UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY



Dominion Cove Point LNG, LP

)

FE Docket No. 11-128-LNG

MOTION FOR LEAVE TO INTERVENE AND PROTEST OF THE AMERICAN PUBLIC GAS ASSOCIATION

Pursuant to Sections 590.303 and 590.304 of the Administrative Procedures with Respect

to the Import and Export of Natural Gas,¹ the American Public Gas Association ("APGA") files

this motion to intervene and protest in the above captioned proceeding. In support, APGA states

the following:

I. COMMUNICATIONS

Any communications regarding this pleading or this proceeding should be addressed to:

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10 C.F. R. §§ 590.303, 590.304 (2011).

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II. INTERVENTION

APGA is the national, non-profit association of publicly-owned natural gas distribution systems, with some 700 members in 36 states. Overall, there are some 950 publicly-owned systems in the United States. Publicly-owned gas systems are not-for-profit retail distribution entities that are owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities. APGA members purchase interstate natural gas transportation services, usually as captive customers of a single interstate pipeline, at rates and under terms and conditions that are regulated by the Federal Energy Regulatory Commission ("FERC"). APGA's members are active participants in the domestic market for natural gas where they secure the supplies of natural gas necessary to serve their end users.

On October 3, 2011, Dominion Cove Point LNG, LP ("Dominion") filed an application in this proceeding to export approximately 7.82 million metric tons per annum, equivalent to approximately 1 billion cubic feet per day ("Bcf/d"), of domestically produced liquefied natural gas ("LNG") by vessel.² Dominion seeks authorization to export from its existing Cove Point LNG Terminal ("Cove Point") in the Chesapeake Bay in Calvert County, Maryland, near the Marcellus Shale formation. Dominion plans to export shale gas produced in the nearby Marcellus formation to any country with which trade is not prohibited by U.S. law or policy, including nations with which the United States does *not* have a free trade agreement requiring the national treatment for trade in natural gas ("FTA"). Dominion requests this authorization for a twenty-five-year term commencing the earlier of the date of first export or six years from the date authorization is issued.

² Dominion Cove Point LNG, LP, Application for Long-Term Authorization to Export Liquefied Natural Gas, Docket No. FE 11-128-LNG (October 3, 2011) ("Application").

APGA has a direct and substantial interest in this proceeding that cannot be adequately represented by any other party. APGA respectfully submits that good cause exists to grant its motion to intervene.

III. PROTEST

Dominion's request for authority to export domestically produced LNG is inconsistent with the public interest and should be denied. The U.S. Energy Information Administration ("EIA") recently released a report on the effect of LNG exports in response to a U.S. Department of Energy Office of Fossil Energy ("DOE/FE") inquiry.³ The EIA Export Report concludes that exporting domestic LNG will significantly increase domestic natural gas prices. In addition, EIA recently issued an early release of its Annual Energy Outlook 2012 ("*AEO2012*"), which substantially reduces the level of estimated technically recoverable natural gas in the Marcellus Shale formation. These new projections undermine the basis for Dominion's application, which is founded on the notion that vast Marcellus Shale resources will keep domestic gas prices low despite LNG exports.

Instead, it appears likely that exports will lead to potentially significant price increases that will jeopardize the viability of natural gas as a "bridge-fuel" in the transition away from carbon-intensive and otherwise environmentally problematic coal-fired electric generation. Inflated natural gas prices will also inhibit efforts to foster natural gas as a transportation fuel, which is important to wean the U.S. from its historic, dangerous dependence on foreign oil. Furthermore, high natural gas and electricity prices will reverse the nascent trend toward renewed domestic manufacturing before it gains momentum – a direction that is the polar

³ Effect of Increased Natural Gas Exports on Domestic Energy Markets, U.S. Energy Information Administration (January 2012) ("EIA Export Report").

opposite of where the President is trying to take this country, as underscored in his January 24, 2012 State of the Union address.

Dominion's plan to export LNG will not prove economically viable. Economically recoverable domestic natural gas may prove even less robust than the revised projections, especially given looming environmental costs and regulations. Eventually, foreign alternatives will likely remove the arbitrage opportunity that Dominion seeks to take advantage of, as natural gas reserves and export capacity expand around the world.

A. Background

Domestic, non-conventional natural gas production has increased dramatically in a few short years, upending the business model of LNG importers, including Dominion. In 2005, Dominion applied to increase the import capacity at Cove Point, arguing that LNG imports were necessary to augment the country's natural gas supply.⁴ Dominion's gamble on long-term natural gas supply trends did not pan out as it did not take into account the rapidly evolving changes in drilling technology. Now, Dominion has submitted its application in the instant proceeding in a bid to salvage its recent investments, based on estimates of vast recoverable natural gas reserves in the nearby Marcellus Shale formation.

Dominion is not alone. So far, nine companies have applied to export domestically produced LNG to FTA and Non-FTA nations based on the promise of huge unconventional domestic gas reserves.⁵ Seven of those nine applicants own or are affiliated with companies that own existing or previously planned LNG import terminals. The total export capacity applied for

Dominion Cove Point LNG, LP, Application to for Authority To Expand Existing LNG Import Terminal Facilities, Docket No. CP05-130-000 (Apr. 15, 2005).
Summer Long Term A. Harting D. Martinez, 2005.

