M E M O R A N D U M

Dominion Shareholder Proposal

Request to report on the financial risks to investors posed by climate change, as well as actions to address these risks

Dominion Resources, Inc

Vote "FOR" Item 8:
Shareholder Proposal for Climate Risk Report

Shareholders request that within 6 months of the 2016 annual meeting, the Board of Directors provide a report to shareholders, prepared at reasonable cost and omitting proprietary information, describing the financial risks to Dominion Resources posed by climate change and resulting impacts on share value, specifically including the impact of more frequent and more intense storms, as well as any actions the Board plans to address these risks.

**Note: this resolution received 23.5% of the vote at the 2015 shareholder meeting and 24% of the vote at the 2014 shareholder meeting.*

Why a "FOR" vote on the Shareholder Proposal:

The economic, business and societal impacts of climate change are of critical and growing importance to investors. The consensus among climate scientists is that without significant reduction of greenhouse gas emissions, climate change will continue to result in more severe and more frequent storms, sea-level rise, drought, and other adverse effects. The latest installment of the Intergovernmental Panel on Climate Change (IPCC) reports, released October 2014, is the strongest and most comprehensive assessment of global warming. This report further reinforced scientific certainty of climate impacts to an unprecedented extent, concluding that global warming is "unequivocal", humanity's role in causing it is "clear" and "most of the world's electricity can - and must - be produced from low-carbon sources by 2050." As cited by the United Nations, inaction would cost "much more" than taking the necessary action. Thus, it is unquestioned that climate change will pose significant risk to Dominion, its employees, its shareholders and customers.

Climate change poses significant risk to Dominion and its shareholders in several ways:

- Increased and more severe storms, sea-level rise and drought pose significant financial risk for Dominion's existing and proposed electricity and natural gas operations.
- Pending regulation presents potential financial risk to companies that emit large amounts of carbon dioxide, methane, and other greenhouse gases, like Dominion.
- Companies seen as being unable or unwilling to address the problem will likely face public disapproval and significant brand damage.

Because of these severe risks posed by climate change, many companies are conducting internal assessments of business risks and are becoming more transparent about climate change by adding sections in their 10K, Annual Reports, website and other public statements on present and future risks and plans for addressing those risks.

Dominion's public disclosure of information related to climate change is improving but remains insufficient to allow investors to assess how the company is managing these risks.

I. Addressing climate change is good business

1. Extreme weather, drought, and sea-level rise are expensive, and Dominion is not immune to these costs.

Climate scientists predict that rising levels of atmospheric carbon dioxide will cause an increase in extreme weather events, water shortages, and rising sea levels. The consequences of these impacts are costly in both economic and social terms. In 2011, the US experienced 14 extreme weather events with losses exceeding $1 billion each. In 2012, there were 11 such events resulting in an estimated $110 billion in total damages and 377 fatalities. Superstorm Sandy caused losses projected at more than $65 billion. The three most costly storms in Dominion's operating history of more than 100 years, Hurricane Isabel, Hurricane Irene and the June 2012 derecho, have occurred in the last decade.

Dominion's restoration costs amounted to $128 million after Hurricane Isabel in 2003, $59 million after Hurricane Irene in 2011 and $42 million after the June 2012 derecho storm. With the addition of storms like Superstorm Sandy in October, Dominion's restoration costs for major storm activity in 2012 totaled $81.6 million throughout the year.

Loss of power for customers also means lost sales for Dominion. Lost electricity sales after Hurricane Isabel, for instance, reduced operating earnings by 4 cents per share.

A significant portion of Dominion's electric transmission and distribution network is and continues to be planned for coastal areas. Dominion plans to build a large new LNG (liquefied natural gas) export facility in coastal Maryland and a new fracked gas pipeline from West Virginia to North Carolina. All this infrastructure is vulnerable to sea-level rise and increased severe weather. The proposed pipeline includes a spur to coastal Virginia, the 2nd most vulnerable population area to sea-level rise in the U.S. after New Orleans.

