

Climate Change: 2 Degree Scenario Analysis

WHEREAS:

In November 2016 the Paris Agreement entered into force and its goal of keeping global temperature rise well below 2 degrees Celsius will begin to shape national policy decisions. To meet this goal the International Energy Agency estimates that the global average carbon intensity of electricity production will need to drop by 90 percent. As long-term shareholders, we would like to understand how Dominion Resources is planning for the risks and opportunities presented by global efforts to keep global temperatures within acceptable boundaries.

In June 2016, the credit rating agency Moody's indicated that they would begin to analyze carbon transition risk based on scenarios consistent with the Paris Agreement, and noted the high carbon risk exposure of the power sector.

In June 2017, The Financial Stability Board's Task Force on Climate-related Financial Disclosures recommended the use of scenario analysis and disclosure of climate-related risks and opportunities.

Rapid expansion of low carbon technologies including distributed solar, storage, energy efficiency and electric vehicles provide both challenges for utilities and opportunities for growth. Many large corporations are increasing their commitments to renewable energy, providing a significant market opportunity for electric utilities. The International Energy Agency and the International Council on Clean Transportation forecast that electrification of transport will play a critical role in achieving the necessary greenhouse gas reductions by 2050.

Dominion Resources is the 14th largest CO₂ emitter in the U.S. Dominion does not have a GHG reduction goal, and does not provide information on its long-term strategy to decarbonize in ways that are consistent with the Paris Climate Agreement. In its recent Integrated Resource Plan in Virginia, the company proposed reducing its CO₂ emission rate while increasing absolute CO₂ emissions, which is inconsistent with the Paris Climate Agreement. As investors, we are concerned that Dominion is not properly accounting for the risk of its current high investment in carbon-intensive generation.

A 2 degree scenario analysis of our company's current generation and future plans will generate a more complete picture of current and future risks and opportunities. By assessing the impact of a 2 degree scenario on the company's full portfolio of power generation assets and planned capital expenditures through 2040, including the financial

risks associated with such scenarios, the company can better plan for future regulatory, technological and market changes.

RESOLVED: Shareholders request that Dominion Resources, with board oversight, publish an assessment (at reasonable cost and omitting proprietary information) of the long term impacts on the company's portfolio, of public policies and technological advances that are consistent with limiting global warming to no more than two degrees Celsius over pre-industrial levels.

Supporting Statement: This report could include:

- How Dominion could adjust its capital expenditure plans to align with a two degree scenario; and
- Plans to integrate technological, regulatory and business model innovations such as electric vehicle infrastructure, distributed energy sources (storage and generation), demand response, smart grid technologies, and customer energy efficiency as well as corresponding revenue models and rate designs.

J.P.Morgan

Richard J. Costantino
Vice President
CIB Client Service Americas

November 2, 2017

Ms. Carter M. Reid
Senior Vice President, Chief Administrative & Compliance Officer and Corporate Secretary
Dominion Resources, Inc.
120 Tredegar Street
Richmond, Virginia 23219

Dear Ms. Reid,

This letter is in response to a request by The Honorable Thomas P. DiNapoli, New York State Comptroller, regarding confirmation from JP Morgan Chase that the New York State Common Retirement Fund has been a beneficial owner of Dominion Resources, Inc. continuously for at least one year as of and including November 2, 2017.

Please note that J.P. Morgan Chase, as custodian for the New York State Common Retirement Fund, held a total of 1,639,300 shares of common stock as of November 2, 2017 and continues to hold shares in the company. The value of the ownership stake continuously held by the New York State Common Retirement Fund had a market value of at least \$2,000.00 for at least twelve months prior to, and including, said date.

If there are any questions, please contact me or Miriam Awad at (212) 623-8481.