⁵ Summary: Long-Term Applications Received by DOE/FE to Export Domestically Produced LNG from the Lower-48 States (as of January 17, 2012), available at http://fossil.energy.gov/programs/gasregulation/LNG_Summary_Table_1_17_12_revised.pdf.

to date is 13.73 Bcf/d and 12.51 Bcf/d to FTA and Non-FTA nations, respectively.⁶ Total marketed natural gas production was approximately 66 Bcf/d in the U.S. in 2011;⁷ therefore, based on current marketed production, the total applied for export capacity would result in a roughly 20% increase in total natural gas demand. The total amount of export authority requested is significant by any measure; thus, the policy created in the current proceeding will have wide-ranging implications.

DOE/FE previously granted Dominion authority to export the requested quantity of LNG to any nation that has, or develops, the capacity to import LNG and with which the United States has, or enters into, a Free Trade Agreement requiring national treatment for trade in natural gas ("FTA Nations").⁸ The DOE/FE granted this authority pursuant to NGA section 3(c), which provides that applications to export shall be "deemed to be consistent with the public interest" and must be "granted without modification or delay."⁹ Pursuant to this mandate, the DOE/FE did not have discretion to consider the serious policy implications of granting this export authority to Dominion.

Despite the earlier, automatic grant of export authority, the DOE/FE has a duty to ensure that the application before it in the instant proceeding for broader export authority is not inconsistent with the public interest pursuant to NGA section 3(a).¹⁰ APGA respectfully submits that Dominion's proposal to export domestically produced LNG to non-FTA Nations is inconsistent with the public interest because it will increase domestic natural gas and electricity prices and will limit natural gas supply at a time when the nation has an opportunity to forge a

⁶ Id.

⁹ 15 U.S.C. § 717b(c) (2011).

 ⁷ EIA Export Report at 1.
⁸ Dominion Cours Dail (14)

⁸ Dominion Cove Point LNG, LP, FE Docket No. 11-115-LNG, DOE/FE Order No. 3019.

¹⁰ 15 U.S.C. § 717b(a) (2011).

path toward energy independence. Ultimately, exports by Dominion will fail to compete with natural gas exports by other nations.

B. Exports Will Increase Domestic Natural Gas Prices

Dominion problematically posits that price levels are "arguably outside the scope of" valid considerations in the current proceeding."¹¹ What good, however, is an inquiry into whether a natural gas export application is inconsistent with the public interest if that inquiry does not consider the economic impact of granting the application?

Indeed, the "public interest analysis of export applications" should be "focused on *domestic* need for natural gas," threats to *domestic* supply, and "other factors to the extent they are shown to be relevant."¹² Relatively low and stable domestic natural gas prices make natural gas competitive against coal and fuel oil and viable as a transportation fuel. The DOE/FE should not pursue policies that directly increase natural gas commodity prices for American consumers, thereby making natural gas less competitive in this country as a replacement for foreign-sourced fuels or for fuels that are less clean and more carbon-intensive.

i. Dominion's Studies Do Not Accurately Forecast the Impact of Exports on Domestic Prices

Dominion admits that its proposed exports from Cove Point will increase domestic natural gas prices, but the price study included in its application has an overly narrow scope, is based on outdated and likely inflated projections of technically recoverable gas in the Marcellus Shale formation, and fails to consider other factors that will inflate domestic natural gas prices if exports continue to expand. Dominion also failed to consider the effects of exports of Marcellus Shale gas on the constrained Northeast market.

¹¹ Application at 27. Sabing Res. L

¹² Sabine Pass Liquefaction, LLC, Opinion and Order Denying Request for Review Under Section 3(c) of the Natural Gas Act, October 21, 2010, FE Docket No. 10-111-LNG.

Dominion's price study focuses on the impact of the 1 Bcf/d of LNG exports planned from Cove Point on index prices at the Henry Hub and more locally at Dominion South Point, a market point in the Marcellus Shale basin near Cove Point.¹³ The DOE/FE, however, must consider the cumulative impact of proposed exports.¹⁴ Dominion's consultants projected prices under four scenarios, none of which reflects the full extent of planned exports:

- <u>Reference Case</u> includes two operational export facilities: the 0.7 Bcfd Kitimat LNG in British Columbia and the 2.0 Bcfd Sabine Pass LNG in Louisiana.
- <u>Cove Point Export Case</u> adds 1.0 Bcfd of exports from Cove Point to the Reference Case.
- <u>Aggregate Export Case</u> adds another 3.4 Bcfd of exports (the total projected exports from the Lake Charles LNG facility in Louisiana and the Freeport LNG facility in Texas at the time Dominion filed its application) in addition to the projected exports at Cove Point.
- <u>Extreme Demand Case</u> assumes the addition of another 6.7 Bcfd of demand in 2040 to the Aggregate Export Case. Of this, 4.7 Bcfd is natural gas vehicle demand derived from the U.S. Energy Information Administration's 2010 Annual Energy Outlook.¹⁵

In each instance, Dominion's consultants admit that exports from Cove Point will increase natural gas commodity prices. The price increases projected by Dominion's consultants are artificially low, however, and their study incomplete because they failed to consider the actual total aggregate of planned exports from North America. As of now, the total export capacity applied for from the U.S. is 13.73 Bcf/d and 12.51 Bcf/d to FTA and Non-FTA nations, respectively. In addition, Dominion factored in the proposed Kitimat LNG export facility in British Columbia, Canada but failed to include two other Canadian export facilities and a

 ¹³ Application at 29; North American Gas System Model to 2040, Appendix B to Application ("Dominion Price Study").
¹⁴ Saa Sahina Para Line G at a MAG TR P of the Magnetic Study.

