

Public Utilities Commission Report

to the

Colorado General Assembly

on

Demand Side Management
(DSM)

Pursuant to HB 07-1037 (40-3.2-105, C.R.S.)

April 28, 2009



During the 2007 legislative session the General Assembly passed House Bill 07-1037. This legislation, which the governor signed into law on May 22, 2007, directs Colorado's investor-owned electric and gas utilities to pursue energy efficiency ("demand-side management" or DSM).

The following is the first annual report on actions and accomplishments resulting from HB 07-1037. This report presents the progress made by the Public Utilities Commission and the energy utilities regulated by the Commission to fully implement DSM programs.

Gas DSM Rulemaking

The Commission's Gas DSM Rules went into effect on May 30, 2008.
--

Colorado Revised Statutes § 40-3.2-103(1) directed the Commission to commence a rulemaking proceeding on or before September 30, 2007, concerning gas DSM programs. The following outlines the actions taken by the Commission to comply with this statutory directive.

June 27, 2007: Commission Decision No. C07-0562 opens Investigatory Docket to gather information from stakeholders, including proposed rule language; decision also solicits written comments and convenes a workshop (on 7/18/2007) for Commission staff to engage stakeholders in a discussion of rule language.

September 19, 2007: Commission Decision No. C07-0830 issues a Notice of Proposed Rulemaking, opening Docket No. 07R-371G to initiate a rulemaking proceeding; the decision also issues a proposed rule reflecting input received in the Investigatory Docket, solicits comments and schedules a public hearing (convened on 12/3/2007).

January 16, 2008: Commission Decision No. C08-0066 issues a Supplement to the Notice of Proposed Rulemaking, offering revised proposed rule language reflecting the comments received at the 12/03/07 hearing; solicits comments and schedules a second public hearing on 2/13/08.

March 5, 2008: Commission deliberates on the proposed language and comments received; Commission issues Decision No. C08-0248 adopting final rules. Final rules conveyed to Attorney General for opinion and Secretary of State for publication in the *Colorado Register*.

April 25, 2008: Attorney General issues opinion finding "no apparent constitutional or legal deficiency in their form or substance."

May 10, 2008: Secretary of State publishes final rule in May 2008 edition of the *Colorado Register*. Rules took effect May 30, 2008.

Gas DSM Rules (4750-5760, 4 CCR 723-4)

State statute identifies specific subjects for inclusion in the Commission’s gas DSM rules. These directives and their corresponding rule language are presented below.

Internet access to the complete rules is available at:
<http://www.dora.state.co.us/puc/rules/RulesIndex.htm>

PROGRAM EXPENDITURE TARGETS § 40-3.2-103(2)(a), C.R.S.

This statute directs the Commission to adopt “DSM program expenditure targets equal to at least one-half of one percent of a natural gas utility’s revenues from its full service customers in the year prior to setting such targets”.

Rule 4 CCR 723-4-4753(g)(I), states that:

The utility’s annual expenditure target for DSM programs shall be, at a minimum two percent a natural gas utility’s base rate revenues (exclusive of commodity costs), from its sales customers in a 12-month calendar year period prior to setting the targets, or one-half of one percent of total revenues from its sales customers in the 12-month calendar period prior to setting the targets, whichever is greater.

The Commission received comments during the rulemaking that connecting expenditures to total revenues would introduce too much variability into the target, one year to the next, due to the fluctuating cost of the commodity. A review of the commodity portion of total revenues, across the six regulated gas utilities, concluded that two percent of base revenue is a reasonable surrogate for one-half percent of total revenue. Thus, the Commission concluded that this approach honored the intent of the statute while also addressing the inter-year variability concerns expressed by the utilities.

PROGRAM SAVINGS TARGETS § 40-3.2-103(2)(b), C.R.S.

This statute directs the Commission to establish “DSM program savings targets that are commensurate with program expenditures and express in terms of an amount of gas saved per unit of program expenditures.”

Rule 4 CCR 723-4-4753(b), directs utilities to include in their gas DSM plans:

The utility’s estimated annual natural gas energy savings for the DSM plan years, expressed in dekatherms per dollar of expenditure, and presented for each DSM program proposed for Commission approval; this represents the utility’s proposed savings targets required by § 40-3.2-103(2)(b), C.R.S.

