

Report to Colorado  
PERA Board of  
Trustees

From Investment  
Staff

Regarding the  
*Colorado PERA*  
*Iran-Related*  
*Investment Policy*

November 21, 2008



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## SECTION 1

### **Executive Summary**

Since the last Board Meeting on September 19, 2008, Colorado PERA staff has continued to work diligently to implement the requirements of the *Colorado PERA Iran-Related Investment Policy* (PERA's policy). Specifically, our efforts have focused on the following areas:

- Reviewing reports received from PERA's research provider to continue to update the list of companies meeting PERA's policy criteria (Phase I).
- Monitoring compliance with the moratorium on direct public investments enacted by the Board (Phase III).
- Updating the status of other public funds' divestment activities.
- Developing a framework for implementing Phase IV of PERA's policy.

In total, there are 16 companies that meet the criteria specified in PERA's policy. Of the 16 companies, PERA owns direct public securities issued by eight of the companies. PERA has enacted a moratorium in direct public investments in the eight companies of the 16 that PERA does not currently own. There have been no new companies identified as potentially meeting PERA's policy criteria since the last report to the Board of Trustees.

#### *Other Public Funds*

An update on the divestment activities of public funds is presented in Section 8. PERA staff summarized the Iran-related investment actions of 22 state retirement systems. Of the 22 retirement systems, five plans have voluntarily adopted internal divestment policies related to Iran, one plan is currently considering adopting such a policy, and 16 plans have legislation mandating divestment.

#### *Investment Staff Evaluation*

As mentioned above, PERA currently has a moratorium on eight companies. This means that there are eight companies in which PERA's portfolio managers are not allowed to invest. In addition, one of those eight companies, China Petroleum and Chemical Corporation (Sinopec), is also on PERA's Sudan list as a company with active business operations in Sudan. Sinopec is a company for which PERA has divested holdings. During the period December 2007 to April 2008, PERA's portfolio managers sold more than 6.5 million shares of Sinopec to comply with the Sudan legislation.

In the previous report to the Board, staff concluded the following regarding the eight companies in which PERA has holdings:

- None of the companies appear to have material oil and gas operations in Iran as compared to the company operations as a whole.
- None of the companies who responded to PERA's letters appear to present a material risk to PERA from their current operations in Iran.
- Overall PERA's external managers indicate that there are not attractive alternatives to these eight companies.

Based on this work, staff concludes that none of the eight companies in which PERA has holdings currently warrant divestment given the provisions of the PERA policy.

Phase IV of PERA's policy addresses the concept of availability of alternative direct public investments providing similar diversity and return expectations. We considered if it was reasonable to assume a portfolio manager could restructure his or her portfolio in such a manner that the risk/return profile of the portfolio would not be materially impacted if a security was divested. In Section 9, staff has summarized certain information for each of the eight companies in which PERA has holdings. Given the above consideration and the summarized data in Section 9, there are two companies of the eight that may have a more modest impact if divestment was considered. These two companies are ENI S.p.A. and Sasol Ltd. Divestment is not, however, staff's recommendation at this time.

#### *Reporting*

Staff is providing this *Colorado PERA Iran-Related Investment Policy* Report as of November 21, 2008. This report will be placed on the PERA Web site and forwarded to the Governor and the General Assembly on November 21, 2008.

## SECTION 2

### **Colorado PERA Iran-Related Investment Policy**

*Adopted January 18, 2008*

PERA will initiate a phased strategy to address PERA's direct public investments in foreign companies doing business in the Islamic Republic of Iran. The strategy will address and will include a number of actions, up to and including possible divestment. PERA recognizes the federal government has sole responsibility for the conduct of American foreign policy. PERA is acting out of a fiduciary concern for the welfare of its members' assets which requires a broad horizon and sensitivity to the potential risks posed by investment in Iran.

The United States prohibits loans from U.S. financial institutions and direct investment in the Iranian energy and defense sectors. The U.S. government can also impose economic sanctions on foreign companies investing in Iran's petroleum and natural gas sector. It is widely reported that Iran supports terrorism, supplies explosively formed penetrators for use against our troops in Iraq, continues to develop the infrastructure to support advanced nuclear technology, and that its president publicly calls for the destruction of the State of Israel.

PERA must be managed for the benefit of the members, retirees and beneficiaries, and this policy is developed to address the potential for risk presented by pension fund investments in companies doing business in Iran.

