THE COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

ONE SOUTH STATION BOSTON, MA 02110 (617) 305-3525

CHARLES D. BAKER GOVERNOR KARYN E. POLITO LIEUTENANT GOVERNOR

May 31, 2016

BY ELECTRONIC FILING

Ms. Kimberly Bose, Secretary Federal Regulatory Energy Commission 888 First Street, NE Washington, DC 20426

Re: Access Northeast Project, Docket No. PF16-1-000

Dear Ms. Bose:

The Massachusetts Energy Facilities Siting Board ("Siting Board" or "EFSB") staff appreciates the opportunity to comment on filings related to the Algonquin Gas Transmission, LLC ("Algonquin" or "Company") Access Northeast Project ("Access Northeast" or "Project") in the Federal Energy Regulatory Commission ("FERC" or "Commission") proceeding Docket No. PF16-1-000. The Siting Board staff is submitting these comments in advance of FERC's preparation of an Environmental Impact Statement ("EIS"). The Siting Board conducted four public comment hearings: in Grafton, MA, on May 2, 2016; Walpole, MA on May 9, 2016; Weymouth, MA on May 11, 2016; and Acushnet, MA on May 12, 2016. In addition, the Siting Board staff has also invited and received written comment from the public; monitored postings on the FERC website for the Access Northeast; and participated in bi-weekly interagency telephone calls coordinated by FERC.

We summarize below some of the significant issues identified by public commenters as well as by the Siting Board staff in our own review of available information. The major topics addressed in these comments include: the need for and alternatives to Access Northeast; overall project concerns; and concerns regarding the proposed compressor stations and liquefied natural gas facilities. The Siting Board staff respectfully requests that FERC require the Company to address the issues and concerns articulated below in the Application that it will file to commence the certificate proceeding, and that FERC also address these issues and concerns in drafting its EIS for the Project.

I. INTRODUCTION

A. Procedural History

This proceeding began with Algonquin's November 3, 2015, filing with FERC requesting its use of the pre-filing review process for the Project. On November 17, 2015, FERC approved Algonquin's request to use pre-filing review. The Project provides for the construction of facilities in New Jersey, New York, Connecticut, Rhode Island, and Massachusetts including: the upgrade and expansion of the existing Algonquin pipeline system; construction of a liquefied natural gas ("LNG") storage facility; modification of seven existing compressor stations, ¹ and construction of a new compressor station. These comments address only the Massachusetts portion of the Project.

On April 29, 2016, FERC issued a "Notice of Intent to Prepare an Environmental Impact Statement for the Planned Access Northeast Project, Requests for Comments on Environmental Issues, and Notice of Public Scoping Meetings" announcing the opening of the public scoping process used to gather input from the public and from interested agencies on the Project. FERC is reviewing the Project under its regulations in compliance with the Natural Gas Act ("NGA") and the National Environmental Policy Act ("NEPA") using its pre-filing review process.²

These comments reflect the Siting Board staff's understanding of the Project as it has developed during the pre-filing process. Once the pre-filing process has been completed, Algonquin will submit a formal application to FERC for a Certificate of Public Convenience and Necessity. At the conclusion of the application review process, FERC will make its decision whether or not to approve the Project.

The Siting Board is an independent board of the Commonwealth of Massachusetts with a statutory mission to ensure a "reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost." G.L. c. 164, § 69H. When an interstate natural gas pipeline company applies to FERC to construct or modify pipeline facilities within Massachusetts, the Siting Board is required by regulation to conduct public information hearings and to intervene in the FERC proceeding. In addition, the Siting Board participates in the prefiling phase of FERC proceedings in order to preserve the rights of interested residents of the Commonwealth, consistent with the Siting Board's statutory and regulatory mandate.

Algonquin has characterized construction of the Weymouth Compressor Station as a "modification" to an existing compressor station. Currently, the construction of a new compressor station in Weymouth is proposed as part of the Atlantic Bridge Project, which is pending before FERC in Docket No. CP16-9-000. The Siting Board staff addresses the issue of characterizing the Weymouth compressor station as a "modification" below.

