
Nos. 15-1127 & 15-1205 (Consolidated)

**In the United States Court of Appeals
for the District of Columbia Circuit**

EARTHREPORTS, INC., *et al.*,
Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION,
Respondent.

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

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

Anne Havemann
Chesapeake Climate Action Network
6930 Carroll Ave, Suite 720
Takoma Park, Maryland 20912
240-396-1981
anne@chesapeakeclimate.org
*Counsel for Petitioner Chesapeake
Climate Action Network*

February 10, 2016
Final: February 24, 2016

Deborah Goldberg
Moneen Nasmith
Earthjustice
48 Wall St., 19th Floor
New York, New York 10005
212-845-7376
dgoldberg@earthjustice.org
mnasmith@earthjustice.org
*Counsel for Petitioners
EarthReports, Inc. and Sierra Club*

CONTENTS

Table of Authorities	ii
Glossary.....	vi
Statutes and Regulations	viii
Summary of Argument	1
Argument.....	4
I. FERC Violated NEPA by Failing to Consider Indirect Impacts of Project-Induced Gas Development.	4
A. The Project Is a Legally Relevant Cause of New Gas Development.	4
B. The Environmental Impacts of Gas Development Caused by the Project Are Reasonably Foreseeable.	9
II. Under NEPA, the Commission Should Have Examined the Project’s Direct and Indirect GHG Emissions and Life-Cycle Climate Impacts.	12
III. FERC’s Dependence on a Deficient State Agency Evaluation of Ballast Water Impacts Violates NEPA.	18
IV. NEPA Requires Updated Analysis of Impacts on Endangered Whales, When Changed Circumstances Undermine Earlier Conclusions.....	20
V. The Commission Failed Adequately to Analyze the Context and Intensity of the Project’s Safety Impacts.	22
Conclusion and Relief Requested	24
Certificate of Compliance	25
Certificate of Service	26

TABLE OF AUTHORITIES

	Page(s)
Court Cases	
<i>Barnes v. U.S. Dep’t of Transp.</i> , 655 F.3d 1124 (9th Cir. 2011)	11
<i>Calvert Cliffs’ Coordinating Comm. v. Atomic Energy Comm’n</i> , 449 F.2d 1109 (D.C. Cir. 1971).....	5, 24
<i>Coal. for Canyon Pres. v. Bowers</i> , 632 F.2d 774 (9th Cir. 1980)	13
<i>Coal. for Responsible Growth & Res. Conservation v. FERC</i> , 485 F. App’x 472 (2d Cir. 2012)	6
<i>Colo. Wild Horse & Burro Coal. v. Jewell</i> , No. 15-cv-01454 (CRC), 2015 WL 5442639 (D.D.C. Sept. 15, 2015)	21
<i>Ctr. for Biological Diversity v. Nat’l Hwy. Traffic Safety Admin.</i> , 538 F.3d 1172 (9th Cir. 2008)	16
<i>Cuomo v. U.S. Nuclear Reg. Comm’n</i> , 772 F.2d 972 (D.C. Cir. 1985).....	21
<i>Dep’t of Transp. v. Public Citizen</i> , 541 U.S. 752 (2004).....	4
* <i>High Country Conservation Advocates v. U.S. Forest Serv.</i> , 52 F. Supp. 3d 1174, 1197 (D. Colo. 2014)	12, 13, 17
<i>Kentuckians for the Commonwealth v. U.S. Army Corps of Eng’rs</i> , 746 F.3d 698 (6th Cir. 2014)	6

* Authorities upon which we chiefly rely are marked with asterisks.

<i>League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Connaughton</i> , No. 3:12-cv-02271-HZ, 2014 WL 6977611 (D. Or. Dec. 9, 2014), <i>appeal pending</i> No. 15-35427 (9th Cir. filed May 29, 2015).....	17
<i>Mid States Coal. for Progress</i> , 345 F.3d 520, 549 (8th Cir. 2003)	13
<i>Myersville Citizens for a Rural Cmty, Inc. v. FERC</i> , 783 F.3d 1301 (D.C. Cir. 2015).....	6
<i>N. Plains Res. Council v. Surface Transp. Bd.</i> 668 F.3d 1067 (9th Cir. 2011)	19
<i>Ocean Advocates v. U.S. Army Corps of Eng’rs</i> , 402 F.3d 846 (9th Cir. 2004)	23
<i>Ohio Valley Envtl. Coal. v. Aracoma Coal Co.</i> , 556 F.3d 177 (4th Cir. 2009)	6
<i>Or. Natural Res. Council Fund v. Brong</i> , 492 F.3d 1120 (9th Cir. 2007)	6
<i>Pennaco Energy, Inc. v. U.S. Dep’t of Interior</i> , 377 F.3d 1147 (10th Cir. 2004)	20
<i>Sylvester v. U.S. Army Corps of Eng’rs</i> , 884 F.2d 394 (9th Cir. 1980)	8
<i>Theodore Roosevelt Conservation Partnership v. Salazar</i> , 616 F.3d 497 (D.C. Cir. 2010).....	21
<i>Town of Barnstable v. Fed. Aviation Admin.</i> , 740 F.3d 681 (D.C. Cir. 2014).....	5
<i>Wabash Valley Power Ass’n, Inc. v. FERC</i> , 268 F.3d 1105 (D.C. Cir. 2001).....	11
Statutes and Regulations	
Natural Gas Act, 15 U.S.C. § 717b.....	4, 5, 6
40 C.F.R. § 1502.9	21
40 C.F.R. § 1508.27	23