¹⁴ See Sabine Pass Liquefaction, LLC, FE Docket No. 10-111-LNG, DOE/FE Order No. 2961 at 33.

¹⁵ Dominion Price Study at 4.

proposed expansion at the Kitimat export facility.¹⁶ Dominion's price study cannot be used to accurately gauge the impact of exports on domestic natural gas prices because it fails to account for the full scope of planned exports.

EIA has reduced its estimates of technically recoverable domestic natural gas reserves dramatically since Dominion conducted its price analysis and submitted its application, due in large part to revised estimates of recoverable Marcellus Shale gas.¹⁷ Dominion's consultants considered the possibility of increased demand but failed to consider reduced reserves in their price study. EIA now estimates that the "unproved technically recoverable resource (TRR) of shale gas for the United States is 482 trillion cubic feet."¹⁸ This number is "*substantially* below the estimate of 827 trillion cubic feet in *AEO2011*."¹⁹ This reduction "largely reflects a decrease in the estimate for the Marcellus Shale, from 410 trillion cubic feet to 141 trillion cubic feet," a reduction of over 65%.²⁰ EIA revised its Marcellus Shale estimates due to a U.S. Geological Survey ("USGS") report that concluded that there is only 84 Tcf of "undiscovered, technically recoverable natural gas" in the Marcellus Shale formation,²¹ and due to improved data from producers as drilling has expanded in the Marcellus area.²²

In its application, Dominion tried to argue that the USGS estimate was in addition to previous estimates because the USGS specified that its report applied to *undiscovered*

 $\frac{20}{21}$ Id.

Evaluating the Prospects for Increased Exports of Liquefied Natural Gas from the United States, Brookings Institution, at 2 (January 2012) ("Brookings Report") ("According to FERC, there are currently three Canadian export facilities under consideration in British Columbia: a proposed 1.4 bcf/day terminal at Kitimat (initial production would start at 0.7 bcf/day), which received a 20-year export license in October 2011; a proposed 0.25 bcf/day facility at Douglas Island; and a potential 1 bcf/day facility at Prince Rupert Island").

 $^{^{17}}_{18}$ AEO2012 at 9.

 $^{^{18}}$ Id. 19 Id.

 $[\]frac{19}{20}$ *Id.* (emphasis added).

Assessment of Undiscovered Oil and Gas Resources of the Devonian Marcellus Shale of the Appalachian Basin Province, United States Geological Survey (Aug. 23, 2011).
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AEO2012 at 9.

quantities.²³ At this point, however, it is clear that the USGS analysis represents a significant reduction in projected reserves. The magnitude of the reduction is sobering. Not only are Dominion's projected price increases inaccurate, but also the entire basis for its application – assumed excess Marcellus gas reserves – has been undermined. The Marcellus Shale formation does not have the technically recoverable resources to justify exports from Cove Point.

Dominion's price study also fails to consider the effect of exporting natural gas directly from the Marcellus Shale on future natural gas prices in the historically constrained Northeast market. Many analysts point to developing Marcellus Shale supplies as a boon to customers in the Northeast, which suffer from the highest natural gas prices in the country.²⁴ The precipitous drop in projected Marcellus Shale reserves casts doubt on this possible trend. At the same time, Dominion plans to siphon gas from the Marcellus Shale for export, which could significantly undermine price relief in the key Northeast market, especially given revised estimates of technically recoverable gas reserves in the formation. Dominion's price study acknowledges that Cove Point exports will increase commodity prices at Dominion South Point, but fails to discuss the effects that these increases may have on relieving historically high prices in the Northeast.

In short, Dominion concedes that LNG exports from Cove Point will increase natural gas prices, but its analysis fails to consider adequately, if at all, the true extent of planned LNG exports, revised estimates substantially reducing projected Marcellus Shale reserves, and the impact of Marcellus exports on gas prices in the Northeast. DOE/FE's previous decision in the *Sabine Pass Liquefaction, LLC* proceeding, Docket No. 10-111-LNG, accepted the applicant's projections regarding natural gas supplies and the impact of exports without conducting an independent analysis. That will no longer suffice in light of the game-changing EIA studies.

²³ Application at 22.

Natural Gas Market Overview, Federal Energy Regulatory Commission, at 20 (January 2012) available at http://www.ferc.gov/market-oversight/mkt-gas/overview/2012/01-2012-ngas-ovr-archive.pdf.