A frequently heard risk of continued climate disruption is sea level rise. Dominion has many customers and much infrastructure in Virginia's coastal areas. Two recent articles illustrate risks to coastal areas such as Virginia's:

- "See How Your City May Be Affected by Rising Sea Levels"[1]
- "Rising sea levels could put 50 percent of Florida population at risk, new study finds"[2]

A March 2016 opinion piece in the Wall Street Journal, "Keep It in the Ground," pointed to a growing belief that continuing to extract fossil fuels is unsustainable and risky.[3] In a March

2015 report titled "The Natural Gas Gamble,"[4], the Union of Concerned Scientists, noting the U.S. electricity industry's move away from coal to natural gas, pointed out the following:

> The choices being made in the power sector today to replace retiring coal power and meet our growing electricity needs merit further examination because they will have major consequences for our economy, health, and climate for decades to come….
>
> The burning of natural gas instead of coal to generate electricity offers important and immediate benefits, including reduced air and water pollutants emanating from power plants, fewer smokestack carbon emissions, less power plant water use, greater flexibility of the power grid, and renewed economic development in gas-rich regions of the country….
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> However, these rewards must be carefully weighed against the risks associated with this rapid adoption of natural gas as the electricity sector's new fuel of choice. Central among these risks is historical and continued natural gas price volatility. Despite the shale gas surge, upward pressure on prices is likely to result from increases in demand for natural gas for electricity and other competing uses (including home heating, industrial production, and transportation), uncertainties about supply, and potentially increased exportation of U.S. natural gas. Such price volatility can harm consumers and the economy. Smokestack emissions from natural gas combustion are significantly cleaner than from coal combustion; however, the extraction, distribution, and storage of natural gas result in the leakage of methane, a powerful global warming gas 34 times stronger than carbon dioxide at trapping heat over a 100-year period. Methane leakage diminishes the climate advantages of natural gas over coal….
>
> Natural gas production, particularly hydraulic fracturing, also presents serious risks to public health and the environment. These risks include potential contamination of drinking water supplies by chemicals used in hydraulic fracturing and air pollution from natural gas operations (EPA 2012a; Haluszczak et al. 2012; EPA 2011; Rowan et al. 2011)….
>
> If natural gas use continues to grow, the industry will need to invest in costly new infrastructure, including pipelines and processing and storage facilities. These investments may lock us into a high-carbon future. And, as public pressure to address climate change grows, much of this costly infrastructure will have to be abandoned, rendering it a "stranded asset." Given limited financial resources and growing climate risks, investment in renewable energy infrastructure would involve less risk to consumers and the economy as a whole….
>
> An electricity sector that will burn increasing amounts of natural gas, emit more and more carbon, and contribute to higher natural gas and electricity prices is clearly unacceptable. Our analysis shows that a combination of a carbon standard with complementary renewable energy and efficiency policies can cut power plant carbon emissions significantly while reducing our long-term reliance on natural gas, lowering costs, and providing important public health benefits….

Given the outcome of the Paris Climate Accords, the company does not seem to be taking into account the effects of federal or state legislation that could well, in the relatively near future, either mandate greater deployment of renewable energy or assess financial penalties for the continued use of fossil fuels (e.g., by a national or regional "carbon fee and dividend" requirement), or both. Further, Dominion appears to be betting that increasing consumer desire for, and choice of, renewable energy electricity sources will not materially change market demand or the current stance of Virginia's legislature that frequently favors Dominion's current interests and business model. Such assumptions could be "betting the company."

Two recent articles reported that two states, California and Oregon, have enacted legislation or dramatically changed policy with respect to fossil fuel investment. These are titled, respectively, "Pension Fund Takes Unprecedented Climate Change Action"[5] and "Oregon Governor Signs

Bill into Law Phasing Out Coal-fired Power."[6] The state of Maryland is now seriously considering major changes to its Renewable Portfolio Standard--the Clean Energy Jobs Act of 2016, HB 1106[7]; at this writing the bill, now in draft form, stands a reasonable chance of passage.

The CalPERS pension fund decision, by the nation's largest public pension fund, requires corporations to include environmental experts on the boards of corporations they will invest in. Obviously, inclusion of climate risk in decisions is becoming important for stakeholders. The March 17, 2016 article in Governing reported:

> On Monday, the investment committee for California Public Employees' Retirement System (CalPERS) voted to start requiring the corporations it invests in to include people on their boards who have expertise in climate change risk management strategies. It is the first U.S. pension system to establish such a requirement, which comes months after California experienced the largest gas leak in U.S. history and the state's largest oil spill in decades.
>
> "Updating our requirements ensures that corporate boards have the expertise and competence to adequately understand and address the challenges and risks imposed by climate change," said California Controller Betty T. Yee in a statement after the vote. Yee is a board member of CalPERS and the California State Teachers' Retirement System (CalSTRS). [37]

Failing to plan for climate change and mitigation of the growing risks associated with it, and to disclose its plans fully and publicly, also carries reputational risks for Dominion. After the derecho, more than a million customers of Dominion's regulated Virginia electric utility division lost power, some for as long as a week. "Freak" storms like the derecho are expected to become more common as climate change progresses.