Regards,

Richard Costantino


cc: Patrick Doherty – NYSCRF
Gianna McCarthy – NYSCRF
Tana Goldsmith – NYSCRF
Kyle Seeley - NYSCRF

Climate Change: 2 Degree Scenario Analysis

WHEREAS:

In November 2016 the Paris Agreement entered into force and its goal of keeping global temperature rise well below 2 degrees Celsius will begin to shape national policy decisions. To meet this goal the International Energy Agency estimates that the global average carbon intensity of electricity production will need to drop by 90 percent. As long-term shareholders, we would like to understand how DTE Energy is planning for the risks and opportunities presented by global efforts to keep global temperatures within acceptable boundaries.

In June 2016, the credit rating agency Moody's indicated that they would begin to analyze carbon transition risk based on scenarios consistent with the Paris Agreement, and noted the high carbon risk exposure of the power sector.

In June 2017, The Financial Stability Board's Task Force on Climate-related Financial Disclosures recommended the use of scenario analysis and disclosure of climate-related risks and opportunities.

Rapid expansion of low carbon technologies including distributed solar, storage, energy efficiency and electric vehicles provide both challenges for utilities and opportunities for growth. Many large corporations are increasing their commitments to renewable energy, providing a significant market opportunity for electric utilities. The International Energy Agency and the International Council on Clean Transportation forecast that electrification of transport will play a critical role in achieving the necessary greenhouse gas reductions by 2050.

DTE Energy is the 15th largest CO₂ emitter in the U.S. and relies on coal for more than 70% of its power generation. DTE has a GHG reduction goal, but does not provide sufficient information on its long-term strategy or plan to decarbonize in ways that are consistent with the Paris Climate Agreement. As investors, we are concerned that DTE is not properly accounting for the risk of its current high reliance on carbon-intensive generation.

A 2 degree scenario analysis of our company's current generation and future plans will generate a more complete picture of current and future risks and opportunities than business as usual planning. By assessing the impact of a 2 degree scenario on the company's full portfolio of power generation assets and planned capital expenditures through 2040, including the financial risks associated with such scenarios, the company can better plan for future regulatory, technological and market changes.

RESOLVED: Shareholders request that DTE Energy, with board oversight, publish an assessment (at reasonable cost and omitting proprietary information) of the long term impacts on the company's portfolio, of public policies and technological advances that are consistent with limiting global warming to no more than two degrees Celsius over pre-industrial levels.

Supporting Statement: This report could include:

- How DTE Energy could adjust its capital expenditure plans to align with a two degree scenario;
- Risks associated with proposed investments in natural gas generation and leakage; and
- Plans to integrate technological, regulatory and business model innovations such as electric vehicle infrastructure, distributed energy sources (storage and generation), demand response, smart grid technologies, and customer energy efficiency as well as corresponding revenue models and rate designs.

J.P.Morgan

Daniel F. Murphy
Vice President
CIB Client Service Americas

November 8, 2017

Ms. Lisa A. Muschong
Vice President, Corporate Secretary and Chief of Staff
DTE Energy Company
One Energy Plaza, Room 2386 WCB
Detroit, Michigan 48226-1279

Dear Ms. Muschong,

This letter is in response to a request by The Honorable Thomas P. DiNapoli, New York State Comptroller, regarding confirmation from JP Morgan Chase that the New York State Common Retirement Fund has been a beneficial owner of DTE Energy Company continuously for at least one year as of and including November 8, 2017.

Please note that J.P. Morgan Chase, as custodian for the New York State Common Retirement Fund, held a total of 413,170 shares of common stock as of November 8, 2017 and continues to hold shares in the company. The value of the ownership stake continuously held by the New York State Common Retirement Fund had a market value of at least \$2,000.00 for at least twelve months prior to, and including, said date.

If there are any questions, please contact me or Miriam Awad at (212) 623-8481.