Specifically, DOE/FE must consider the EIA Export Report, which it requested due presumably to the absence of independent price impact data in the record of any LNG export proceeding to date. The EIA Export Report itself, while filling a void, failed to consider certain pressures that may limit domestic natural gas supply and increase demand. The projected price increases may, therefore, be overly conservative.

ii. EIA Export Report

As requested by the DOE/FE, EIA analyzed four scenarios of export-related increases in natural gas demand:

- 6 billion cubic feet per day (Bcf/d), phased in at a rate of 1 Bcf/d per year (low/slow scenario),
- 6 Bcf/d phased in at a rate of 3 Bcf/d per year (low/rapid scenario),
- 12 Bcf/d phased in at a rate of 1 Bcf/d per year (high/slow scenario), and
- 12 Bcf/d phased in at a rate of 3 Bcf/d per year (high/rapid scenario).²⁵

In addition, DOE/FE requested that EIA consider the four scenarios of increased natural gas exports in the context of four cases from the EIA's then current *AEO2011* that reflect projected domestic natural gas supply situations and growth rates for the U.S. economy:

- the AEO2011 Reference case,
- the High Shale Estimated Ultimate Recovery ("EUR") case (reflecting more optimistic assumptions about domestic natural gas supply prospects, with the EUR per shale gas well for new, undrilled wells assumed to be 50 percent higher than in the Reference case),
- the Low Shale EUR case (reflecting less optimistic assumptions about domestic natural gas supply prospects, with the EUR per shale gas well for new, undrilled wells assumed to be 50 percent lower than in the Reference case), and

²⁵ EIA Export Report at 1.

• the High Economic Growth case (assuming the U.S. gross domestic product will grow at an average annual rate of 3.2 percent from 2009 to 2035, compared to 2.7 percent in the Reference case, which increases domestic energy demand).²⁶

Under every scenario, EIA forecasts that exports will increase domestic natural gas prices. According to EIA, "[1]arger export levels lead to larger domestic price increases."²⁷ EIA also concluded that "rapid increases in export levels lead to large initial price increases," but that slower increases in export levels" will, "eventually produce higher average prices during the decade between 2025 and 2035."²⁸

EIA projects that prices will increase by 36% to 54% by 2018 under the "high/rapid scenario," depending on natural gas supplies and economic growth. Given the number of export applications that DOE/FE has received to date and the total export capacity requested of 13.73 Bcf/d and 12.51 Bcf/d to FTA and Non-FTA nations, respectively, it appears that "high/rapid" was the most realistic scenario considered by EIA.

In addition, the Low Shale EUR case reflecting less optimistic assumptions about domestic natural gas supply prospects than the *AEO2011* Reference Case may be the most accurate scenario considered in the EIA Export Report, given the reduction in technically recoverable gas per the early *AEO2012* overview report. The *AEO2012* overview report bears out the concern that prior resource projections may have been overly optimistic. Under the high/rapid scenario in the Low Shale EUR case, EIA projects that exports could increase natural gas prices by 54% in 2018.²⁹

Even this projection may not accurately predict the full scope of price increases resulting from unchecked LNG exports because the EIA Export Report fails to consider several factors

²⁶ EIA Export Report at 1.

 $[\]frac{27}{28}$ Id. at 6.

 $[\]frac{28}{29}$ Id.

²⁹ EIA Export Report at 9.

that may further limit economically recoverable domestic gas supplies and increase domestic natural gas demand in the near future (as discussed below). But in any event, what is crystal clear is that the EIA Export Report provides an independent analysis demonstrating what protestants in the *Sabine Pass* proceeding could only logically surmise – that LNG exports in the aggregate will push the price needle considerably and in so doing will adversely affect the public interest in maintaining low-priced domestic natural gas to fuel domestic manufacturing plants and power plants and to stimulate use of CNG-fueled vehicles.

iii. Why Future Natural Gas Prices May Be Higher Than Projected

Supply-Side

The *AEO2012* early report indicates that the amount of technically recoverable gas in the ground is less than projected in Dominion's analysis and in every scenario in the EIA Export Report save the Low Shale EUR case. It may not be economically feasible or politically palatable, however, to recover all of the technically feasible reserves of unconventional natural gas.

There is increasing regulatory uncertainty regarding the production of unconventional gas in the United States, especially in the states that make up the Marcellus formation. This regulatory uncertainty stems from looming environmental and other regulations. These regulations will likely increase the cost of production and thus potentially limit the amount of economically recoverable natural gas. EIA's projections in its Annual Energy Outlooks and the Export Report are based on technical and economic data and do not consider the effect of possible regulation. This eventuality, however, cannot be ignored by DOE/FE when making policy decisions on export applications that depend *entirely* for their viability on ample future natural gas from shale formations.

Environmental

The production of natural gas from shale formations requires hydraulic fracturing, commonly known as "fracking" – a controversial practice that is under increasing environmental scrutiny. While it is true that there has been extreme rhetoric on both sides of the fracking issue,³⁰ there can be no doubt that the affected states and the federal government are taking the issue seriously and that shale gas production will one day be subject to increased environmental regulation.

Shale gas production raises environmental issues in three areas: water, emissions, and other pollution such as localized disruptions caused by work-site activity. In each instance, industry faces increased regulatory oversight and public opposition, raising production costs and limiting the amount of gas that can be recovered in an economically or politically acceptable manner.