A number of commenters to the EFSB and FERC have noted that the May 31 deadline for comments (32 days after FERC's issuance of the Notice on April 29, 2016) is insufficient, and requested that FERC extend the comment period for scoping comments.

As referenced below, a recent Order issued by the Massachusetts Department of Public Utilities ("Department") has concluded that, in general, there is a need in Massachusetts for additional natural gas pipeline capacity to reduce regional gas prices for both gas and electric customers.³ The Department also noted that all possible options should be considered in developing a solution to the natural gas capacity constraint issues facing Massachusetts. Recognizing that there are several issues and concerns about the Project yet to be addressed and resolved, the Siting Board staff will remain actively engaged in this process to help ensure that these issues and concerns are fully addressed. Accordingly, this letter neither endorses the Project, as currently proposed, nor rejects the possibility that the Project ultimately can be appropriately routed, designed, built, and operated in a manner that would warrant FERC approval – provided that all necessary environmental, economic, safety, health, and other regulatory requirements and appropriate conditions are satisfied.

B. <u>Proposed Massachusetts Facilities</u>

1. Pipelines

Pursuant to Draft Resource Report 1, filed in this proceeding in December 2015, Algonquin proposes construction and operation of approximately 123 miles of natural gas transmission pipeline in New Jersey, New York, Connecticut, Rhode Island, and Massachusetts. The Project, as now proposed, would enable Algonquin to deliver up to an additional 925,000 dekatherms per day ("Dth/d") of natural gas, of which 410,000 Dth/d would be provided from a new on-system liquefaction/storage/vaporization liquefied natural gas ("LNG") facility in Acushnet.

The tables below provide a summary of pipeline and other Project facilities proposed for Massachusetts.

See Investigation by the Department of Public Utilities into Means to Add Natural Gas Delivery Capacity to the New England Market, D.P.U. 15-37 (2015); appeal docketed, No. SJC-12052 (February 18, 2016).

Table 1: Proposed New Pipeline Facilities in Massachusetts

Facility Name	Diameter (inches)	Location	Length (miles)	Maximum Allowable Operating Pressure (pounds per square inch)
Q-1 Loop	30	Medway, Bellingham, Franklin, Millis, Norfolk, Walpole, Sharon, Stoughton, and Canton	21.68	750
I-8 Loop	30	Braintree, Weymouth	4.19	850
West Boylston Lateral	16	Medway, Milford, Upton, Grafton, Sutton, Millbury, Shrewsbury, Boylston, West Boylston	26.78	750
Acushnet Connector	24	Freetown, Acushnet	2.86	650

The Massachusetts portion of the Project includes approximately 55.5 miles of new pipeline in total. Approximately 25.9 miles of the Massachusetts route (the Q-1 and I-8 Loops) involve "looping," whereby a new segment of pipe is constructed parallel to an existing Algonquin pipeline to increase capacity. The remaining 29.7 miles of the Massachusetts route (the West Boylston Lateral and the Acushnet Connector) involve entirely new pipeline corridors. The West Boylston Lateral would be predominantly within or parallel to existing electric transmission rights-of-way ("ROWs"); the Acushnet Connector would use a mix of existing roadways and greenfield locations.

Algonquin proposes to use a 100-foot wide construction ROW to construct the two pipeline loop segments in Massachusetts. The majority of the Q-1 Loop would parallel Algonquin's existing Q-1 24-inch pipeline ROW. Algonquin's existing permanent ROW width is 50 feet. Both the Q-1 Loop and the I-8 Loop also would parallel an existing Eversource Energy electric transmission line. The proposed construction ROW for the loops would overlap with a portion of Algonquin's existing permanent ROW as well as the electric transmission corridor, to the extent practicable. Depending on the actual location of the proposed loop pipelines (to be determined), Algonquin proposes to obtain an additional 10 - 50 feet of new permanent ROW.

