

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Nos. 15-1127 & 15-1205

EARTHREPORTS, INC. (dba PATUXENT RIVERKEEPER), SIERRA CLUB,
and CHESAPEAKE CLIMATE ACTION NETWORK,

Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION,

Respondent,

DOMINION COVE POINT LNG, LP and
AMERICAN PETROLEUM INSTITUTE,

Intervenors-Respondents.

BP ENERGY COMPANY,

Petitioner,

v.

FEDERAL ENERGY REGULATORY COMMISSION and
UNITED STATES OF AMERICA,

Respondents,

DOMINION COVE POINT LNG, LP and STATOIL,

Intervenors-Respondents.

On Petition for Review of Orders of the Federal Energy Regulatory Commission

**JOINT BRIEF OF PETITIONERS EARTHREPORTS, INC., SIERRA
CLUB, AND CHESAPEAKE CLIMATE ACTION NETWORK**

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with Circuit Rule 28(a)(1), Petitioners EarthReports, Inc. (dba Patuxent Riverkeeper), Sierra Club, and Chesapeake Climate Action Network submit this Certificate as to Parties, Rulings, and Related Cases.

I. Parties, Intervenors, and *Amici*

A. No. 15-1127

EarthReports, Inc. (dba Patuxent Riverkeeper), Sierra Club, and Chesapeake Climate Action Network are the petitioners.

The Federal Energy Regulatory Commission is the respondent.

Dominion Cove Point LNG, LP and American Petroleum Institute are the intervenors-respondents.

Allegheny Defense Project; Calvert Citizens for a Healthy Community; Clean Air Council; Myersville Citizens for a Rural Community; Potomac Riverkeeper, Inc.; Stewards of the Lower Susquehanna, Inc.; Waterkeepers Chesapeake; and Wild Virginia are *amici curiae* in support of the petitioners.

B. No. 15-1205

BP Energy Company is the petitioner.

The Federal Energy Regulatory Commission and the United States of America are the respondents.

Dominion Cove Point LNG, LP and Statoil are the intervenors-respondents.

II. Circuit Rule 26.1 Disclosure Statement

A. EarthReports, Inc. (dba Patuxent Riverkeeper) has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in EarthReports, Inc.

EarthReports, Inc., a corporation organized and existing under the laws of the State of Maryland, is a nonprofit organization dedicated to conserving, protecting, and replenishing the Patuxent River.

B. Sierra Club has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Sierra Club.

Sierra Club, a corporation organized and existing under the laws of the State of California, is a national nonprofit organization dedicated to the protection and enjoyment of the environment.

C. Chesapeake Climate Action Network has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Chesapeake Climate Action Network.

Chesapeake Climate Action Network, a corporation organized and existing under the laws of the State of Maryland, is a nonprofit organization dedicated to fighting global warming and moving our country towards cleaner energy.

III. Rulings Under Review

The following orders of the Federal Energy Regulatory Commission are under review:

A. Order Granting Section 3 and Section 7 Authorizations, *Dominion Cove Point LNG, LP*, 148 FERC ¶ 61,244 (Sept. 29, 2014) [JA616-728]; and

B. Order Denying Rehearing and Stay, *Dominion Cove Point LNG, LP*, 151 FERC ¶ 61,095 (May 4, 2015) [JA834-67].

IV. Related Cases

The following cases pending before this Court involve substantially the same parties and the same or similar issues as in this proceeding:

A. *Sierra Club & Galveston Baykeeper v. Federal Energy Regulatory Commission*, No. 14-1275 (D.C. Cir. filed Dec. 10, 2014).

B. *Sierra Club v. Federal Energy Regulatory Commission*, No. 14-1249 (D.C. Cir. filed Nov. 17, 2014).

C. *Sierra Club v. Federal Energy Regulatory Commission*, No. 15-1133 (D.C. Cir. filed May 11, 2015).

/s/ Moneen Nasmith

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Dep't of Energy, Sec'y of Energy Advisory Bd., Shale Gas Production Subcommittee Second Ninety-Day Report (Nov. 28, 2011), http://goo.gl/R3BHEh	22
Dominion Cove Point LNG, LP, Application for Long-Term Authorization to Export LNG to Non-Free Trade Agreement Countries, FE Docket No. 11-128-LNG (Oct. 3, 2011), http://goo.gl/ekzJUm	10, 19, 37
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* EIA, <i>Effect of Increased Natural Gas Exports on Domestic Energy Markets</i> (Jan. 2012), http://goo.gl/MQL1Qf	10, 18, 40
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FERC, Draft EIS, Jordan Cove Liquefaction and Pacific Connector Pipeline Projects, CP13-483-000 & CP13-492-000 (2014), https://goo.gl/sZlc9k	46
FERC, Environmental Assessment for the Cove Point Reinforcement Project, CP09-60 (May 8, 2009), http://elibrary.ferc.gov/idmws/file_list.asp	15
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Cabot to Supply Gas to Dominion Cove Point LNG Terminal, LNG
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Erin Cox, *\$10 Million Grant to Expand Port of Baltimore*, The
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*GAIL India Inks Agreement to Buy 2.5 Million Tonnes of LNG from
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Katie Johnson, *Panama Canal Expansion to Have Major Impact on
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Press Release, Cabot Oil & Gas Corporation Provides Corporate
Update, Announces Agreement to Provide Natural Gas to the
Dominion Cove Point LNG Terminal (Dec. 19, 2013)19, 37

Sam Kusic, *Region's Shale Gas Will Help Fuel India*, Pittsburgh Bus.
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Self-Propelled Modular Transporters, Am. Ass'n of State Highway &
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Services/Broking/LNG, Clarksons, <http://goo.gl/kKO9Sr>12

Timothy Wheeler, *Evacuation Route Eyed for Cove Point Gas Plant*,
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GLOSSARY

Application	Application, Cove Point Liquefaction Project of Dominion Cove Point LNG, LP under CP13-113 (Apr. 1, 2013)
Authorization Order	Order Granting Section 3 and Section 7 Authorizations, <i>Dominion Cove Point LNG, LP</i> , 148 FERC ¶ 61,244 (Sept. 29, 2014)
Dominion	Dominion Cove Point LNG, LP
EA	Environmental Assessment
EA Comments	Comment of Sierra Club, et. al. under CP13-113, re. EA (June 16, 2014)
EIA	Energy Information Administration
EIA Study	U.S. Energy Information Administration, <i>Effect of Increased Natural Gas Exports on Domestic Energy Markets</i> (Jan. 2012)
EIS	Environmental Impact Statement
Environmental Petitioners	Petitioners EarthReports, Inc. (dba Patuxent Riverkeeper), Sierra Club, and Chesapeake Climate Action Network
EPA	Environmental Protection Agency
FERC or the Commission	Federal Energy Regulatory Commission
FONSI	Finding of No Significant Impact
LNG	Liquefied Natural Gas
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration

Project	Cove Point Liquefaction Project, as Described in Application Cove Point Liquefaction Project of Dominion Cove Point LNG, LP under CP13-113 (Apr. 1, 2013)
Rehearing Order	Order Denying Rehearing and Stay, <i>Dominion Cove Point LNG, LP</i> , 151 FERC ¶ 61,095 (May 4, 2015)
Rehearing Request	Request for Rehearing of EarthReports, Inc. et al., CP13-113-001 (Oct. 15, 2014)

JURISDICTIONAL STATEMENT

Petitioners EarthReports, Inc. (dba Patuxent Riverkeeper), Sierra Club, and Chesapeake Climate Action Network (collectively, “Environmental Petitioners”) seek review of two final orders issued by the Federal Energy Regulatory Commission (“FERC” or the “Commission”). The first—issued on September 14, 2014, under Section 3 and Section 7 of the Natural Gas Act, 15 U.S.C. §§ 717b & 717f(c)—granted Dominion Cove Point LNG, LP (“Dominion”) permission to construct and operate a liquefied natural gas (“LNG”) export terminal and associated infrastructure (the “Project”). Order Granting Section 3 and Section 7 Authorizations, *Dominion Cove Point LNG, LP*, 148 FERC ¶ 61,244 (Sept. 29, 2014) (“Authorization Order”) [JA616-728]. The second—issued on May 4, 2015, under the Natural Gas Act, 15 U.S.C. § 717r(a)—denied Environmental Petitioners’ Request for Rehearing of the Authorization Order, which they timely filed on October 15, 2014. Order Denying Rehearing and Stay, *Dominion Cove Point LNG, LP*, 151 FERC ¶ 61,095 (May 4, 2015) (“Rehearing Order”) [JA834-67].

On May 7, 2015, Environmental Petitioners timely filed their petition for judicial review. 15 U.S.C. § 717r(b) (requiring filing within 30 days of final order). This Court has jurisdiction under 15 U.S.C. § 717r(b).

STATEMENT OF ISSUES

1. Did FERC act arbitrarily, capriciously, or unlawfully under the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321 *et seq.*, which requires evaluation of the Project’s reasonably foreseeable indirect environmental effects, when it: (a) determined that liquefying nearly a billion cubic feet of gas for export every day for 20 years would not promote any regional gas development, and (b) refused to use readily available data and modeling tools to predict the environmental impacts of new production?

2. Did FERC act arbitrarily, capriciously, or unlawfully under NEPA, when it refused to calculate the lifecycle greenhouse gas emissions from the Project or to estimate the harm that they would cause, which the Commission could have done with tools used by other federal agencies, such as the “social cost of carbon”?

3. Did FERC act arbitrarily, capriciously, or unlawfully under NEPA, when it concluded that another agency’s outdated and ineffective regulations will protect the Chesapeake Bay from invasive species and other pollutants in ballast water discharged from the 85 LNG tankers using Dominion’s terminal each year?

4. Did FERC act arbitrarily, capriciously, or unlawfully under NEPA, when it refused to update a 2007 analysis of shipping impacts on the critically endangered North Atlantic right whale, which is on the brink of extinction, in light

of: (a) increased shipping in the whale's migratory path caused by expansions of the Panama Canal and the Port of Baltimore; (b) proposed seismic testing and offshore drilling along the whale's migration route, and (c) decreasing food supplies from warming oceans?