Water issues may prove the most serious, starting with the contamination of drinking water, but also including the volume of water used in the process of fracking and the disposal of spent fracking fluid.³¹ In November 2011, the EPA released a draft analysis from an investigation of ground water quality in Pavillion, Wyoming. At least preliminarily, the EPA found that the local aquifer contained "compounds likely associated with gas production practices including hydraulic fracturing," and that chemical samples were "generally below

³⁰ The newspapers are replete with articles chronicling the uncertain future of shale gas exploration. See, e.g., Ian Urbina, Regulation Lax as Gas Wells' Tainted Water Hits Rivers, N.Y. Times Online (Feb. 26, 2011); Ian Urbina, Wastewater Recycling No Cure-All in Gas Process, N.Y. Times Online (March 2, 2011); Ian Urbina, Pressure Limits Efforts to Police Drilling for Gas, N.Y. Times Online (March 4, 2011); Darryl Fears, Sitting Atop Huge Gas Reserve, Md. Debates Drilling Practice, Washington Post Online (March 28, 2011); Ian Urbina, Insiders Sound an Alarm Amid a Natural Gas Rush, N.Y. Times (June 25, 2011). Contrary views also abound: e.g., http://johnhanger.blogspot.com/2011/06/statement-about-todays-nyt-front-page.html.

³¹ Brookings Report at 7.

established health and safety standards."³² The EPA's draft analysis has "galvanized opponents of fracking" and raises the possibility of an outright ban on the practice.³³

Congress has ordered the EPA to study water quality, water use and waste fluid disposal issues associated with fracking.³⁴ In addition, the EPA has announced that it will initiate proposed rulemakings to regulate the disposal of waste fluid produced by fracking and obtain data on the chemical substances and mixtures used as fracking fluid.³⁵

With regard to emissions, in August 2011 EPA proposed rules for regulating air

pollutants, particularly volatile organic compound ("VOC") emissions, from hydraulically

fractured oil and gas wells.³⁶ In addition, unintentional leaks of natural gas and intentional

flaring have come under increased scrutiny.

State governments in the Marcellus Shale region are also considering increased

environmental and other regulatory oversight, such as higher impact fees and restrictions on the

location of wells. Pennsylvania, for instance, is considering a range of possible new regulations

including impact fees, longer liability periods for producers, sighting restrictions and increased

³⁵ Press Release, EPA Announces Schedule to Develop Natural Gas Wastewater Standards/Announcement is part of administration's priority to ensure natural gas development continues safely and responsibly (Oct. 20, 2011) available at

³² Press release, EPA Releases Draft Findings of Pavillion, Wyoming Ground Water Investigation for Public Comment and Independent Scientific Review (Dec. 8, 2012) available at yosemite.epa.gov/opa/admpress.nsf/0/EF35BD26A80D6CE3852579600065C94E.

³³ Brookings Report at 9.

³⁴ In its Fiscal Year 2010 Appropriation Conference Committee Directive to EPA, the U.S. House of Representatives ordered the EPA to conduct a study of hydraulic fracturing. That study is currently underway. Seehttp://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/index.cfmhttp://water.epa.gov/type/gro undwater/uic/class2/hydraulicfracturing/index.cfm.; On May 5, 2011, U.S. Secretary of Energy Stephen Chu impaneled a group of environmental, industry, and state regulatory experts to study and make recommendations to "improve the safety and environmental performance of natural gas hydraulic fracturing from shale formations." See http://www.energy.gov/news/10309.htm; see also Bill Holland, DOE Panel Questions Fracking's SDWA Exemption, Gas Daily (July 14, 2011).

http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/91e7fadb4b114c4a8525792f00 542001!OpenDocument ; *Hydraulic Fracturing Study Plan*, EPA (November 2011) available at http://water.epa.gov/type/groundwater/uic/class2/hydraulic fracturing/upload/hf_study_plan_110211_final_508. pdf.

 ³⁶ New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 76 Fed. Reg. 52,738 (August 23, 2011).

local authority over drilling locations.³⁷ Maryland is considering new fees on producers, as well as changes to state liability laws that should favor landowners and other injured parties over producers.³⁸ Meanwhile New York maintains a moratorium on hydraulic fracturing while it considers environmental and safety restrictions on the practice. Although increased state regulatory oversight of unconventional gas drilling may be warranted, it will increase production costs, making marginal shale production uneconomic.

Demand Side

In addition to the supply concerns outlined above, the analysis of future price increases by Dominion and EIA failed to consider the full extent of natural gas demand from electric generators faced with imminent EPA rules that will force the retirement of coal-fired generators. Dominion and EIA consider possible greenhouse gas regulation as a factor that could ultimately drive-up domestic natural gas demand as coal production gives way to natural gas over time. Both fail to consider more traditional environmental regulations that will force the retirement of some coal generators in the near future, specifically EPA's Mercury and Air Toxics Standards ("MATS") and the recently delayed, but still pending, Cross-State Air Pollution Rule ("CSAPR").³⁹ EIA did not consider these pending, more traditional environmental restrictions in its Annual Energy Outlooks, but it notes in the version of *AEO2012* released in January that a later version in April may consider the impact of MATS for the first time.⁴⁰

http://pa.gov/portal/server.pt/community/marcellus_shale_advisory_commission/20074.