For the Acushnet Connector, Algonquin proposes to use a 75-foot wide construction ROW. Algonquin proposes to maintain a 50 foot-wide permanent easement during operation, except in roadways where a permit/license would be obtained. Algonquin is proposing to utilize a 75-foot wide construction ROW to construct the West Boylston Lateral. Algonquin proposes to maintain a 30-foot-wide permanent easement during operation. The majority of the West Boylston Lateral will parallel a National Grid electric transmission corridor. Algonquin stated that it will continue to work with National Grid and other stakeholders, to better define the proposed pipeline route, including the extent to which the proposed construction ROW can

overlap with the electric transmission corridor.

2. Compressor Stations

The Company proposes to construct a new compressor station in Rehoboth, MA. In addition, the Draft Resource Reports refer to the proposed "modification" of an "existing" compressor station in Weymouth, MA. The "existing" compressor station, however, does not exist at this time, and FERC has not yet granted permission to build it as part of Algonquin's Atlantic Bridge Project (CP16-9-000). Accordingly, the Siting Board staff views the proposed Weymouth compressor station for Access Northeast as a <u>new</u> facility, and not a modification of an existing facility.

Table 2: Proposed New Compressor Station Facilities in Massachusetts

Town	Total Horsepower	Number of Compressor Units	Estimated Acreage of Compressor Station Site (acres)	Estimated Acreage of Property (acres)	Residents Within Half Mile of Property
Rehoboth	10,320	1	Not available	Not available	Not available
Waymouth	10.3204	1	Not available	Not available	Not available

3. Meter Stations

The Company proposes to construct two new metering and regulating ("M&R") stations in Massachusetts, listed by town in Table 3 below. No metering and regulation station in Massachusetts would be modified as part of the Project.

Table 3: Proposed New Metering Facilities in Massachusetts

Facility Type	Location
New M&R station	Acushnet, Bristol County
New M&R station	West Boylston, Worcester County

4. LNG Facility

As part of the Access Northeast Project, the Company proposes to construct an LNG facility in Acushnet, Massachusetts.

The Atlantic Bridge Project, yet to be approved, would include the installation of a 7,700 horsepower gas-fired compressor unit prior to construction of Access Northeast at the same location in Weymouth. The two compressor units for both projects at the Weymouth site would have a total of 18,020 horsepower.

Town	Number of Storage Tanks	Total Storage Capacity	Liquefaction Capacity	Acreage of Site
Acushnet	2	6.8 billion cubic feet	54 million cubic feet/day	210

II. NEED FOR AND ALTERNATIVES TO ACCESS NORTHEAST

In D.P.U. 15-37 (October 2, 2015), the Department concluded an investigation on its own motion to examine how new natural gas delivery capacity may be added to the New England market, including possible capacity purchases by the electric distribution companies ("EDCs"). The investigation did not review any specific pipeline projects. Rather, the investigation addressed gas capacity needs for the electric generation sector generally, including the legal authority of the Department to review and approve of EDC contracts for gas capacity. The Department concluded that sufficient information had been provided in the docket to arrive at a conclusion that increasing regional gas capacity would lead to lower wholesale gas and electricity prices.

The Department did not make a finding that voiced a preference for any particular gas pipeline project over any other potential capacity constraint solution. The Department found that innovative solutions and a menu of options are required to alleviate capacity constraints and the associated downstream market price impacts experienced by Massachusetts ratepayers. The Department further concluded that, pursuant to G.L. c. 164, § 94A, it has the requisite authority to approve EDC contracts for the acquisition of new natural gas capacity and to allow recovery of such costs through electric distribution rates. Following the Department's issuance of the Order, several EDCs filed petitions seeking Department approval of EDC gas capacity contracts. See D.P.U. 15-181 and D.P.U. 16-05. Eversource has requested approval of contracts totaling 207,000 MMBtu/day; National Grid has requested approval of contracts totaling 180,900 MMBtu/day. These quantities represent both pipeline and storage capacity from Access Northeast facilities.