Accordingly, the PERA Board of Trustees adopts a policy consisting of the following phases:

- Phase I: Commencing immediately, staff shall undertake research to identify a list of public companies doing business in Iran which meet the following criteria: (This list will be developed through staff research of publicly available information that may include the retention of external third party researchers and/or other information provided by other public funds, pension systems, and investor organizations.)
  1. That have made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20,000,000 or more, in Iran's energy sector; or
  2. Are engaged in business with any Iranian organization labeled by the U.S. government as a terrorist organization; or
  3. Are engaged in any business that facilitates Iranian acquisition of nuclear, chemical, or biological weapons technology or military equipment.
- Phase II: Upon a company being included on the list that meets the criteria set forth under Phase I in which PERA holds a direct public investment, staff shall within 30 days after identifying such a company, engage such company and ask them to:
  1. Provide a detailed description of the nature, extent, duration, and full history of the companies' business activities in Iran;
  2. Provide an explanation as to how these activities are consistent with a sound and prudent long-term investment strategy;
  3. Report how they are engaging the government of Iran regarding its conduct and how they are mitigating investment risks posed by doing business in Iran;
  4. Report whether substantial action has been taken to affect the policies and practices of the government of the Islamic Republic of Iran; and

5. Additionally, staff shall, where practical, confer and work with other pension systems and investor organizations regarding information stemming from their engagement with such companies and potentially cooperate in taking joint action in engaging such companies.
- Phase III: Upon a company being included on the list that meets the criteria set forth under Phase I, the Board enacts a moratorium on direct public investments in companies in which PERA currently holds no interest. The moratorium shall apply upon the date that staff determines such a company meets the criteria. The Board shall give 90-days' advance notice before the effective date of any amendment or repeal of this moratorium to the public, the General Assembly, and the Governor.
  - Phase IV: Within 90 days after engaging such a company, staff shall evaluate the companies' responses and determine if they have taken sufficient steps to minimize risk to PERA and/or whether additional time is required to effectively engage such company. If not, staff shall analyze:
    1. The available strategies for addressing the risk presented;
    2. The viability of working with other interested parties and investors to affect the policies and practices of companies with business operations in Iran;
    3. The materiality of the company's Iranian operations in regards to their overall operations; and
    4. The availability of alternative direct public investments providing similar diversity and return expectations.
  - Phase V: Staff shall report to the Board its findings, actions, and recommendations concerning individual companies on the list at every regularly scheduled Board meeting. This report shall be made available to the public and forwarded to the General Assembly and the Governor; provided, however, the first public report shall be made no later than March 21, 2008. Should adequate mitigation of risk not be possible, the PERA Board of Trustees, consistent with its fiduciary obligations and responsibilities, will thereafter direct staff to:
    1. Withhold additional or new direct public investments in non-complying companies; and/or
    2. Divest current direct public investments in the companies.

## Section 3

### Review of Staff Activities

*January 18–March 21, 2008*

- Made initial contact with two independent research providers (January 25)
- Discussed product offering with first research provider (January 29)
  - What could they provide
  - Current clients they are serving with similar needs
  - What would it cost
  - What research is currently available
  - How much customization would be required to meet PERA's criteria
  - How long would it take to obtain a list customized to PERA's criteria
- Agreed to send PERA a proposal and agreement
- Discussed product offering with second research provider (January 29)
  - What could they provide
  - Current clients they are serving with similar needs
  - What would it cost
  - How much customization would be required to meet PERA's criteria
  - How long would it take to obtain a list customized to PERA's criteria
  - Research provider indicated that it would be about three months, or perhaps sooner, to provide a list that met PERA's criteria
- Received proposal from first research provider interviewed that included a sample report and a draft of an agreement for research services (January 30)
- Forwarded job description for Investment Analyst to Human Resources (January 29)
- Posted job announcement in *Denver Post* and on CFA Web site (beginning February 3)
- Conducted first interviews (February 14, 15, 19, 26, 29, and March 6). Conducted second interviews week of March 10
- Held follow-up conversation with research provider regarding criteria wording (February 7). Also discussed inclusion of subsidiaries and nuclear power plants on the list – agreed to create a watch list for companies that do not have involvement in Iran
- Signed contract with research provider (February 13)
- Received initial set of reports from research provider (February 15). Prepared detailed list of questions related to criteria wording, questions on specific companies on the list and also companies excluded from the list (February 25). Held conversation regarding questions and definition of “investing in Iran” (February 26)
- Compared JCRC list (initially received in 2007) to research provider list (February 19)