5. Did FERC act arbitrarily, capriciously, or unlawfully under NEPA, when it failed to disclose significant health and safety threats of the Project, which creates a heightened risk of catastrophic explosion by storing toxic and combustible chemicals on an unusually small site directly adjacent to a residential neighborhood and along the community's principal evacuation route?

STATUTES AND REGULATIONS

Pertinent statutes and regulations appear in the Addendum to this brief.

INTRODUCTION

At stake in this NEPA case is FERC's decision to approve the conversion of Dominion's defunct LNG import terminal on the shores of the Chesapeake Bay into a facility capable of exporting nearly one billion cubic feet of gas per day to customers in India and Japan, for at least the next two decades, without full analysis and disclosure of the Project's environmental impacts. Congress enacted NEPA "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man" and "to enrich the understanding of the ecological systems and natural resources important

to the Nation.” 42 U.S.C. § 4321. “NEPA promotes its sweeping commitment . . . by focusing Government and public attention on the environmental effects of proposed agency action. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989).

Despite NEPA’s clear purpose and goals, the Commission approved the Project without analyzing its most significant impacts—indirect effects on communities and the environment in the nearby region that will supply the gas for export. In defense of that omission, FERC claimed that opening LNG sales to Asian buyers for at least 20 years will have no effect on domestic production—as if gas, unlike every other commodity in competitive markets, were immune from the influence of supply and demand. In fact, the Project is the crucial link between gas producers, who are deferring development because of a product glut, and their overseas customers, who cannot ship the gas to consumers without the liquefaction services that Dominion will provide. FERC has both the information and modeling tools that it needs to identify the general location and extent of gas development induced by the Project, and the failure to provide that forecast (which it did in another contemporaneous proceeding) cannot be squared with NEPA.

In refusing to analyze indirect effects, FERC failed to disclose the lifecycle climate impacts of the Project, which amount to 26.1 million tons of carbon

dioxide equivalent per year. The environmental assessment (“EA”) contained no estimate of greenhouse gas emissions—the atmospheric pollutants that trap solar energy and accelerate global warming—from “upstream” induced gas development and infrastructure or from “downstream” shipping and burning of LNG.

Moreover, the EA failed to disclose the environmental consequences of the Project’s greenhouse gas emissions, including those emitted directly from Project facilities, which other federal agencies have done using a tool that calculates the social cost of carbon.

FERC’s analysis of direct Project impacts was equally deficient. The Commission relied on an obsolete study to avoid identifying threats to the critically endangered North American right whale. Where threats could not be denied, as with safety impacts on residents living directly across the street and water pollution in the Chesapeake Bay, FERC presumed that compliance with regulations of sister agencies would eliminate any significant harm. That business-as-usual approach unlawfully discounted risks unique to the Project context and ignored evidence of rapidly changing environmental conditions.

NEPA does not countenance FERC’s reliance on outdated data and analytical methods—especially when the public urgently needs to understand the consequences of gas infrastructure build-out. The global climate crisis and widespread species extinction is fueled by projects like the Cove Point facility, and

those threats are hastened when federal agencies do not disclose full project impacts. FERC's stubborn refusal to address the most pressing issues defeats "the basic thrust" of NEPA—to ensure "that agencies consider the range of possible environmental effects before resources are committed and the effects are fully known." *Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 937 F. Supp. 2d 1140, 1157 (N.D. Cal. 2013) (quoting *City of Davis v. Coleman*, 521 F.2d 661, 676 (9th Cir.1975)). To fulfill that purpose, this Court should remand this proceeding to FERC for reconsideration of the Project's significant impacts, using current information and 21st-century modeling tools. NEPA requires no less.

STATEMENT OF THE CASE

On April 1, 2013, Dominion filed its application for Commission authorization of the Project.¹ Environmental Petitioners thereafter successfully moved to intervene in the proceeding.²

¹ Application, Cove Point Liquefaction Project of Dominion Cove Point LNG, LP under CP13-113 (April 1, 2013) ("Application") [JA93-112]. "[JA__]" refers to pages of the Joint Appendix. "[Add.__]" refers to pages of the Addendum to this brief.

² Authorization Order ¶¶ 20–21 & App. A [JA624-25, 711].

On May 15, 2014, FERC issued the EA for the Project.³ Environmental Petitioners submitted comments on the EA, noting its failure to take a hard look at the Project's significant indirect effects (impacts of induced gas production and infrastructure development) or the Project's direct effects (pollution of the Chesapeake Bay, injuries to the critically endangered North Atlantic right whale, and threats to public safety).⁴ The comments also flagged the EA's failure to consider the consequences of the Project's lifecycle greenhouse gas emissions.⁵ Environmental Petitioners noted that fully analyzed Project impacts would be significant and therefore must be disclosed in a comprehensive environmental impact statement ("EIS").⁶ *See* 42 U.S.C. § 4332(c).

³ Environmental Assessment for the Cove Point Liquefaction Project (May 15, 2014) [JA263-503]. The Natural Gas Act, as amended by the Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005), designated FERC as "the lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act," including the Department of Energy export authorization required under Section 3 of the Natural Gas Act. *See* 15 U.S.C. § 717n(b)(1).

⁴ *See* Comment of Sierra Club, et al. under CP13-113, re. EA (June 16, 2014) ("EA Comments") [JA512-85]; Chesapeake Climate Action Network, Comments on Environmental Assessment for Dominion Cove Point LNG, LP, preliminary Quantitative Risk Assessment conducted by Ricardo-AEA under CP13-113 (June 30, 2014) (public safety impacts) [JA598-615].

⁵ EA Comments at 56–60 [JA570-74].

⁶ *E.g.*, *id.* at 4, 30, 32, 40, 50 [JA518, 544, 546, 554, 564].

On September 29, 2014, the Commission published the Authorization Order, making a finding of no significant impact (“FONSI”) and declining to prepare an EIS.⁷ *See* 40 C.F.R. § 1508.13. On October 15, 2014, Environmental Petitioners submitted a timely request for rehearing of the Authorization Order, reaffirming their challenge of FERC’s environmental review.⁸ On the same day, Environmental Petitioners asked for a stay of the approval and a halt to planned construction.⁹

Just shy of 30 days later, FERC granted rehearing, but only to give itself more time to decide the merits, thereby avoiding an automatic and appealable denial.¹⁰ *See* 15 U.S.C. § 717r(a)–(b). The Commission ignored Environmental Petitioners’ motion for a stay, and the tolling order prevented them from seeking review of the Authorization Order, as Dominion moved forward with substantial pre-construction activities. *See Moreau v. FERC*, 982 F.2d 556, 564 (D.C. Cir. 1993) (“[W]e hold that section 717r(a) denies us jurisdiction to review matters . . . raised in rehearing petitions before FERC until FERC denies the petition or until

⁷ Authorization Order ¶¶ 218, 281 [JA685, 707-08].

⁸ Request for Rehearing of EarthReports, Inc. et al., CP13-113-001 (Oct. 15, 2014) (“Rehearing Request”) [JA731-72].

⁹ Motion for Stay Pending Rehearing of EarthReports, Inc. et al., CP13-113-001 (Oct. 15, 2014) [JA773-809].

¹⁰ Order Granting Rehearing for Further Consideration, CP13-113-001 (Nov. 13, 2014) [JA833].

FERC rules on the merits of a granted petition for rehearing.”). It was not until May 4, 2015, that FERC finally denied Environmental Petitioners’ requests for rehearing and a stay.¹¹

On May 7, 2015, Environmental Petitioners filed their petition for review. On June 1, they sought an emergency stay of construction pending judicial review. On June 12, this Court denied the emergency motion.

STATEMENT OF FACTS

I. The Project

Dominion proposes to convert its virtually defunct LNG import facility into a bustling center for LNG exports, sending customers in Asia nearly one billion cubic feet of gas per day for a period of at least 20 years.¹² To transport the gas between continents, it must be cooled and compressed into a liquid and shipped in specially designed LNG tankers. Dominion’s customers contract for the gas from operators in the nearby Marcellus Shale region, and retain ownership of the gas, which Dominion purifies, liquefies, and loads onto the tankers.¹³ The Project would expand substantially Dominion’s industrial operations in Calvert County,

¹¹ Rehearing Order [JA834-67].

¹² Authorization Order ¶¶ 7 & n.14, 30 [JA620, 627-28].

¹³ Application at 12, 15–17 [JA105, 108-10].

Maryland, a largely rural peninsula bordered by the Patuxent River and the Chesapeake Bay.

The Project also would provide a new market for gas reserves that otherwise cannot be developed profitably. With the shale gas boom in the northeastern United States, the price of gas has plummeted, forcing operators to leave Marcellus Shale gas wells uncompleted and depressing demand for LNG imports.¹⁴ The Project thus offers struggling domestic producers access to profitable overseas markets, while providing Dominion an opportunity to revive its failing LNG import terminal at Cove Point.¹⁵

Converting Cove Point to an export facility requires substantial new construction. The Project includes purification and liquefaction facilities, storage tanks, and a new 130-megawatt, utility-scale power plant. Those facilities will be squeezed within Dominion's existing 59.5-acre site, which is nestled between a state park and a residential neighborhood.¹⁶ Because of space constraints not

¹⁴ See *Antero Delays Marcellus Well Completions, Stays Highly Hedged*, Unconventional Oil & Gas Rep., Apr. 1, 2015, <http://goo.gl/R7z7nA> [Add.A-77 to A-78]; Dominion Cove Point LNG, LP, Application for Long-Term Authorization to Export LNG to Non-Free Trade Agreement Countries, FE Docket No. 11-128-LNG, at 3–4 (Oct. 3, 2011), <http://goo.gl/ekzJUu> [Add.A-82 to A-83].

¹⁵ See Application at 8 [JA101]; U.S. Energy Info. Admin., *Effect of Increased Natural Gas Exports on Domestic Energy Markets* (Jan. 2012), <http://goo.gl/MQL1Qf> (“EIA Study”) at 3.