1. Public Comments

A significant number of commenters questioned the need for Access Northeast, with many citing a November 2015 study performed by the Analysis Group, Inc. on behalf of the Massachusetts Office of the Attorney General. Many commenters maintained that the energy

On October 22, 2015, the Conservation Law Foundation filed a petition for appeal of the Order with the Department and subsequently filed an appeal with the Massachusetts Supreme Judicial Court, which is currently pending. See No. SJC-12052

needs of the Commonwealth and the New England region could be met with non-fossil fuel energy resources, such as wind, solar, and energy efficiency, or by repairing existing gas pipeline systems – particularly at the distribution level – where a number of leaks have been identified and are in need of repair. In addition, some commenters stated that existing LNG import facilities are underutilized and can serve peak winter needs adequately. Some commenters maintained that the gas to be delivered by Access Northeast would predominantly serve export markets in Canada or overseas (with liquefaction of the gas to LNG) and that such transactions would raise the price of natural gas used in New England.

A number of commenters cited the importance of reducing greenhouse gas emissions and meeting the requirements of the Massachusetts Global Warming Solutions Act. The Project's reliance on gas supplied from the Marcellus Shale formation, where hydraulic fracturing (or "fracking") is increasingly used to produce natural gas, elicited concerns about the environmental impacts of such gas production. In addition, some commenters voiced concerns about the constituents in the "fracked" gas that could be released into the environment in Massachusetts given potential pipeline leaks or other potential releases. Some commenters objected to the possibility that electric ratepayers might face charges on their bills relating to the Project pursuant to a recent order by the Department, D.P.U. 15-37 (2015), and petitions now before the Department by several Massachusetts EDCs seeking approval of Precedent Agreements with Algonquin to procure transportation capacity on Access Northeast.

2. EFSB Recommendations

As of now, all of the contracted capacity for the Access Northeast Project submitted for review and approval by the Department relates to agreements entered into between Algonquin and Massachusetts EDCs. Given the pending appeal of D.P.U. 15-37 before the Massachusetts Supreme Judicial Court in SJC-12052, and pending adjudicatory proceedings before the Department to review proposed EDC contracts (D.P.U. 15-181 and D.P.U. 16-05) for gas capacity from Access Northeast, Siting Board staff defers at this time from making any substantive comments relating to these ongoing matters. As appropriate, the Siting Board staff will provide recommendations relating to need and project alternatives for Access Northeast at a later date.

See, for example, the Department's Order in Gas System Enhancement Plans,
 D.P.U. 14-130 through D.P.U. 14-135 (2015).

III. OVERALL PROJECT CONCERNS

A. Protected Lands (Including Article 97 Lands and Farms), Conservation, Land Use

1. Public Comments

Commenters raised a number of concerns about Article 97⁷ and other conservation lands. For example, protected conservation lands identified by members of the public included, but were not limited to, town and state forests in Walpole and Upton, respectively, and Moose Hill, a Massachusetts Audubon property in Sharon. Several commenters voiced concern that the Company failed to identify specific Article 97 properties in Draft Resource Report 1.

Some public comments focused on the disposition of Article 97 lands for private commercial uses (such as that proposed by Algonquin) given that public funds were used originally for their purchase and the potential loss of conservation values. Commenters asserted that natural gas pipelines and their ancillary facilities impact all of the values articulated in Article 97 such as air and water quality, and natural, scenic, historic, and aesthetic qualities. Specifically, the commenters maintained that a pipeline built across public protected lands reduces public use and enjoyment of the agricultural, mineral, forest, water, air and other resources that are declared a public purpose consistent with the intent and values for which a parcel was protected.

2. EFSB Recommendations

The Siting Board staff notes that the Company's Draft Resource Reports for Access Northeast makes no mention of Article 97 in its recitation of laws and regulations with which the Project would have to comply in Massachusetts (Draft Resource Report 1, Appendix 1B, Table 1B-6) nor whether the Project would affect any Article 97 properties. However, as several commenters noted, there are, in fact, several Article 97 properties affected by the current routing of the Project, although a precise number and description has yet to be provided by the Company. The Siting Board staff is concerned by the omission of this information by the Company.