Other Authorities

* CEQ, <i>Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews</i> , 79 Fed. Reg. 77,802 (Dec. 24, 2014)	15, 16
Dep't of Energy, <i>Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States</i> (Aug. 2014), available at http://goo.gl/hcAz2h	14
Dep't of Energy, <i>Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States</i> (May 29, 2014), available at http://goo.gl/nKW04I	14
Dep't of Energy, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export LNG by Vessel from the Cove Point LNG Terminal to Non-Free Trade Agreement Nations, FE Docket No. 11-128-LNG (Sept. 11, 2013)	17
Envtl. Def. Fund et al., <i>Frequently Asked Questions, The Cost of Carbon</i> , http://costofcarbon.org/faq (last visited Feb. 8, 2016)	15
* EPA, <i>Comments on the Draft Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act</i> , FERC Docket AD16-3, Accession No. 20160120-5026	2, 14, 16
Fed. R. App. P. 28(j)	11
Interagency Working Group on Social Cost of Carbon, <i>Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis</i> (Feb. 2010), https://goo.gl/jvoAVp	16
* <i>KeySpan LNG, LP</i> , 112 FERC ¶ 61,028 (July 5, 2005)	5, 6, 9
Letter from Earthjustice to FERC under CP13-113, Accession No. 20140219-5145 (Feb. 19, 2014)	10
N.Y. Dep't of Env'tl. Conserv., <i>Final Supplemental Generic Environmental Impact Statement</i> (May 13, 2015), available at http://goo.gl/juW9nE	10

Pa. Dep't of Env'tl. Prot., http://www.dep.pa.gov/	10
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)	7, 10
U.S. Coast Guard, <i>USCG BWM Vessel Extension Requests</i> , https://homeport.uscg.mil/mycg/portal/ep/home.do	19

GLOSSARY

Authorization Order	Order Granting Section 3 and Section 7 Authorizations, <i>Dominion Cove Point LNG, LP</i> , 148 FERC ¶ 61,244 (Sept. 29, 2014)
CEQ	Council on Environmental Quality
CEQ Guidance	CEQ, <i>Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews</i> , 79 Fed. Reg. 77,802 (Dec. 24, 2014)
Dominion	Dominion Cove Point LNG, LP
Dominion Brief	Initial Brief for Intervenors Dominion Cove Point LNG, LP and Statoil Natural Gas, LLC
EIS	Environmental Impact Statement
Environmental Addendum	U.S. Department of Energy, <i>Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States</i> (2014)
Environmental Petitioners	Petitioners EarthReports, Inc. (dba Patuxent Riverkeeper), Sierra Club, and Chesapeake Climate Action Network
Environmental Petitioners' Brief	Joint Brief of Petitioners EarthReports, Inc, Sierra Club, and Chesapeake Climate Action Network
EPA	Environmental Protection Agency
EPA Guidance Comments	EPA, <i>Comments on the Draft Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act</i> , FERC Docket AD16-3, Accession No. 20160120-5026 (Jan. 20, 2016)
FERC or the Commission	Federal Energy Regulatory Commission

FERC Brief	Brief of Respondent Federal Energy Regulatory Commission
Greenhouse Gas Report	U.S. Department of Energy, <i>Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States</i> (2014)
LNG	Liquefied Natural Gas
MDE	Maryland Department of the Environment
NEPA	National Environmental Policy Act
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)

STATUTES AND REGULATIONS

Except for the following, all applicable statutes and regulations are contained in the Addendum to the Environmental Petitioners' Brief.

40 C.F.R. § 1502.9: Draft, final, and supplemental statements

...

(c) Agencies:

(1) Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

SUMMARY OF ARGUMENT

Since northeastern shale gas development exploded in 2008, a raft of new tools, models, and studies has been published offering methodologies for estimating gas production induced by liquefied natural gas (“LNG”) export approvals, environmental impacts of gas production in the Northeast, environmental impacts of LNG export, greenhouse gas emissions from LNG export facilities, and climate impacts of greenhouse gas emissions. In their briefs, the parties have referred to at least ten of those resources. The Federal Energy Regulatory Commission (“FERC” or the “Commission”) has declined to use any of them in its environmental review of the Cove Point LNG export facilities (“Project”).

In addition, Environmental Petitioners have called to FERC’s attention extensive factual evidence relevant to Project impacts.¹ The record provides a concrete picture of who will produce gas for liquefaction, what volumes will be transported to Cove Point, where the wells supplying the gas will be located, when gas delivery will start and for how long it will last, and why Project-induced gas production can be expected to cause significant adverse environmental impacts. The record shows the legal relationships among the producers, Dominion Cove

¹ “Environmental Petitioners” are EarthReports, Inc. (dba Patuxent Riverkeeper); Sierra Club; and Chesapeake Climate Action Network.

Point LNG, LP (“Dominion”), and the shippers linked together in what Dominion calls the three-step “process of exporting natural gas.” Initial Brief for Intervenor Dominion Cove Point LNG, LP and Statoil Natural Gas, LLC (“Dominion Brief”) at 3. FERC has declined to investigate these facts.