³⁷ See Marcellus Shale Advisory Commission,

³⁸ Marcellus Shale Safe Drilling Initiative Study, Part I, Maryland Department of the Natural Resources (December 2011) available at http://www.mde.state.md.us/programs/Land/mining/marcellus/Documents/Meetings/Marcellus_Shale_Report_

Part_I_Dec_2011.pdf.
³⁹ Ayesha Rascoe and Timothy Gardner, U.S. Rolls Out Tough Rules on Coal Plant Pollution, Reuters Online (Dec. 21, 2011) available at http://www.reuters.com/article/2011/12/21/us-usa-coal-mercury-idUSTRE7BK1DI20111221.

⁴⁰ *AEO2012* at 2.

EIA predicts that as natural gas prices increase due to exports, domestic demand will slacken with most of the decrease coming from the electric generation sector as utilities fire-up their existing "excess coal-fired capacity" to mitigate higher natural gas prices.⁴¹ But the assumption of "excess coal-fired capacity" does not take into account pending MATS and CSAPR rules that will force retirements and increase dependency on natural gas-fired generation. With less demand elasticity, natural gas prices will likely increase by more than previously projected. At the same time, electricity prices will increase by more than anticipated in EIA's report.

The DOE/FE cannot take the modest price increases projected by Dominion or even those projected by EIA at face value. There are both supply and demand pressures that were not adequately considered in either study. In addition, neither evaluates the likely effect of volatile global markets on prices and volatility in the U.S. market.

C. Effect of High Prices

Currently, relatively low natural gas prices give the U.S. an opportunity to wean itself off of carbon-intensive coal and expensive foreign oil, to attract renewed domestic manufacturing, and to stimulate displacement of gasoline by CNG-fueled vehicles. Increased prices due to exports jeopardize each of these prospects and ultimately our national security and national wellbeing. Estimates of domestic natural gas resources are still markedly higher than just a few years ago, but given revised supply projections, U.S. policy makers cannot take current low prices for granted.

Inflated prices will decrease the viability of natural gas as a bridge-fuel from carbonintensive coal. Current low prices make natural gas-fired electricity generation an economically sound alternative to coal-fired generation. Sustained low prices may encourage this transition by

⁴¹ EIA Export Report at 12.

private initiative regardless of increased environmental regulations as investors find natural gas competitive with coal. If exports inflate natural gas prices, the economics turn against cleaner burning natural gas.⁴²

In addition, as discussed above, pending environmental regulations will soon force coal retirements, and possible greenhouse gas regulation may cause further retirements in the future. If natural gas prices remain low, the U.S. may be able to transition away from carbon intensive coal without causing electricity prices to increase significantly. If natural gas prices are high, electricity prices will spike as relatively cheap coal-fired generators are forced to retire for regulatory reasons. Spiking electricity rates will have rippling effects on the U.S. economy.

Currently, the U.S. imports billions of dollars worth of oil from around the globe, a great deal of which is used for gasoline to fuel vehicles. The replacement of current gasoline-powered fleets with natural gas vehicles (and support infrastructure) would significantly reduce U.S. dependence on foreign oil, and thereby enhance U.S. security and strategic interests and reduce our trade deficit. Substantial resources are being expended today to put that infrastructure in place, including initiatives near the heart of the Marcellus Shale formation.⁴³

On the residential side, the same is true for natural gas versus heating oil. Low natural gas prices make it economical to convert a home from heating oil to natural gas despite the initial

⁴² *Id.* at 17.

⁴³ Officials are planning a series of compressed natural gas ("CNG") filling pumps at existing filling stations across the Pennsylvania US Route 6, stretching 400 miles from New York State near Milford, Pike County, Pa. in the east and through Crawford County, Pa. to the Ohio state line on the west, known as "PA Route 6 CNG Corridor;" at the same time, Chesapeake Energy is converting its vehicles in northeastern Pennsylvania to CNG and working with a local convenience-store chain and transit authority to foster further CNG integration. Eric Hrin, *Pennsylvania Looks to CNG*, The Daily Review Online (May 26, 2011) available at http://thedailyreview.com/news/pennsylvania-looks-to-cng-1.1135267; *see also*, New Alternative Transportation to Give Americans Solutions Act, H.R. 1380, 112th Cong. (2011) ("NAT GAS Act") (proposing tax incentives and other measures to encourage adoption of natural gas powered vehicles); Texas S.B. 20 (On July 15, 2011, the governor of Texas signed S.B. 20, supporting a network of natural gas-refueling stations along the Texas Triangle between Dallas/Ft. Worth, San Antonio, and Houston. The new legislation will lay a foundation for wider-scale deployment of heavy-duty, mid- and light-duty natural gas vehicles (NGVs) in the Texas market).

conversion costs. Low natural gas prices, and Marcellus Shale gas in particular, are helping spur the transition away from carbon-intensive, foreign sourced heating oil in the Northeast.44 Dominion's plan to export Marcellus Shale gas from Cove Point will undermine this trend by raising natural gas prices in this particularly vulnerable region.