¹⁶ EA at 3 [JA279].

present at other LNG terminals, explosive chemicals will be stored right next to hazardous impurities that are stripped out of the gas before it is liquefied.¹⁷

Project construction is proceeding rapidly. Already, Dominion has clear-cut nearly 100 acres of forest to make way for a construction staging area and a parking lot for 1,700 cars.¹⁸ Declaration of Thomas Idhe (“Idhe Decl.”) ¶ 7.¹⁹

Dominion also has begun barging in heavy construction equipment to a newly built 166-foot pier that juts out into the Patuxent River.²⁰ Declaration of Tracey Eno (“Eno Decl.”) ¶¶ 6, 12; Declaration of Kenneth Hastings (“Hastings Decl.”) ¶¶ 5–9; Declaration of Rachel Heinhorst (“Heinhorst Decl.”) ¶ 14; Declaration of David Linthicum (“Linthicum Decl.”) ¶¶ 5, 8; Declaration of Frank Mazur (“Mazur Decl.”) ¶ 6. The barged materials—which can be up to 150 feet long and weigh up to 330 tons—are offloaded onto massive, self-propelled transporters, which

¹⁷ *Id.* [JA279].

¹⁸ *Id.* at 13 [JA289].

¹⁹ Environmental Petitioners’ organizational and member standing declarations appear in the Addendum to this brief.

²⁰ *See* EA at 28–29 [JA304-05].

proceed to the Project area at walking speed.²¹ Eno Decl. ¶ 6. The construction, and the community disturbance it brings, is likely to continue for three years.²²

Once operational, Dominion expects to receive 85 LNG tankers at its offshore pier annually for at least 20 years.²³ Each of these nearly 1,000-foot-long tankers will be loaded with 16–25 million gallons of ballast water, likely gathered from the shores of India and Japan, which will be discharged in whole or in part into the Chesapeake Bay to make room for LNG to be carried back overseas.²⁴ To deliver each load of LNG, the tankers will travel thousands of nautical miles down the eastern coast of the United States, passing through the habitat of the endangered North Atlantic right whale, through the Panama Canal, and across the Pacific Ocean.

²¹ See *id.* at 29 [JA305]; Supplemental Information – Implemen[t]ation Plan for Offsite Area B of Dominion Cove Point LNG, LP under CP13-113, at 1.1 (Sept. 30, 2014) (describing self-propelled modular transporters); *Self-Propelled Modular Transporters*, Am. Ass’n of State Highway & Transp. Officials, <http://goo.gl/ZXMfhP> (characterizing speed).

²² EA at 3 (“[Dominion] proposes to begin construction of the Liquefaction Facilities in the summer of 2014, and would place the facilities in service in June 2017.”) [JA279].

²³ *Id.* at 20 [JA296].

²⁴ See *Services/Broking/LNG*, Clarksons, <http://goo.gl/kKO9Sr> (describing LNG tankers up to 345 meters, or over 1,100 feet); Application, Resource Report 2 at 2-24 (describing ballast water discharges) [JA114].

II. Environmental Impacts

A. Community Health and Safety

The Project carries health and safety risks unlike other existing and proposed LNG export terminals. Dominion's liquefaction facilities are adjacent to a residential neighborhood and to Cove Point Park, a popular recreational facility with baseball fields and a swimming pool.²⁵ Moreover, the Project's liquefaction and purification facility—including large tanks of toxic materials and combustible chemicals—will be squeezed onto 59.5 acres. The unusually small footprint increases the risk that one component failure could cause a catastrophic chain reaction.²⁶

The dangers posed to the nearby community are radically heightened by the Project's location on Cove Point Road—a narrow, two-lane street without a paved shoulder. The road will be used by trucks transporting hazardous and explosive materials to and from the facility, including chemicals needed to liquefy the gas and impurities stripped from it. Cove Point Road is the primary—and by far the

²⁵ See Application at Resource Report 8, Figure 8-9 [JA119].

²⁶ By comparison, the “operational footprint” of the Freeport LNG “liquefaction plant and associated facilities” is 259.7 acres, and the “land affected during operation” of the Cameron terminal is 502.2 acres. FERC, Draft EIS for the Freeport LNG Liquefaction Project Phase II Modification Project, CP12-29-000 & CP12-509-000, at 2-9 (Mar. 14, 2014), <http://goo.gl/ISlpQn>; FERC, Draft EIS for the Cameron Liquefaction Project, CP13-25-000 & CP13-27-000, at 2-14 (Jan. 10, 2014), <http://goo.gl/N1la7w>.

most direct—evacuation route for thousands of residents who live south of Dominion’s facility, and it simultaneously provides the only access to the site for emergency vehicles. In the event of an accident at the site, evacuees forced to pass the facility gate will put themselves and their children in harm’s way. The only alternative evacuation route would take residents down narrow back roads that are ill-suited to handle a mass exodus. Idhe Decl. ¶ 16; Mazur Decl. ¶ 10; Declaration of Linda Morin (“Morin Decl.”) ¶ 10. Faced with the evident threat to their family’s safety, many residents have sold their homes and moved away from the facility, Mazur Decl. ¶ 3; Heinhorst Decl. ¶ 5; others have imminent plans to do so, Morin Decl. ¶ 17. Those who remain face ready danger in the event of a major accident at the site. Eno Decl. ¶¶ 13–15; Declaration of Kenneth Pritchard (“Pritchard Decl.”) ¶ 11.

B. The Chesapeake Bay

The Project also threatens the health of the already impaired Chesapeake Bay. As soon as 2017, Dominion plans to begin receiving at least 85 massive LNG tankers per year at its pier on the Bay, a nearly 20-fold increase over the limited

shipping associated with the nearly defunct import operations.²⁷ Each of these tankers, which can be over 1,000 feet long (only slightly smaller than the Empire State Building) will be loaded with 16–25 million gallons (about 24–38 Olympic-sized swimming pools) of ballast water, likely drawn from coastal waters of India and Japan, to be discharged to the Bay before reloading with LNG.²⁸

As is explained in the expert submissions of Dr. Mario Tamburri, Research Professor with the University of Maryland and Director of the Maritime Environmental Resource Center, this ballast water could carry invasive species; pathogens, including infectious bacteria, such as cholera; and even radioactive material.²⁹ Those pollutants threaten not only the health of the Chesapeake Bay, with its commercial and recreational fisheries, but also the safety of the nearby

²⁷ See EA at 20 [JA296] (noting expected 85 vessels per year); *id.* at App. B-5 to B-6 (estimating marine LNG vessel emissions beginning in 2017) [JA495-96]. The Maritime Administration reported five gas vessel calls at Cove Point in 2011. See Maritime Administration spreadsheet of Port Data (submitted to FERC under Accession No. 20130521-0008).

²⁸ See FERC, Environmental Assessment for the Cove Point Reinforcement Project, CP09-60, at 4 (May 8, 2009), http://elibrary.ferc.gov/idmws/file_list.asp; Application, Resource Report 2 at 2-24 [JA114].

²⁹ See Letter from Dr. Mario Tamburri to Kimberley Bose, FERC (June 2, 2014) (“Tamburri 2014 Letter”) [JA504-11]; Letter from Dr. Mario Tamburri to Kimberley Bose, FERC (Nov. 11, 2013) (“Tamburri 2013 Letter”) [JA203-29].

nuclear power plant, which produces extra radioactive waste when invasive species in Bay water clog its cooling system.³⁰

C. The Critically Endangered North Atlantic Right Whale

Each LNG tanker calling on Cove Point is expected to travel through the narrow mouth of the Chesapeake Bay, crossing the migratory path of the North Atlantic right whale, recognized as “the world’s most critically endangered large whale species and one of the world’s most endangered mammals.”³¹ According to the National Oceanic and Atmospheric Administration (“NOAA”), fewer than 450 North Atlantic right whales remain, and the loss of even one individual could be “devastating to the right whale population.”³² Under existing conditions, Dominion’s import facility presents little risk to the whales because it generates almost no shipping activity. With the Project, however, dozens of massive LNG tankers will travel to and from Asia—likely through the Panama Canal, up the East Coast, and through the mouth of the Chesapeake Bay—where they risk encountering the critically endangered whale. This route puts the ships directly in

³⁰ See Tamburri 2013 Letter [JA203-04].

³¹ Final Rule Removing Sunset Provision on Ship Speed Restriction, 78 Fed. Reg. 73,726 (Dec. 9, 2013).

³² NOAA, *Three Vessels Charged with Violating Right Whale Ship Strike Reduction Rule Pay Penalties* (Jan. 10, 2012), <http://goo.gl/qeZNSY>.

the whale's migratory path, increasing the risk of ship-strike and threatening the species' recovery.³³

Although the Coast Guard has adopted regulations to protect North Atlantic right whales from death or grievous injury caused by collisions with ships, compliance has been low, and NOAA has determined that more must be done to save the species.³⁴ Additional protection will be urgent by 2017, when the export terminal is scheduled to begin operation, because the North Atlantic right whale then will face cumulative threats from increased shipping out of the expanded Port of Baltimore and widened Panama Canal, from food losses caused by climate change, and from proposed seismic testing and offshore drilling.³⁵ Even though none of those threats was considered in 2007, when potential impacts on the whale from Dominion's import facility last were studied, FERC has refused to update its analysis of risks to the species.

³³ Ship strikes are among the primary threats to the continued survival of the species. 78 Fed. Reg. at 73,727.

³⁴ See Rehearing Request at 19–20 [JA749-50]; EA Comments at 22 [JA536]; Critical Habitat for Endangered North Atlantic Right Whale, 80 Fed. Reg. 9,314 (Feb. 20, 2015) (proposing expansion of critical habitat).

³⁵ See Erin Cox, *\$10 Million Grant to Expand Port of Baltimore*, The Baltimore Sun, Sept. 1, 2013, <http://goo.gl/aG9hSX>; Katie Johnson, *Panama Canal Expansion to Have Major Impact on Boston*, The Boston Globe, Mar. 16, 2014, <http://goo.gl/rO4GU7>; 80 Fed. Reg. at 9329–32 (discussing negative climate change impacts on the North Atlantic right whale); Rehearing Request at 23 n.39 [JA753].