The foregoing resources and information show that the upstream gas production impacts and life-cycle climate impacts of the liquefaction facility are caused by FERC’s Project approval and are reasonably foreseeable, but the Commission has not previously analyzed such impacts, and it does not see why it should do so now. *See* Brief of Respondent Federal Energy Regulatory Commission (“FERC Brief”) at 37, 50–52. Even if the Commission’s prior practice could have been considered reasonable in times past, the new resources and information now available mean that old routines no longer comply with the National Environmental Policy Act (“NEPA”). It is time for FERC to face the 21st century and to begin analyzing the indirect effects and climate impacts of its projects, as the Environmental Protection Agency (“EPA”) repeatedly has recommended.²

² The most recent request appears in EPA’s Comments on the Draft Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act (“EPA Guidance Comments”), <http://elibrary.ferc.gov/idmws/search/fercadvsearch.asp> (enter Accession Number 20160120-5026) (Jan. 20, 2016).

FERC's resistance to EPA stands in stark contrast with its eager abdication to state and local agencies regulating water quality and public safety. *See* FERC Brief at 59–60 (relying on unsupported comment by Maryland Department of Environment (“MDE”) that ballast water management regulations will be in place in time for the Project); *id.* at 66 (deferring to unverified Calvert County Department of Public Safety assessment of evacuation route). The Commission also readily “tiers” off of its own old studies, *see id.* at 62 (relying on studies of the North American right whale from 2006 and 2009), notwithstanding materially changed circumstances since then, even as it refuses to rely on timelier LNG export studies that could be adapted to the specific facts of the Project. The inconsistencies in FERC's reasoning, combined with its fierce defense of business as usual, highlight the arbitrary and capricious nature of its significance determinations. For all of the foregoing reasons, the Court should vacate the Project approval and direct FERC to prepare a coherent and scientifically defensible environmental impact statement (“EIS”).

ARGUMENT

I. FERC Violated NEPA by Failing to Consider Indirect Impacts of Project-Induced Gas Development.

FERC contends that the environmental effects of Project-induced increases in Marcellus shale gas production are not indirect impacts under NEPA, because the effects are neither “sufficiently causally related” to the Project nor reasonably foreseeable. FERC Brief at 32–33. Dominion argues that FERC’s action cannot be the legally relevant cause of induced production and its adverse effects, because the Commission has “no authority to prevent or regulate the impact.” Dominion Brief at 9 (citing *Dep’t of Transp. v. Public Citizen*, 541 U.S. 752, 758–59 (2004)). FERC and Dominion also claim that the effects of any production that *is* caused by the Project need not be disclosed, because “the record still ‘lacks’ sufficient specificity for a meaningful analysis of potential impacts.” FERC Brief at 42; *see* Dominion Brief at 9–10. As is explained below, both arguments fail.

A. The Project Is a Legally Relevant Cause of New Gas Development.

This case contrasts markedly with *Public Citizen*, where the agency “ha[d] no ability to prevent a certain effect due to its limited statutory authority.” 541 U.S. at 770. It is undisputed that FERC has “the exclusive authority to approve *or deny* an application for the siting, construction, expansion, or operation of an LNG terminal.” 15 U.S.C. § 717b(e)(1) (emphasis added). FERC could have decided,

for instance, that it is too risky for a residential community to rely on a sound barrier for protection against catastrophic explosions directly across the street and, on that basis, could have found that Project location “will not be consistent with the public interest.” 15 U.S.C. § 717b(a); *see KeySpan LNG, LP*, 112 FERC ¶ 61,028, ¶ 3 (July 5, 2005) (denying application for LNG import terminal for safety reasons). Had FERC done so, the Project would not be built, and the gas would not come from the Marcellus shale for liquefaction at Cove Point.

FERC thus has the authority to prevent the impacts of gas development required for the Project. To prevent the environmental harm caused by that extraction, the Commission does not need the power to regulate gas production, because exercising the authority that FERC *does* have—to “deny an application for the siting, construction, expansion, or operation of an LNG terminal”—will prevent the harmful *effect*.³ When an agency has statutory authority to prevent the relevant effects—as FERC does with respect to the impacts of Project-induced gas

³ NEPA recognizes that other agencies may have the authority to regulate discrete parts of a process having environmental effects, but the regulatory overlap does not excuse the lead agency—FERC in this case—from examining the direct, indirect, and cumulative impacts of a project. *See Calvert Cliffs’ Coordinating Comm. v. Atomic Energy Comm’n*, 449 F.2d 1109, 1123 (D.C. Cir. 1971). Unlike in *Town of Barnstable v. Fed. Aviation Admin.*, 740 F.3d 681, 691 (D.C. Cir. 2014), FERC is not being asked to duplicate the NEPA review in another EIS for the same project.

production—“*Public Citizen’s* limitation on NEPA does not apply.”⁴ *Or. Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1134 n. 20 (9th Cir. 2007).⁵

FERC’s statutory authority to deny an application for siting, construction, or operation of an LNG export terminal is plain from its own action in *KeySpan LNG*. There, the Commission denied an application to convert an LNG storage facility into a terminal capable of receiving LNG from ships, even though Department of Energy authorization already had been obtained for “much of the LNG” planned for import. 112 FERC at ¶ 61,234–61,235, ¶ 11 & n. 12. The Natural Gas Act does not distinguish between import and export facilities in granting FERC authority to grant or deny approval of LNG terminals. *See* 15 U.S.C. § 717b(e). If

⁴ The coal mining cases on which Dominion chiefly relies, *see Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177 (4th Cir. 2009); *Kentuckians for the Commonwealth v. U.S. Army Corps of Eng’rs*, 746 F.3d 698 (6th Cir. 2014), are inapposite, because Environmental Petitioners are not attempting to turn gas production “into a Federal action,” 556 F.3d at 196 (internal quotation marks omitted); nor are they seeking duplicative analysis of state action under a federally delegated program that already requires coordinated review, *see id.* They are not claiming that production is part of the federal action under FERC’s jurisdiction but rather that, because FERC can prevent the effects of production—which is *neither* subject to the federal standards of a delegated program *nor* part of coordinated environmental review—NEPA requires analysis of those indirect Project effects.