- Evaluated exposure (domestic equity and fixed income) to companies on both the JCRC list and the research provider list as of December 31, 2007 (February 25). Considered needs for creating security identifiers for relevant companies and report description needs
- Conducted conference calls with two large public pension plans to discuss what each fund has done to date (February 13)
- Received updated JCRC list (February 25)
- Received new research provider report (March 3)
- Updated comparison of JCRC list and research provider list (March 7)
- Contacted JCRC to request information regarding JCRC list criteria (March 7)
- PERA contacted by JCRC. JCRC will request AIPAC to follow up on PERA request (March 9)
- Completed initial review of research provider's report and list (March 14)
- Prepared *Iran-Related Investment Policy Report* for Board of Trustees (March 14–March 20)

#### *March 21 – June 20, 2008*

- Sent letters to all 31 companies identified in the March 21, 2008, report as part of Phase II of the *Colorado PERA Iran-Related Investment Policy* (March 21)
- Enacted a moratorium on three companies identified in the March 21, 2008, report as part of Phase III of the *Colorado PERA Iran-Related Investment Policy* (March 21)
- Updated the portfolio accounting system to identify securities issued by the three companies meeting the policy criteria with a purchase moratorium in effect (March 21)
- Sent letters to all portfolio managers (internal and external) of actively managed separate account portfolios notifying the managers of the moratorium (March 21)
- Hired Investment Analyst (March 24)
- Conducted conference call with AIPAC regarding their methodology in selecting companies for divestment (March 31)
- Reviewed security holdings and transactions to verify compliance with moratorium (April 1)
- Received new research provider report (April 1). Prepared and sent a detailed list of questions to research provider regarding the findings in their April 1 report (April 8). Received response from research provider (April 10)
- Conducted conference call with research provider to further discuss their research (April 11). Received follow-up answers from research provider in response to additional questions posed during April 11 conference call (April 14). Sent research provider further questions on their findings (April 15). Received response from research provider (April 16). Received another response from research provider regarding unresolved questions remaining from our April 11 conference call (April 17)



- Compared JCRC research (received February 2008) and provider research (April 1) for each company on a project by project basis in an effort to corroborate findings and determine if cited companies meet PERA's policy (April 14–16)
- Used Bloomberg research to determine if each cited company had publicly traded debt or equity (April 17)
- Searched the following Web sites for company activities in Iran in an effort to independently corroborate provided research: U.S. Department of Energy, U.S. Department of State, Congressional Research Service, Library of Congress, Reuters, Bloomberg, and brokerage research sites in addition to the individual Web sites of each cited company (April 18–22)
- Retrieved the annual reports and Forms 20-F (Form filed with the SEC by non-U.S. companies with securities that trade on a U.S. exchange) for each subject company for the years that company was believed to have conducted operations in Iran (April 22)
- Examined annual reports and other SEC filings in order to identify and calculate the value of subject companies' Iran investments (April 24–30)
- Reviewed security holdings and transactions to verify compliance with moratorium (May 1)
- Received new research provider report (May 1). Prepared and sent a detailed list of questions to research provider regarding the findings in their May 1 report (May 2). Received response from research provider (May 5)
- Prepared and sent a detailed list of questions to AIPAC regarding their research findings; also requested an updated research report (if one was available) (May 5)
- Sent e-mails directly to the investor relations departments of those remaining companies that had not yet replied to PERA's engagement letter sent on March 21 (May 6–8)
- Met with PERA's equity and fixed income teams to outline steps necessary to develop a framework for implementing Phase IV of the Iran-Related Investment Policy (May 16 and 21)
- Reviewed security holdings and transactions to verify compliance with moratorium (June 2)
- Received new research provider report (June 2)
- Prepared *Iran-Related Investment Policy Report* for Board of Trustees (May 29–June 11)

#### *June 20 – September 19, 2008*

- Enacted a moratorium on five additional companies identified in the June 20, 2008, report as part of Phase III of the *Colorado PERA Iran-Related Investment Policy* (June 20)
- Sent letters to all portfolio managers (internal and external) of actively managed separate account portfolios notifying the managers of the moratorium (June 20)
- Used Bloomberg research to identify actively traded securities issued by the five additional companies meeting PERA's policy criteria with a purchase moratorium in effect (June 23)
- Updated the portfolio accounting system to identify securities issued by the five additional companies meeting PERA's policy criteria with a purchase moratorium in effect (June 24–26)