D. The Northeastern Shale Gas Region

1. Induced Gas Production

The Project connects gas from the nearby Marcellus and Utica Shale formations with new overseas markets. As the EA notes, Dominion “presumes that the Project customers selected [Dominion’s] facility as their location for export due to its proximity to natural gas supplies in the northeastern United States.”³⁶ Connecting those supplies with overseas demand will raise the price of domestic gas and increase domestic production.³⁷ Indeed, the Energy Information Administration (“EIA”) predicted in 2012 that 60–70 percent of the demand created by export projects will be met with new gas development.³⁸ Moreover, in filings with the Department of Energy, Dominion touted the Project’s ability to

³⁶ EA at 176 [JA452].

³⁷ EIA Study at 6.

³⁸ *Id.* at 6, 10. EIA derived these estimates from the National Energy Modeling System, which models the economy’s energy use. EIA, *The National Energy Modeling System: An Overview* 1–2 (2009), <https://goo.gl/44nZLL>. The October 2014 update to the EIA Study found that 61–84 percent of LNG exports would be sourced from new natural gas development. EIA, *Effect of Increased Levels of Liquefied Natural Gas Export on U.S. Energy Markets* 12 (Oct. 29, 2014), <https://goo.gl/yVMcms>.

“provid[e] a steady, incremental demand for gas” and thereby “support ongoing supply development.”³⁹

Recent events confirm that the Project will induce new development. In December 2013, Cabot Oil & Gas Corporation announced an agreement to sell gas to Pacific Summit Energy, a customer for 50 percent of Dominion’s liquefaction and loading capacity.⁴⁰ According to Cabot, it has agreed to sell Pacific Summit Energy 350,000 million British thermal units per day (the equivalent of 350 million cubic feet per day) of Marcellus Shale gas for 20 years, commencing when Dominion’s export terminal opens.⁴¹

Cabot’s drilled wells and its permitted-but-not-yet-drilled wells are clustered in and near Susquehanna County, Pennsylvania.⁴² Just before Cabot announced that it would send gas to Cove Point, Cabot leased an additional 200,000 acres of

³⁹ Dominion, *supra* note 14, at 14–15 [Add.A-85 to A-86]; *id.* at 9 [Add.A-84] (claiming that “LNG exports will increase the opportunities for more robust development of energy resources”).

⁴⁰ See Press Release, Cabot Oil & Gas Corporation Provides Corporate Update, Announces Agreement to Provide Natural Gas to the Dominion Cove Point LNG Terminal (Dec. 19, 2013) [JA243-44]; see also Application at 2 (explaining that Dominion is “fully contracted,” with 50 percent of its liquefaction and export capacity going to Pacific Summit Energy, LLC, the United States subsidiary of the Japanese Sumitomo Corporation) [JA95].

⁴¹ Press Release, *supra* note 40 [JA243].

⁴² EA Comments at 35 (map of Cabot’s wells) [JA549].

land in Susquehanna County.⁴³ Cabot made the connection: “This long-term firm sales agreement . . . ensures the continuing development of our Marcellus Shale position in Northeast Pennsylvania for years to come.”⁴⁴

Between the issuance of FERC’s Authorization Order and its Rehearing Order, GAIL, Dominion’s other customer, announced a long-term agreement to buy gas produced from the Marcellus and Utica Shales for liquefaction and loading at Cove Point.⁴⁵ According to news reports, “the majority of the gas—3.3 million cubic feet—will be sourced through an existing agreement between [a] WGL Midstream subsidiary and Antero Resources Corp.,” the latter of which “operates in eastern Ohio’s Utica fields and southwestern Pennsylvania’s and northern West

⁴³ See Brendan Gibbons, *Cabot’s NEPA Wells “Still Howling” a Year Later*, Scranton Times-Tribune, Nov. 18, 2013, <http://goo.gl/W2A3FR> [JA587-88].

⁴⁴ See *Cabot to Supply Gas to Dominion Cove Point LNG Terminal*, LNG World News, Dec. 19, 2013, <http://goo.gl/5CfCFr> [Add.A-79] (quoting Dan O. Dinges, Cabot’s Chairman, President and Chief Executive Officer); see also EA Comments at 36–40 (estimating, based on publicly available information about Cabot’s then-existing commitments and production, that Cabot was reasonably likely to increase production, by drilling additional wells or refracturing existing wells, to meet its commitments in 2017, including the commitment to Dominion’s customer) [JA550-54].

⁴⁵ Sam Kusic, *Region’s Shale Gas Will Help Fuel India*, Pittsburgh Bus. Times, Dec. 5, 2014, <http://goo.gl/qfWE01> [Add.A-130]; see also Application at 2 (noting Project customers) [JA95].

Virginia's Marcellus fields.”⁴⁶ Antero, which has been delaying completion of wells, now may begin the hydraulic fracturing needed for shale gas extraction.⁴⁷

2. New Pipeline Construction

In addition to inducing gas production, the Project will encourage additional infrastructure development. For example, Cabot plans to ship its gas to Cove Point via a new pipeline connecting its wells in Susquehanna County to pipelines serving Cove Point. The new pipeline, which is part of the Transcontinental Gas Pipeline Company (“Transco”) Atlantic Sunrise Project, “pave[s] the way for Cabot’s shipment of 350 MMcfd [million cubic feet per day] to Dominion Cove Point LNG to fulfill a 20-year supply agreement with Pacific Summit Energy.”⁴⁸ According to Transco’s application for the pipeline, Cabot has “committed to 850,000 [decatherms/day] of firm transportation capacity from a new interconnection in Susquehanna County, Pennsylvania,” and 350,000 decatherms/day—the equivalent of 350 million cubic feet per day—will be delivered “to the existing point of interconnection between Transco’s mainline and Dominion Transmission’s

⁴⁶ Kusic, *supra* note 45; see *GAIL India Inks Agreement to Buy 2.5 Million Tonnes of LNG from US-based Firm*, Econ. Times, Dec. 5, 2014, <http://goo.gl/twMJ3d> [Add.A-96].

⁴⁷ See Unconventional Oil & Gas Rep., *supra* note 14 [Add.A-77 to A-78].

⁴⁸ See Christopher E. Smith, *Cabot Secures Transco Natural Gas Pipeline Space, Sales to WGL*, Oil & Gas J., Feb. 21, 2014, <http://goo.gl/j3qwmN> [Add.A-80].

Pipeline,” which serves Cove Point.⁴⁹ The proposed pipeline provides the shortest route for transmission of gas from Cabot’s Susquehanna County wells to the export facility.⁵⁰

3. Impacts of Gas Production and Transmission

Continuing to expand shale gas development poses “a real risk of serious environmental consequences.”⁵¹ As the New York State Department of Environmental Conservation recently concluded, public health threats from the use of hydraulic fracturing to stimulate gas production from shale deposits include:

- 1) air impacts that could affect respiratory health due to increased levels of particulate matter, diesel exhaust, or volatile organic chemicals; 2) climate change impacts due to methane and other volatile organic chemical releases to the atmosphere; 3) drinking water impacts from underground migration of methane and/or fracturing fluid chemicals associated with faulty well construction or seismic activity; 4) surface spills potentially resulting in soil, groundwater, and surface water contamination; 5) surface water contamination resulting from inadequate wastewater treatment;

⁴⁹ Transcontinental Gas Pipe Line Company, LLC, Application for Certificate of Public Convenience and Necessity, CP15-138-000, at 10 (Mar. 31, 2015), <http://goo.gl/CiirQB> [Add.A-135].

⁵⁰ EA Comments at 53 (showing mapped pipeline connection to Cove Point) [JA567].

⁵¹ Dep’t of Energy, Sec’y of Energy Advisory Bd., Shale Gas Production Subcommittee Second Ninety-Day Report 10 (Nov. 28, 2011), <http://goo.gl/R3BHEh>.

6) earthquakes and creation of fissures induced during the hydraulic fracturing stage; and 7) community character impacts such as increased vehicle traffic, road damage, noise, odor complaints, and increased local demand for housing and medical care.⁵²

New pipelines routed through forest habitats, agricultural lands, and rural communities also carry environmental consequences. Clearing and maintaining pipeline routes disturb the land, discharging dust, dirt, and rocks that can pollute waterways.⁵³ Emissions from the pipelines and associated compressor stations contribute to air pollution and climate change.⁵⁴

E. Contributions to Climate Change

FERC estimated greenhouse gas emissions that would come directly from construction and operation of Project facilities, but it refused to consider the indirect effects of the Project in a full lifecycle analysis.⁵⁵ FERC's narrow focus excluded carbon emissions from equipment used to extract natural gas and move it through pipelines as well as predictable releases of the gas—which is mostly

⁵² N.Y. Dep't of Env'tl. Conservation, Final Supplemental Generic Environmental Impact Statement, Executive Summary at 2 (May 13, 2015), <http://goo.gl/juW9nE> [Add.A-99]; see Dep't of Energy, *Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* (May 29, 2014), <http://goo.gl/RoOOiF>.

⁵³ See EA Comments at 53 [JA567].

⁵⁴ See *id.* at 41–42 [JA555-56].

⁵⁵ EA at 112 [JA388].

methane, a potent greenhouse gas. FERC also failed to calculate greenhouse gas emissions from transportation of LNG overseas, re-gasification, and combustion of the fuel, which all contribute to climate change.

Environmental Petitioners provided FERC with detailed calculations, based on conservative assumptions, showing that the total lifecycle greenhouse gas emissions of the Project are in excess of 26,100,000 tons of carbon dioxide equivalent per year.⁵⁶ This volume rivals lifecycle emissions from Maryland's entire fleet of coal-fired power plants.⁵⁷ Using the social cost of carbon, a tool that the Environmental Protection Agency ("EPA") and other federal agencies use to estimate the climate effects of federal rulemakings, a conservative estimate of the climate change damages that will result from the Project's greenhouse gas emissions runs into billions of dollars.⁵⁸ FERC refused to use that tool—or any other methodology—to assess harm from those emissions.