2. As climate change impacts increase, so will regulation of carbon emitters.

With the increasing recognition of the dangers of greenhouse-gas emissions, regulation presents potential financial risk to companies that emit large amounts of carbon dioxide, methane, and other greenhouse gases.

Failure to take strong steps now to reduce Dominion's carbon emissions over the next 20 years puts the company and its investors at increasing financial risk as regulations promulgate. The steps outlined on Dominion's Citizenship & Sustainability Report and in Dominion's Key Issues section of their website are inadequate to protect the company from these increasing financial risks from regulation of greenhouse-gas emissions.

3. Dominion faces an increasingly skeptical public and critical media.

Dominion has had problems with its public image in recent years. Very public battles over new fossil fuel projects like the new LNG (liquefied natural gas) export facility in coastal Maryland and the proposed Atlantic Coast Pipeline from West Virginia to North Carolina have put Dominion in the spotlight, as has a recent General Assembly fight in Virginia over freezing Dominion's rates.

- 'Monday Night Football' protest aimed at stopping Md. natural gas project: http://www.baltimoresun.com/news/maryland/bs-md-mnf-dominion-protest-20151103-story.html
- Keystone off the Table, but Back East, Pipeline Fight Builds: http://abcnews.go.com/US/wireStory/keystone-off-table-back-east-pipeline-fight-builds-35068583
- Hands Across Our Land Focuses on Property Rights: http://wvtf.org/post/hands-across-our-land-focuses-property-rights#stream/0
- Washington Post: A Proposed Pipeline Tests Property Rights in Virginia: http://www.washingtonpost.com/opinions/a-proposed-pipeline-tests-property-rights-in-virginia/2015/02/06/f18b0226-abe1-11e4-9c91-e9d2f9fde644_story.html
- Pipeline protestors at Dominion Shareholders Meeting: http://www.newsplex.com/home/headlines/Pipeline-Protesters-at-Dominion-Shareholders-Meeting-302777321.html
- Virginian-Pilot: Dominion's latest deal relies on faulty lines: http://hamptonroads.com/2015/02/dominions-latest-deal-relies-faulty-lines#

Dominion's reputation problems would be much ameliorated by full disclosure of its climate risk, especially when combined with a realistic plan to reduce those risks.

The company may face significant reputational risks from the current fossil fuel divestment campaign. This campaign has spread to well over 300 college campuses, with many college foundations committing to divest. Additionally, at least 10 US cities have pledged to divest, and petitions are active in 100 other cities and states.[8] The campaign has garnered significant media attention, and arguably has put serious pressure on religious, social and certain other institutional investors to divest from oil and gas companies and/or significantly increase their efforts to engage fossil fuel companies to modify their business models to reduce emissions dramatically – an often cited goal being an 80% reduction in emissions by 2050. Divestment campaign leaders are seeking to reduce the political influence of the oil and gas industry by persuading the public that (1) fossil fuel companies threaten the global economy, ecosystems, and the quality of life of hundreds of millions of people, and (2) fossil fuel company managers are enriching themselves and their investors at the expense of society. The divestment campaign could well present serious reputational risk to Dominion among the public and may make it more difficult for Dominion to recruit, retain and motivate employees. Further, the unburnable carbon analysis is a serious threat to Dominion's reputation amongst investors who may lose faith in the value of its plans to spend significant sums finding and producing new reserves.

II. Dominion has not fully implemented this resolution

Dominion provides inadequate disclosure of its financial risks pertaining to climate change, especially as it relates to the impact of more frequent and more intense storms on share value, and what actions the company intends to take to address these risks. Without improved disclosure, shareholders cannot adequately assess the climate risks of their investment in Dominion.

In their Opposing Statement, Dominion claims that they are providing appropriate disclosures to investors regarding climate change and its associated risks, stating that the preparation of the requested report would be duplicative and an unnecessary waste of company resources.

However, given the increasing risk of more frequent and intense storms, none of the listed documents adequately address these weather-related risks, nor do the documents adequately define the actions the Board intends to take address these risks.

Below are what the Company lists as examples of the implementation of climate risk assessment; these do not provide adequate disclosure or information.

