annual amount of $1,000 was found to be reasonable for general management and the keeping of the books of the company. *In re Cripple Creek Water Co*.....

7. In a valuation of a utility for rate-making purposes, the Commission had no recourse but to state the fact that the employes of the company had been negligent in the collection of revenues, and the Commission was unable to understand or condone the lax business methods of the company, as the Commission had many times stated that it could not and would not tolerate wasteful management of public utilities within the state of Colorado when called upon to adjust and fix fair rates or adequate service. *Idem* .....

8. The Commission, in the performance of its duties in the regulation of public utilities, must act in a dual capacity and protect not only the public in the charges it shall be required to pay, as well as in the adequacy of the service, but at the same time protect the utilities and their stockholders from losses due to poor management, and it shall be the posi-

I. Jurisdiction, powers and duties of commission.

1. Every public utility under the jurisdiction of the Commission must furnish, provide and maintain such service, instrumentalities, equipment and facilities as shall promote the health, comfort and safety of its patrons, employes and the public, and as shall in all respects be adequate, efficient, just and reasonable; and the Commission has no power to order an extension of a street railway line because it will enhance the value of the property, nor has it the authority to prohibit the removal of street railway tracks solely on the ground that the removal of said tracks will depreciate the value of the property. *Thormann v. D. & I. R. R. Co*.....

2. In an investigation to determine the proper location of a district telephone exchange serving two towns, the Commission held that any conclusion as to same would be inadvisable, inasmuch as a general investigation of telephone matters by the Commission was in progress which would include the determination of the above. *In re Telephone Exchanges at Fierce and Ault*.....

II. Duty to render service.

a. Extensions.

3. In an investigation as to the reasonableness of the rates of a water utility, the Commission found that the practice of the company of compelling the consumer to lay and pay for the service pipe from the company's main to the curb of a consumer's property was unreasonable and illegal, as it is the duty of the water company to supply a service connection to the property line, as it is the duty of the company to supply a meter to the consumer when the service is metered, and the utility, not the consumer, has the right to occupy the streets, and all pipe lines in the streets should be the property of the utility and the expense of placing them should be borne by the utility, as it is the business of the water company to deliver its product to the premises of the consumer. *In re Cripple Creek Water Co*.....

b. Abandonment and discontinuance.

4. Where a petition had been filed with the Commission petitioning for an order permitting a street railway company to make a change in certain of its tracks and routes, and the municipality in which the railway operated had agreed to such proposed changes, the Commission, after a public hearing, ordered the company to make such changes. *City of Colorado Springs v. C. S. & I. Ry. Co*.....

5. The Commission, after a hearing, and in accordance with a compromise between the City of Fort Collins and The Denver & Interurban Railroad Company, permitted the carrier to remove its tracks on College Avenue from Walnut Street to Jefferson Street, and on Jefferson Street from College Avenue to Linden Street, inasmuch as the service was of very little value to the residents, and the real objection thereto was that the value of the property would be depreciated; and the carrier, having received the consent of the majority in frontage of the owners of property and a permit from the city council, was ordered to construct a line of

railway along Walnut Street between College Avenue and Linden Street, and maintain adequate service over such line. *Thorman v. D. & I. R. R. Co.* . . . . . .

6. While the Commission, in a proper application for the abandonment of a branch line of a street railway company, would permit the introduction of evidence in regard to the operating revenues of the branch line, yet the fact that the branch line was not of itself earning operating expenses would not necessarily justify the Commission in permitting the abandonment of the branch line, and has been so held by the Colorado Supreme Court in the case of The Colorado & Southern Railway Company v. The State Railroad Commission, et al., 54 Colo., 64. *Colorado Springs & Interurban* . . . . . .

III. Service by particular utilities.

a. Electricity.

7. In a valuation of the Arvada Electric Company's properties for rate-making purposes the Commission was of the opinion that the service of the company was entirely adequate inasmuch as there was no evidence presented to the contrary. *Town of Arvada v. Arvada Electric Co.* . . . . . .

8. In the valuation of the properties in the City of La Junta of the Arkansas Valley Railway, Light & Power Company for rate-making purposes, the Commission found after a thorough investigation that the service of the company in the City of La Junta was entirely adequate and beyond criticism. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co.*

b. Railroads.

9. Conclusive evidence that a branch of a railroad was not paying operating expenses over that branch would not justify the Commission in refusing to order the erection and maintenance of a station and agency thereon if the convenience and necessities of the public demanded such outlay. *In re Station at Hot Springs* . . . . . .

10. A practice of a railroad company in holding less carload shipments of freight consigned to a small town, at another point for assembly, until such shipments aggregated 5,000 pounds was found unreasonable, and a schedule furnishing the town with three trains a week for the picking up and laying down of less carload freight was found reasonable. *Wellington Commercial Club v. C. & S. Ry. Co.* . . . . . .

SERVICE CONNECTIONS.
See SERVICE, 3.

SIGNALS.
Warning, at grade crossings, see CROSSINGS.

SPECIFICATIONS.
For uniform grade crossings, see CROSSINGS, 6.