STANDING

Environmental Petitioners have standing as nonprofit environmental organizations whose members live and recreate in the areas directly affected by

⁵⁶ EA Comments at 56–60, Ex. 1 [JA570–574, 582-85]; Rehearing Request at 32–36 [JA762-66].

⁵⁷ EA Comments at 56–57, Ex. 1 [JA570-71, 582-85].

⁵⁸ Rehearing Request at 37 [JA767]; see EPA, *The Social Cost of Carbon*, <http://goo.gl/H5gFM>.

FERC's unlawful approval of the Project. Declaration of Dan Chu ("Chu Decl.") ¶ 4; Heinhorst Decl. ¶¶ 14–16; Mazur Decl. ¶¶ 12; Pritchard Decl. ¶¶ 2, 5; Declaration of Michael Tidwell ("Tidwell Decl.") ¶ 12; Declaration of Frederick Tutman ("Tutman Decl.") ¶¶ 9, 17.

[T]o satisfy Article III's standing requirements, a plaintiff must show (1) it has suffered an 'injury in fact' that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 180–81 (2000) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–561 (1992)). In addition,

[a]n association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization's purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.

Id. at 181 (citing *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 343 (1977)).

Environmental Petitioners meet this standard. They have suffered procedural injuries at FERC's hands, because the Commission has denied them the

environmental review to which they are entitled under NEPA. Substantively, Commission-authorized construction has injured, and future Project operations will injure, Environmental Petitioners' members by exposing them to increased pollution, impeding their recreational and aesthetic pursuits, and in some cases, forcing them to uproot their families at great economic and personal cost. *See Horsehead Res. Dev. Co. v. Browner*, 16 F.3d 1246, 1259 (D.C. Cir. 1994) (“[E]nvironmental organizations [whose members live in affected areas] clearly do have standing ...”); *Am. Bird Conservancy, Inc. v. F.C.C.*, 516 F.3d 1027, 1031 (D.C. Cir. 2008) (finding standing where organizational members recreated in the area affected by an agency action).

Dominion's construction has caused increases in heavy-vehicle traffic, which has inconvenienced and endangered Environmental Petitioners' members. Eno Decl. ¶¶ 4–8; Heinhorst Decl. ¶¶ 7–10; Ihde Decl. ¶¶ 7–9; Mazur Decl. ¶¶ 6–8; Morin Decl. ¶¶ 7–8. The incessant noise from heavy machinery and truck traffic also has interrupted members' sleep and impaired their enjoyment of the outdoors. Eno Decl. ¶¶ 9–10; Heinhorst Decl. ¶ 8; Ihde Decl. ¶ 9; Morin Decl. ¶ 6; Pritchard Decl. ¶ 7. Some members have stopped biking on local roads, Ihde Decl. ¶ 8; Mazur Decl. ¶ 6, or no longer enjoy walks in the area, Pritchard Decl. ¶ 7, because of safety and aesthetic concerns related to increased traffic and construction noise.

Dominion's activities have changed and will continue to alter the character of the previously quiet residential community, by exposing Environmental Petitioners' members to increased air pollution and depressing the value of their homes. Eno Decl. ¶ 17; Ihde Decl. ¶¶ 11, 17; Mazur Decl. ¶ 13. Faced with a three-year construction schedule and a lifetime of worry about a devastating Project accident, some of those members have moved their families out of their home community. Heinhorst Decl. ¶¶ 11–13; Mazur Decl. ¶ 11.

Environmental Petitioners' members also are suffering adverse effects from the construction and operation of Dominion's pier in the Patuxent River. The pier and the barges delivering huge components of the liquefaction facility have created navigational dangers, causing members to curtail their favorite pastimes, including boating and fishing on the Patuxent River, and hurting one member's river-based business. Eno Decl. ¶ 12; Hastings Decl. ¶ 11; Linthicum Decl. ¶¶ 10–12; Tutman Decl. ¶ 18. Future LNG tankers will mar the views of Chesapeake Bay that Environmental Petitioners' members used to enjoy from their boats and local beaches. Eno Decl. ¶ 18; Hastings Decl. ¶ 12; Heinhorst Decl. ¶¶ 14–15; Linthicum Decl. ¶ 13; Morin Decl. ¶¶ 15, 20.

The injuries Environmental Petitioners' members continue to suffer were caused by FERC's failure to analyze significant impacts of the Project. Had the Commission disclosed the full effects of building and operating Dominion's export

facilities, it might have been persuaded to deny the Application or to require further mitigation, better preserving the quiet character of the local community and preventing degradation of its recreational resources. A decision in Environmental Petitioners' favor therefore would remedy the procedural and substantive injuries caused by the Project. *See WildEarth Guardians v. Jewell*, 738 F.3d 298, 306–07 (D.C. Cir. 2013) (holding that where an agency approval was granted without complying with NEPA, and vacatur would allow the agency to “change its mind,” the injury, causation, and redressability requirements are met). Consequently, Environmental Petitioners have demonstrated all of the elements of standing.

STANDARD OF REVIEW

In reviewing an agency's compliance with NEPA, the Court must “ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary and capricious.” *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1312–13 (D.C. Cir. 2014) (citation omitted). The impact that must be evaluated encompasses both “the direct and indirect impacts of a proposed action.” *TOMAC, Taxpayers of Michigan Against Casinos v. Norton*, 433 F.3d 852, 864 (D.C. Cir. 2006). Indirect impacts include those that “are caused by the action and are . . . farther removed in distance, but are still reasonably foreseeable.” *New York v. Nuclear Reg. Comm'n*, 681 F.3d 471, 476 (D.C. Cir. 2012) (citing 40 C.F.R. §1508.8). An environmental assessment

that omits review of indirect effects cannot survive scrutiny if the agency has not “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

When petitioners challenge a decision not to prepare an EIS, this Court reviews the FONSI to determine whether the agency has taken a “hard look” at all relevant environmental issues and has made “a convincing case for its finding.” *Grand Canyon Trust v. FAA*, 290 F.3d 339, 340–41 (D.C. Cir. 2002) (internal quotation marks omitted). “Judicial review of an agency’s finding of ‘no significant impact’ is not . . . merely perfunctory as the court must insure that the agency took a ‘hard look’ at the environmental consequences of its decision.” *Sierra Club v. Peterson*, 717 F.2d 1409, 1413 (D.C. Cir. 1983) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976)). “Although the standard of review is deferential, . . . simple, conclusory statements of ‘no impact’ are not enough to fulfill and agency’s duty under NEPA.” *Del. Riverkeeper*, 753 F.3d at 1313 (citation omitted).

SUMMARY OF ARGUMENT

FERC failed to take a hard look at the significant environmental consequences of allowing Dominion to construct and operate a terminal capable of exporting nearly one billion cubic feet of LNG per day for 20 years to India and

Japan. Admitting that “it is axiomatic that natural gas exports require natural gas supplies,” and that “natural gas production, transportation, and export facilities are all components of the general supply chain required to bring domestic natural gas to market for export,” FERC nevertheless insisted that “Marcellus Shale production is not required for the Cove Point Liquefaction Project and production is likely to increase in the area regardless of whether the Cove Point Liquefaction Project is approved.”⁵⁹ Ignoring both corporate announcements identifying the source of gas for the Project and readily available modeling tools—including the model used by the EIA to assess how exports would affect the domestic gas market—FERC claimed that the source of gas is “speculative” and that the Commission could not and need not consider the effects of additional production in its environmental review.⁶⁰ FERC’s refusal to provide even a general overview of the reasonably foreseeable impacts of that production is arbitrary and capricious. Had it examined those impacts, the Commission could not have justified its FONSI.

The Commission also arbitrarily refused to calculate the significant lifecycle greenhouse gas emissions of the Project, which exceed those of Maryland’s seven coal-fired power plants, or to assess the climate impacts of those emissions.

⁵⁹ Rehearing Order ¶ 29 [JA845]; *see id.* ¶¶ 26–27 [JA843-44].

⁶⁰ *Id.* ¶¶ 32, 38, 40–41, 44 [JA846, 848-51].

Although it conservatively estimated the volume of greenhouse gas emitted directly from the Project's liquefaction and gas compression facilities, FERC ignored reasonably foreseeable greenhouse gas emissions from induced gas production and transmission to Cove Point as well as inevitable emissions from overseas transport of the LNG, its re-gasification, and its combustion. Moreover, FERC refused to evaluate the *impacts* of those emissions, including even the direct Project emissions. Other agencies have used the social cost of the carbon to monetize the damages from greenhouse gas emissions, thereby providing a readily understandable comparison of a project's economic benefits with its climate harms. Because FERC declined to use that tool or any other to evaluate the Project's climate-change impacts, it failed to disclose significant harms warranting preparation of an EIS.

In issuing the EA, FERC unlawfully discounted the Project's direct effects. According to the Commission, transforming a virtually idle import terminal into a bustling export operation, to be served by ships carrying ballast water drawn from sources overseas, presents little risk of introducing invasive species or pollutants into the Chesapeake Bay, because Coast Guard regulations governing ballast water discharges would prevent any significant contamination.⁶¹ FERC did not address concerns of a marine expert, who pointed out that Coast Guard regulations had

⁶¹ *See id.* ¶ 72 [JA862].

failed to stop invasive species from clogging a nearby nuclear power plant's cooling system, thus increasing radioactive discharges, and that implementation of new regulations had been delayed indefinitely. FERC therefore provided no rational explanation for concluding the Project would have insignificant water quality impacts.