Any Access Northeast facilities that pass through Article 97 lands would trigger a process requiring that both houses of the Massachusetts Legislature approve by a two-thirds vote any change in use or deposition of lands held under the provision's constitutional strictures. State practice requires that an equal amount of protected conservation land must be secured to offset

Article 97 of the Massachusetts Constitution provides that "The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose."

any land removed from Article 97 protection. If Algonquin intends to traverse Article 97 lands, the Company must adhere to Massachusetts law, including the Commonwealth's no net loss policy, and seek legislation for the disposition of Article 97 lands through the Massachusetts Legislature. Such "converted land" must be replaced with land of equal monetary value and recreational or conservation utility. This will ensure that Massachusetts experiences no net loss of Article 97 lands today, and that future conservation efforts are not jeopardized.⁸

As some commenters noted, the proposed Project may contradict the terms of the conservation trust documents or other conservation requirements underlying affected Article 97 properties and this could diminish the public's confidence that such programs offer permanent, protection for conservation land. The disposition of Article 97 lands for pipeline easements, or other commercial or industrial uses, could certainly send a detrimental message to donors and benefactors of future conservation lands.

In addition to Article 97 lands, Massachusetts preserves many farms in the Commonwealth through the Massachusetts Department of Agricultural Resources Agricultural Preservation Restrictions ("APRs"). APR land has a permanent deed restriction, which precludes any use of the property that will have a negative impact on its agricultural viability. Potential impacts to farms concern both the quality of resources required for their operation and their aesthetic and perceived market appeal. Article 97 lands, APRs, and other such conservation-restricted properties are protected in perpetuity, for the benefit of the Commonwealth, its residents, and its ecosystem. The Siting Board asks that FERC direct Algonquin to submit a list of farms along the route of its proposed pipeline and the construction and operational impacts of the Project on such properties. The Siting Board recommends that FERC require Algonquin to observe any protections now associated with individual farms under APRs.

B. Impacts on Property Values

1. Public Comments

Commenters described a number of reasons for anticipating impaired value of their properties from a potential pipeline: preclusion of intended development use of the property; loss of value in the eyes of future buyers due to aesthetics, undesirable land use characteristics, safety-related issues, or other factors. A number of property owners voiced concern that they stand to receive inadequate compensation for their property, and that the impairment of property value may not be fully recognized by Algonquin.

In this letter, the Siting Board staff is not addressing the scope of federal preemption authority to authorize the taking of land designated as Article 97 property should the Legislature not grant its approval.

2. EFSB Recommendations

In the past, FERC has acknowledged the possibility that pipeline facilities could, in fact, adversely affect the property values of nearby residents, but it has not been able to quantify with any degree of certainty the impact on or decrease in property values that may be experienced. Millennium Pipeline Company L.L.C., 145 FERC 61,007, at ¶ 96 (2013). In other cases, FERC has found only that "a *significant loss* of property value due to construction of a pipeline *is not supported by the literature*." Constitution Pipeline Company, LLC, 149 FERC ¶ 61,199 at ¶ 95 (emphasis added).

Many of the available studies on property value impacts of gas pipelines were funded directly by the pipeline industry. For example, the Interstate Natural Gas Association of America ("INGAA") produced a study in 2001, titled "Natural Gas Pipeline Impact Study," which concluded that there is no significant impact on the sales price of properties located along natural gas pipelines" in the areas studied. Some experts have suggested that additional research is necessary to achieve any conclusions about the effects compared to earlier study results. See Diskin, B., Friedman, J., Peppas, S., January/February 2011, *The Effect on Natural Gas Pipelines on Residential Value*, Right of Way at 24-28.

With regard to property value losses, in at least one FERC pipeline case, a pipeline company itself proposed to compensate landowners for reduced crop yields due to construction of the Rockies Express East pipeline facilities and use of the easement. Rockies Express Pipeline LLC, CP07-208-000, Final EIS at ES-5 (April 11, 2008). According to the FEIS "[c]onstruction of the pipeline may affect the fertility of the agricultural fields for several years." Id. Reduced crop yields arising from pipeline construction are not limited to the Rockies Express case; reductions to crop yields and timber growth, which have tangible financial consequences, are not dissimilar to the loss of homeowner property values. The Siting Board recommends that FERC give, or direct, due consideration, study, and compensation, as necessary, to claims made by property owners regarding property value impacts associated with the proposed pipeline in Massachusetts. See Diskin, B., Friedman, J., Peppas, S., January/February 2011, The Effect of Natural Gas Pipelines on Residential Value, Right of Way at 24-28.