- Annual report on Form 10-K and quarterly reports on Form 10-Q filed with the SEC: these documents include both regulatory and weather-related risks, but do not adequately address the risks to Dominion's current and planned operations of more frequent and more intense storms, nor of the company's plans to address these risks.
- Annual Citizenship & Sustainability Report (CSR): while the "Business- Risk Management" section of this report does include discussion of both regulatory and weather-related risks, neither includes mention of climate change, or an acknowledgment that rising global temperatures and pending regulation of carbon emissions mean these risks are growing, how those growing risks might affect shareholders, or what the company's plans are to address these risks.

III. Dominion history

To demonstrate some of the actions that Dominion has taken that do not appear to take the risk of climate change seriously, a list of some Dominion actions in Virginia are presented. Dominion is the largest carbon polluter in the commonwealth. If Virginia is going to make real progress in the fight against climate disruption and rising sea levels, Dominion needs to take positive action. Yet it is headed in exactly the wrong direction:

1. While other utilities are turning more to renewable energy, Dominion Resources is making major investments in natural gas, including plans to build a large new gas pipeline through Virginia and the acquisition of Questar, a gas storage and transmission company.
2. To lock in customers for natural gas, Dominion Virginia Power has invested heavily in new power plant facilities. It plans to have 4,600 MW of new gas generation in Virginia by 2019, and to develop over 8,000 MW more in coming years. These facilities, with lifetimes of 30-50 years, will lock Dominion into heavy fossil fuel use for decades.
3. Rather than lowering carbon emissions, Dominion's plans would increase CO_2 emissions by 37% in the next 15 years and 66% over the next 25 years due to its massive buildout of natural gas generating plants.
4. Dominion is lobbying Virginia regulators to adopt a Clean Power Plan compliance approach that excludes new sources, leaving the company free to build new natural gas plants and increase total carbon emissions from Virginia.

5. Dominion's actions have exposed its shareholders and Virginia consumers to risks of stranded assets as gas becomes uncompetitive with clean energy or if new climate protection regulations penalize gas.
6. Dominion ranked dead last overall on a CERES ranking of national utilities' progress on renewable energy and energy efficiency.
7. Dominion has erected barriers to the ability of others to install renewable energy in Virginia, including fighting third-party sales of solar and wind power and imposing substantial "standby charges" that act as a prohibitive tax on homeowners with larger solar arrays.
8. Dominion lobbies in support of taxpayer subsidies for coal mining, including coal derived from mountaintop removal coal mining. These subsidies artificially lower the price of electricity derived from coal, and make it harder for renewable energy to compete.
9. Dominion continues to buy coal mined through mountaintop removal (MTR), a practice that has destroyed over 50 mountains in southwest Virginia, obliterated miles of streams, polluted rivers and groundwater, and destroyed entire mountain communities. The company has opposed shareholder resolutions calling on it to phase out its purchase of MTR coal. Other energy companies have agreed to phase out use of MTR coal.
10. Dominion has repeatedly misled its customers and the public on its renewable energy record and practices. As one example, in 2010 it published advertisements suggesting it was providing Virginia with wind power, when in fact wind power accounts for none of its sales in the state.
11. Dominion cites its small biomass (wood-burning) plants as evidence of its investments in renewable energy in Virginia. Because the trees are not sustainably harvested, these plants threaten Virginia's forests while emitting significant amounts of pollution, including CO2. Dominion has converted several coal-burning plants to wood-burning, with the hope that this will continue to qualify as renewable energy under Virginia regulation. However, many studies show that wood-fired plants, when the full life cycle of fuel and transport are included, actually emit more CO2 per kWh than coal plants.
12. Dominion's own documents show it is not on track to meet even Virginia's weak energy efficiency targets. Yet Dominion undermines legislative efforts to enhance energy efficiency programs.
13. Unlike many neighboring states, Virginia has no mandatory renewable portfolio standard (RPS), due in large part to Dominion's years of lobbying.
14. Virginia lags far behind neighboring states in developing wind and solar. Based on 2014 EIA data, Virginia has only 3% of the wind and solar installed of the neighboring states of Maryland, North Carolina, West Virginia and Tennessee, despite having, on average, 38% higher population.
15. Dominion is pushing to build a third reactor at its North Anna nuclear site, in spite of a 2011 earthquake that shut the existing reactors for 3 months. At over $19 billion, it would be the most expensive nuclear plant in the world and would raise electricity rates by 25% in its first year in operation. The cost for this unit would be over $13,000 per installed kW. Nuclear is a "must-run" source that crowds out renewable energy. Many studies have found that over-installation of nuclear base-load power will obstruct the financial feasibility of installing wind power. Dominion has already sunk roughly $400 million into the North Anna 3 site, and plans to sink a total of $1.9 billion into it before even

applying for the requisite permits. Dominion continues to keep the costs of North Anna 3 on the books as recoverable from customers by raising rates, despite having been told very clearly by the Virginia State Corporation Commission that these costs will not be recoverable if permits are not granted.