FERC's examination of the potentially significant impacts of increasing shipping through the migration path of the critically endangered North Atlantic right whale fares no better under NEPA. The only support for FERC's conclusion that shipping would cause no significant impacts on the species was a 2007 analysis, citing climate studies more than a decade old. Since that time, new research has revealed increasing threats to the whale's food supply from warming oceans. In addition, the Port of Baltimore has been expanded and work proceeds to widen the Panama Canal, while seismic testing and offshore drilling have been proposed for southern reaches of the East Coast—which increases the risk of ship-strike and introduces deafening noise fatal to whales. By refusing to evaluate the impacts on North American right whales in this new, more dangerous context, FERC offered no means of understanding current, cumulative Project impacts on the species, thereby violating NEPA's "hard look" standard and undermining the FONSI.

Finally, the Commission discounted the unprecedented public safety implications of siting a liquefaction facility on an extremely compressed footprint in a populated area with limited evacuation routes. Rather than soberly assessing the risks of an industrial accident to local residents and park users, FERC trusted that Dominion's presumed adherence to regulations established by other federal agencies would avoid all serious problems. FERC neither disclosed nor quantified the risk that those regulations would be unequal to the task at this site, where an accident could produce a chain reaction of explosions in the presence of highly toxic chemicals.

ARGUMENT

I. FERC Unlawfully Refused to Consider the Effects of a Project That Will Induce Additional Natural Gas Production.

Despite abundant record evidence, FERC concluded that permitting Dominion to liquefy nearly one billion cubic feet of gas per day for transport to India and Japan for at least 20 years would have no impacts beyond the Project site. FERC declined to examine the effects from reasonably foreseeable increased gas production that will result from building and operating the liquefaction facility linking northeastern natural gas producers with their international customers.

The "reasonably foreseeable" environmental effects of gas production induced by the Project must be factored into a NEPA review. 40 C.F.R. § 1508.8(b). FERC's analysis must include "growth inducing effects and other

effects related to induced changes in the pattern of land use . . . and related effects on air and water and other natural systems, including ecosystems.” *Id.*; *see id.*

§ 1502.16(b). Implicit in this requirement is a duty to engage in “reasonable forecasting” to predict effects. *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973) (“Reasonable forecasting and speculation is . . . implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’”). An effect is reasonably foreseeable if it is so “likely to occur that a person of ordinary prudence would take it into account in reaching a decision.” *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (internal quotation and citation omitted); *see Brady Campaign to Prevent Gun Violence v. Salazar*, 612 F. Supp. 2d 1, 21 (D.D.C. 2009) (finding that NEPA required the agency to analyze the foreseeable consequences that would occur as a result of the agency action).

Under this standard, courts have required agencies evaluating energy infrastructure projects to analyze indirect effects of construction and operation. *See Mid States*, 345 F.3d at 549–50 (impacts of increased coal consumption resulting from construction of rail line to coal mine); *Border Power Plant Working Grp. v. Dep’t of Energy*, 260 F. Supp. 2d 997, 1028–29 (S.D. Cal. 2003) (Mexican power plant impacts caused by new transmission line to California

grid). Following those decisions, the United States Army Corps of Engineers analyzed indirect surface and ground water impacts, among others, of projects that might be built in the future as a result of approving a pipeline.⁶²

FERC offered two defenses for its refusal to examine the effects of the increased gas production that will occur because of the Project. First, FERC argued that the Project would not induce gas development because production would occur even without the facility. Second, even though FERC and other agencies have estimated how gas markets will respond to infrastructure projects and have calculated the resulting environmental consequences, FERC argued that Project-induced impacts from gas development are too “speculative” to factor into its review. For the reasons stated below, these explanations do not satisfy the “hard look” standard.

A. FERC’s Conclusion That the Project Will Not Cause Any Gas Development Defies the Record.

FERC based its conclusion that the Project would have no effect on the gas market on the bald assertion that “natural gas development will likely continue with or without the Cove Point Liquefaction Project.”⁶³ The unsupported

⁶² See U.S. Army Corps of Eng’rs, Final EIS, Alaska Stand Alone Gas Pipeline §§ 5.20.5.5; 5.20.6.2 (Oct. 2012), <http://goo.gl/VzBkHh>.

⁶³ Rehearing Order ¶¶ 27[JA844]; see *id.* ¶¶ 26, 29 [JA843-45]; Authorization Order ¶¶ 225–27 [JA686-87].

assumption that gas production will proceed at exactly the same pace whether or not Dominion exports nearly seven trillion cubic feet of LNG over the Project's 20-year lifetime does not meet the hard look standard. *See Pub. Citizen v. Nat'l Highway Traffic Safety Admin.*, 848 F.2d 256, 266–67 (D.C. Cir. 1988) (“A ‘bald assertion’ that . . . two actions [are] equivalent in their environmental impact simply [does] not add up to reasoned decisionmaking based upon a ‘hard look’ at the relevant factors.” (citation omitted)). Without record evidence that *all* of the development will “occur anyhow,” this Court should vacate the challenged orders and order full analysis of indirect Project effects. *See Coal. for Canyon Pres. v. Bowers*, 632 F.2d 774, 782 & n.3 (9th Cir. 1980) (rejecting a bald statement in a highway project EIS that “pollution would ‘occur anyhow’ because traffic was bound to increase”); *Barnes v. U.S. Dep’t of Transp.*, 655 F.3d 1124, 1136–38 (9th Cir. 2011) (rejecting agency’s unsupported assertion that air traffic would increase at the same rate irrespective of airport expansion).

The bald assertion that the Project will have no effect on production also contradicts FERC’s prior claims about the effect of exports on gas markets. As EPA noted: “Both FERC and the [Department of Energy] have recognized that an

increase in natural gas exports will result in increased production.”⁶⁴ Even Dominion has admitted that “producers . . . will be obligated to match production to export related demand.”⁶⁵

The record confirms the Project’s foreseeable effect on production. Months before FERC prepared the EA, Cabot Oil & Gas Corporation announced a contract to sell one of Dominion’s customers Marcellus Shale gas for 20 years from the launch of Project operations.⁶⁶ Before making that announcement, Cabot leased an additional 200,000 acres of land in Susquehanna County, allowing it to meet future commitments.⁶⁷ Cabot’s CEO explained: “This long-term firm sales agreement . . . ensures the continuing development of our Marcellus Shale position in Northeast Pennsylvania for years to come.”⁶⁸ Shortly thereafter, Transco filed an application seeking FERC’s permission to construct the Atlantic Sunrise Pipeline, which

⁶⁴ U.S. EPA, Region 3, Detailed Comments on FERC’s EA, Cove Point Liquefaction Project, CP13-113-000 (June 16, 2014) (citing EIA study and Cameron LNG EIS, Appendix L (Response to Comments), at L-36, <http://goo.gl/fsFnc>) [JA595].

⁶⁵ See Dominion, *supra* note 14, at 31 [Add.A-87].

⁶⁶ See Press Release, *supra* note 40 [JA243-44].

⁶⁷ See Gibbons, *supra* note 43 [JA587-88].

⁶⁸ See LNG World News, *supra* note 44 [Add.A-79]; see also EA Comments at 36–40 (estimating, based on publicly available information about Cabot’s then-existing commitments and production, that Cabot was reasonably likely to increase production, by drilling additional wells or refracturing existing wells, to meet its commitments in 2017, including the commitment to Dominion’s customer) [JA550-54].

would transport Cabot's gas. Market analysts concluded that the new pipeline would "pave the way for Cabot's shipment of [gas] to Dominion Cove Point LNG to fulfill a 20-year supply agreement with Pacific Summit Energy."⁶⁹

Evidence that the Project will induce gas production continues to mount. Before FERC denied rehearing, Dominion's other customer, GAIL, announced that it would procure the natural gas Dominion will liquefy from a company that has a long-term supply contract with Antero. Antero has delayed putting Marcellus and Utica Shale gas wells into production because of unfavorable market conditions.⁷⁰ Antero, like Cabot, stands ready to ramp up production to meet demand created by the Project.

The record thus demonstrates that the Project will cause increased production in the Northeast gas fields, which will result in a wide range of impacts. FERC's assertion that Marcellus gas production would continue with or without the Project, offers no basis for concluding that the production will remain at

⁶⁹ Smith, *supra* note 48 [Add.A-80]; Transcontinental Gas Pipe Line Company, LLC, Request for Pre-filing Review, PF14-8, (Mar. 31, 2014); Transcontinental Gas Pipe Line Company, *supra* note 49, at 10 (explaining that Cabot plans to use 350,000 decatherms/day of its transportation capacity to deliver gas between Transco's mainline and the pipeline leading to Cove Point) [Add.A-135].

⁷⁰ Kusic, *supra* note 45 [Add.A-130]; *see also* Econ. Times, *supra* note 46 [Add.A-96]; Unconventional Oil & Gas Rep., *supra* note 14 [Add.A-77 to A-78].

precisely the same level, despite the additional demand from the Project.⁷¹ With no explanation for that conclusion, FERC’s refusal to evaluate the significant environmental and health impacts of increased natural gas production in the Northeast is arbitrary and capricious. *See, e.g., State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 52 (“The agency must explain the evidence which is available, and must offer a “rational connection between the facts found and the choice made.”) (internal citations omitted); *Brady*, 612 F. Supp. 2d at 21 (finding that agency “arbitrarily and capriciously ignored the environmental impacts.”).

B. FERC Unlawfully Concluded That Impacts from Induced Growth in Gas Production Are Too Speculative to Be Analyzed.

FERC also has claimed that the “impacts from additional shale gas development upstream of LNG export projects are not reasonably foreseeable”—and need not be disclosed—because “[t]he source of gas to be exported” and the extent of the drilling are “speculative.”⁷² Cabot and Antero are known sources of gas, however, and Commission staff estimated the number of gas wells needed to support another infrastructure project for an EIS issued almost contemporaneously

⁷¹ Authorization Order ¶¶ 228–29 [JA687–88]; Rehearing Order ¶¶ 26–27, 29 [JA843–45].

⁷² Rehearing Order ¶¶ 32, 37 [JA846, 848].

with the Rehearing Order.⁷³ FERC cannot explain why it is impossible do here what its staff was able to do in another proceeding. *Cf. Burlington N. & Santa Fe Ry. Co. v. Surface Transp. Bd.*, 403 F.3d 771, 776–77 (D.C. Cir. 2005) (“An agency must provide an adequate explanation to justify treating similarly situated parties differently.”).