Given the concerns related to general use, visual impacts, agricultural productivity and marketability, the Siting Board concurs that the time is ripe to conduct additional research into the relationship between property values and interstate pipeline facilities, including compressor stations and LNG storage facilities. The Siting Board requests that FERC fund and conduct third-party studies so that homeowners may be compensated, as appropriate, for any demonstrated loss of value associated with the proposed Project. In addition, the Application and EIS should address the issues of property values in the vicinity of the pipeline, compressor stations, and LNG facility as well as investigate the question of whether homeowners' insurance premiums and coverage availability would be impacted by the Project.

C. <u>Wetland Impacts</u>

1. Public Comments

Commenters at Siting Board hearings expressed particular concern regarding alteration of wetlands for Access Northeast construction in Massachusetts and the potential irreversible impacts of these changes. A related concern was wetland impacts at river crossings for pipeline installation. A number of speakers suggested taking stringent measures to safeguard long-term wetland ecosystem health. The measures described included establishing a pre-construction baseline for wetlands and planning for their post construction restoration.

2. EFSB Recommendations

Wetlands protection practices in Massachusetts under the Massachusetts Water Protection Act ("WPA") are, as a rule, more stringent than protections at the federal level under the Clean Water Act ("CWA"). Furthermore, municipalities and townships may adopt local protections that are above and beyond those required under the WPA. Meeting these regulations would require the Company to operate within the bylaws and ordinances of Massachusetts communities; wherever appropriate, to file Notices of Intent with local conservation commissions; and to implement any resulting conditions contained in an Order of Conditions.

The Siting Board staff asks that FERC act in accord with the high value that Massachusetts places on wetland resources. The Siting Board staff suggests that FERC might direct Algonquin to avoid disturbance to wetlands for Access Northeast construction or operation to the extent possible. Algonquin should mitigate unavoidable wetland impacts by restoring wetlands to their original condition. The Siting Board staff agrees with commenters who suggest that pre-construction study of wetlands along the route of the Algonquin pipeline loops, lateral, and connector in Massachusetts is advisable as an aid to wetlands restoration. The Siting Board staff observes that lack of full information on the proposal presents a challenge to participants in the FERC pre-filing process attempting to evaluate wetland impacts of Access Northeast.

D. Water Quality, Water Supply, and Well Water

1. Public Comments

Several commenters expressed concerns about the potential adverse effects of the construction and operation of Access Northeast on community water supplies. Commenters cited the potential of a pipeline leak or break to contaminate aquifers and wells and the potential of a horizontal drilling borehole at waterbody crossings to trigger groundwater migration. Some noted that possible infiltration of water resources and wells by contaminants related to Access Northeast construction or operation is a particular concern in areas relying on private or town wells for drinking water. This concern was frequently mentioned in Walpole and in Grafton. Three Grafton Water District town wells are planned along the ROW where the West Boylston Lateral is proposed. Speakers raised the question of the impact of Access Northeast on installation and maintenance of theses wells. These commenters also questioned whether

exploratory drilling and installation of a gas pipeline might impact the well location and water quality, especially if Access Northeast construction were to require blasting or digging in the vicinity of the wells.

2. <u>EFSB Recommendations</u>

The Siting Board staff requests that FERC direct Algonquin to test and monitor public and private water supply wells potentially impacted by Access Northeast before and after pipeline construction to assure pre-construction water quantity and that quality is not adversely affected. The Siting Board staff further suggests that FERC direct Algonquin to submit measures the Company will take to prevent, reduce, and mitigate any impacts to public water supplies associated with Access Northeast pipeline construction. As part of such mitigation, Algonquin should communicate and coordinate with any affected public water supplier regarding protection of the public water supplier's infrastructure and all its resources.