⁵ FERC chiefly relies on two cases in support of their causality arguments, but the claims and facts in both are distinguishable. *See Myersville Citizens for a Rural Cmty, Inc. v. FERC*, 783 F.3d 1301, 1326 (D.C. Cir. 2015) (rejecting segmentation claim); *Coal. for Responsible Growth & Res. Conservation v. FERC*, 485 F. App’x 472 (2d Cir. 2012) (rejecting claim that effects of gas development must be considered in cumulative impact analysis of pipeline, when there was no record evidence that pipeline would do more than improve the flow of existing supplies).

the Commission uses that authority to approve the Project, and producers expand gas production for liquefaction customers, NEPA requires that FERC evaluate the environmental impacts of that induced development.

The facts disclosed about the contract between Cabot Oil and Gas Corporation and liquefaction customer Pacific Summit Energy, *see* Environmental Petitioners' Brief at 19 & n. 40, belie FERC's argument that the causal connection between Project approval and the impacts of induced gas production "is not sufficiently 'close' to warrant further analysis in the NEPA document."⁶ FERC Brief at 35. Without approval of Project operation, the producer has no legal obligation to extract gas for the shipper—and the gas stays in the ground. FERC's approval therefore is more than a "but for" cause of gas development; it is the legal

⁶ *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) (reporting an agreement with Pacific Summit Energy, "under which Cabot has agreed to sell ... natural gas from its Marcellus Shale position for a term of 20 years commencing on the in-service date of the Dominion Cove Point LNG liquefaction project") [JA 243-44]. Dominion claims that FERC had no way to obtain a copy of the contract from Cabot, to confirm the "commercially sensitive information" in the press release, because "Cabot was not a party to the proceedings." Dominion Brief at 21. Cabot is a party in the Atlantic Sunrise Project proceeding, FERC Docket No. CP15-138, as the holder of a precedent agreement for transportation of the gas to be liquefied at Cove Point.

catalyst for Cabot's extraction.⁷ Because extraction and liquefaction are “two links of a single chain,” *Sylvester v. U.S. Army Corps of Eng'rs*, 884 F.2d 394, 400 (9th Cir. 1980); *see* Dominion Brief at 3 (describing extraction, liquefaction, and shipping as the three steps in the “process of exporting natural gas”), FERC must analyze the environmental effects of induced gas development.

Analyzing the impacts of induced development satisfies NEPA's rule of reason. Environmental Petitioners are not asking for a “boundless analysis,” FERC Brief at 47, with “no logical stopping point,” Dominion Brief at 16. They are seeking evaluation of clearly defined and significant impacts of induced development that is legally contingent on FERC's approval—impacts that FERC has the power to prevent and certainly could estimate, if only it would use readily available resources.⁸ That estimate could—and should—be meaningful to FERC's

⁷ Contrary to the American Petroleum Institute's claim, there is no 20-year supply of gas waiting for export from the Project—except in the sense that reserves remain “available” underground. Brief for Respondent-Intervenor American Petroleum Institute at 8. Cabot will tap those reserves, if and when the Project commences operation. Even FERC is “[f]ar from asserting that the Project will have no effect on production.” FERC Brief at 35 (internal quotation marks omitted). That Project-induced increase in production will have environmental impacts subject to NEPA review.

⁸ Dominion's suggestion that impacts on communities in the shale region that will supply a trillion cubic feet of gas to the Project are no different from the impacts attributable to the use of a few pencils, *see* Dominion Brief at 16, says more about the company's disdain for people suffering from the effects of production than it does about the validity of Environmental Petitioners' indirect impacts claim.

decision, even though the Commission cannot regulate the development. *See KeySpan*, 112 FERC ¶ 61,028, ¶¶ 54, 58 (disapproving LNG project as unsafe, even though it was grandfathered under safety regulations promulgated by the Department of Transportation, and even though FERC lacked jurisdiction to regulate the design and operation of LNG facilities).

B. The Environmental Impacts of Gas Development Caused by the Project Are Reasonably Foreseeable.

According to FERC, even if Cabot “will produce gas in the Marcellus shale region to supply its contract with the export customer, the record still ‘lacks sufficient specificity for a meaningful analysis of potential impacts.’” FERC Brief at 42 (quoting Order Granting Section 3 and Section 7 Authorizations, *Dominion Cove Point LNG, LP*, 148 FERC ¶ 61,244, ¶ 233 (Sept. 29, 2014) (“Authorization Order”) [JA 690]). Information in FERC’s own dockets or readily available on other governmental websites discloses: (1) how much Cabot will supply daily for liquefaction at Cove Point; (2) that the commencement and duration of Cabot’s gas sales coincides exactly with the Project’s in-service date and 20-year term; (3) what pipeline will be used for transport; (4) where Cabot’s wells are located and whether they are active; (5) production volumes at those wells over time; (6) Cabot’s commitments to other customers; (7) the typical impacts of well development, assuming regulatory compliance; and (8) the additional impacts of

Cabot's wells, given its record of environmental violations.⁹ With that specific information to augment models and governmental studies estimating how much new production generally is required for LNG export, the nature and extent of impacts from Project-induced development are anything but "speculative." FERC Brief at 42 ("[T]he source of the gas to be exported is speculative.").