- Reviewed security holdings and transactions to verify compliance with moratorium (July 1)
- Received new research provider report (July 1)
- Acquired equity and fixed income index constituent data. Identified the constituent securities within these indices issued by the eight companies that met the criteria but do not have a purchase moratorium in effect, which will be referred to hereafter as the “eight companies with PERA holdings.” Calculated the sector and geographical weightings of these companies within each respective index (July 2–23)
- Requested that PERA’s custodian bank determine the potential active risk associated with removing the eight companies with PERA holdings from the respective equity benchmarks (July 8)
- Read the annual reports, SEC filings, and other public documents issued by each of the eight companies with PERA holdings in order to collect relevant information for each company (July 9–16)
- Used Bloomberg research to identify actively traded securities issued by the eight companies with PERA holdings (July 15–18)
- Updated the portfolio accounting system to identify securities issued by the eight companies with PERA holdings (July 21–24)
- Sent research provider questions on their research (July 22). Received response from provider (July 23)
- Inquired of certain external equity managers regarding preliminary thoughts on potential replacement investments (July 22–August 5)
- Retrieved monthly return data for the fixed income securities of the eight companies with PERA holdings (July 24)
- Gathered, interpreted, converted, and verified oil and gas reserve data for the eight companies with PERA holdings (July 28–August 1)
- Received monthly equity return data from PERA’s investment consultant for the eight companies with PERA holdings (July 29)
- Received active risk analysis from custodian bank (July 31)
- Reviewed security holdings and transactions to verify compliance with moratorium (August 1)
- Received new research provider report (August 1)
- Gathered research from major brokerage firms on the eight companies with PERA holdings. Read and synthesized research. Began preparing detailed analyses on these companies in order to better understand their history, structure, risks, opportunities, revenue and profit drivers, and future prospects (August 5–September 10)
- Sent research provider additional questions on their research (August 11). Received response from provider (August 14)
- Reviewed security holdings and transactions to verify compliance with moratorium (September 2)
- Received new research provider report (September 2)

- Evaluated PERA's exposure (equity and fixed income) to the securities of the eight companies with PERA holdings as of the close of business on September 5, 2008 (September 8)
- Prepared *Iran-Related Investment Policy Report* for Board of Trustees (August 27–September 9)

#### *September 19 – November 21, 2008*

- Collected and analyzed information on the current status of the Iran divestment policies of 22 other public pension funds (September 19–October 22)
- Reviewed security holdings and transactions to verify compliance with moratorium (October 1)
- Received research provider updated report (October 1)
- Sent e-mails directly to the investor relations departments of the three remaining companies with PERA holdings that had not yet replied to PERA's engagement letter sent on March 21 (October 8)
- Read the annual reports, SEC filings, and other public documents issued by each of the eight companies with a purchase moratorium in effect in order to collect relevant information for each company (October 9–November 21)
- Acquired equity index constituent data for the MSCI indices utilized by PERA as benchmarks as of October 16, 2008. Identified the constituent securities within these indices issued by the eight companies with PERA holdings. Calculated the energy sector weightings of these companies within each respective index (October 16)
- Reviewed security holdings and transactions to verify compliance with moratorium (November 3)
- Received research provider updated report (November 3)
- Evaluated PERA's exposure (equity and fixed income) to the securities of the eight companies with PERA holdings as of the close of business on November 7, 2008 (November 10)
- Prepared *Iran-Related Investment Policy Report* for Board of Trustees (October 27–November 10)

## Section 4

### Company Response Letters

In compliance with Phase II of the *Colorado PERA Iran-Related Investment Policy*, on March 21, 2008, PERA sent letters to 31 companies. The letters requested information relating to the criteria specified in Phase I, asked the companies to provide and report on the items specified in Phase II, and also requested information on their business activities within Iran. The letters were sent via Federal Express courier, and PERA received delivery verification notices for each letter. Between May 6 and May 8, and again between October 8 and October 13, 2008, PERA staff sent e-mails directly to the investor relations departments of the companies who had not yet responded. As of November 21, 2008, PERA has received responses from the following 13 companies:

Bow Valley Energy Ltd. <sup>1</sup>

China National Offshore Oil Corp. (CNOOC)

ENAP

ENI S.p.A. <sup>1</sup>

INPEX <sup>1</sup>

Linde AG

OMV AG

Petroleo Brasileiro S.A. (Petrobras) <sup>1</sup>

Repsol YPF, S.A.

Royal Dutch Shell Plc <sup>1</sup>

StatoilHydro ASA <sup>1</sup>

The Siam Cement PCL

Total S.A. <sup>1</sup>

<sup>1</sup> Indicates a company that is listed in Section 5 of this report and is identified as meeting the criteria in PERA's policy.

