Natural Resources Defense Council Riverkeeper Sierra Club

March 16, 2015

Comments filed electronically to Docket No. USCG-2013-0363

U.S. Department of Transportation Docket Management Facility West Building, Ground Floor, Room W12-140 1200 New Jersey Avenue SE Washington, DC 20590-0001

Re: Port Ambrose Deepwater Port Application: Notice of Availability of the Draft Environmental Impact Statement (Docket No. USCG-2013-0363)

Dear Sir or Madame:

The Natural Resources Defense Council (NRDC), Riverkeeper, and the Sierra Club respectfully submit this letter in response to the request for public comments by the Maritime Administration (MARAD) and the U.S. Coast Guard (USCG), on the Draft Environmental Impact Statement (DEIS) prepared under the National Environmental Policy Act (NEPA) for the Deepwater Port License Application submitted by Liberty Natural Gas LLC (Liberty Natural Gas). Liberty Natural Gas proposes to construct, own, and operate the Port Ambrose deepwater port and liquefied natural gas (LNG) terminal in the New York Bight, approximately 16.1 nautical miles southeast of Jones Beach, New York, 24.9 nautical miles east of Long Branch, New Jersey and 27.1 nautical miles from the entrance to New York Harbor.

NRDC is a national non-profit environmental advocacy organization with its headquarters in New York City. NRDC has nearly 119,000 members and e-activists in New York State and over 41,000 members and e-activists in New Jersey. NRDC's top institutional priorities include curbing global warming, building the clean energy future, and protecting our oceans and ocean ecosystems. We are a leading advocate for sustainable and well-sited renewable energy, including the deployment of offshore wind energy off the Atlantic coast. NRDC is actively engaged in supporting clean energy policies across New York State and in New Jersey.

Riverkeeper is a member-supported watchdog organization dedicated to defending the Hudson River and its tributaries and protecting the drinking water supply of nine million New York City and Hudson Valley residents. Riverkeeper is actively involved in litigation, advocacy, and public education surrounding the issue of natural gas production and related infrastructure, particularly because of the potentially adverse impacts on New York State's drinking water supplies.

Founded in 1892, the Sierra Club is the nation's oldest grassroots environmental organization with approximately 600,000 members in all 50 states, including 40,000 members in the State of New York.

The Sierra Club's mission involves promoting the responsible use of the earth's resources and protecting and restoring the quality of the natural and human environments. In view of this mission, the Sierra Club seeks to ensure the availability of safe and reliable energy in a manner that protects human health and promotes a healthy environment.

Our organizations' comments focus on conflicts posed by the Port Ambrose LNG project to an offshore wind electricity project proposed for the same ocean area by the New York Power Authority (NYPA), Long Island Power Authority (LIPA), and Consolidated Edison. The federal government, New York State, and New Jersey should reject the Port Ambrose LNG facility because the facility would prevent or substantially complicate movement forward on what could be New York State's first offshore wind project. The United States, New York State, and the region should be working together to build a clean energy future dominated by renewable energy. It would be the height of irony – and a damaging energy policy – to privilege the construction of a fossil fuel import facility over a much-needed and overdue renewable offshore wind facility that represents a cleaner, healthier future for our children and future generations of New Yorkers.

Our organizations' comments also highlight data gaps and deficiencies within the DEIS, including inadequate analysis of the stated "need and purpose" for the Port Ambrose LNG project. Further, these comments discuss other potential environmental impacts that should be considered in further detail in the final EIS, as well as the appropriate scope for the alternatives analysis.

MARAD and USCG Responsibilities under the Deepwater Port Act

Under the Deepwater Port Act, before a deepwater port license may be issued to an applicant, MARAD must determine that "the construction and operation of the deepwater port will be in the national interest and consistent with national security and other national policy goals and objectives, including energy sufficiency and environmental quality."¹ Thus, the proposed Port Ambrose LNG import facility may only move forward if MARAD and USCG, based on the record, make a finding that the facility is "in the national interest." In the Final EIS, MARAD and USCG should explicitly make a determination whether or not the facility is in the national interest. In doing so, the agencies should consider the likely impacts of an LNG import facility, including continued reliance on greenhouse gas-emitting fossil fuels, the displacement of renewable energy investment and development, and the actual interference with a proposed offshore wind facility. All of these considerations weigh heavily against a finding that the Port Ambrose project is in the national interest.

Furthermore, MARAD and USCG must ensure that the proposed Port Ambrose LNG facility would be "consistent with national security and other national policy goals and objectives, including energy sufficiency and environmental quality." For years, the Obama Administration has made clear that the rapid and responsible development of offshore wind energy is a high priority initiative.² The fact that

¹ 33 U.S.C. § 1503(c)(3).

² DOI, Press Release, Salazar Launches "Smart from the Start" Initiative to Speed Offshore Wind Energy Development off the Atlantic Coast, Nov. 23, 2010, available at <u>http://www.doi.gov/news/pressreleases/Salazar-</u>

the Port Ambrose LNG facility may prevent what could be New York State's first offshore wind project suggests that Port Ambrose would not be consistent with national policy goals and objectives. Similarly, President Obama's Climate Plan and EPA's proposed carbon regulations demonstrate national policy efforts to curb global warming by reducing greenhouse gas emissions. Approving an LNG import facility that may lead to increased greenhouse gas emissions – while also slowing or preventing the development of clean, carbon-free electricity – clearly runs counter to the important national policy goal of reducing greenhouse gas emissions. To ensure compliance with the Deepwater Port Act, MARAD and USCG must disapprove the Port Ambrose LNG facility if the agencies find, as the evidence indicates, that the project would not be in the national interest and would in fact be inconsistent with national policy goals and objectives.