FERC's refusal in the past to analyze the impacts of induced gas development, *see* FERC Brief at 37, does not excuse the Commission from its obligation to do so in this case. FERC should not be allowed to complain that "the parties have cited no 'modeling software that forecasts when, where, and how['] gas development attributable to the Liquefaction Project will occur," FERC Brief at 45 (quoting Order Denying Rehearing and Stay, *Dominion Cove Point LNG, LP*, 151 FERC ¶ 61,095, ¶ 37 (May 4, 2015) ("Rehearing Order") [JA 848]), when Environmental Petitioners have cited alternative sources for all of that information.

⁹ *See* Press Release, *supra* note 6 [JA 243-44]; Pa. Dep't of Env'tl. Prot., <http://www.dep.pa.gov/> (website with well status, operators, and maps; production reports; and violation data); Letter from Earthjustice to FERC under CP13-113, Accession No. 20140219-5145 (Feb. 19, 2014) (providing information about Cabot's well locations, production declines, customer commitments, and environmental compliance) [JA 230-62]; Environmental Petitioners' Brief at 18-23 & nn. 40-54 (providing citations); *id.*, Add. A-97 (N.Y. Dep't of Env'tl. Conserv., Final Supplemental Generic Environmental Impact Statement (May 13, 2015), *available at* <http://goo.gl/juW9nE>). That "the Project approval [was] not tied to assumptions concerning potential gas supply," FERC Brief at 43, is irrelevant. No "assumptions" about the source are needed. FERC simply has to face the documented facts.

“While ‘foreseeing the unforeseeable’ is not required, an agency must use its best efforts to find out all that it reasonably can.” *Barnes v. U.S. Dep’t of Transp.*, 655 F.3d 1124, 1136 (9th Cir. 2011) (internal quotation marks omitted).

Nor can FERC rely on its limited analysis of indirect impacts in the Constitution pipeline proceeding to support its claim that assessment of the effects of Project-induced gas development would not “meaningfully” inform the Commission’s decision.¹⁰ FERC Brief at 27; *see id.* at 43–44 (noting that FERC did nothing more than estimate the acreage that “might hypothetically be impacted” by increased gas production). With all of the information available to FERC in this proceeding, it is possible to do more than estimate acreage in the Marcellus region potentially affected by Cabot’s increased production. The significant water, air, ecosystem, and community impacts caused by the induced drilling and completion of wells in Susquehanna County also can be—and should be—described. The public clamor and EPA’s requests for analysis of those effects

¹⁰ Dominion asks this Court to disregard the final EIS for the Constitution pipeline, because Environmental Petitioners did not cite it in the Request for Rehearing of *EarthReports, Inc. et al.*, CP13-113-001 (Oct. 15, 2014) (“Rehearing Request”). *See* Dominion Brief at 20. FERC released that EIS on October 24, 2014, nine days *after* the Rehearing Request was filed with a clear request for indirect impact review. The case invoked by Dominion bars consideration of new *claims* on appeal, *see Wabash Valley Power Ass’n, Inc. v. FERC*, 268 F.3d 1105, 1114 (D.C. Cir. 2001), not the citation of a new authority supporting a properly raised claim. New authorities may be cited even after oral argument. *See* Fed. R. App. P. 28(j).

demonstrate how meaningful that description could be. Only by ignoring them can FERC conclude that the Project will have no significant impacts.

II. Under NEPA, the Commission Should Have Examined the Project's Direct and Indirect GHG Emissions and Life-Cycle Climate Impacts.

FERC declines to estimate (1) the greenhouse gas emissions of the upstream Project-induced gas development or the downstream shipping and combustion of LNG liquefied at Cove Point or (2) the climate impacts of the Project's life-cycle greenhouse gas emissions, including those directly from the liquefaction facilities. *See* FERC Brief at 49–52. In defense of its refusal to estimate indirect greenhouse gas emissions, the Commission invokes the myth of “perfect substitution,” *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1197 (D. Colo. 2014)—the idea that exactly the same amount of gas will be produced and consumed regardless of whether FERC opens up a new market for nearly seven trillion cubic feet of Marcellus shale gas.¹¹ *See* FERC Brief at 49–50. To justify its refusal to estimate climate impacts, it attacks the social cost of carbon and considers no alternative tool. *See id.* at 52–53. The Commission's arguments deserve no credence.

¹¹ Environmental Petitioners already have addressed FERC's additional arguments, *see* FERC Brief at 49–50, that all upstream production is “speculative” and that FERC is entitled to do now what it has done in the past. *See infra* Point I(B).

There is no evidence in the record to support FERC's claim that Marcellus shale gas production would "occur anyhow" at exactly same pace, *see Coal. for Canyon Pres. v. Bowers*, 632 F.2d 774, 782 & n.3 (9th Cir. 1980), even if the Project were disapproved.¹² *See Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (rejecting the argument as "illogical at best"). Because domestic prices have plummeted, it is more profitable for Dominion's customers to buy Marcellus gas for liquefaction and then ship the LNG half way around the world than to obtain fuel from closer foreign sources. If the Project goes into service, the "additional supply [induced in the Marcellus] will impact the demand for [gas] relative to other fuel sources, and [gas] that otherwise would have been left in the ground will be burned." *High Country*, 52 F. Supp. 3d at 1198.