## Section 5

### Iran-Related Companies Meeting Criteria as of November 21, 2008

#### 1. Bow Valley Energy Ltd.

Bow Valley Energy Ltd. is a Canadian natural resources company. According to the company's 2007 Annual Information Filing "since its inception in 1996, Bow Valley has been focused principally on sourcing, evaluating, and acquiring international oil and natural gas properties with exploration and exploitation potential...Bow Valley owns oil and natural gas assets in the United Kingdom and Alaska. Bow Valley is engaged in a full-cycle exploration and production program that entails land acquisition, seismic purchase and interpretation, drilling, facilities and pipeline construction, and the production of oil and natural gas."

Bow Valley Energy Ltd meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran's energy sector.

#### 2. China Petroleum & Chemical Corporation (Sinopec)

China Petroleum & Chemical Corporation (aka Sinopec) is a Chinese energy and chemical company. "China Petroleum & Chemical Corporation is an energy and chemical company, which through its subsidiaries, engages in integrated oil and gas, and chemical operations in the People's Republic of China. Oil and gas operations consist of exploring for, developing and producing crude oil and natural gas; transporting crude oil, natural gas and products by pipelines; refining crude oil into finished petroleum products, and marketing crude oil, natural gas and refined petroleum products. Chemical operations include the manufacture and marketing of a range of chemicals for industrial uses."<sup>1</sup>

China Petroleum & Chemical Corporation meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran's energy sector.

#### 3. ENI S.p.A.

"ENI S.p.A. is an Italy-based company producing, supplying and distributing petroleum and natural gas, as well as producing electricity and offering engineering, construction and petrochemical services. The Company operates in three segments: Exploration and Production, which is involved in the exploration and production of hydrocarbons; Gas and Power, which is involved in all phases of the gas business and electricity generation activities, and Refining and Marketing, which is involved in the refining and marketing of petroleum products."<sup>1</sup>

ENI S.p.A. meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran's energy sector.

#### 4. GAIL (India) Limited

GAIL (India) Limited is a natural gas company in India. "The Company operates through its business segments, which include gas transmission, petrochemicals, liquid hydrocarbons, LNG, LPG transmission and marketing, exploration and production (E&P), and coal bed methane (CBM)."<sup>1</sup>

<sup>1</sup> Company description information sourced from Reuters.

<sup>2</sup> Company description information sourced from Company Web site.

GAIL meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 5. Gazprom OAO

Gazprom OAO is a Russian oil and gas company. “Gazprom OAO and its subsidiaries operate a gas pipeline system. The Company provides production of oil and oil products. It is also an exporter of gas to European countries. Its principal activities include exploration and production of gas; transportation of gas; domestic and export sale of gas; production of crude oil and gas condensate, and processing of oil, gas condensate and other hydrocarbons and sales of refined products. Other activities primarily comprise banking, construction and media. The Company operates through six segments: production of gas, transport, distribution, production of crude oil and gas condensate, refining and other.”<sup>1</sup>

Gazprom OAO meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 6. GS Engineering & Construction Corp.

“GS Engineering & Construction Corp., formerly LG Engineering & Construction Co., Ltd., is a Korean company involved in civil, architectural, and environmental engineering. The Company specializes in the construction of oil, gas, and petrochemical plants, and power and electrical plants; the construction of environmental facilities; the construction of commercial and residential buildings, and the provision of remodeling services. It is also engaged in feasibility studies; the gathering, analysis and evaluation of data on proposed projects; consulting services; the operation and maintenance of completed plants; design engineering services, including concept design, reserve design, basic design, detailed design, and production design; procurement services, and facilities-commissioning and start-up services.”<sup>1</sup>

GS Engineering & Construction meets criteria (1) - a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 7. INPEX

“INPEX Corporation, headquartered in Tokyo, Japan, is a supplier of oil and natural gas. The Company primarily is engaged in the exploration for, and the development, supply and shipping of natural resources such as petroleum and natural gas. The Company has major exploration projects in Indonesia, Australia, the Timor Sea Joint Petroleum Development Area (JPDA), the Caspian Sea area, the Middle East and South America.”<sup>1</sup>

INPEX meets criteria (1) - a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 8. Liquefied Natural Gas Ltd. (LNGL)

“Liquefied Natural Gas Limited is engaged in the development of liquefied natural gas (LNG) production plants to facilitate the production and sale of LNG in Australia.”<sup>1</sup>

LNGL meets criteria (1) - a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

<sup>1</sup> Company description information sourced from Reuters.