COST RECOVERY PROCEDURES § 40-3.2-103(2)(c)(I) and (II), C.R.S.

This statute directs the Commission to adopt “procedures for allowing gas utilities to recover their prudently incurred costs of DSM programs without having to file a rate case.”

Rules 4 CCR 723-4-4757 and 4758, set forth the procedure through which a utility prepares a Gas DSM Cost Adjustment (G-DSMCA). This adjustment mechanism is the means through which a utility may recover prudently incurred costs of DSM programs without having to file a rate case. The rules also allow for prospective recovery of costs through the G-DSMCA (*e.g.*, recovering costs concurrent with incurring the expenses). Rule 4758 delineates the required contents of a G-DSMCA application, which is the method through which a utility requests Commission approval of a G-DSMCA prior to its implementation.

This statute also directs the Commission to “give gas utilities the option of obtaining cost recovery either through expensing DSM program expenditures or adding them to base rates”.

Rules 4756(a) and 4757(a) delineate that utilities may either amortize costs (and propose an appropriate amortization period), or expense costs with recovery of annual expenditures occurring over a one-year period.

BONUS STRUCTURE § 40-3.2-103(2)(d), C.R.S.

This statute directs the Commission to adopt “a bonus structure to reward gas utilities for investments in cost-effective DSM programs.”

Rule 4754(g) delineates the terms and conditions under which a utility may receive a bonus. The bonus is a percentage of the net economic benefits resulting from the DSM plan. The calculation of the percentage is based upon the utility’s performance relative to its energy target (anticipated amount of dekatherms to be saved versus the actual amount), and its performance relative to its savings target (anticipated expenditure per dekatherm saved versus actual).

This statute establishes a maximum bonus at “twenty-five percent of the expenditures or twenty percent of the net economic benefits of the DSM programs, whichever is lower.”

Rule 4754(i) incorporates this exact statutory language concerning the maximum bonus.

PHASE-IN PERIOD § 40-3.2-103(2)(e), C.R.S.

This statute directs the Commission to consider “the fact that implementing the new DSM programs may require a phase-in period before a gas utility is able to achieve the (minimum) funding level” and that “a gas utility that implements a new DSM program in phases shall be eligible to receive a bonus”.

Rule 4754(g)(II) sets forth a minimum expenditure requirement as a prerequisite to earning a bonus and waives this requirement during a phase-in period. Rule 4753(g)(III) establishes the expenditure minimum and provides for up to three years to achieve the minimum.

PROHIBITION AGAINST FINANCIAL PENALTIES § 40-3.2-103(2)(f), C.R.S.

This statute precludes the Commission from adopting “any measure authorizing a financial penalty against a gas utility that fails to meet the targets in any particular year.”

Rule 4757(c) incorporates the prohibition against financial penalties resulting from failing to reach the approved targets.

INITIATION OF GAS DSM PROGRAMS BY UTILITIES § 40-3.2-103(2)

This statute requires each gas utility to “develop and begin implementing a set of cost-effective DSM programs” and requires that this be done “within 12 months after completion of the rule-making”.

As of April 30, 2009, four gas DSM programs are approved and operational:

Atmos; Colorado Natural Gas; Public Service and SourceGas.

Black Hills¹ received approval in April, and will be operational in May.

Eastern Colorado’s plan is pending before the Commission.

Timetable of Gas DSM Plan Approvals:

- The Commission’s Gas DSM Rules took effect May 30, 2008.
- Commission Rule 4752(a) requires filing of plan/application within 120 days of DSM rules taking effect; that deadline is Sept. 29, 2008.
- Public Service filed August 11, 2008, a combined gas and electric DSM plan
 - A modified Public Service plan approved on November 28, 2008
- Atmos, Black Hills, CNG and SourceGas filed September 29, 2008
 - Modified plans were approved on December 30, 2008, for Atmos, CNG and SourceGas
 - Black Hills’ plan was approved on April 8, 2009, and is set to begin in May, 2009.
- Eastern Colorado was granted an extension and filed December 3, 2008.
 - Plan is pending before the Commission.