16. Dominion Resources is planning a giant natural gas pipeline to carry gas from Ohio and West Virginia through Virginia to North Carolina. Much of the natural gas will be extracted through the destructive drilling technique known as fracking. Land for the pipeline will be seized through eminent domain. In 2014 Dominion sued landowners who would not allow its contractors entry to their property to conduct surveys for the pipeline.
17. Dominion also plans major export operations from its Cove Point Liquefied Natural Gas (LNG) terminal in Maryland, shipping fracked gas from the U.S. to foreign markets. While enriching Dominion, it will drive up the price of natural gas in the U.S., reduce domestic supplies, and intensify pressure to frack in Virginia.
18. Dominion's actions have brought the company into disrepute in Virginia. These include misleading legislators on the cost of 2015 legislation shielding it from rate reviews for five years, its failure to remediate leaking coal ash ponds for many years, its dumping of untreated coal ash wastewater into surface waters in 2015, and its actions hostile to private investments in wind and solar.
19. Dominion has encouraged Virginia lawmakers to believe, wrongly, that the EPA's Clean Power Plan, designed to reduce carbon emissions, will impose extraordinary expenses on Virginia customers. Using this justification, Dominion pushed through legislation that will limit regulatory oversight and allow it to retain excess profits for the next five years.
20. Dominion's lobbying and campaign contributions have corrupted the legislative process in Virginia. As the Staunton *News Leader* observed in a September 2014 editorial, "Dominion has shown us the real Virginia way to get things done. Give money, get laws passed, show up at public meetings and do whatever you want."
21. Dominion's activities in the legislature are not the independent acts of one company. Dominion is a member of the American Legislative Exchange Council (ALEC), and through ALEC actively coordinates with other utility and fossil fuel companies to block action on air and water pollution and climate. In 2014 several large companies—including Microsoft, Facebook, Google and Ebay—quit ALEC because of its promotion of climate-science denial. In explaining his company's departure, Google chairman Eric Schmidt said that ALEC was "literally lying" about climate change.

IV. Conclusion

While we acknowledge the steps Dominion has taken to include a connection between climate change and weather-related risk in its 10-K and 10-Q filings, and the steps Dominion has taken to acknowledge the pending regulatory risks in these documents, the utility must do more to acknowledge the growing likelihood of weather-related risks, especially more frequent and more intense storms, and to clearly define the actions the Board intends to take to address these risks. **These are the steps Dominion needs to take to adequately protect its shareholders from the financial risks associated with climate change.**

The economic costs and risks of climate change continue to mount. Cities and states across the country are beginning to recognize the imminent threat of climate change, and are mandating that utilities start to analyze these risks. Utilities have an obligation to consider the local effects of climate change on their operations, and integrate these considerations in to their own planning.

Dominion faces serious financial challenges with regard to climate change risks that are not being addressed. Financial and reputational risks to Dominion's shareholders are numerous and severe. Dominion should be required provide adequate climate risk assessments, including clearly defined actions the Board intends to take to address these risks, by a FOR vote on this shareholder resolution.

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[1] http://time.com/4257194/sea-level-rise-climate-change-miami/

[2] http://web.tampabay.com/news/nation/rising-sea-levels-could-put-50-percent-of-florida-population-at-risk-new/2269338

[3] http://www.realclearenergy.org/2016/03/16/039keep_it_in_the_ground039_amp_obama_follows_orders_275178.html

[4] http://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/natural-gas-gamble-risky-bet-on-clean-energy-future#.Vur_rGf2a00

[5] http://www.governing.com/topics/finance/gov-climate-change-pension-calpers.html

[6] http://www.renewableenergyworld.com/articles/2016/03/oregon-governor-signs-bill-into-law-phasing-out-coal-fired-power.html?cmpid=renewablesolar03192016&eid=291085651&bid=1343033

[7] http://mgaleg.maryland.gov/webmga/frmMain.aspx?stab=01&pid=billpage&tab=subject3&ys=2016rs&id=HB1106

[8] http://www.sustainablebusiness.com/index.cfm/go/news.display/id/24815