Conflict with the New York Power Authority Offshore Wind Lease Application

In September 2011, NYPA submitted an unsolicited request for a commercial wind lease offshore of New York to the Bureau of Ocean Energy Management (BOEM). NYPA submitted the request on behalf of itself, LIPA, and Con Edison, which together form a public-private entity known as the Long Island-New York City Offshore Wind Collaborative. The proposed Long Island-New York City Offshore Wind Project) would be located in the Atlantic Ocean in a long wedge-shaped area, with its westerly most point approximately 14 nautical miles due south of Nassau County, though its exact proposed location will not be known until the completion of feasibility, environmental and wind-strength studies. As proposed, the project is designed to generate 350 megawatts of clean electricity for the Long Island and New York City region, with the ability to expand generation capacity to as much as 700 megawatts, sufficient to power almost 250,000 homes.³ Our organizations strongly support the NYPA lease application, with appropriate mitigation measures to protect the marine environment and wildlife.⁴

In May 2014, BOEM published a "Call for Information and Nominations" to obtain nominations from companies interested in commercial wind energy leases for the area proposed for the NYPA Offshore Wind Project.⁵ BOEM also published a Notice of Intent to prepare an Environmental Assessment for the

Launches-Smart-from-the-Start-Initiative-to-Speed-Offshore-Wind-Energy-Development-off-the-Atlantic-Coast.cfm; see also DOI, Factsheet on elements of Smart from the Start Initiative, available at http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&PageID=73317 ("A top priority of this Administration is developing renewable domestic energy resources to strengthen the nation's security, generate new jobs for American workers and reduce carbon emissions.").

³ Long Island-New York City Offshore Wind Project, Frequently Asked Questions,

http://www.linycoffshorewind.com/faq.html (last visited Mar. 5, 2015).

⁴ Comments from the Natural Resources Defense Council on the January 4, 2013 Public Notice of an Unsolicited Request for a Commercial OCS Wind Lease, Request for Interest, and Request for Public Comment on a request submitted by the New York Power Authority on behalf of the Long Island-New York City Offshore Wind Collaborative (Mar. 5, 2013), available at <u>http://www.regulations.gov/#!documentDetail;D=BOEM-2012-0083-0023</u> (last visited Jan. 5, 2015).

⁵ BOEM, New York Activities, available at <u>http://www.boem.gov/Renewable-Energy-Program/State-Activities/New-York.aspx</u> (last visited Mar. 16, 2015).

proposed area.⁶ Given that BOEM is moving forward to designate a Wind Energy Area offshore New York and has determined that NYPA is legally, technically, and financially qualified to hold a lease, USCG and MARAD must give due consideration to these developments and the fact that the siting of the proposed Port Ambrose LNG facility would pose a substantial conflict to the successful implementation of the NYPA Offshore Wind Project.

As illustrated by Figure 1⁷ below, the lease area proposed by NYPA consists of a 127 square mile area forming a triangular wedge, the top third of which is located in shallower waters situated closer to New York City and Long Island, with the lower portion located in deeper waters (over 50 meters at the southeastern end) and substantially further from the metropolitan New York region. The upper third of the lease is thus the easiest and least expensive area for offshore wind development, both because, given current technologies, it is easier to build turbines in shallower waters and because areas closer to New York City and Long Island will require shorter transmission cables. The proposed NYPA lease area is also located between two shipping lanes for large vessels traveling to and from the Port of New York and New Jersey. To avoid the risk of collision, the USCG has initially recommended that there should be a minimum setback of one nautical mile between the proposed NYPA Offshore Wind Project and these shipping lanes.⁸

⁶ Id.

⁷ Figure 1 is a map prepared by the Bureau of Ocean Energy Management (BOEM) and submitted as an attachment to its scoping comments on the Port Ambrose Project. See BOEM's Scoping Comments on Port Ambrose Deepwater Port Application, available at <u>http://www.regulations.gov/#!documentDetail;D=USCG-2013-0363-0360</u> (last visited Jan. 7, 2015).

⁸ Potential Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore New York, Request for Interest, 78 Fed. Reg. 760, 761 (Jan. 4, 2013).



New York Proposed Lease Area

The proposed Port Ambrose LNG facility would fall directly inside NYPA's proposed offshore wind lease area. The LNG facility consists of two buoy systems which would receive natural gas from LNG regasification vessels and send the gas via a pipeline to the Transco Lower New York Bay Lateral for delivery to shore. The LNG carriers would deliver an average of 400 million standard cubic feet of natural gas per day.⁹ The Port Ambrose facilities are estimated to receive up to 45 deliveries annually, with deliveries taking between 5 and 16 days to complete.¹⁰ According to BOEM – the federal agency charged with approving and siting offshore wind projects in federal waters – it may be necessary to require a safety zone of 1500 meters (almost a mile) around the buoy system when the LNG carriers are delivering LNG, for the same reason that a significant buffer is recommended for the wind turbines – to avoid collision and navigational risk.¹¹

Figure 1 (Map prepared by BOEM).

⁹ Draft Environmental Impact Statement for the Port Ambrose Project Deepwater Port Application (hereinafter "DEIS"), Port Ambrose Deepwater Port Quick Reference, at xvi.

¹⁰ Id.

¹¹ BOEM, Scoping Comments on Port Ambrose Deepwater Port Application.