Willful disregard of “where, and to what extent, gas development will occur,”⁷⁴ is no excuse for limited environmental review. FERC could have estimated how gas production would respond to the Project’s new market demand with either of two readily available models.⁷⁵ *Cf. Mid States*, 345 F.3d at 550 (requiring that agency use available models to estimate air quality impacts of increased availability of coal in evaluation of a proposed rail line to coal mines). FERC kept its head in the sand.

FERC ignored information that Cabot was likely to drill additional wells or to produce gas from uncompleted wells to meet its publicly announced contract to supply gas to Dominion’s Japanese customer and that Cabot would transport its gas from Susquehanna County to Cove Point via a newly proposed FERC-

⁷³ FERC, Final EIS for the Constitution Pipeline, CP13-499-000 & CP13-502-000, at § 4.13.2.1 (Oct. 24, 2014), <http://goo.gl/tVdlTf> [Add.A-90].

⁷⁴ Rehearing Order ¶ 37 [JA848].

⁷⁵ EA Comments at 32–34 (describing models) [JA546-48]; Rehearing Request at 30 (same) [JA760]; *see* EIA Study at 6–10 (relying on models).

regulated pipeline.⁷⁶ FERC's only excuse for ignoring those facts was that the "contract with Cabot has not been submitted as part of the record in the proceeding and that nothing in the record indicates where gas will originate."⁷⁷ Unlike Environmental Petitioners, FERC easily could have obtained the contract from Cabot, which had announced that the gas would come from its "Marcellus Shale position in Northeast Pennsylvania."⁷⁸

Under NEPA, FERC cannot avoid disclosing environmental impacts by refusing to investigate facts timely brought to its attention. Because minimal inquiry could have resolved the supposed uncertainty about the Project's indirect impacts, the Commission's FONSI fails the "hard look" standard. *See Ctr. for Biological Diversity*, 937 F. Supp. 2d at 1159 ("Preparation [of an EIS] is mandated where uncertainty may be resolved by further collection of data, or where collection of such data may prevent speculation on potential effects.") (quoting *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005))).

⁷⁶ See pages 19–22, *supra*; EA Comments at 34–40, 51–53 [JA548-54, 565-67].

⁷⁷ Rehearing Order ¶ 41 [JA849]; see Authorization Order ¶ 233 [JA690].

⁷⁸ See LNG World News, *supra* note 44 [Add.A-79]. Using public mapping tools, Environmental Petitioners demonstrated that Cabot's wells are clustered largely in Susquehanna County, Pennsylvania. See EA Comments at 52–53 [JA566-67].

In addition, because the nature of the indirect impacts is predictable and has been documented extensively, FERC cannot “simply ignore the effect.” *Mid States*, 345 F.3d at 549 (“[W]hen the nature of the effect is reasonably foreseeable but the extent is not . . . [an] agency may not simply ignore the effect.”). Under *Mid States*, FERC must estimate how gas production will affect the environment, even if questions remain about the precise locations of wells. In *Mid States*, the agency refused to estimate how burning fuel brought to market by a new railway would affect the environment, citing uncertainty about “where [additional power] plants will be built, and how much coal these new unnamed power plants would use.” *Id.* The Court concluded, however, that the missing information “show[e]d only that the *extent* of the effect is speculative. The *nature* of the effect is far from “speculative,” however, because “it is almost certainly true . . . that the proposed project will increase the long-term demand for coal and any adverse effects from burning coal.” *Id.* (emphasis in original).

As in *Mid States*, FERC knows the nature of the effects of producing gas and shipping it to Cove Point for export.⁷⁹ FERC also has substantial information

⁷⁹ See N.Y. Dep’t of Env’tl. Conservation, *supra* note 52, at 2 (discussing environmental impacts of natural gas production) [Add.A-199]; Dep’t of Energy, *supra* note 52 (same); see also EA Comments at 32–53 (describing effects of foreseeable induced gas drilling and pipeline construction) [JA546-67].

about the identity of producers and locations of wells that will produce that gas.⁸⁰ FERC has ready access to records that document production volumes from those producers' wells and modeling tools for predicting the extent of new production needed over the 20-year term of Dominion's contracts with its customers.⁸¹ FERC thus is not being "asked to engage in 'crystal ball' inquiry," and it should not "be allowed to abjure 'informed prediction' of possibilities." *See Potomac Alliance v. U.S. Nuclear Reg. Comm'n*, 682 F.2d 1030, 1036–37 (D.C. Cir. 1982) (internal citations omitted); *see id.* at 1035–36 (noting that a "complete environmental assessment would have to extend throughout the period" of reasonably foreseeable impacts). For these reasons, this Court should bring FERC in line with other agencies that forecast effects of induced fossil fuel production.⁸²

II. FERC Failed to Evaluate the Project's Climate Impacts.

FERC arbitrarily refused to take a hard look at the full extent of greenhouse gas emissions that will result from the Project and did not evaluate the impacts of Project emissions on the human environment.⁸³ The Commission quantified only

⁸⁰ *See supra* text accompanying notes 40–48.

⁸¹ *See supra* text accompanying note 38; Comments on EA at 49 n. 216 [JA563].

⁸² *See, e.g.*, U.S. Army Corps of Eng'rs, *supra* note 62.

⁸³ Council on Env'tl. Quality, *Draft Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change* (Dec. 18, 2014), <http://goo.gl/HNnaaz>.

emissions directly from Project facilities and ignored the very significant emissions that will result from the “production, transport, and combustion of natural gas proposed to be exported.”⁸⁴ Even for the emissions it did count, FERC refused to analyze their environmental impacts.

The record demonstrates that the Project will induce additional gas production and that, at every stage, gas development and transmission will leak methane, a potent greenhouse gas.⁸⁵ Record evidence also confirms that transporting LNG overseas and burning it contributes to climate change.⁸⁶ FERC did not rebut this evidence—which shows over 26 million tons per year of lifecycle greenhouse gases from the Project—but rather omitted any consideration of indirect emissions.⁸⁷

⁸⁴ U.S. EPA, Region 3, *supra* note 64 [JA594]; *see* Letter from U.S. EPA, Region 6, to FERC, Regarding “Lake Charles Liquefaction Project,” CP14-119, CP14-12, & CP14-122, <http://elibrary.ferc.gov/idmws/search/fercadvsearch.asp> (enter Accession No. 20150609-0062) (June 9, 2015) (asking FERC to disclose the “[greenhouse gas] emissions associated with the production, transportation, and combustion of the natural gas proposed to be exported by the project”—“even where the ultimate end use of the natural gas occurs outside of the US”—“due to their reasonably close causal relationship to the project”).

⁸⁵ EA Comments at 57 [JA571].

⁸⁶ *Id.* at 57–58 [JA571-72].

⁸⁷ *See* Authorization Order ¶ 246 (claiming that consumption was not part of the Project) [JA694-95]; Rehearing Order ¶¶ 57–59 [JA856-58].

To justify that omission, FERC repeated the refrain that it need not consider the greenhouse gas impacts of producing gas for export because “development of upstream production is speculative and not reasonably foreseeable.”⁸⁸ FERC also claimed, without support, that “end use consumption of natural gas will likely occur regardless of whether this project is approved” and thus assumed that combustion of gas liquefied by Dominion would add no new emissions.⁸⁹ These bald statements are “illogical at best” and demonstrate that FERC failed to act as a reasoned decision-maker. *Mid States*, 345 F.3d at 549 (explaining that “it is almost certainly true” that a railroad’s proposal to build tracks to coal mines “will increase the long-term demand for coal and any adverse effects that result from burning coal”); see *S. Fork Band Council of W. Shoshone of Nev. v. U.S. Dep’t of Interior*, 588 F.3d 718, 725–26 (9th Cir. 2009) (holding unlawful the failure to evaluate the environmental impacts of transporting and processing ore in approving a mining permit); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1197–98 (D. Colo. 2014) (rejecting argument that coal produced under newly leased land would “perfect[ly] substitute[.]” for other coal to be burned—leaving environmental effects unchanged—and requiring the agency to analyze

⁸⁸ Rehearing Order ¶ 57 [JA856-57].

⁸⁹ *Id.* ¶ 58 [JA857].

“[t]his reasonably foreseeable effect . . . , even if the precise extent of the effect is less certain”).

FERC’s refusal to consider any greenhouse gas emissions beyond those from the Project facilities also is inconsistent with the practice of other agencies and even FERC’s own analysis of another LNG export terminal. The federal Department of Agriculture, in its environmental review of a coal-leasing program, calculated the potential greenhouse gas emissions from combustion of the mined coal, even though the exact location of combustion was unknown.⁹⁰ The Army Corps of Engineers analyzed the total lifecycle greenhouse gas effects of a proposed gas pipeline, including emissions from increased gas production induced by the pipeline and emissions from burning the fuel transported by the pipeline.⁹¹ The Commission also has considered the greenhouse gas impacts of burning LNG to be exported from the West Coast.⁹² These examples demonstrate that the Project’s greenhouse gas emissions could have—and should have—been estimated.

⁹⁰ U.S. Dep’t of Agric., Final EIS, Federal Coal Lease Modifications COC-1362 & COC 67232, at 79–80 (Aug. 2012), <http://goo.gl/RpYvjR>.

⁹¹ See U.S. Army Corps of Eng’rs, *supra* note 62, at 5.20-68 to 5.20-78.

⁹² FERC, Draft EIS, Jordan Cove Liquefaction and Pacific Connector Pipeline Projects, CP13-483-000 & CP13-492-000, § 4.12.1.4 (2014), <https://goo.gl/sZlc9k> (analyzing greenhouse gas emissions from combusting gas to be exported) [Add.A-92 to A-95].