Last month, in his State of the Union Address, President Obama spoke of "an America that attracts a new generation of high-tech manufacturing and high-paying jobs - a future where we're in control of our own energy, and our security and prosperity aren't so tied to unstable parts of the world," and "an economy built on American manufacturing, American energy."45 Low natural gas prices in the U.S. provide the path forward. Lower energy prices are spurring a nascent return to American manufacturing. Dominion's application cites the jobs its proposed project may create.⁴⁶ Dominion does not acknowledge, however, the jobs that may be destroyed if natural gas exports are sanctioned and predicted increases in natural gas costs occur along with increased price volatility.47

Low natural gas prices make efforts to transition away from coal and foreign oil and to resuscitate American manufacturing economically viable. LNG exports will drive up domestic natural gas prices, as the EIA has determined, thereby undermining these national priorities. The DOE should not pursue an export policy that undermines the efficient, local use of a domestic fuel stock and America's first and best opportunity to move toward energy independence by decreasing reliance on foreign oil.

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John Luciew, Midstaters Increasingly Switch From Oil to Gas, The Patriots-News, (January 29, 2012) available at http://www.pennlive.com/midstate/index.ssf/2012/01/midstaters_increasingly_switch.html. 45

President Barack Obama, State of the Union Address (Jan. 24, 2011), transcript available at: http://www.whitehouse.gov/state-of-the-union-2012. 46

Application at 40. 47

See Brookings Report at 18 ("The industrial sector is highly price-sensitive with respect to energy inputs").

D. Cove Point Exports Will Not Prove Economical

Dominion's export plans will eventually prove uneconomical. Currently, there are significant disparities between domestic natural gas commodity prices and prices in some nations that rely on LNG imports. These disparities, which provide Dominion and other would-be exporters with appealing arbitrage opportunities in the short run, will likely not last for the duration of contemplated long-term LNG supply contracts. Gas rich shale deposits are a global phenomenon that are just now beginning to be tapped. As other nations develop their resources and export capacity and as U.S. natural gas prices increase due to the very exports Dominion proposes, international and domestic prices will converge, leaving the U.S. with the worst of all worlds, i.e., higher (and likely more volatile) domestic prices that thwart energy independence and that undermine the competitiveness of the manufacturing sector that relies heavily on natural gas as a process fuel.

Shale gas formations are not isolated to the United States – this is not a U.S.

phenomenon; it is a world-wide phenomenon.⁴⁸ The State Department launched the Global Shale Gas Initiative ("GSGI") in April 2010 in order to help countries identify and develop their unconventional natural gas resources.⁴⁹ To date, partnerships under GSGI have been announced

⁴⁸ E.g., Dallas Parker, Shale Gas: Global Game Changer, Oil and Gas Financial Journal (Feb. 8, 2011); Vello A. Kuuskra and Scott A. Stevens, Worldwide Gas Shales and Unconventional Gas: A Status Report, ("The final segment of this 'paradigm shift' - the worldwide pursuit of gas shales and unconventional gas - has only just begun, with Australia, China and Europe in the lead. Europe's gas shale geology is challenging, but its resource endowment and potential are large.") available at: http://www.rpsea.org/attachments/articles/239/KuuskraaHandoutPaperExpandedPresentWorldwideGasShalesPr esentation.pdf. Debajyoti Chakraborty, Asia's First Shale Gas Pool Found Near Durgapur, Times of India Online, (January 26, 2011); Hillary Heuler, Shale Gas in Poland Sparks Hope of Wealth, Energy Security, Voice of America Online (June 11, 2011) (Reporting on efforts by U.S. and other western gas companies to develop gas from shale deposits); Mark Summor, The Shale Gas Run Spreads Worldwide, IPS, Deccan Herald (Aug. 1, 2011)("Recent discoveries of deeply buried oil shale layers containing natural gas or oil are being reported in Australia, Canada, Venezuela, Russia, Ukraine, Poland, France, India, China, North Africa and the Middle East. Taken together, say some energy analysts, these 'plays' could become a game-changer, making Australia and Canada into new Saudi Arabias").

⁴⁹ See http://www.state.gov/s/ciea/gsgi/.

with China, Jordan, India, and Poland. ⁵⁰ The big energy players, including ExxonMobil, Chevron, Shell, BP, etc. are spending billions world-wide to pursue shale gas plays.⁵¹ The United States is at the forefront technologically of the development of shale gas reserves and should export its technology and expertise, instead of spending billions of dollars to build facilities in order to export a commodity that will likely be abundant world-wide before the LNG export facilities can even be completed.