<sup>2</sup> Company description information sourced from Company Web site.

## 9. Lukoil OAO

“Lukoil is a vertically integrated Russian oil and gas company. The main activities of the Company are exploration and production of oil and gas, production of petroleum products and petrochemicals, and marketing of these outputs. Most of the Company’s exploration and production activity is located in Russia, and its main resource base is in Western Siberia. Lukoil owns modern refineries, gas processing and petrochemical plants located in Russia, Eastern Europe and near-abroad countries. Most of the Company’s production is sold on the international market. Lukoil petroleum products are sold in Russia, Eastern and Western Europe, near-abroad countries and the USA. Lukoil is carrying out international exploration and production projects in Kazakhstan, Egypt, Azerbaijan, Uzbekistan, Saudi Arabia, Iran, Colombia, Venezuela, Cote d’Ivoire, and Iraq.”<sup>2</sup>

Lukoil meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 10. Petroleo Brasileiro S.A. (Petrobras)

“Petroleo Brasileiro S.A. (Petrobras) is a wholly owned enterprise of the Brazilian Government, which is responsible for all hydrocarbon activities in Brazil. The Company is engaged in a range of oil and gas activities. Petrobras operates in six segments: exploration and production, supply, distribution, gas and power, international and corporate. Its exploration and production segment encompasses exploration, development and production activities in Brazil. The supply segment encompasses refining, logistics, transportation, exportation and the purchase of crude oil, as well as the purchase and sale of oil products and fuel alcohol. In addition, this segment includes the petrochemical and fertilizers division, which includes investments in domestic petrochemical companies and its two domestic fertilizer plants. Its distribution segment represents the oil product and fuel alcohol distribution activities conducted by its wholly owned subsidiary, Petrobras Distribuidora S.A. - BR in Brazil. The gas and power segment encompasses the purchase, sale, transportation and distribution of natural gas produced in or imported into Brazil. In addition, this segment includes the Company’s participation in domestic electricity production, including investments in domestic natural gas transportation companies, state-owned natural gas distributors and gas-fired power companies. Its international segment encompasses exploration and production, supply, distribution and gas and power activities conducted in Argentina, Angola, Bolivia, Colombia, Ecuador, Equatorial Guinea, Iran, Libya, Mexico, Mozambique, Nigeria, Paraguay, Peru, the United States, Tanzania, Turkey, Uruguay, and Venezuela. Its corporate segment includes the financial results and those activities not attributable to other segments.”<sup>1</sup>

Petroleo Brasileiro meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 11. Petroliaam Nasional (Petronas)

Petroliaam Nasional is the Malaysian national oil company. “Petronas’ business has grown to encompass the full spectrum of oil and gas operations, both locally and globally, in the areas of upstream oil and gas exploration and production (E&P) to downstream oil refining; marketing and distribution of petroleum products; trading; gas processing and liquefaction; gas transmission pipeline network operations; marketing of liquefied natural gas (LNG); petrochemical manufacturing and marketing; shipping; and property investment. According to Bloomberg the company is also involved in upstream and downstream ventures in Vietnam,

<sup>1</sup> Company description information sourced from Reuters.

<sup>2</sup> Company description information sourced from Company Web site.

China, Pakistan, the Philippines, and the Middle East, and has interests in Australia and Argentina.”<sup>2</sup>

Petroliam Nasional meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 12. Royal Dutch Shell Plc

Royal Dutch Shell Plc is an oil and gas company headquartered in the Netherlands. “Royal Dutch Shell Plc (Shell) is engaged in all principal aspects of the oil and natural gas industry, and also has interests in chemicals and additional interests in power generation and renewable energy (mainly in wind and advanced solar energy). The Company operates in five segments: Exploration & Production, which searches for and recovers oil and natural gas around the world and is active in 38 countries; Gas & Power, which liquefies and transports natural gas, and develops natural gas markets and related infrastructure; Oil Products, which include all of the activities necessary to transform crude oil into petroleum products and deliver these to customers worldwide; Chemicals, which produces and sells petrochemicals to industrial customers globally, and Other Industry Segments and Corporate, which include Renewables and Hydrogen.”<sup>1</sup>

Royal Dutch Shell Plc meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 13. Sasol Ltd.