E. Safety

1. Public Comments

A number of commenters voiced concern that the proposed pipeline will traverse small towns (e.g., Acushnet) that do not currently have the necessary equipment or training to address potentially significant emergencies associated with either pipelines or compressor stations. Other commenters expressed concerns about the proximity of high-pressure natural gas pipelines to high-voltage electric transmission lines ("co-location"), as proposed by the Company for much of the Massachusetts pipeline route. The recent pipeline incident on the Texas Eastern Pipeline system in Salem Township, Pennsylvania (owned by Spectra Energy, the parent company of Algonquin) was mentioned by many commenters, and cited as evidence of the safety risks inherent to gas pipelines as well as Spectra Energy's alleged failings regarding its safety practices and record.

2. EFSB Recommendations

The draft EIS should include a detailed description of all the federal, state, and local safety regulations and inspections that pertain to the Project, as well as any additional Algonquin safety protocols. The Siting Board staff further requests that Algonquin provide a detailed history of its safety record, which would include failures, incidents, and accidents with respect to pipelines and compressor stations within Spectra's portfolio. The information should include the cause of the incident; the quantity of leaked gas and pollutants, and other environmental impacts; and any related injuries or fatalities. Additionally, the Siting Board staff requests that Algonquin provide information on incidents and accidents at any compressor station across the United States in the past ten years.

The Siting Board staff notes that, historically, FERC has relied on the U.S. Department of Transportation ("DOT") as the U.S. government agency with sole responsibility for establishing

criteria and requirements for the safety of natural gas pipeline facilities. Existing DOT pipeline safety standards require use of different pipeline specifications based on population density in the vicinity of the pipeline. More rigorous safety requirements are specified for more heavily populated areas. The Siting Board staff recommends that the Company ensure that only the best and most protective safety standards are used throughout Massachusetts, regardless of whether construction occurs in a rural, suburban, or urban location. No community, no matter its size, should be required to host an interstate pipeline with safety standards that are less than best practices or that fail to provide the greatest assurance of safety.

Algonquin should adopt the highest levels of safety standards for the entire Massachusetts portion of the proposed Access Northeast pipeline. Examples of pipeline projects that have incorporated safety measures above the DOT minimum exist. Accordingly, the Siting Board staff requests that Algonquin identify such pipeline projects and voluntarily propose, similarly, to incorporate safety standards for Access Northeast that would exceed the "minimum" DOT standards. FERC should ensure that the Project is developed in this fashion.

The Siting Board staff observes that the Access Northeast pipeline route does indeed, as commenters note, go through numerous small towns in Massachusetts that may lack the equipment and personnel to respond to potential large-scale emergencies, as well the financial resources to upgrade their existing police and firefighting equipment to accommodate the pipeline. Funding the cost of emergency management equipment and training associated with an interstate natural gas pipeline would place an undue burden on these towns. The Siting Board staff recommends that FERC require that Algonquin file an emergency response plan that includes a cost sharing plan that identifies mechanisms for funding Project-specific security and emergency management costs that would otherwise be borne by state and local agencies.

IV. COMPRESSOR STATIONS

As noted above, Algonquin is proposing two new compressor stations, two new M&R stations, and additional aboveground appurtenant facilities (<u>e.g.</u>, mainline valves, "pig" launcher and receiver sites) as part of the Project.

A. <u>Air Impacts</u>

1. Public Comment

In Weymouth, many commenters voiced concerns about the cumulative air impacts of the Project, the Company's Atlantic Bridge project, and existing industrial and commercial land uses in the Project vicinity (e.g., Fore River Energy Center, MWRA pumping station). Several commenters noted concerns about air quality impacts on the thousands of residents and several

A pipeline "pig" is a device to clean or inspect the pipeline. Launcher and receiver sites are aboveground facilities where pigs are inserted or retrieved from the pipeline.

schools in proximity to the Project. Commenters pointed to various emissions from compressor stations during normal operations, blowdowns (venting of natural gas in the compressor and associated piping during a compressor shutdown), and from fugitive emissions that are unquantified. Pollutants mentioned by commenters include greenhouse gases, criteria pollutants (such as nitrogen oxides, carbon monoxide, and volatile organics compounds), and air toxics.