The proposed Port Ambrose LNG facility – and the associated exclusion zone for the two buoys and the LNG delivery vessels – would be located in the upper northwestern third of the NYPA lease site – just the area that is likely best suited for turbine construction. Thus, the Port Ambrose facility would not only compete directly with the Offshore Wind Project for lease space – it would do so in the prime area for offshore wind construction, making construction and operation of the offshore wind project as a whole. As BOEM stated in its comments: "the proposal to construct a LNG Port in the same area proposed for a large wind facility could result in serious conflicts – or at the minimum, complicating factors – that may impact the overall viability of one or both projects."¹²

The DEIS does acknowledge that the proposed Port Ambrose location would conflict with the NYPA lease area.¹³ However, it largely avoids analyzing the conflict, citing assessment constraints due to lack of specific details regarding the NYPA Wind Project.¹⁴ The DEIS also assumes that the applicant, Liberty Natural Gas, is correct in its calculations that "the area occupied by the proposed Port itself, including the Safety Zone, [no anchoring areas], and the [areas to be avoided], would eliminate approximately 1 percent of the lease for turbine installation."¹⁵ With the addition of its setback recommendation, Liberty Natural Gas claims that the proposed Port and setbacks between shipping routes and wind turbines would take "approximately 4 percent of the available wind farm area."¹⁶

Elsewhere in the DEIS, the sizes of the likely exclusion zones are clarified. In addition to Liberty Natural Gas's proposed Safety Zone, the USCG would require that the Safety Zone be expanded when the LNG carriers are present and on the buoy.¹⁷ Furthermore, although Liberty Natural Gas proposes that the no anchoring areas (NAAs) and area to be avoided (ATBA) be identical in size, it is common practice for the USCG to require the ATBA to have a radius longer than that of the NAA.¹⁸ Given this information, Liberty Natural Gas appears to be substantially underestimating the exclusion zones likely to put in place around the Port Ambrose facility. These exclusion zones, along with the recommended setbacks, could very well take up more of the Wind Lease Area than Liberty Natural Gas is suggesting.

¹² Id., at 2.

¹³ DEIS, § 5.4.3, at 5-11 "(The proposed Project falls within the proposed area of interest for the wind energy project(s) proposed for offshore New York as described in the Bureau of Ocean Energy Management's (BOEM) Call for Information of May 28, 2014"); § 6.1.1.6, at 6-7 ("Should the Long Island-New York City Offshore Wind Project move forward, the proposed Port Ambrose Project would be located within some of the same lease blocks."). ¹⁴ DEIS, § 5.4.3, at 5-11 ("[B]ecause of the lack of specific wind project details, the assessment is necessarily

constrained in its ability to provide an analysis of the navigational safety risks that operation of the deepwater port may have on a future wind farm siting and operation.").

¹⁵ DEIS, § 6.1.1.6, at 6-7.

¹⁶ Id.

¹⁷ DEIS, § 3.7.1.1, at 3-61. Liberty Natural Gas's proposed Safety Zone would encompass a combined area of approximately 388 acres or 0.6 square mile. When LNG vessels are present, the Safety Zone would be extended by a distance of 2,624 feet.

¹⁸ Id. The NAA would expand the exclusion zone to a radius of 3,281 feet or 2.4 square miles around each buoy. The larger ATBA would further expand the exclusion zone to a radius of 4,101 feet.

Given these concerns, in the Final EIS, MARAD and USCG must take a hard look at the potential conflict between the proposed Port Ambrose LNG facility and the NYPA Offshore Wind Project. The current DEIS does not meet this standard as it makes conclusory assertions like "should both [projects] move forward, risk management strategies would be developed to address the coexistence and simultaneous activities of both projects"¹⁹ and "careful siting would avoid potential impacts."²⁰ In terms of avoiding the conflict, the DEIS only provides some suggestions for risk management strategies, including "simultaneous operations procedures, communications and coordination plans, emergency response plans, LNG carrier tug-assist, and specialized equipment and training as required."²¹ Additional analysis must be done to show the safety and navigational implications of siting Port Ambrose LNG facility in the lease area for the proposed NYPA Offshore Wind Project.

Both Liberty Natural Gas and the DEIS treat the entire lease area as equal for the purposes of offshore wind siting, which is incorrect for the reasons explained above. Moreover, Liberty Natural Gas appears to assume that its project would be the only conflict to be avoided within the entire lease area. Depending on the results of the environmental review process, however, it may well be that other areas within the lease area will be off limits or limited, including areas that may be significant for ecosystem uses, like fishing and other maritime or recreational purposes. Such limitations would heighten the conflict between Port Ambrose and the offshore wind project by further reducing the buildable portion of the lease. MARAD and USCG must consider these limitations more fully in the Final EIS.

Deficiencies and Data Gaps in the Needs Assessment

Under NEPA, a key aspect of a draft EIS is the statement of the underlying purpose and need.²² This statement will inform the basis for identifying the reasonable alternatives that meet the identified purpose and need, often called the "heart of the NEPA analysis."²³ The DEIS prepared for the Port Ambrose LNG import facility states the purpose of licensing LNG deepwater ports is "to provide a reliable and timely supply of natural gas and increase energy diversity, while considering impacts on the environment, safety, and security."²⁴ The identified need is to "distribute the natural gas into the downstate New York City and Long Island markets to meet existing and future demand requirements, particularly during periods of peak winter and summer demand."²⁵

While it is true that downstate New York City and Long Island markets can experience relatively high demand for natural gas during peak periods, this typically only occurs during periods of extreme cold weather, such as the highly publicized "Polar Vortex" of 2014.²⁶ During these times of increased

¹⁹ DEIS, § 5.4.3, at 5-11.

²⁰ DEIS, § 4.8.5.1, at 4-125.

²¹ DEIS, § 5.4.3, at 5-11.

²² CEQ NEPA Regulations, 40 C.F.R. § 1502.13.

²³ CEQ, A Citizen's Guide to the NEPA, 16, available at <u>https://ceq.doe.gov/nepa/Citizens_Guide_Dec07.pdf</u>.

²⁴ DEIS, § 1.0, at 1-3.

²⁵ Id.

²⁶ Denver Nicks, Polar Vortex Sends Natural Gas Prices on Rollercoaster, TIME, Jan. 7, 2014, available at <u>http://science.time.com/2014/01/07/polar-vortex-sends-natural-gas-prices-on-rollercoaster/</u>.

demand, the price of natural gas-driven electricity prices and/or the price of natural gas for heating may spike. Liberty Natural Gas asserts, and the DEIS accepts, that there is an unsatisfied demand for natural gas in the New York City and Long Island markets and that an additional supply of natural gas, in the form of imported LNG, could alleviate Polar Vortex-induced price spikes by providing more natural gas to a constrained market.²⁷ This assertion is unsupported for several reasons.