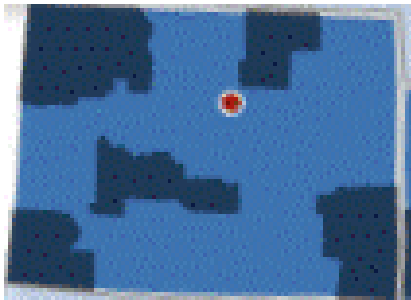
¹ Black Hill Electric completed the purchase of Aquila, Inc. in July 2008, and began serving Colorado consumers at that time.

Gas Demand-Side Management Plans

The following six pages present the specific gas DSM programs being offered by the six regulated gas utilities in Colorado. Most gas DSM programs operate by providing financial incentives, in the form of rebates, for specific energy efficiency investments made by the customer. Some DSM programs focus on educating the customer, such as via an energy audit or school-based programs, with the objective of assisting the customer to make more informed energy efficiency investment decisions.

Gas DSM programs are limited to “full service” gas customers. This excludes customers buying their gas commodity from a third party and having the gas transported to them through the regulated pipeline system, (generally larger commercial and industrial customers). Thus, most gas DSM focuses on residential customers. The transportation-only customers are also excluded from paying the DSM surcharge that full-service customers pay.

ATMOS ENERGY CORPORATION

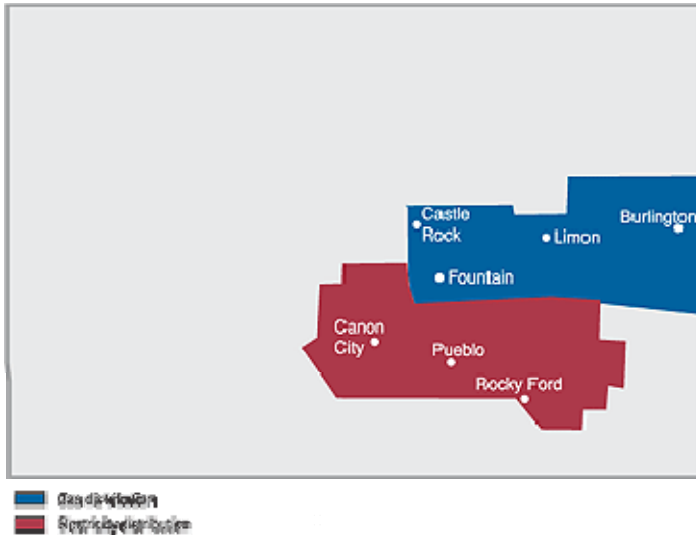


Atmos’ Colorado Service Territory

Link to more information regarding the service territory:
<http://www.atmosenergy.com/about/utility.html>

ATMOS ENERGY CORPORATION GAS PROGRAMS, 2009 - 2010
AUDITS
EFFICIENT FURNACES AND FILTERS
EFFICIENT NATURAL GAS WATER HEATERS
INSULATION AND INFILTRATION MEASURES
LOW-INCOME KITS (self-install devices and educational information)
LOW-INCOME MULTIFAMILY WEATHERIZATION
LOW-INCOME SINGLE FAMILY WEATHERIZATION
PROGRAMABLE THERMOSTATS
PROPER SIZING OF FURNACES AND BOILERS