In addition, once FERC quantified the total greenhouse gas emissions that will result from the Project gas, it should have used available tools (such as the social cost of carbon) to assess the impacts that will result from those emissions.⁹³ *See, e.g., High Country Conservation Advocates*, 52 F. Supp. 3d at 1190. FERC provided no such assessment, even for the direct Project emissions that it did quantify. For all of these reasons, FERC's failure to evaluate the real-world greenhouse gas impacts of Project-induced activities, from gas drilling in the Northeast to eventual burning overseas, is arbitrary and capricious.

III. FERC Improperly Discounted Significant Water Quality Impacts from Industrial Shipping at Cove Point.

FERC arbitrarily minimized the impacts of Project-induced shipping on the Chesapeake Bay. Unlike ships used to import LNG, each of the 85 tankers used for export will discharge ballast water drawn from foreign seas before filling up with LNG. The ballast water may come with invasive species and other contaminants transported from ports of origin. Citing record evidence that contaminated ballast water discharges could harm the Chesapeake Bay, Environmental Petitioners urged FERC to take a hard look at the environmental impact of industrial shipping.⁹⁴ In response, FERC concluded that new ballast

⁹³ *See EPA, The Social Cost of Carbon*, *supra* note 58.

⁹⁴ *See* Rehearing Request at 14–19 [JA744-49]; Tamburri 2014 Letter [JA504-11]; Tamburri 2013 Letter [JA203-29].

water regulations will eliminate any significant risk, even though they may not even be in effect when the facility begins operating.⁹⁵

The Coast Guard published new ballast water regulations in 2012 because earlier rules provided inadequate protection for water quality.⁹⁶ The revisions require that certain vessels operate an approved ballast water management system, but no such system has been approved and therefore none would protect the Chesapeake Bay from Cove Point tanker discharges.⁹⁷ In the meantime, ships use only the failed procedure permitted under the prior regulations, which “is limited in its ability to reduce the risk of ballast water invasive species.”⁹⁸

Dr. Tamburri, an expert who studies the risk of invasive species through maritime transportation, warned FERC that the regular influx of LNG tankers from Japan and India will create the “perfect scenario” for the introduction of invasive species and other pollutants that threaten not only aquatic ecosystems and public health but also the nearby Calvert Cliffs Nuclear Power Plant.⁹⁹ The power plant already has been forced to “significantly alter[] standard power plant operations” to

⁹⁵ Authorization Order ¶¶ 127–29 [JA656]; Rehearing Order ¶¶ 71–74 [JA861-63].

⁹⁶ *See* Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters, 77 Fed. Reg. 17,254 (Mar. 23, 2012) (replacing regulations allowing for open ocean ballast water exchange).

⁹⁷ *See* Tamburri 2014 Letter at 2 [JA505].

⁹⁸ *Id.*

⁹⁹ *Id.*

deal with an invasive species that is being drawn from the Bay into the plant's cooling system.¹⁰⁰ That non-native species causes “a reduction in flow of cooling waters” and can clog filters, impact pump performance, and cause an increase in the amount of radioactive waste produced by the plant.¹⁰¹

FERC has offered no meaningful response to Dr. Tamburri's expert opinion. New ballast water management systems are not in place, and there is no record evidence demonstrating that they will be in effect when the first tankers arrive. If approved management systems are not in effect, FERC irrationally concluded that the current, admittedly deficient rules will prevent significant environmental effects from annual discharges of more than a billion gallons of ballast water into the Chesapeake Bay.

The Coast Guard rulemaking therefore cannot excuse FERC from evaluating environmental impacts. *See Del. Dep't of Nat. Resources v. Env'tl. Prot. Agency*, 785 F.3d 1, 16 (D.C. Cir. 2015) (refusing to allow “dodge” in which agency “seeks to excuse its inadequate responses by passing the entire issue off onto a different agency”); *New York v. Nuclear Reg. Comm'n*, 681 F.3d at 481 (“[M]erely pointing to [a] compliance program is in no way sufficient to support a scientific finding [of no significant environmental impact].”). Because FERC's reliance on the

¹⁰⁰ Tamburri 2013 Letter at 2 [JA204].

¹⁰¹ *Id.*

regulations does not provide a “convincing statement of reasons that explain why the project will impact the environment no more than insignificantly,” the proceeding should be remanded for a hard look at the water quality impacts of the Project. *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 864 (9th Cir. 2005) (internal quotation and citation omitted); *see Bluewater Network v. Salazar*, 721 F. Supp. 2d 7, 39–40 (D.D.C. 2010) (a FONSI must “adequately explain the connection between objective facts and conclusions reached”).

IV. FERC’s Analysis of Impacts on the Critically Endangered North Atlantic Right Whale Is Legally Deficient.

FERC has refused to analyze Project impacts on the North Atlantic right whale, a species so critically endangered that the loss of even one individual could threaten the recovery of the entire population.¹⁰² Instead, the FONSI for the Project rests on a 2007 study prepared for Dominion’s ill-fated import facility.¹⁰³ FERC’s reliance on the outdated study, which cites climate research more than a decade old, violates NEPA for failure to account for material changes in “the setting in which the agency’s action takes place.” *Barnes*, 655 F.3d at 1139 ; *see* 40 C.F.R. § 1508.27.

¹⁰² *See* 78 Fed. Reg. at 73,726.

¹⁰³ Authorization Order ¶ 142 [JA660-61]; Rehearing Order ¶¶ 76–78 [JA863-64].

Since 2007, the threats to the North Atlantic right whale's continued survival have intensified.¹⁰⁴ Ship strikes are one of the primary threats to the whales, and non-compliance with federal speed regulations designed to protect the whales is well documented.¹⁰⁵ There has been an increase in the volume of large-ship traffic in the Chesapeake Bay area, and additional increases are reasonably foreseeable because of expansions to the Port of Baltimore and the Panama Canal. Warming oceans also will continue to place increasing strain on the whales' food supply. Dominion's proposed mitigation measures are insufficient to meet the ongoing threats to the whales and are entirely voluntary, in contrast with more protective mandatory measures adopted in other projects.¹⁰⁶ By refusing to confront these facts and update its analysis, FERC offers no means of understanding current, cumulative Project impacts on the whale, thereby violating NEPA's "hard look" standard and undermining the FONSI. *See Pres. Coal., Inc. v. Pierce*, 667 F.2d 851, 860 (9th Cir. 1982).

V. FERC Did Not Take a Hard Look at the Public Safety Threats.

NEPA requires that FERC evaluate the risks to public safety posed by the projects it reviews, *see Metro. Edison Co. v. People Against Nuclear Energy*, 460

¹⁰⁴ *See* EA Comments at 21–23 [JA535-37]; Rehearing Request at 23–24 [JA753-54].

¹⁰⁵ *See* EA Comments at 21–22 [JA535-36]; 78 Fed. Reg. at 73,727.

¹⁰⁶ *See* EA Comments at 23–25 [JA537-39]; Rehearing Request at 24 [JA754].

U.S. 766, 773 (1983), and consider the context and intensity of potential impacts, *see* 40 C.F.R. § 1508.27(a)–(b). Unlike the other LNG export terminals that FERC has evaluated and approved to date, the Cove Point facility is located in extremely close proximity to a populated residential area, with homes located directly across the street. If an accident requiring evacuation were to occur—a risk increased because the concentrated storage of hazardous materials on the Project’s small footprint makes it difficult to isolate and contain explosions—local residents will face heightened danger because the primary and most direct evacuation route runs right by the Project gate.

In this context, too, FERC based its FONSI on presumed compliance with other agencies’ requirements. Even with perfect regulatory compliance, accidents happen. Indeed, traffic accidents already have occurred during construction. Mazur Decl. ¶ 7; Pritchard Decl. ¶ 8. The unavoidable risk to human health and safety, particularly given the hazardous chemicals trucked to and from liquefaction site, the compressed footprint of the facility, and its location along the evacuation route for most residents of the Cove Point peninsula, cannot be ignored. That risk must be disclosed and evaluated in FERC’s environmental review in order to comply with NEPA. *See New York v. Nuclear Reg. Comm’n*, 681 F.3d at 482 (“[O]nly if the harm in question is so remote and speculative as to reduce the effective probability of its occurrence to zero may the lead agency dispense with

the consequences portion of the analysis.” (internal quotations omitted)). Even if the probability of a catastrophic incident is low, the severity of potential harm to residents alone warrants the preparation of an EIS. *See Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1185 (9th Cir. 2008).

FERC based its conclusion that safety impacts would be insignificant on the existence of mitigation measures, including an adequate evacuation route.¹⁰⁷ Dominion’s proposal of an alternative evacuation route, announced during the week of Project approval, implicitly acknowledges that Cove Point Road is inadequate.¹⁰⁸ Any new evacuation route necessarily must rely, moreover, on circuitous back roads that cannot handle the expected traffic volume. *See Idhe Decl.* ¶ 16. Given the context and intensity of potential Project impacts, NEPA requires a harder look at public safety.

¹⁰⁷ Authorization Order ¶ 206 [JA682].

¹⁰⁸ Timothy Wheeler, *Evacuation Route Eyed for Cove Point Gas Plant*, The Baltimore Sun, Sept. 30, 2014, <http://goo.gl/LBK6qx> [Add.A-131].

CONCLUSION AND RELIEF REQUESTED

For the foregoing reasons, Environmental Petitioners respectfully request that the Court vacate the Rehearing Order and Authorization Order and remand this proceeding to the Commission for compliance with NEPA.

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Final: February 24, 2016

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CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of this Court's order of October 13, 2015, because this brief contains 11,788 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Circuit Rule 32(e)(1). Microsoft Word 2010 computed the word count.

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface (Microsoft Word 2010 Times New Roman) in 14 point font.

This brief has been scanned for viruses and is virus free.

Dated: February 24, 2016

/s/ Moneen Nasmith

CERTIFICATE OF SERVICE

I hereby certify that on February 24, 2016, I served a true and correct copy of the foregoing Final Brief of Petitioners EarthReports, Inc., Sierra Club, and Chesapeake Climate Action Network on all registered counsel via the electronic filing system of the U.S. Court of Appeals for the D.C. Circuit.

/s/ Moneen Nasmith