The DEIS relies on an outdated New York State Energy Plan from 2009, though it cites to the 2014 Draft New York State Energy Plan, for its assertion that there is unsatisfied demand

A significant portion of the "Purpose and Need" section of the DEIS discusses the Natural Gas Outlook for New York.²⁸ In this section, the DEIS makes several conclusions, supposedly relying on the Draft New York State Energy Plan that was released in 2014.²⁹ Oddly, the assertions made in the DEIS are nowhere to be found in the 2014 Draft New York State Energy Plan. Indeed, the 2014 Draft New York State Energy Plan provides information that contradicts the DEIS's analysis of demand for natural gas:

"Another source of the U.S. natural gas supply is from imported LNG. However in 2012, U.S. LNG imports continued to decline with only 175 Bcf received. This is 23 percent of the 2007 levels which were at 771 Bcf. The 2012 annual LNG imports represent less than 1 percent of total U.S. natural gas requirements. The principal reasons for the decline include low domestic natural gas prices that made it difficult to attract LNG cargo to the U.S. Of 12 active U.S. terminals, only Everett LNG in Massachusetts and Elba Island in Georgia received regular LNG cargo throughout the year, albeit with lower frequency than in past years. Both have long-term contracts. Figure 24 illustrates LNG price variations around the world."

"The U.S. domestic production in the lower 48 states has increased with the development of new supply basins, so the need for substantial increased volumes of imported LNG has diminished for the near term. It is anticipated that if natural gas production from Shale basins outstrips demand in the U.S., LNG may be exported from the continental U.S. to Asia or Europe. This could cause price volatility in the future and should be monitored."³⁰

²⁷ ICF International, The Adequacy and Cost of Natural Gas Capacity Serving the New York and New Jersey Energy Market: Lessons from the Polar Vortex Winter of 2013/2014, prepared for Port Ambrose LNG, July 2014, available at <u>http://portambrose.com/wp-content/uploads/2014/07/ICF-NY-NY-Polar-Vortex-Gas-Market-White-Paper-July-</u><u>17-2014-Final.pdf</u> (last visited Mar. 13, 2015).

²⁸ DEIS, § 1.0 Introduction, at 1-6, 1-8.

²⁹ Id. (citing "Draft New York State Energy Plan (NYSEP 2014)").

³⁰ 2014 Draft New York State Energy Plan. Volume 2: Sources, at 79-80, available at <u>http://energyplan.ny.gov/Plans/2014.aspx</u> (last visited Mar. 16, 2015).

The DEIS, despite its citations to the 2014 Draft New York State Energy Plan, is actually relying on outdated information from the **2009** New York State Energy Plan.³¹ The fact that the DEIS is – whether purposefully or accidentally – relying on an outdated report from 2009 raises substantial questions regarding the accuracy of the analysis of the Need and Purpose for the Port Ambrose LNG import facility.

Indeed, as the actual 2014 New York State Energy Plan makes clear and as further explained below, there is substantial evidence that shows the need for imported LNG has diminished and the current trend is for LNG to be exported from the United States.³²

Exports have displaced imports, numerous export facilities have been proposed, and many import facilities remain underutilized

Fourteen onshore LNG export facilities are currently proposed³³ with an additional thirteen potential export terminal sites identified.³⁴ Four export facilities have already received FERC approval.³⁵ One of these approved export facilities is the Dominion Cove Point LNG Terminal, which was originally an import facility but has switched to an export facility.³⁶ A deepwater port applicant, Freeport-McMoRan Energy (Main Pass Energy Hub), has received Department of Energy authorization for LNG exports from its offshore deepwater port.³⁷ The fact that facilities originally intended for importing LNG are switching to exports highlights concerns regarding the accuracy of the DEIS's needs assessment.

In addition to the clear trend toward export facilities, several LNG import facilities have either decommissioned or have not been utilized in recent years. Excelerate's Gulf Gateway Deepwater Port has been decommissioned, notably "due primarily to declining pipeline capacity issues, significant operational challenges, and changes in the global natural gas market."³⁸ Similarly, in July 2013, the Neptune Deepwater Port offshore of Boston, Massachusetts, petitioned for a license amendment (which was granted) to shut down operations for five years. MARAD explained that "…recent conditions within

http://www.fossil.energy.gov/programs/gasregulation/authorizations/2013 applications/Freeport-McMoRan Energy LLC - 13-26-LNG.html.

³¹ 2009 New York State Energy Plan, available at <u>http://energyplan.ny.gov/Plans/2009.aspx</u> (last visited Mar. 16, 2015).

³² 2014 Draft New York State Energy Plan. Volume 2: Sources, at 79-80.

³³ FERC, North American LNG Export Terminals – Proposed, Jan. 5, 2015, available at <u>http://www.ferc.gov/industries/gas/indus-act/lng/lng-export-proposed.pdf</u>.

³⁴ FERC, North American LNG Export Terminals – Potential, Jan. 5, 2015, available at <u>http://www.ferc.gov/industries/gas/indus-act/lng/lng-export-potential.pdf</u>.

³⁵ Maria Gallucci, Feds Approve Fourth LNG Export Terminal Amid Growing Pressure to Cash In On US Energy Boom, International Business Times, Sept. 30, 2014, available at <u>http://www.ibtimes.com/feds-approve-fourth-Ing-</u> <u>export-terminal-amid-growing-pressure-cash-us-energy-boom-1697255</u>.

³⁶ James Polson & Mark Chediak, Dominion Cove Point LNG Terminal Wins Federal Approval, Bloomberg, September 30, 2014, available at <u>http://www.bloomberg.com/news/articles/2014-09-30/dominion-cove-point-</u><u>Ing-terminal-wins-federal-approval</u>.