FERC attempts to avoid estimating the Project's indirect greenhouse gas emissions by conflating them with their climate impact. Those "reasonably foreseeable" emissions can be calculated, even if the climate impact of the Project

¹² The same point applies to FERC's claim about downstream combustion. *See* FERC Brief at 49.

is “less certain.”¹³ *Id.* Moreover, Environmental Petitioners have not asked FERC to analyze climate change impacts ““specific to the [Project] locale”” or to ““describe *with particularity* how the project would contribute to overall climate change,”” as the Commission insinuates. FERC Brief at 52 (emphasis added) (quoting, respectively, *Barnes*, 655 F.3d at 1139–40, and *WildEarth Guardians v. U.S. Forest Serv.*, 828 F. Supp. 1223, 1240 (D. Colo. 2014) (emphasis added)). Rather, Environmental Petitioners consistently have suggested that FERC employ the “social cost of carbon” tool, *or another instrument of its choice*, to estimate the climate impacts of the Project’s direct and indirect greenhouse gas emissions.¹⁴

¹³ See Comment of Sierra Club, et al. under CP13-113, re. EA, 56–60 & nn. 228–40 (June 16, 2014) (calculating life-cycle emissions) [JA 570-74]. Alternatively, to analyze greenhouse gas implications of particular projects, FERC could adapt the methodologies used in two Department of Energy reports, see *Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* (Aug. 2014) (“Environmental Addendum”), available at <http://goo.gl/hcAz2h>; *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States* (May 29, 2014) (“Greenhouse Gas Report”), available at <http://goo.gl/nKWo4I>. See EPA Guidance Comments at 3 (noting possibility of adaptation).

¹⁴ EPA agrees that a “methodology exists to determine how an individual project’s incremental contribution to [greenhouse gases] would translate into physical effects on the global environment.” EPA Guidance Comments at 2. EPA also endorsed Environmental Petitioners’ request for a life-cycle analysis, noting that the discussion of [greenhouse gas] emissions from gas infrastructure projects, including LNG terminals, “should include emissions associated with the production, transport, and combustion of the natural gas.” *Id.*

The social cost of carbon is widely used both in the U.S. and abroad to monetize the climate impacts of greenhouse gas emissions.¹⁵ The Council on Environmental Quality (“CEQ”) recognizes that “the Federal social cost of carbon ... offers a harmonized, interagency metric that can provide decisionmakers and the public with some context for meaningful NEPA review.”¹⁶ Although the CEQ issued the guidance before FERC denied rehearing, the Commission chose not to use the social cost of carbon—or any other tool—to evaluate the climate impacts of the Project’s life-cycle greenhouse gas emissions. FERC simply provided no evaluation at all.

The Commission’s explanation for refusing to use the social cost of carbon cannot withstand scrutiny under NEPA. First, the fact that there is no consensus on the discount rate, *see* FERC Brief at 52, can be accommodated by presenting values calculated with the full range of rates, as the inter-agency developer of the

¹⁵ *See* Env’tl. Def. Fund et al., *Frequently Asked Questions, The Cost of Carbon*, <http://costofcarbon.org/faq> (last visited Feb. 8, 2016) (noting use of the tool in domestic and foreign rulemakings, corporate financial planning, and a utility ratemaking).

¹⁶ *See Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, 79 Fed. Reg. 77,802, 77,827 (Dec. 24, 2014) (“CEQ Guidance”).

tool recommended.¹⁷ FERC also could have disclosed the limitations of the tool, as CEQ recommends, instead of completely omitting a climate impact analysis for direct and indirect Project emissions.¹⁸ *See Ctr. for Biological Diversity v. Nat'l Hwy. Traffic Safety Admin.*, 538 F.3d 1172, 1201 (9th Cir. 2008) (noting that a National Academy of Sciences committee “acknowledged the wide range of values” but nevertheless selected one). Second, it is unclear what FERC means in complaining that “the tool does not measure the actual incremental impacts of a project,” FERC Brief at 53, because the tool’s cost estimate would be based on the volume of greenhouse gases emitted directly and indirectly from the Project. Third, FERC suggests that the tool is useless because there are “no established criteria” for determining the significance of monetized impacts, *id.*, but the tool need not be used for that purpose. The significance determination could have been based on the pre-monetized volume of direct and indirect greenhouse gas emissions, except that the Commission refused to estimate them.¹⁹ Finally, FERC has never explained why it refused to do any climate impact analysis for the Project—using the social cost of carbon or some other acceptable methodology—

¹⁷ Interagency Working Group on Social Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis* 17–23 (Feb. 2010), <https://goo.gl/jvoAVp>.

¹⁸ *See* CEQ Guidance, *supra* note 16, at 77,827.

¹⁹ *See* EPA Guidance Comments, *supra* note 2, at 3.

when it admits having done so at least to some extent in the Jordan Cove LNG export proceeding.²⁰ *See id.* at 51.