BLACK HILLS ENERGY

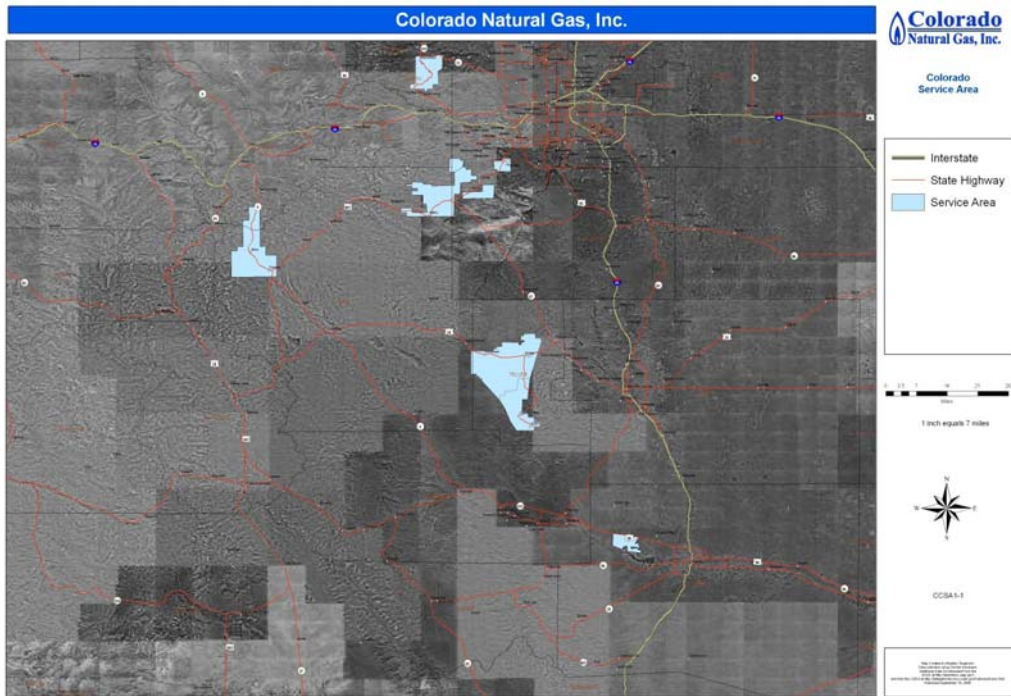


Black Hills Energy's Colorado Service Territory

Link to more information regarding the service territory:
<http://www.blackhillsenergy.com/services/serviceareas/>

BLACK HILLS ENERGY GAS PROGRAMS, 2009 - 2011, (PENDING COMMISSION APPROVAL)
AUDITS (Commercial and Residential)
CUSTOM REBATES (site-specific; for commercial customers)
ENVELOPE MEASURES RETROFIT (residential insulation and air leakage reduction)
LOW-INCOME AFFORDABLE HOMES (new construction)
LOW-INCOME WEATHERIZATION
LOW-INCOME WEATHERIZATION TEAMS (volunteer-delivered low-cost retrofits)
NEW CONSTRUCTION INCENTIVES
PRE-SET REBATES (heating systems; water heaters; appliances) – Commercial & Residential
SCHOOL-BASED ENERGY EDUCATION (self-install devices and related education)

COLORADO NATURAL GAS, INC.



Colorado Natural Gas, Inc.'s Colorado Service Territory

Link to more information regarding the service territory:

<http://www.coloradonaturalgas.com/view/86>

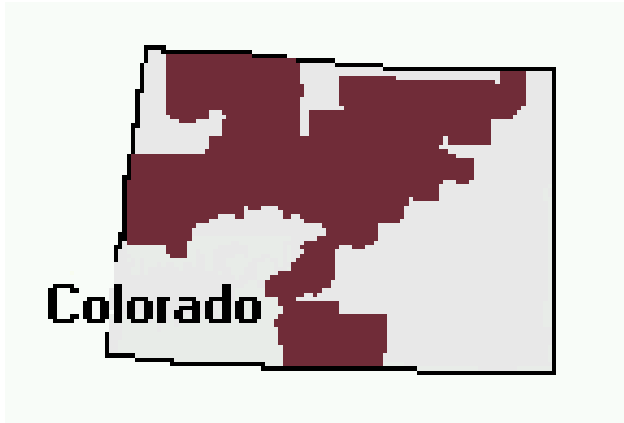
COLORADO NATURAL GAS, INC. PROGRAMS, 2009 - 2010
ENERGY AUDIT
INSULATION: CEILING, WALL AND ATTIC
APPLIANCE REBATES (heating systems; water heaters; appliances) – Commercial & Residential
PROPER SIZING AND MAINTENANCE OF FURNACES AND BOILERS
MISCELLANEOUS MEASURES: water heater and water pipe insulation; hot water efficiency devices (showerheads; aerators); programmable thermostats
INFILTRATION – various air leakage reduction measures
LOW-INCOME: all of the above DSM programs, targeted to income-eligible customers

EASTERN COLORADO UTILITY

Eastern Colorado Utility Company serves about 3,800 customers in Adams, Arapahoe, Cheyenne and Kiowa counties. About 85 percent of its customers are residential. Eastern's business office is located in Strasburg.