³⁷ U.S. DOE, Freeport-McMoRan Energy LLC – FE Dkt. No. 13-26-LNG, available at

³⁸ MARAD, Notice of Gulf Gateway Deepwater Port Decommissioning and License Termination, 78 Fed. Reg. 49603 (Aug. 14, 2013), available at <u>http://www.gpo.gov/fdsys/pkg/FR-2013-08-14/pdf/2013-19687.pdf</u>.

the Northeast region's natural gas market had significantly impacted the Neptune Port's operational status and its ability to receive a consistent supply of natural gas imports. As a result, the Neptune Port has remained inactive over the past several years and will likely remain inactive for the foreseeable future."39

Another deepwater port, Excelerate Energy's Northeast Gateway, only received one shipment this winter (December 2014), and this was the first shipment since March 2010.40 While some have questioned whether LNG shipments to Boston's LNG import facilities have reduced peak price spikes in the market this year,⁴¹ experts attribute the increased shipments to an abnormal change in the market, where worldwide LNG prices were unusually low last summer causing producers to enter into futures contracts with the Boston LNG terminals to provide LNG during this winter.⁴²

Given the recent trend of LNG import facilities switching to export facilities, MARAD and USCG should view skeptically the purported need for an LNG import facility offshore of New York. Furthermore, given the significant environmental and economic impacts such conversions may cause, the agencies should clarify that, if the LNG import facility is approved (which it should not be), any future switch to an export facility would require a second full environmental review, with public participation and another opportunity for Governors Cuomo and Christie to exercise their disapproval power under the Deepwater Port Act.43

Price spikes and pipeline capacity would not necessarily be alleviated by an LNG import facility

Even with clear evidence showing increased supply in domestic natural gas and the national trend toward LNG exports – both of which would suggest decreasing natural gas prices – Liberty Natural Gas's application asserts that the Port Ambrose LNG facility could lead to "a \$0.25 to \$6.00 per MMBTu price savings" for New York consumers, relying on a report by ICF International that utilized outdated data.⁴⁴ The 2012 ICF report projected that Henry Hub gas prices "will decline to under \$4.00 per MMBtu (in

³⁹ MARAD. Notice of Amendment of the Neptune LNG LLC Deepwater Port License and Temporary Suspension of Operations at the Neptune LNG Deepwater Port, 78 Fed. Reg. 42587 (July 16, 2013), available at https://www.federalregister.gov/articles/2013/07/16/2013-17052/deepwater-port-license-amendment-of-theneptune-Ing-Ilc-deepwater-port-license-and-temporary.

⁴⁰ Jay Fitzgerald, No quick relief for electricity customers, Boston Globe, Jan. 25, 2015, available at http://www.bostonglobe.com/business/2015/02/25/wholesale-electric-prices-lower-that-expected-butresidential-rates-remain-high/MNwQJa1oERLXr1qJxBxVDO/story.html ("Excelerate Energy of Texas is finally using its \$350 million offshore floating buoy system, which receives natural gas from LNG ships anchored about 13 miles off the coast of Gloucester and transports it via underwater pipelines into the land-based pipeline system. Excelerate's Northeast Gateway Deepwater Port, as the buoy system is known, hadn't been used since 2010; this year it has received one shipment of LNG.").

⁴¹ Tux Turkel, Deliveries of liquefied natural gas take edge off region's supply gap, Press Herald, Feb. 1, 2015, http://www.pressherald.com/2015/02/01/deliveries-of-liquefied-natural-gas-take-edge-off-regions-supply-gap/.

⁴² Rick Margolin, Another LNG Cargo Expected for New England Ahead of Next Week's Cold Snap, Genscape, Jan. 23, 2015, http://www.genscape.com/blog/another-Ing-cargo-expected-new-england-ahead-next-weeks-cold-snap. ⁴³ 33 U.S.C. § 1508. ("The Secretary shall not issue a license without the approval of the Governor of each adjacent

coastal State."). ⁴⁴ Liberty LNG Application, Volume IVb, at 2.

2010 constant dollars) in 2012 and increasing to \$6.00 per MMBtu by 2020 and almost \$7.50 per MMBtu by 2025." $^{\prime\prime45}$

Recent data from the Energy Information Administration (EIA), however, confirms that in 2012, "high natural gas storage inventories[] and high natural gas production that put significant downward pressure on domestic natural gas prices ... contributed to a decrease in natural gas prices at the Henry Hub to about \$2.75 per thousand cubic feet (Mcf) on average in 2012, the lowest level since 1999."⁴⁶ Such low domestic prices would not justify the increased cost of \$2-\$4 per MMBtu on imported LNG (imported LNG is typically \$2-\$4 per MMBtu more than pipeline-delivered natural gas due to costs of the liquefaction process and shipping).⁴⁷

Furthermore, the claim that an offshore LNG import facility would alleviate pipeline capacity in the New York City and Long Island markets does not appear to be adequately supported. The DEIS states that two submerged turret loading buoys would be the receiving connection for the natural gas unloaded from the LNG regasification vessels and delivered to the proposed Mainline, which will then connect to Transco's Lower New York Bay Lateral for delivery to shore.⁴⁸ Because the natural gas will be delivered to an existing pipeline that currently transports about half of the natural gas consumed in New York City, it is not clear that Port Ambrose would provide a new "delivery point."⁴⁹ MARAD and USCG should closely analyze whether Port Ambrose would in fact alleviate pipeline capacity restraints or whether it would merely provide additional supply to an existing pipeline.

Even assuming without conceding that an LNG import facility could relieve heightened demand during these relatively rare occasions, it still does not make financial sense to invest in a facility that will be rarely used, especially when alternatives such as adequate natural gas storage, expanded pipeline capacity, and decreased natural gas demand through energy efficiency measures and increased renewable energy dispatch could also meet this need.⁵⁰ An adequate analysis of the identified need, as

⁴⁵ Liberty LNG Application, Volume IVb, at 11.