STATE.
Co-operation of Highway Commission, see CROSSINGS generally.
Power of, to regulate and abrogate contracts, see CONSTITUTIONAL LAW, 3.
Police powers, see POLICE POWERS.
Legislature, see LEGISLATURE.

STATIONS.
Erection of, see EVIDENCE, 3; SERVICE, 9.

STEAM HEATING.
Segregation of steam properties, in valuation, see APPORTIONMENT, 2.

I. Fair values found.

1. The Commission, in a valuation for rate-making purposes, after considering development expenses, going value, and all other tangible and intangible value, found the present fair value of the La Junta properties of the Arkansas Valley Railway, Light & Power Company, to be $80,000 for rate-making purposes. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co.* .....

2. In valuing the properties of the Arvada Electric Company for rate-making purposes, the Commission found that an error was made in including the sum of $3,158.78, the value of the transmission line, which was not the property of the respondent, and found, after deducting same, the present fair value of the properties of the company to be $31,224.22. *Town of Arvada v. Arvada Electric Co*.....

3. In a valuation of The Cripple Creek Water Company for rate-making purposes, the Commission, after deducting the present fair value of a pipe line found to be not in use or useful, found the present fair value of the property of the company in use and useful to be $150,000, for rate-making purposes. *In re Cripple Creek Water Co*.....

II. Methods and measures of ascertaining value or cost.

a. Original cost.

4. In a valuation of a utility for rate-making purposes, the Commission was able to ascertain clearly the detailed cost of the properties of the utility in use and useful, and by applying the rule that where original costs may be obtained accurately the question of whether or not the investment had been made honestly, wisely and prudently must be considered also, the Commission arrived at the conclusion that the important test was the original cost to date, rather than the reproduction cost of the properties of the utility, provided the investment was honestly, wisely and prudently made. *In re Cripple Creek Water Co*.....

b. Reproduction cost less depreciation.

5. The Commission, while of the opinion that the reproduction method of valuing property is an important factor in valuation by state regulatory bodies, as a general rule is unable to follow or adopt the reproduction theory in the strictest sense of its meaning; and, while it is true that an engineer, in arriving at the present fair value of the property of a utility by the method of reproducing the property new as of the date of the valuation, arrives at the present fair value of the property by deducting accrued depreciation, yet this theory can not be followed to the extent that prices of material and the cost of labor should be taken as of the date of the valuation, but, in all fairness, should be averaged for a period of years. *In re Cripple Creek Water Co*.....

6. In a majority of cases before the Commission involving valuation of public utility properties, actual or original cost can not be ascertained with any degree of certainty, the reasons for this being self-evident; by "original cost" in the case of physical properties is meant the actual cost new of properties in use and useful; and while, in arriving at the reproduction cost, the Commission endeavors to ascertain the present day cost of replacing existing property, in both cases depreciation, or the estimated decline in units of service from wear, obsolescence, inadequacy or any other causes, is equally to be considered, and estimates necessarily must be used in both lines of investigation. *Idem*.....

7. In a valuation of a utility for rate-making purposes one of the important tests used by the Commission in arriving at the fair value was reproduction cost less depreciation, but the Commission was unable to settle upon any one test which should be the sole basis of arriving at a sum of money upon which the utility should be permitted to earn a fair rate of return. *In re Colorado Springs Light, Heat & Power Co.*.....

8. In a valuation of a utility for rate-making purposes, the Commission found the original cost new to date of the properties of the utility, to which was added a sum to include supervision during construction and also certain overhead charges not included in the books of the utility; and, by adoption of the method of depreciation as used by the Commission's engineer, by making fair allowance in accordance with the methods previously adopted by the Commission, and by considering the utility as a going concern, the Commission was able to arrive at the present fair value of the utility. *In re Cripple Creek Water Co.*.....

c. Book cost or value.

9. The Commission, in a valuation for rate-making purposes, found the book value of the properties of the Arkansas Valley Railway, Light & Power Company in the City of La Junta to be $135,375.81. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co.*.....

III. Non-physical elements affecting value or cost.

a. Overhead expenses.

1. Legal and organization expenses.

10. In a valuation for rate-making purposes of a utility whose present fair value of properties in use and useful was found to be $150,000, the Commission held that $17,642 for legal services and investigation was unreasonable. *In re Cripple Creek Water Co.*.....

2. Engineering and supervision.

11. In a valuation of a utility for rate-making purposes, the Commission, while of the opinion that 7% allowed for engineering services may not be excessive in estimating the reproduction cost of the properties of the utility in use and useful, held that the percentage may be applied only to that part of the properties which necessarily require engineering supervision; and, although the Commission in previous cases has permitted 10% for contractors' profits, under the reproduction method of valuing property, the allowance of such percentage was contingent on the fact that the same applied only to such properties as might require a contractor. *In re Cripple Creek Water Co.*.....

3. Allowances for.

12. In the valuation of a public utility for rate-making purposes the Commission was of the opinion that no allowance upon the present fair value of the utility should be set aside annually to protect the company against extraordinary accidents of the future. *In re Colorado Springs Light, Heat & Power Co.*.....