Finally, FERC contends—for the first time on appeal—that it did not have to analyze the indirect impacts of the Project or its life-cycle greenhouse gas emissions, because the Department of Energy already did so, and the Commission should not be asked to duplicate its work. *See* FERC Brief at 55–56. FERC chides Environmental Petitioners for ignoring two Department reports that in fact they cited to the Commission, *see* Request for Rehearing at 28 n.46 (citing Environmental Addendum) [JA758]; *see id.* at 35 (citing Greenhouse Gas Report) [JA765], and which FERC expressly and summarily dismissed. *See* Rehearing Order ¶¶ 38–39, 56–58 [JA848-49, 856-57]. The post-hoc argument raised in this litigation that the two reports are sufficient to provide the missing analyses, after

²⁰ FERC exploits the bifurcated approval process for LNG terminals to distinguish *High Country*, claiming that the Commission did not attempt to quantify Project benefits and therefore does not have to quantify its costs. *See* FERC Brief at 54. But the Department of Energy *did* quantify the benefits, *see* Department of Energy, Order Conditionally Granting Long-Term Multi-Contract Authorization to Export LNG by Vessel from the Cove Point LNG Terminal to Non-Free Trade Agreement Nations, FE Docket No. 11-128-LNG, 25–29, 137–42 (Sept. 11, 2013), and its delegation to FERC of lead agency authority under NEPA should not be an excuse for a one-sided analysis. Unlike in *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Connaughton*, No. 3:12-cv-02271-HZ, 2014 WL 6977611, *26 (D. Or. Dec. 9, 2014), *appeal pending* No. 15-35427 (9th Cir. filed May 29, 2015), where there was no clear science on the carbon impact of forest thinning, the impact of burning gas is quantifiable in carbon dioxide equivalents—the parameter used in the social cost of carbon.

FERC explicitly found them “too general to assist [it],” *id.* ¶ 58, just highlights the arbitrariness of the Commission’s NEPA review.

III. FERC’s Dependence on a Deficient State Agency Evaluation of Ballast Water Impacts Violates NEPA.

Environmental Petitioners claim that the Project’s invasive species impacts will be significant, because the Coast Guard determined that prior regulations governing ballast water discharge were inadequately protective, and evidence in the record from Dr. Mario Tamburri indicated that replacement regulations will not be implemented by the Project’s in-service date. FERC’s only response to this claim is an appeal to an unsupported contrary statement in comments submitted by the MDE. *See* FERC Brief at 59–60. Because there is no evidence that MDE considered the information provided by Dr. Tamburri, FERC cannot reasonably rely on MDE to defend the Commission’s NEPA analysis.²¹

To secure deference to its arbitrary reliance on MDE, FERC portrays this dispute as a battle of the experts. *See id.* at 60. But the *facts* are at issue here, not the opinions of warring scientists. Neither FERC nor MDE disputes the *fact* disclosed by Dr. Tamburri that, by June 2014, the Coast Guard had not approved a

²¹ Dr. Tamburri filed his letter on June 2, 2014 [JA 504]. MDE filed its comments on June 17, 2014, but the document is dated May 2014 [JA 589], indicating that the agency made no changes in response to the new information supplied by Dr. Tamburri.

single ballast water management system—the prerequisite for timely compliance with the new 2012 regulations.

It is now 2016, and the Coast Guard has granted thousands of compliance extensions for lack of any approved system, the vast majority of which stretch to January 1, 2018—*after* the Project’s in-service date.²² MDE’s assumption in 2014 that new ballast water management system regulations would be effective by 2017 defied the facts then and now; the agency never even acknowledged the absence of any approved management system. FERC’s unquestioning and unexplained reliance on MDE’s unsupported comment therefore is arbitrary and capricious. *See N. Plains Res. Council v. Surface Transp. Bd.* 668 F.3d 1067, 1075 (9th Cir. 2011) (“The agency must ... explain [its] conclusions ... and the reasons it considered the underlying evidence to be reliable.”) (internal quotation marks omitted).

MDE’s statement that “since the project does not entail increased shipping traffic over and above prior approvals, there is no anticipated increased risk of

²² *See* U.S. Coast Guard, *USCG BWM Vessel Extension Requests* (spreadsheet), <https://homeport.uscg.mil/mycg/portal/ep/home.do> (in left-hand menu: click on “Environmental,” click on “Ballast Water Management Program,” click on “Regulations and Policy Documents;” under document list, click on “Extended Compliance Dates - Application, Guidance, and Approved Vessels; under “Supporting Documents,” click on above-entitled spreadsheet) (last visited Feb. 19, 2016).

ballast water introductions” from the Project, FERC Brief at 59, offers FERC no better defense. The increased risk presented by the Project is principally a function of the new *export* capacity, not the number of ships using the facility (which will increase from current levels). Ships calling at the defunct *import* facility neither drew ballast water from overseas nor discharged it into the Chesapeake Bay. By contrast, every vessel using the Project’s *export* services will discharge 16–25 million gallons of foreign-drawn ballast water into the Bay. The Project therefore carries a significantly greater risk of introducing invasive species into domestic waters than the Cove Point facility did in the past. FERC’s reliance on a state agency that failed to appreciate the different water quality implications of LNG import and export is another reason why the Commission’s significance determination fails to meet NEPA’s hard look standard.

IV. NEPA Requires Updated Analysis of Impacts on Endangered Whales, When Changed Circumstances Undermine Earlier Conclusions.

FERC contends that no further analysis is needed of Project impacts on the critically endangered North Atlantic right whale, claiming for the first time to be “tiering” from 2006 and 2009 studies to “exclude from consideration issues that already were decided.” FERC Brief at 62. Tiering is encouraged to avoid unnecessary duplication, but the Commission still must take a “hard look” at the impacts of the Project. *See Pennaco Energy, Inc. v. U.S. Dep’t of Interior*, 377 F.3d 1147, 1156–1157 (10th Cir. 2004). Although agencies need not revisit old

analyses that continue to yield “adequate” results, *Theodore Roosevelt Conservation Partnership v. Salazar*, 616 F.3d 497, 511–12 (D.C. Cir. 2010), tiering is appropriate only “where no new information or circumstances ... convey[] a different picture of the affected environment,” *Colo. Wild Horse & Burro Coal. v. Jewell*, No. 15-cv-01454 (CRC), 2015 WL 5442639, *8 (D.D.C. Sept. 15, 2015) (internal quotation marks omitted).