EASTERN COLORADO UTILITY GAS PROGRAMS, 2009 - 2010, (PENDING COMMISSION APPROVAL)
HIGH EFFICIENCY FURNACES
LOW-INCOME HIGH EFFICIENCY FURNACES AND BOILERS
LOW-INCOME INSULATION AND INFILTRATION
LOW-INCOME PROFESSIONAL ENERGY AUDIT
LOW-INCOME PROGRAMABLE THERMOSTATS
LOW-INCOME WATER HEAT MEASURES
PROGRAMABLE THERMOSTATS

PUBLIC SERVICE COMPANY OF COLORADO



Public Service Co. of Colorado’s Service Territory

Link to more information regarding the service territory:

http://www.xcelenergy.com/COMPANY/ABOUTUS/SERVICE%20AREA%20MAP/Pages/Colorado_Service_Area.aspx

PUBLIC SERVICE COMPANY GAS DSM PROGRAMS, 2009 – 2010
BOILER EFFICIENCY (commercial customers); rebates for new boilers
CUSTOM REBATES (site-specific; for commercial customers)
ENERGY EFFICIENT SHOWERHEADS
ENERGY MANAGEMENT SYSTEMS (rebates for on-site control systems)
ENERGY STAR NEW HOMES (incentives to home builders)
HEATING SYSTEM REBATES (commercial & residential)
“HOME PERFORMANCE WITH ENERGY STAR” – (vendor partnership promoting comprehensive efficiency upgrades for existing homes)
INSULATION REBATES (attics and walls. residential)
LOW-INCOME EASY SAVINGS ENERGY KITS
LOW-INCOME MULTI-FAMILY WEATHERIZATION
LOW-INCOME NON-PROFIT FACILITY WEATHERIZATION
LOW-INCOME SINGLE FAMILY WEATHERIZATION
NEW CONSTRUCTION: incentives to include efficiency in design of commercial properties
PROCESS EFFICIENCY: site-specific rebates; targeting large industrial customers
RECOMMISSIONING: incentives to include efficiency when re-engineering existing buildings
SCHOOL EDUCATION KITS
SEGMENT EFFICIENCY: targeting unique needs of various commercial market segments
SELF-DIRECT: customer-initiated efficiency improvements
“STANDARD OFFER”: bundled packages of efficiency improvements; targeting commercial facilities; delivered via energy service companies
WATER HEATER REBATE (residential)

SOURCE GAS DISTRIBUTION

SourceGas Distribution serves approximately 85,000 residential and commercial customers in twenty Colorado Counties:

North/Northeast Colorado: Larimer; Phillips; Sedgwick; Washington; Weld; Yuma

South/Southeast Colorado: Bent; Crowley; Otero; Pueblo

West/Southwest Colorado: Archuleta; Delta; Garfield; Gunnison; Mesa; Montrose; La Plata; Ouray; Pitkin

SOURCEGAS DISTRIBUTION LLC GAS PROGRAMS, 2009 - 2010
PROFESSIONAL ENERGY AUDIT
CUSTOM REBATES (site-specific; for commercial customers)
APPLIANCE REBATES: furnaces; boilers; water heaters
PROPER SIZING AND MAINTENANCE OF FURNACES AND BOILERS
INFILTRATION - VARIOUS MEASURES
INSULATION: Ceiling/attic and wall
LOW-FLOW SHOWERHEAD AND FAUCET AERATORS
LOW-INCOME: all of the above DSM programs, targeted to income-eligible customers
MISCELLANEOUS MEASURES: water heater and water pipe insulation; hot water efficiency devices (showerheads; aerators); programmable thermostats
WHOLE FACILITY EFFICIENCY EVALUATION

Electric DSM: §40-3.2-104, C.R.S.

Section (2) of this statute directs the Commission to establish energy savings and peak demand reduction goals, to be achieved by each regulated electric utility. The minimum goals are set at five percent of the utility's 2006 peak system demand and five percent of the utility's 2006 electric sales. The goals are to be met by 2018.

PUBLIC SERVICE COMPANY OF COLORADO (PSCo)

The Commission set a 2020 DSM goal for Public Service equal to **11%** of 2006 electric sales.