IV. Valuation of particular kinds of tangible property.

a. Property in use.

13. In the valuation of a water utility for the purpose of rate-making, the Commission, in the absence of any showing as to the existence of any unappropriated flood waters of Beaver Creek, one of the sources of the company's supply, did not allow the claim of the utility to the capacity value of certain reservoirs in addition to the construction cost, when the claim was apparently made upon the theory that if said reservoirs were not used for the purpose of temporarily impounding and more efficiently using the irrigation rights acquired, they could be used for the purpose of catch-

ing the flood and unappropriated waters of Beaver Creek during the storage season; nor did the Commission feel that a theoretical availability in use of such reservoirs for different purposes than that for which they were being utilized was properly for the consideration of the Commission in determining the case; and, while it was conceded that these reservoirs were valuable adjuncts in the utilization of the direct flow rights acquired, the Commission considered that the company, in being allowed the full value of such rights and the expense of construction of such reservoirs, had received all that it was legally entitled to receive with respect to its water rights. *In re Cripple Creek Water Co*.....

14. In a valuation of a water utility for rate-making purposes, where it was shown that the company had constructed an additional pipe line parallel to its existing pipe line, the Commission found that the investment made by the company for the additional pipe line was not wisely and prudently made, and that the same could not be considered by the Commission as property in use or useful. *Idem*.....

b. Property not in use.

15. In the valuation of a utility for rate-making purposes an estimated deduction from book value was made for property purchased from previous companies which had been abandoned and was not in use or useful in the operations of the present company, and where there was no evidence to show any depreciation deductions on the abandoned property. *In re Colorado Springs Light, Heat & Power Co*.....

c. Impounded water.

16. In a valuation of a water utility for rate-making purposes, where it was urged in the hearing that the quantity of water purchased by the company was excessive in amount, for the asserted reason that the quantity purchased was approximately three times that of the carrying capacity of the company's pipe lines, the Commission held the assumption that there was a reasonable necessity for the company to acquire an amount of water in excess of the discharge capacity of the company's pipe lines, as no evidence was produced as to whether or not the full amount of decreed water was available at all seasons of the year and this assumption was particularly applicable in view of the fact that the company owned two certain reservoirs which were apparently used exclusively for the temporary impounding of the water, to which the company, or the consumers, were entitled by virtue of the direct appropriation rights. *In re Cripple Creek Water Co*.....

d. Working capital.

17. In the valuation of the properties of an electric utility located within a certain city for rate-making purposes, upon which the present fair value was found to be $80,000, the Commission, by averaging the value of the stores and supplies over a period of one year, amounting to $1,500, and by taking one-twelfth of the total billing of the station for the previous fiscal year, which amounted to $3,500, found the proper amount to be allowed as working capital to be $5,000. *Citizens of La Junta v. Arkansas Valley Ry., Light & Power Co*.....

V. Valuation of particular kinds of intangible property.

a. In general.

18. One of the great underlying dangers of state regulation is the attitude of public utility corporations favoring large intangible values for the purpose of presenting a large paper valuation of properties. *In re Colorado Springs Light, Heat & Power Co*.....

b. Water rights.

19. In a valuation of a water utility for rate making purposes, although no evidence had been introduced as to the necessity for acquiring certain additional water rights, it was to be inferred from the record that such purchases were dictated by the demands upon the company at the time of purchase and the reasonable anticipated demands of the future, and upon that basis it was to be assumed, in the absence of definite contravening testimony, that the investment in question was not unwisely made. *In re Cripple Creek Water Co*.....

20. In the valuation of a water utility for rate-making purposes, certain opinion evidence was presented with respect to the so-called "market value" of the utility's water rights, by reference to the values which the rights might possess if it were possible to transfer the diversion points thereof and supply distant communities with such water supply; but it was the opinion of the Commission that the evidence in that respect was not sufficiently definite in character to warrant fixing the value at other than the actual cost of such supply; and upon the presumption that the purchase was not unwisely made, the Commission reached the common sense inference that the actual value was the amount of the purchase price. *Idem*.....

21. The Commission, in a valuation of a water utility for rate-making purposes, gave careful consideration to the question of whether basic titles to the water rights of the utility were vested in the company or in the consumers of water, as a body, supplied by the company's system, but found a determination as to same unnecessary in the instant case. *Idem*.....

VALUE OF SERVICE.

See RATES, 2, 6, 11, 14.
See RETURN generally.

VEHICLES.

See CROSSINGS generally.
Operators of, legislation needed to give supervision over, at crossings, see COMMISSION, 7.

VISUAL SIGNALS.

At grade crossings, see CROSSINGS, 3.

WARNING.

Bells and signs, generally, see CROSSINGS.

WATER.

Rates, see RATES, 43.
Extension of service pipes, see SERVICE, 3.
Impounded, in valuation, see VALUATION, 13, 16.

WATER RIGHTS.

See VALUATION, 19-21.

WIG-WAG SIGNALS.

At grade crossings, see CROSSINGS, 8, 10.

WORKING CAPITAL.

See VALUATION, 17.

ZONE.

System of express rates, see RATES, 8, 9.