“Sasol Limited is an integrated oil and gas company with substantial chemical interests. Sasol mines coal in South Africa. The Company also has chemical manufacturing and marketing operations in Europe, Asia, and the Americas. Its larger chemical portfolios include monomers, polymers, solvents, olefins, surfactants, surfactant intermediates, comonomers, waxes, phenolics, and nitrogenous products.”<sup>1</sup>

Sasol Ltd. meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 14. StatoilHydro ASA

Statoil and NorskHydro ASA merged to become StatoilHydro ASA, a Norwegian oil and gas company, in October 2007. “StatoilHydro ASA is an integrated oil and gas company. The Company’s focus is on exploration, development and production of oil and natural gas from the Norwegian Continental Shelf.”<sup>1</sup>

StatoilHydro ASA meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

## 15. Total S.A.

Total S.A. is an oil company headquartered in France. “Total S.A. together with its subsidiaries and affiliates, is an integrated oil and gas company. With operations in more than 130 countries, Total engages in all aspects of the petroleum industry, including upstream operations (oil and gas exploration, development and production, liquefied natural gas) and downstream operations (refining, marketing, and the trading and shipping of crude oil and petroleum products). Total

<sup>1</sup> Company description information sourced from Reuters.

<sup>2</sup> Company description information sourced from Company Web site.



also produces base chemicals (petrochemicals and fertilizers), chlorochemicals, intermediates, performance polymers, and specialty chemicals for the industrial and consumer markets.”<sup>1</sup>

Total S.A. meets criteria (1) – a company that has made an investment on or after August 5, 1996, or in any combination in any 12-month period, of \$20 million or more, in Iran’s energy sector.

#### 16. Ulan-Ude Aviation Plant JSC

“Ulan-Ude Aviation Plant JSC is a Russian company specializing in the production of military and civilian helicopters and airplanes.”<sup>2</sup>

Ulan-Ude meets criteria (3) – a company that is engaged in any business that facilitates Iranian acquisition of nuclear, chemical, or biological weapons technology or military equipment.

<sup>1</sup> Company description information sourced from Reuters.

<sup>2</sup> Company description information sourced from Company Web site.

## SECTION 6

### **PERA Holdings of Iran-Related Companies Meeting Criteria As of November 21, 2008**

To develop the following information, PERA used an identification date of November 7, 2008. The following table indicates which companies are (a) on the list meeting the policy criteria, and (b) are or are not held by PERA in separate account portfolios. There have been no new companies identified as meeting PERA's policy criteria since the last report to the Board of Trustees.

<b>Company Name</b>	<b>Date Added to PERA List</b>	<b>Market Value</b>
Bow Valley Energy Ltd.	March 21	–
China Petroleum & Chemical Corporation (Sinopec)	March 21	–
ENI S.p.A.	March 21	\$ 2,482,532
GAIL (India) Ltd.	June 20	–
Gazprom OAO	March 21	\$ 27,659,486
GS Engineering & Construction Corp.	March 21	–
INPEX	June 20	–
Liquefied Natural Gas Ltd. (LNGL)	June 20	–
Lukoil OAO	March 21	\$ 5,507,202
Petroleo Brasileiro S.A. (Petrobras)	March 21	\$ 20,901,470
Petroliam Nasional (Petronas)	March 21	–
Royal Dutch Shell Plc	March 21	\$ 33,273,342
Sasol Ltd.	June 20	\$ 4,945,061
StatoilHydro ASA	March 21	\$ 26,299,003
Total S.A.	March 21	\$ 35,636,970
Ulan-Ude Aviation Plant JSC	June 20	–

## Section 7

### **Iran-Related Companies Meeting Criteria as of November 21, 2008, With Purchase Moratorium in Effect**

<b>Company Name</b>	<b>Date Moratorium Enacted</b>
Bow Valley Energy Ltd.	March 21
China Petroleum and Chemical Corporation (Sinopec)	June 20
GAIL (India) Ltd.	June 20
GS Engineering & Construction Corp.	March 21
INPEX	June 20
Liquefied Natural Gas Ltd. (LNGL)	June 20
Petroliam Nasional (Petronas)	March 21
Ulan-Ude Aviation Plant JSC	June 20

## Section 8

### **Update on Public Funds' Divestment Activities**

In an effort to gauge the divestment activities of other public pension funds, PERA staff studied the Iran-related divestment policies and actions of 22 other state retirement systems. The information used in the study was gathered from the popular press, correspondence with the funds themselves, and the 2007 and 2008 annual reports on state divestment legislation published by the National Conference of State Legislatures.

Of the 22 retirement systems included in the study, five voluntarily adopted internal divestment policies related to Iran, one is currently considering adopting such a policy, and 16 are complying with legislation mandating divestment efforts.