Even at today's prices, domestic natural gas is at a disadvantage compared to gas sourced from certain other nations. For example, there are three Canadian export facilities under construction in British Columbia, and Canadian natural gas still tends to trade lower than domestic gas in the contiguous United States.⁵² Canada and the U.S. are not alone in developing LNG export capacity; investors in Australia hope to overtake Qatar as the world's largest exporter of LNG.⁵³ Qatar meanwhile has a moratorium on further developing its vast reserves of natural gas; natural gas is largely a by-product of liquids production in Qatar and sells for far less than even today's U.S. prices.⁵⁴

LNG itself is at a disadvantage compared to pipelines due to higher fixed costs. For example, if Dominion supplies Western Europe, it could one day find itself competing with shale gas piped from Poland or Ukraine at lower fixed costs. The cost of liquefaction, transportation and regasification processes and facilities must be acknowledged when considering the economic

⁵⁰ Id. see also, Rakteem Katakey, India Signs Accord with US to Assess Shale-Gas Reserves, Bloomberg News (November 8, 2010) (The US signed a memorandum of understanding with India to help it asses its shale gas reserves and prepare for its first shale gas auction at the end of this year.); Kate Andersen Brower and Catherine Dodge, Obama Says US, Poland Will Cooperate on Economy, Energy, Bloomberg News (May 28, 2011). (Reporting on President Obama's pledge to share U.S. shale gas extraction expertise and technology on a recent trip to Warsaw); see also, Energy in Poland: Fracking Heaven, The Economist (June 23, 2011).

⁵¹ Ken Silverstein, *Big Oil Betting on Shale Gas*, EnergyBiz (July 31, 2011).

⁵² Brookings Report at 25.

⁵³ Ross Kelly, Strong Australian dollar to help build cheap LNG export terminals, says Origin Energy CEO, The Australian (April 28, 2011) available at http://www.theaustralian.com.au/business/mining-energy/strongaustralian-dollar-to-help-build-cheap-lng-export-terminals-says-origin-energy-ceo/story-e6frg9ef-1226046219296.

⁵⁴ Brookings Report at 23.

wisdom of LNG projects. The Brookings Institution estimates that current price spreads between the U.S. and potential export markets must remain intact for at least 10-12 years in order for investors to recoup the pre-planning and facility construction costs associated with an LNG terminal.⁵⁵ Beyond that, domestic prices must still be low enough to overcome foreign competition and the higher fixed cost of liquefaction, transport by vessel and regasification.

The EIA has reduced the projected technically recoverable resources of the Marcellus Shale formation and independently concluded that LNG exports will increase domestic prices substantially. These reports come on the heels of EPA's recent preliminary findings that hydraulic fracturing may pollute groundwater and increased regulatory scrutiny of unconventional gas production. Despite this sobering news, the U.S. may still have an opportunity to transition away from our reliance on coal-fired electricity generation, without risking price shocks, and finally make real progress towards energy independence. All of this, however, depends on relatively low and stable natural gas prices. DOE/FE should not turn a blind eye and allow the same businesses that gambled and lost on projections of the need for future natural gas imports to now potentially squander our Nation's future on what will likely turn out to be another failed venture as natural gas production and export capacity develop throughout the world.

⁵⁵ *Id.* at 29.

IV. CONCLUSION

WHEREFORE, based on the foregoing, APGA respectfully requests that the DOE/FE (1) grant its motion to intervene in this proceeding with all rights appurtenant to that status, and (2) deny, as inconsistent with the public interest, Dominion's application for additional export authority.

Respectfully submitted,

AMERICAN PUBLIC GAS ASSOCIATION

By William T. Miller

William T. Miller Justin R. Cockrell Miller, Balis & O'Neil, P.C. Twelfth Floor 1015 Fifteenth Street, N.W. Washington, DC 20005

Its Attorneys

February 6, 2012

UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

Dominion Cove Point LNG, LP

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FE Docket No. 11-128-LNG

VERIFICATION

WASHINGTON	§
	§
DISTRICT OF COLUMBIA	Ş

Pursuant to C.F.R. § 590.103(b) (2011), William T. Miller, being duly sworn, affirms that he is authorized to execute this verification, that he has read the foregoing document, and that all facts stated herein are true and correct to the best of his knowledge, information, and belief.

Villiam T. Willer

William T. Miller Miller, Balis & O'Neil, P.C. Twelfth Floor 1015 Fifteenth Street, N.W. Washington, DC 20005 Telephone: (202) 296-2960 Fax: (202) 296-0166 Email: wtmiller@mbolaw.com

Subscribed and sworn to before me this 6th day of February, 2012.

Notary Public

LESLIE K. NELSON-WALSKI My Commission Expires: Notary Public, District of Columbia My Commission Expires May 31, 2015

UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY

Dominion Cove Point LNG, LP) FE Docket No. 11-128-LNG

CERTIFIED STATEMENT OF AUTHORIZED REPRESENTATIVE

Pursuant to C.F.R. § 590.103(b) (2011), I, William T. Miller, hereby certify that I am a duly authorized representative of the American Public Gas Association, and that I am authorized to sign and file with the Department of Energy, Office of Fossil Energy, on behalf of the American Public Gas Association, the foregoing document and in the above-captioned proceeding.

Dated at Washington, D.C., this 6th day of February, 2012.

William T. Mille

William T. Miller Miller, Balis & O'Neil, P.C. Twelfth Floor 1015 Fifteenth Street, N.W. Washington, DC 20005 Telephone: (202) 296-2960 Fax: (202)-296-0166 Email: wtmiller@mbolaw.com

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon on the applicant and on DOE/FE for inclusion in the FE docket in the proceeding in accordance with 10 C.F.R. § 590.107(b) (2011).

Dated at Washington, D.C., this 6th day of February, 2012.

By:

Justin R. Cockrell Miller, Balis & O'Neil, P.C.

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