Regards,



Daniel F. Murphy

cc: Patrick Doherty – NYSCRF
Gianna McCarthy- NYSCRF
Tana Goldsmith – NYSCRF
Kyle Seeley - NYSCRF

WHEREAS: In November 2016, the Paris Agreement entered into force. Its goal of keeping global temperature rise well below 2 degrees Celsius is already shaping global policy decisions. Resulting national, state, and local regulations to address climate change, technological innovation, energy efficiency improvements, and consumer preference are leading the way toward a low carbon energy market that will meaningfully reduce demand for carbon-based fuels.

The CEOs of Statoil and Shell have predicted that peak demand for oil may occur as early as the 2020s. The increasing likelihood of public policy action, and the speed of technological advancements to address climate change, make it vital that Southwestern provide investors with more detailed analyses of the potential risks to its business under a range of climate scenarios. This imperative is underscored by Moody's announcement that it will take climate risk into account in establishing bond ratings.

Investors are increasingly focused on the need for robust climate disclosure, including scenario analysis. In June 2017, the Financial Stability Board's Task Force on Climate-related Financial Disclosures finalized its guidelines for reporting on climate risk, recommending that companies in the energy sector evaluate the potential impact of different scenarios, including a 2°C scenario, on the organization's businesses, strategy, and financial planning.

Investors representing over \$25 trillion in assets publicly endorsed the Task Force recommendations.

Southwestern admits in its financial filings that action on climate change "could result in increased operating costs and reduce demand for the natural gas, oil and NGLs we produce." A recent analysis by Carbon Tracker found that 60 to 70% of Southwestern's potential capital expenditure is at risk in a low-carbon transition, the highest of any company examined.

And yet our company's current disclosure is weak, receiving a failing score of "F" from CDP, a climate disclosure organization supported by investors with \$100 trillion in assets, even as peers like ConocoPhillips and Occidental have begun the process of providing shareholders with improved disclosure on carbon asset risk.

A 2-degree scenario analysis of Southwestern's future plans will generate a more complete picture of current and future risks and opportunities than business-as-usual planning. Scenario analysis allows a company to consider multiple potential futures and to design a strategy that is resilient in a world of increasing uncertainty. This report will help Southwestern identify both vulnerabilities and opportunities for its business, and reassure investors that our company is poised to manage and take advantage of future regulatory, technological and market changes.

RESOLVED: Shareholders request that by 2019 Southwestern publish, with board oversight, an assessment of the long-term portfolio impacts of scenarios consistent with the internationally recognized goal of limiting the global increase in temperature to 2 degrees Celsius. The assessment should outline the impacts of multiple, fluctuating demand and price scenarios on

the company's existing reserves and resource portfolio and explain how capital planning and business strategies incorporate analyses of the financial risks of a low-carbon transition. The report should be done at reasonable cost and omit proprietary information.

J.P.Morgan

Daniel F. Murphy
Vice President
CIB Client Service Americas

December 6, 2017

Mr. John C. Ale
Senior Vice President, General Counsel and Secretary
Southwestern Energy Company
10000 Energy Drive
Spring, Texas 77389

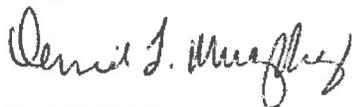
Dear Mr. Ale,

This letter is in response to a request by The Honorable Thomas P. DiNapoli, New York State Comptroller, regarding confirmation from JP Morgan Chase that the New York State Common Retirement Fund has been a beneficial owner of Southwestern Energy Company continuously for at least one year as of and including December 6, 2017.

Please note that J.P. Morgan Chase, as custodian for the New York State Common Retirement Fund, held a total of 1,520,666 shares of common stock as of December 6, 2017 and continues to hold shares in the company. The value of the ownership stake continuously held by the New York State Common Retirement Fund had a market value of at least \$2,000.00 for at least twelve months prior to, and including, said date.

If there are any questions, please contact me at (212) 623-8536.

Regards,



Daniel F. Murphy

cc: Patrick Doherty – NYSCRF
Gianna McCarthy- NYSCRF
Tana Goldsmith – NYSCRF
Kyle Seeley - NYSCRF