Each fund has specific criteria that are being used to define a company with activities in Iran ("a scrutinized company"). The criteria employed by each fund are unique to the policy or legislation that governs the fund's divestment activities. As a result, the number, type, and identity of scrutinized companies vary widely by fund.

The funds covered in the study are all in various stages of divestment activities. Three funds have yet to report any divestment-related activity. Four funds are currently conducting research on scrutinized companies. Seven funds have sent engagement letters to scrutinized companies requesting information on their Iran activities. Eight funds have either completed divestment or are in the process of doing so. Of those eight funds that have divested or are in the process of doing so, five divested from all companies that met their definition of a scrutinized company, and two funds divested from a subset of scrutinized companies. One other retirement system has divested, but the extent of the fund's divestment is unclear.

The divestment activities of Teacher Retirement System of Texas (TRS) warrant further mention. TRS identified 42 companies that met their definition of a scrutinized company due to their activities in Iran and Sudan. In accordance with their policy, TRS then searched the investable universe to determine whether there were alternative companies which offered similar risk/return characteristics. Their analysis revealed that even the best substitutes identified could not track the scrutinized company returns with reasonable confidence. Since most of the companies on their scrutinized lists were large energy companies, TRS argued that replacing investments in these large companies with substitutes would result in a more concentrated, less diversified portfolio. As a result of their analysis, TRS recommended that nine of the 42 scrutinized companies be excluded from their scrutinized list.

## SECTION 9

### Information on Companies Meeting Criteria with PERA Holdings

The table below was constructed for the purpose of comparing key characteristics of each of the eight companies meeting PERA's policy criteria in which PERA has holdings. The table summarizes information for each company. This information is the same information that was provided in Section 9 of the *Iran-Related Investment Policy Report* to the Board dated September 19, 2008. Specifically, the table includes the respective weights for each company's securities within the energy sector of the relevant equity index, the company's market capitalization, PERA's equity and fixed income exposure within its separate account portfolios, the company's total proved oil and gas reserves, the discounted future cash flows relating to those proved reserves, and whether or not the company responded to PERA's engagement letter sent on March 21, 2008.

	MSCI ACWI ex US Energy Sector Weight <sup>1</sup>	MSCI EAFE Energy Sector Weight <sup>1</sup>	MSCI EM Energy Sector Weight <sup>1</sup>	Market Capitalization <sup>1</sup>	PERA Separate Account Exposure <sup>2</sup>	Proved Reserves (mmboe) <sup>3</sup>	Discounted Future Net Cash Flows <sup>4</sup>	Letter Received?
ENI S.p.A.	4.9%	8.5%	N/A	\$53,569,200,000	\$2,482,532	6,370	\$77,398,820,600	Y
Gazprom OAO	4.1%	N/A	15.2%	\$44,977,598,800	\$27,659,486	195,154	Not Reported	N
Lukoil OAO	1.8%	N/A	6.5%	\$19,180,200,000	\$5,507,202	20,369	\$76,699,000,000	N
Petroleo Brasileiro S.A. (Petrobras)	5.8%	N/A	21.5%	\$63,796,780,000	\$20,901,470	11,704	\$178,992,000,000	Y
Royal Dutch Shell Plc	13.8%	23.9%	N/A	\$150,742,760,000	\$33,273,342	11,920	\$54,359,000,000	Y
Sasol Ltd.	1.5%	N/A	5.6%	\$16,589,460,000	\$4,945,061	227	\$599,284,756	N
StatoilHydro ASA	2.0%	3.5%	N/A	\$21,863,320,000	\$26,299,003	6,010	\$55,380,178,560	Y
Total S.A.	9.8%	17.0%	N/A	\$107,270,500,000	\$35,636,970	10,449	\$70,771,979,200	Y
	<b>43.7%</b>	<b>52.9%</b>	<b>48.8%</b>		<b>\$156,705,066</b>			

<sup>1</sup> Data as of October 16, 2008.

<sup>2</sup> Data as of November 7, 2008. Includes equity and fixed income exposure.

<sup>3</sup> Data as of company's 2007 annual report, Form 20-F, or other annual reporting. Reserves reflect oil and natural gas reserves – refer to the September 19, 2008, *Iran-Related Investment Policy Report* to the Board.

<sup>4</sup> Data as of company's 2007 annual report, Form 20-F, or other annual reporting. For comparison purposes, amounts reported in currencies other than U.S. dollars were converted to U.S. dollars using conversion rates from the Federal Reserve Bank of New York as of December 31, 2007.