Based on PSCo's 2006 peak demand and energy sales, PSCo's statutory minimum DSM goals are:

- Demand Reduction; 331 MW
- Energy Reduction: 1,382 GWh

In Docket No. 07A-420E, the Commission deliberated on DSM goals proposed by PSCo along with alternative goals proposed by seven of the parties intervening in this proceeding. The Commission's final decision established the following DSM goals:

- Demand Reduction:
 - 886 – 944 MW by 2020The Decision in this proceeding concluded that the primary emphasis of DSM goals shall be on energy; this range was established by the Commission for use in the Electric Resource Planning docket (Docket No. 07A-447E).
- Energy Reduction:

▪ 2009-2018:	2,834 GWh
▪ 2007-2008 ² :	248 GWh
▪ TOTAL (2007 -2018):	3,082 GWh (11% of 2006)

The Commission's DSM goals for Public Service set the utility on a path to fully achieving its portion of the DSM-based carbon reduction targets outlined in the Governor's Climate Action Plan.

Governor Ritter's Climate Action Plan calls upon increased energy efficiency to achieve half of the carbon reductions targeted in the electric utility sector. Primarily this equates to all utilities – investor-owned, municipal and cooperatives – initiating or greatly expanding their DSM efforts.

The Governor's Energy Office reviewed the Public Service electric DSM goals established by the Commission and concluded that Public Service is on target to achieve its portion of the overall DSM targets set forth in the Climate Action Plan.

² These DSM quantities were achieved via commitments in an earlier Commission proceeding

BLACK HILLS ENERGY

(Note: Black Hills Energy completed the purchase of Aquila, Inc. in July 2008, and began serving Colorado consumers at that time.)

Based on Black Hills’ 2006 peak demand and energy sales, its statutory minimum DSM goals are:

- Demand Reduction: 35.5 MW
- Energy Reduction: 93.9 GWh

Docket No. 08A-518E is pending before the Commission. Black Hills’ DSM goals are an issue in that docket. A Commission decision regarding Black Hills’ DSM plan and goals is anticipated in May.

Ensuring that all classes of customers an opportunity to participate in DSM § 40-3.2-104(4), C.R.S.

This section of the statute addresses the issues of equity and fairness, concerning ratepayer access to electric DSM programs. The general objective is to make DSM options available to all three customer classes: Industrial; Commercial; and Residential. Industrial programs tend to be “self-directed” (*e.g.*, the customer designs and proposes the specific DSM investments he or she desires to make and the utility determines a rebate that reflects the cost-effectiveness). Thus, most DSM programs focus on Commercial and Residential customers. The utilities are also specifically expected to include low-income programs in their portfolios.

The following two charts present the spectrum of electric DSM programs within Black Hills’ and Public Services’ portfolio. Both utilities have portfolios that offer opportunities for all classes of customers to participate in DSM.

BLACK HILLS ENERGY ELECTRIC PROGRAMS, 2009 – 2011(PENDING COMMISSION APPROVAL)	Comm	Res
BUILDING COMMISSIONING	X	
CUSTOM REBATE PROGRAM	X	
NEW CONSTRUCTION & LEED	X	
PRESRCRIPTIVE REBATE	X	
INDUSTRIAL ENERGY-EFFICIENCY		
LOW-INCOME ASSISTANCE		X
HIGH EFFICIENCY COOLING		X
HIGH EFFICIENCY LIGHTING		X
SCHOOL-BASED ENERGY EDUCATION		X

PUBLIC SERVICE COMPANY ELECTRIC DSM PROGRAMS, 2009 - 2010	Comm	Res
COMPRESSED AIR EFFICIENCY	X	
COOLING EFFICIENCY	X	
CUSTOM EFFICIENCY	X	
DATA CENTER EFFICIENCY	X	
ENERGY MANAGEMENT SYSTEMS	X	
ENERGY STAR NEW HOMES		X
ENERGY STAR RETAILER INCENTIVE		X
EVAPORATIVE COOLING REBATES		X
HOME LIGHTING & RECYCLING		X
HOME PERFORMANCE WITH ENERGY STAR		X
LIGHTING EFFICIENCY	X	X
LOW-INCOME EASY SAVINGS ENERGY KITS		X
LOW-INCOME MULTI-FAMILY WEATHERIZATION		X
LOW-INCOME NON-PROFIT WEATHERIZATION		X
LOW-INCOME SINGLE FAMILY WEATHERIZATION		X
MOTOR AND DRIVE EFFICIENCY	X	
NEW CONSTRUCTION	X	
PROCESS EFFICIENCY	X	
RECOMMISSIONING	X	
REFRIGERATOR RECYCLING		X
SAVER'S SWITCH		X
SCHOOL EDUCATION KITS		X
SEGMENT EFFICIENCY	X	
INDUSTRIAL SELF-DIRECT (also available to large commercial customers)	X	
SMALL BUSINESS LIGHTING	X	
STANDARD OFFER	X	

Allowing an opportunity for DSM investments to be more profitable
§40-3.2-104(5), C.R.S.