⁴⁶ U.S. Natural Gas Imports & Exports 2012, available at

http://www.eia.gov/naturalgas/importsexports/annual/archives/2013/ (last visited Feb. 26, 2015).

 ⁴⁷ FERC, Energy Primer, July 2012, available at <u>http://www.ferc.gov/market-oversight/guide/energy-primer.pdf</u>
("The cost of the LNG process is \$2-\$4 per million British thermal units (MMBtu), depending on the costs of natural gas production and liquefaction and the distance over which the LNG is shipped.").
⁴⁸ DEIS, § 2.0, at 2-1.

⁴⁹ DEIS, § 1.0, at 1-6 (claiming that "[n]ew delivery points at New York City market locations would relieve existing capacity constraints and increase the reliability of the gas system").

⁵⁰ For example, the DEIS, at 2-54, 2-55, recognizes that the Transco Rockaway Delivery Point Project and the Iroquois Eastern Long Island Project are expected to deliver additional natural gas to meet market need and location. See also FERC, Winter 2014-15 Energy Market Assessment, available at <u>http://www.ferc.gov/marketoversight/reports-analyses/mkt-views/2014/10-16-14-A-3.pdf</u> ("The Transco Rockaway Delivery Project will enable Transco to deliver an additional 647 MMcfd into the New York City distribution system, which is fully contracted by local distribution companies. The project will work directly with Transco's 100-MMcfd Northeast Connector Project adding capacity from the mainline at Station 195 near the Pennsylvania-Maryland border to delivery points at Long Island."); ICF International, 2012 Assessment of New York City Natural Gas Fundamentals and Life Cycle Fuel Emissions, 25, available at <u>http://www.nyc.gov/html/om/pdf/2012/icf_natural_gas_study.pdf</u> ("Spectra and

well as Liberty Natural Gas's claim that Port Ambrose would fulfill that need, requires the Final EIS to adequately assess impacts from the following: (1) contracting practices (whether the LNG would be purchased on the spot market or through long-term supply contracts); (2) the effect of increasing domestic gas production; (3) declining natural gas demand due to energy efficiency programs; and (4) declining demand for natural gas-powered electricity due to displacement of natural gas with renewables. The Final EIS developed for Port Ambrose must take a hard look at all of these considerations.

Insufficient Alternatives Analysis

Under NEPA, reasonable alternatives "include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."⁵¹ The alternatives considered in the DEIS prepared for the Port Ambrose LNG facility are limited in scope and most are deemed "outside the scope" of the deepwater port application for Port Ambrose.

For example, regarding the alternative of non-renewable sources of energy that could be used to meet the lower New York and Long Island market's energy needs, the DEIS states that "United States domestically sourced gas is not an alternative energy source for the Port Ambrose project" because the purpose of the "proposed project, as stated in [Liberty Natural Gas's] application, is to supplement U.S. domestic supplies delivered through existing land-based pipelines with natural gas from foreign sources."⁵² Earlier in the DEIS, however, the identified purpose of deepwater port licensing is "to provide a reliable and timely supply of natural gas and increase energy diversity, while considering impacts on the environment, safety, and security."⁵³ Because the appropriate scope of the alternatives analysis largely depends on the stated purpose of the proposed federal action, MARAD and USCG should clarify that the purpose of the proposed federal action is the one supported by the Deepwater Port Act's text, and not the excessively narrow and transparently self-serving purpose put forth by Liberty Natural Gas in its application.

Even where the DEIS does recognize that other alternatives would meet the purpose of the Port Ambrose facility, it dismisses those alternatives by relying on outdated "projections that indicate a continued increase in demands, requiring further expansion and diversification of the natural gas supply."⁵⁴ For example, although the completion of Spectra Energy's New Jersey-New York Expansion Project would meet the same need as an LNG import facility by improving "reliability and diversity of gas supplies for the region," the DEIS concludes that the need for Port Ambrose would still not be satisfied

⁵¹ CEQ, A Citizen's Guide to the NEPA, 16, available at <u>https://ceq.doe.gov/nepa/Citizens_Guide_Dec07.pdf</u>.

Williams expansions into Transco Zone 6-NY, which also interconnect with New York City LDCs, will alleviate gas pipeline constraints and reduce gas prices in the region relative to Henry Hub.").

⁵² DEIS, § 2.2.3.1, at 2-51.

⁵³ DEIS. § 1.0, at 1-3.

⁵⁴ DEIS, § 2.2.3.3, at 2-55.

because "demand for natural gas continues to increase."⁵⁵ Based on this reasoning, seemingly any infrastructure project that would deliver natural gas to the New York region would be approved, without regard to sufficient existing infrastructure or other, more cost-effective and environmentally-friendly alternatives.

The DEIS's analysis of alternatives such as renewable energy sources and energy conservation measures is also insufficient. For example, the DEIS summarily dismisses renewable energy sources, such as wind power, as an alternative to an LNG import facility because "[w]ind power, like solar, is intermittent and cannot be scheduled based on demand. Therefore, it is likely that during times of peak energy needs, these sources would not be available to provide the additional energy required."⁵⁶ In making this conclusion, the DEIS fails to consider significant data that suggests renewable energy needs.⁵⁷ The final EIS must recognize, as New York State has, that renewable energy has the potential to meet a significant portion of New York State's energy needs.⁵⁸ And with New York's technical potential for offshore wind power setimated at 146 GW, this single resource has the potential to provide enough energy to exceed New York's total energy needs.⁵⁹ Additionally, the NY-Sun initiative, launched by Governor Cuomo in 2012 and expanded in 2014, is expected to result in 3 GW of installed capacity by 2023.⁶⁰ The fact that renewable energy is already meeting significant portions of New York State's energy needs.⁶¹ and is expected to grow, demonstrates that the final EIS must include renewable energy as a true alternative to Port Ambrose.