Reliance on prior environmental studies of the Cove Point terminal violates NEPA because the threats to the whale have changed and increased in the intervening years.²³ Earlier studies did not consider recent evidence of the limited effectiveness of Coast Guard regulations aimed at protecting the whales, threats to the species’ food supply from warming ocean waters, or an increase in area shipping traffic. It is against this new backdrop that FERC is authorizing the Project, and it is within this materially changed context that FERC must conduct its review. At a minimum, it was unreasonable for the Commission not to supplement its outdated analysis to account for the significant new circumstances and information about escalating threats to the North Atlantic right whale. *See* 40

²³ Mitigation measures proposed for the Project cannot eliminate the threats. FERC is correct that Dominion must implement the measures in its Vessel Strike Avoidance Plan, *see* FERC Brief at 63, but they will not work unless they also are binding on tanker operators calling on Cove Point. Many of the provisions of that Plan are mere suggestions to ship operators that do not compel protective navigation practices. *See* Rehearing Request at 24 (contrasting another plan) [JA754].

C.F.R. § 1502.9(c)(1)(ii); *see also Cuomo v. U.S. Nuclear Reg. Comm'n*, 772 F.2d 972 (D.C. Cir. 1985).

V. The Commission Failed Adequately to Analyze the Context and Intensity of the Project's Safety Impacts.

FERC attempts to defend its safety analysis by belittling the scale of the Project. *See* FERC Brief at 15. According to the Commission: “The primary FERC-jurisdictional component of the ... Project is the addition of one liquefaction train, which is a stand-alone unit containing refrigeration compressors that liquefy natural gas.” *Id.* In addition to that “one liquefaction train with a capacity rating of 5.75 million metric tons per annum of LNG,” the facilities include:

- separate pre-treatment units for removal of mercury, carbon dioxide and sulfur, water, and heavy hydrocarbons;
- a power plant with two 65-megawatt steam turbine electrical generators;
- storage vessels for hazardous materials, including flammable refrigerants (propane, ethane), hydrocarbon condensate, and fresh and contaminated amines;
- a truck loading station with pumps for condensate; and
- five spill impoundment basins.²⁴

FERC understates not only the scope of the facilities but also the hazard they present. FERC claims that the 59.5-acre Project site is not unusually small by comparison with the Freeport and Cameron LNG projects (which have operational footprints of 259.7 and 502.2 acres, respectively), *see* Environmental Petitioners'

²⁴ *See* Environmental Assessment at 9–10, 145–46 [JA 285-86, 421-22].

Brief at 13 n.26, because those projects “entail construction of facilities more than twice the size” of the Project. FERC Brief at 64. What FERC fails to mention is that Freeport’s facilities will occupy a site more than *four* times the size of the Project’s 59.5-acre site, and Cameron’s facilities will occupy a site more than *eight* times larger. The intensity of Project development therefore will be substantially greater than that of the two facilities in the Gulf, with a correspondingly intensified risk that one accident could cause a catastrophic chain reaction. FERC’s significance determination cannot withstand scrutiny under NEPA without adequate consideration of that increased intensity. *See* 40 C.F.R. § 1508.27(b) (listing 10 intensity factors, including the degree to which a proposed action affects public safety); *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 865 (9th Cir. 2004) (noting that an EIS may be warranted even when only one intensity factor is met).

FERC cites paragraphs 205 and 206, respectively, of the Authorization Order in defense of its claims that it adequately analyzed the Project’s proximity to residents living directly across the street (far closer than the distance between residential communities and the Freeport or Cameron facilities) and the adequacy of the evacuation route running past the facility entrance. *See* FERC Brief at 66. Paragraph 205 discusses LNG storage tanks and makes no reference to the residential context of the Project. *See* 40 C.F.R. § 1508.27(a) (requiring that

significance determinations account for context). In paragraph 206, FERC cites a letter from the Calvert County Department of Public Safety claiming that the evacuation route is adequate, but there is no evidence that the Commission conducted any analysis of its own. This Court should not condone FERC's abdication of its NEPA obligations to a local agency. *See Calvert Cliffs*, 449 F.2d at 1122 (condemning "abdication of NEPA authority to the standards of other agencies").

CONCLUSION AND RELIEF REQUESTED

For the foregoing reasons, Environmental Petitioners respectfully request that the Court vacate FERC's Orders, stay construction of the Project, and remand this proceeding to the Commission for preparation of an EIS.

Dated: February 10, 2016

Final: February 24, 2016

/s/ Deborah Goldberg _____

Anne Havemann
Chesapeake Climate Action Network
6930 Carroll Ave, Suite 720
Takoma Park, Maryland 20912
240-396-1981
anne@chesapeakeclimate.org
*Counsel for Petitioner Chesapeake
Climate Action Network*

Deborah Goldberg
Moneen Nasmith
Earthjustice
48 Wall St., 19th Floor
New York, New York 10005
212-845-7376
dgoldberg@earthjustice.org
mnasmith@earthjustice.org
*Counsel for Petitioners
EarthReports, Inc. and Sierra Club*

CERTIFICATE OF COMPLIANCE

This Reply Brief complies with the type-volume limitation of this Court's order of October 13, 2015, because this brief contains 5,850 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 Reply 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 Reply 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