Section 40-3.2-104(5), C.R.S., states that the “Commission shall allow an opportunity for a utility’s investment in cost-effective DSM programs to be more profitable to the utility than any other utility investment that is not already subject to special incentives.”

The Commission’s general policy concerning DSM incentives: provide incentives sufficient to meet the statutory requirements and signal that all cost-effective DSM is to be pursued aggressively, while also tempering the incentive so that it does not raise rates more than necessary to achieve the desired results.³

The Commission, in Decision No. C08-0560, (Docket No. 07A-420E, the docket in which PSCo’s DSM goals and incentives were determined), found that the DSM incentive is actually comprised of several components, each of which has a financial impact upon the utility. The Commission identified three discrete incentive components:

- (a) Addressing the fact that DSM, as a business venture, runs counter to Public Service’s current business practices;
- (b) Creating a recovery mechanism for DSM cost, including determining how such a mechanism would be implemented; and
- (c) Determining the type and magnitude of a performance incentive is necessary to reward the attainment of DSM goals.

To address the change in business practice that DSM represents, the Commission authorized PSCo to receive \$2 million per year in after-tax revenue for each year that it initiates a DSM program, contingent upon achieving at least 80 percent of that year’s goal. The objective of this up-front incentive is to position DSM within the utility so that it provides a positive impact upon earnings per share, and thus root this new business practice solidly within the utility. As noted in the Decision, this upfront payment “is provided in acknowledgement that Public Service is being directed to divert from its traditional business practices by actively promoting reduced consumption of its product.”⁴

The Commission also authorized a cost recovery mechanism that allows for full recovery of costs within 12 months, (*e.g.*, expensing costs rather than amortizing them), as well as recovery on a prospective basis (*e.g.*, recovering each year’s anticipated expenses as they are incurred, with a reconciliation of planned and actual after the year is completed).

The performance incentive mechanism approved by the Commission serves to encourage the utility to not only meet the established goals but to exceed them. A utility begins to receive a performance incentive (bonus) after it surpasses 80 percent of each year’s energy

³ Decision No. C08-0560, paragraph 103 (paraphrased)

⁴ *Ibid*, at paragraph 107.

savings goal. The bonus increases with each percentage increase beyond 80, up to 150 percent of the goal.

The bonus is a portion of the net economic benefits resulting from the DSM programs. “Net economic benefits” are the total financial benefits accruing to all sources (utility, participating customers and society overall) less the total costs of the DSM programs. The bonus is capped at 20 percent of the Public Service’s total annual expenditures.

In its electric DSM application, Black Hills has proposed that this three-pronged incentive approach also be applied to its DSM efforts, adjusting the values as appropriate. That application is pending before the Commission; (Docket No. 08A-518E.)

Anticipated Energy Savings From First Year of DSM (2009)

NATURAL GAS – ANTICIPATED SAVINGS

The numbers presented in the chart, below, represent the anticipated savings from gas DSM programs being implemented in 2009. (Note: the Eastern Colorado Utility DSM plan is still pending before the Commission.)

The values listed for each year (2009 and 2010) are the anticipated savings occurring in that year, not the cumulative savings over the life of the DSM measures.

These same six gas utilities reported gas sales in 2007 of 162,082,020 dekatherms (dkt). Thus, the anticipated 2009 savings represent about 0.5 percent of 2007 sales. The anticipated 2010 savings represent about 0.6 percent of sales.