Furthermore, the DEIS ignores recent advancements in energy storage technologies for intermittent renewable energy sources. New York State has recognized the promise of energy storage and recently committed \$65 million to Brookhaven National Laboratory to help commercial developers expand battery storage research and development.⁶² Likewise, the Long Island Power Authority (LIPA) has made

⁵⁵ DEIS, § 2.2.3.3, at 2-54.

⁵⁶ DEIS, § 2.2.3.1, at 2-53.

⁵⁷ National Wildlife Federation, Catching the Wind: State Actions Needed to Seize the Golden Opportunity of Atlantic Offshore Wind Power, 2014, at 2, <u>http://www.nwf.org/~/media/PDFs/Global-Warming/Reports/Offshore-Wind/NWF_2014OffshoreWind7-9Pagesopt.pdf</u> (noting that "meteorological towers have confirmed strong, consistent wind speeds off of New England and New York during critical high electricity demand periods when the most expensive and polluting power sources are used – afternoons, summer heat waves, and winter cold snaps.") ⁵⁸ NYSERDA, Energy Efficiency and Renewable Energy Potential Studies, July 2014, available at

http://www.nyserda.ny.gov/Cleantech-and-Innovation/EA-Reports-and-Studies/EERE-Potential-Studies (last visited Mar. 16, 2015).

⁵⁹ National Renewable Energy Laboratory, U.S. Renewable Energy Technical Potential: A GIS-Based Analysis, July 2012, available at <u>http://www.nrel.gov/docs/fy12osti/51946.pdf</u> (last visited Mar. 16, 2015).

⁶⁰ New York State, NY-Sun Initiative Frequently Asked Questions, available at <u>http://ny-sun.ny.gov/About/NY-Sun-FAQ</u> (last visited Mar. 16, 2015).

⁶¹ New York Independent System Operator, NYISO Marks New Wind Power Record, Mar. 9, 2015, available at http://www.nyiso.com/public/webdocs/media room/press releases/2015/Wind%20Peak%20-

 <u>%20NYISO%20Marks%20New%20Wind%20Power%20Peak 3 5 15 DRAFT.pdf</u> (last visited Mar. 16, 2015).
⁶² Governor Andrew M. Cuomo, 2015 Opportunity Agenda, at

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2015 Opportunity Agenda Book.pdf.

efforts to increase energy storage by requesting proposals for up to 150 MW of energy storage resources to complement planned increases in renewable resources.⁶³ Because renewable energy sources in conjunction with energy storage technologies could meet peak energy demand in the New York region, MARAD and USCG must reevaluate renewable energy sources and energy storage technologies as true alternatives to an LNG import facility.

The DEIS does recognize that "[e]nergy conservation measures will likely continue to play an increasingly prominent role in offsetting the target market's increasing energy demand."⁶⁴ Yet, it concludes that "energy conservation will reduce the energy demands of the target market by only a small fraction for the foreseeable future" and "[t]herefore, energy conservation would not replace the need" for Port Ambrose.⁶⁵ This conclusion, based largely on an outdated NYISO report from 2012,⁶⁶ ignores many studies that demonstrate the significant impact energy efficiency measures can have on reducing load growth and demand.⁶⁷ Indeed, a recent report by the International Energy Agency (IEA) found that the energy efficiency measures significantly reduce energy consumption.⁶⁸ The 2014 Draft New York State Energy Plan includes a state commitment to energy efficiency programs through 2020, though historical performance and various analyses demonstrate that a more ambitious goal of meeting roughly 20% of forecasted demand in 2025 through energy efficiency measures is both possible and desirable.⁶⁹

Other Environmental Issues

As noted in the comments submitted by the National Oceanic and Atmospheric Administration,⁷⁰ the Port Ambrose project poses risks to the North Atlantic Right Whale, including the risk of vessel collision with whales and other impacts during construction, operation and delivery of LNG. The right whale is a

⁶³ LIPA, Request for Proposal for New Generation, Energy Storage and Demand Response Resources, October 18, 2013, at <u>http://www.lipower.org/proposals/GSDR.html</u>.

⁶⁴ DEIS, § 2.2.3.2, at 2-53.

⁶⁵ Id.

⁶⁶ NYISO has since released a 2014 report that adjusts downward New York's projected electricity demand. See NYISO 2014 Reliability Needs Assessment, Table 3-1 at 7, available at

http://www.nyiso.com/public/webdocs/media room/press releases/2014/Child Reliability Needs Assessment/2 014%20RNA_final_09162014.pdf.

⁶⁷ EPA, Energy Efficiency Fact Sheet, available at

http://www.epa.gov/cleanenergy/documents/suca/consumer fact sheet.pdf ("Studies show that these efforts could help reduce the nation's total energy demand by 20 percent by 2025, cutting the expected growth in electricity demand in half and the growth in natural gas use by 50 percent or more."); see also McKinsey & Company, Unlocking energy efficiency in the US economy, July 2009, available at

http://www.mckinsey.com/client service/electric power and natural gas/latest thinking/unlocking energy efficiency_in_the_us_economy.

⁶⁸ IEA, Energy Efficiency Market Report 2014, October 2014, available at <u>http://www.iea.org/Textbase/npsum/EEMR2014SUM.pdf</u>.

⁶⁹ Shaping the Future: 2014 Draft New York State Energy Plan, Vol. 1 January 2014, at 31; see also Testimony of Jackson Morris to the New York State Energy Planning Board, Mar. 6, 2014.

⁷⁰ NOAA Comments on the Port Ambrose Deepwater Port Notice of Intent, August 8, 2013, available at <u>http://www.regulations.gov/#!documentDetail;D=USCG-2013-0363-0521</u> (last visited Mar. 13, 2015).

critically endangered species with an estimated global population between 450-500 individual animals. Right whales may migrate through the area proposed for the Port Ambrose project (as well as the lease area for the NYPA Offshore Wind Project) while traversing between their southern calving grounds and northern feeding and mating grounds.

The DEIS concludes that both the preferred project and its alternatives "may affect, but [are] not likely to adversely affect" the North Atlantic right whale.⁷¹ This is found to be the case for potential impacts during construction from vessel traffic⁷² and potential entanglement,⁷³ and noise.⁷⁴ In order to further minimize potential impacts, MARAD and USCG should require effective measures such as limiting vessel speeds, requiring enhanced marine mammal monitoring, and limiting construction activities and LNG deliveries during periods when right whales are particularly vulnerable and are likely to be in the area.

The final EIS should further evaluate the Port Ambrose location in terms of the substrate the facility would be constructed on and adjacent to, relative to other potential uses for the area. The DEIS claims that the only substrate disturbed by the Port Ambrose facility would be soft bottom.⁷⁵ It appears, however, that the facility might sit within a patch of coarse sand substrate,⁷⁶ which could become an increasingly valuable resource for beach and coastal restoration in the face of a predicted increase in Atlantic seaboard hurricane occurrence and intensity.⁷⁷

The final EIS for Port Ambrose should also more closely analyze the impact that Port Ambrose's exclusion zones would have on the commercial and recreational fishing industries during any Shuttle and Regasification Vessel (SRV) activity, particularly during the winter and summer seasons when Port Ambrose would receive the bulk of its expected 45 yearly deliveries.⁷⁸ The DEIS acknowledges that the exclusion zones around the Port Ambrose facility, including the safety zone, NAAs, and the ATBA, would restrict commercial fishing operations.⁷⁹ The DEIS also claims that "recreational fishers are unlikely to fish in close proximity to the proposed Port site due to the lack of relief or structure on the ocean bottom in this area" even though remote sensing data has shown the presence of miscellaneous debris from potential shipwrecks.⁸⁰ Additional analysis should be done to estimate how large of an impact Port

⁷¹ DEIS, Table 4.3-1, at 4-64.

⁷² DEIS, § 4.3.2.1, at 4-67 ("The short-term and minor increase in vessel traffic associated with construction activities may affect, but not likely to adversely affect ESA-listed marine mammals.").

⁷³ Id., at 4-69 ("With adherence to best management practices for detection of ESA-listed marine mammals in the area, the potential for entanglement associated with construction activities can be minimized.").

⁷⁴ Id., at 4-66 ("The short-term and moderate increase in noise associated with construction activities may affect, but not likely to adversely affect ESA-listed marine mammals.").

⁷⁵ DEIS, § 4.5.1, at 4-100.

⁷⁶ New York State Department of State, Offshore Atlantic Ocean Study, July 2013, available at <u>http://www.eenews.net/assets/2013/07/11/document_gw_01.pdf</u> (last visited Mar. 13, 2015).

⁷⁷ Cornelia Dean, Costs of Shoring Up Coastal Communities, The New York Times, Nov. 5, 2012, available at http://www.nytimes.com/2012/11/06/science/storm-raises-costs-of-shoring-up-coastal-

communities.html?pagewanted=all& r=2& (last visited Mar. 13, 2015).

⁷⁸ DEIS, § 2.1.4, at 2-7.

⁷⁹ DEIS, § 4.8.2.2, at 4-118.

⁸⁰ DEIS, §§ 4.8.2.2, at 4-119, and 4.6.2, at 4-104.

Ambrose and its exclusion zones would have on fishing industries. Finally, while Port Ambrose's ballast water cooling system would recirculate onboard the vessels, it may be possible for invasive species to enter the waters by attaching to boat hulls, which should be addressed in the final EIS.

Alternative Proposed Location

The alternative proposed location, referred to as Study Area D, also raises serious concerns. While Study Area D does not conflict with the lease area for the proposed NYPA Offshore Wind project, it does conflict with military operations, as it is located within a Restricted/Prohibited Airspace. In addition, the alternative proposed location would require LNG vessels to cross the incoming TSS lane when the vessels depart from the Port, thereby creating additional safety concerns. Another potential concern is that the alternative proposed location would place the project within or at least near a large sport fishing ground known as the "Yankee Spot." Given these concerns, the final EIS should more thoroughly analyze the viability of the alternative proposed location, in addition to the preferred proposed location.

Conclusion

New York State has worked hard to recover from the devastating impacts of Superstorm Sandy and has adopted new climate resilience strategies for the future. In addition, President Obama's Climate Plan has injected new energy into federal efforts to curb global warming. We urge the federal government to work with New York State and neighboring states to double-down on renewable energy solutions such as the NYPA Offshore Wind Project and to reject alternatives that would stand in the way of, or pose distractions to, a clean energy future. Because evidence shows that the Port Ambrose LNG project is not needed to meet the energy needs of the New York region and because the project would pose a significant obstacle to the development of the NYPA Offshore Wind Project, MARAD and USCG should reject the Port Ambrose project application as not in the national interest.

Respectfully submitted,

Willia hung

Katherine Kennedy, Director, Energy & Transportation Program

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Sarah Chasis, Director, Ocean Initiative

indrea . eshak

Andrea Leshak, Ford Foundation Legal Fellow

Natural Resources Defense Council 40 W. 20th Street New York, NY 10011 (212) 727-4637 <u>kkennedy@nrdc.org</u> <u>schasis@nrdc.org</u> <u>aleshak@nrdc.org</u>

Poul Gallay

Paul Gallay, President and Hudson Riverkeeper

Riverkeeper, Inc. E-House, 78 North Broadway White Plains, NY 10603 (914) 422-4133 PGallay@riverkeeper.org

Koger Downs

Roger Downs, Conservation Director

Sierra Club Atlantic Chapter 353 Hamilton Street Albany, NY 12210 (518) 426-9144 Roger.downs@sierraclub.org