**Anticipated Gas DSM Savings
(in dekatherms)**

Utility	2009	2010	Total
Atmos Energy	13,503	19,385	32,888
Black Hills Energy	372,277	482,831	855,108
Colorado Natural Gas	17,782	8,974	26,756
Eastern Colorado Utility	271	426	697
Public Service Co. of Colorado	318,141	402,808	720,949
SourceGas	18,565	23,643	42,208
TOTAL:	740,539 dkt	938,067 dkt	1,678,606 dkt

ELECTRICITY – ANTICIPATED SAVINGS

The numbers presented in the chart, below, represent the anticipated savings from electric DSM programs being implemented in 2009. (Note: the Black Hills DSM plan is still pending before the Commission.)

The values listed for each year (2009 and 2010) are the anticipated savings occurring in that year, not the cumulative savings over the life of the DSM measures.

These two electric utilities⁵ reported electric sales in 2006 of 29,022,328 megawatt-hours (MWh) combined. Thus, the anticipated 2009 savings represent about 0.6 percent of 2006 sales. The anticipated 2010 savings represent about 0.9 percent of sales. By statute, the total savings achieved by 2018 must be at least 5 percent of 2006 sales (aggregating the savings of each year).

Anticipated Electric DSM Savings
(Megawatt-hours of energy and Megawatts of demand)

Utility	2009 Anticipated Savings	2010 Anticipated Savings	Total
Black Hills: Energy Savings (MWh)	8,123	12,399	20,523
Black Hills: Demand Savings (MW)	2.2	4.0	6.2
Public Service Co: Energy Savings (MWh)	175,835	237,465	413,300
Public Service Co: Demand Savings (MW)	56.5	66.9	123.4
TOTALS:	183,958 MWh 58.7 MW	249,864 MWh 70.9 MW	433,822MWh 129.6 MW

Note:

In 2008 the Commission deliberated on a Public Service Company application to install two gas turbines at its Ft. St. Vrain generating station. One issue involved in that docket was the Public Service electric system’s ability to meet anticipated peak demands, starting in 2009.

In its decision in that docket the Commission directed Public Service to increase its demand response efforts. Specifically, Decision No. C08-0369 directed Public Service to expand its *Saver’s Switch* and Interruptible Service Option Credit (ISOC) programs, as well as initiate procurement of a third-party demand response aggregation vendor.

⁵ The 2006 sales in the Black Hills service territory were through the predecessor utility, Aquila, Inc.

The demand savings (MW) data presented above for Public Service includes its plans to expand the *Saver's Switch* residential air conditioning control program. It does not include increases in the Interruptible Service Option Credit (ISOC) program or its new demand response contract (44 MW in 2009).

Estimated Cost Effectiveness of Approved DSM Programs: 2009-2010

GAS DSM

As noted previously, five gas utilities have received Commission approval of their DSM plans. (Only Eastern Colorado Utility is awaiting approval.) Those five plans represent anticipated utility and participant⁶ expenditures of just under \$75.5 million.

Based upon engineering analyses of the DSM programs, this \$75.5 million investment in DSM programs will yield approximately \$124.5 million in benefits, to the participating customers, the utility and society overall, over the lifetime of the DSM investments.⁷

Thus, for each \$1 invested in gas DSM, \$1.65 in benefits will result.

ELECTRIC DSM

Currently only the Public Service Co. of Colorado electric DSM plan has been approved by the Commission. The Black Hills Energy plan is currently before the Commission and a decision is anticipated in May.

The Public Service electric DSM plan anticipates utility and participant expenditures of \$193 million in 2009-2010. The engineering analysis in the Public Service plan predicts \$652 million in benefits, to the participating customers, utility and society overall, over the lifetime of the DSM investments.

Thus, for each \$1 invested in electric DSM, \$3.38 in benefits will result.

Recommended Changes to Statutes, to Further the Intent of the DSM Statutes

Based upon the Commission's experience to date with DSM programs, we have no recommendations concerning modifications to the pertinent DSM statutes at this time. The Commission anticipates a more comprehensive review of energy efficiency policy and practices throughout 2009 and will communicate further with the General Assembly our findings at that time.

⁶ The "participant" is the customer. A portion of the total cost of any DSM measure is borne by the participant. That portion is quantified for inclusion in cost-effectiveness assessments.

⁷ Each DSM measure has an identifiable lifetime, representing the anticipated number of years the measure will be in effect. For example, attic insulation has a twenty-year lifetime.