2. EFSB Recommendations

The Siting Board staff requests that the Company provide air quality data representing the following for the Weymouth compressor station: (a) existing air quality (i.e., without any of the turbines proposed under Atlantic Bridge or Access Northeast); (b) impacts from only the 7,700 horsepower ("hp") turbine proposed under Atlantic Bridge; (c) impacts from only the 10,320 hp turbine proposed under Access Northeast; and (d) cumulative impacts from both the Atlantic Bridge and Access Northeast projects. The direct emissions of the Access Northeast project should be compared to both (a), and the sum of (a) and (b), to represent the impact of the Project compared to the existing conditions and to conditions after the development of the proposed Atlantic Bridge project. The Siting Board staff requests that the Company provide air quality data for the Rehoboth compressor station that includes the air impacts of the Project and existing ambient conditions.

The Company should provide specific information about the air quality impacts on sensitive populations such as children and senior citizens for all compressor stations and meter stations. The air analysis should include information about the impacts of blowdowns; including the typical quantity and duration of blowdowns, quantity of natural gas released, and quantity of criteria pollutants released. Furthermore, the air analysis should include a discussion of fugitive emissions, including typical quantity of unanticipated natural gas releases and measures to prevent fugitive emissions. Algonquin's air analysis should include a full discussion and recommendations for post-construction and operational air quality monitoring at each aboveground facility.

B. Noise Impacts

1. Public Comment

Many commenters in Weymouth voiced concerns about the cumulative noise impacts that would be experienced in the Fore River basin due to the addition of a compressor station along with the existing infrastructure in the Project's vicinity. The commenters noted that the compressor station construction, operation, and maintenance would add to the cumulative noise impacts that are experienced by residents, schoolchildren, and visitors to the area.

2. EFSB Recommendations

The Siting Board staff requests that the Company provide a detailed noise analysis for

each compressor station and meter station based on <u>both</u> MassDEP and FERC standards. Each analysis should incorporate the following factors:

- The noise analysis should include a table that consists of at least the following columns:

 (a) receptor; (b) measured ambient sound level; (c) modeled facility-only noise level;

 (d) combined ambient and facility noise level; and (e) increase above ambient. The noise analysis should be based on L₉₀ measurements to evaluate MassDEP standards. The Siting Board staff requests that the Company indicate how the noise levels at each aboveground facility would comply with MassDEP noise standards, including the 10 A-weighted decibels ("dBA") above-ambient limit at the property line and pure tone conditions.
- For the Weymouth compressor station, the Company should provide two versions of the above analysis. The first version should be based on the existing ambient sound level (i.e., no impact from Atlantic Bridge project). This analysis should incorporate the modeled noise impacts from both the Atlantic Bridge and Access Northeast in the modeled facility-only noise level, distinguishing the individual noise impacts of each turbine. The increase above ambient should be calculated to show (a) impact of just Atlantic Bridge; (b) impact of just Access Northeast; and (c) impact of both projects. The second version should be based on a modeled ambient sound level when the proposed Atlantic Bridge project would be operating.
- Nighttime measurements should be taken between midnight and 4:00 a.m. to represent the quietest nighttime hours, which the Company used at the Siting Board's request for Atlantic Bridge. In Weymouth, the noise measurements should be taken when there is no nighttime construction at the Fore River Bridge.
- For the Weymouth compressor station, the Company should not include any mitigation or attenuation from tree buffer, as the site is not buffered. For Rehoboth and Acushnet, the Company should model "leaf-off" conditions, to more accurately represent the maximum sound levels.
- In Weymouth, the Company should model the noise impacts at eight receptors, all of which the Company used in the Atlantic Bridge filing. These receptors should include: (1) Kings Cove Way, Weymouth; (2) Kings Cove Beach Road (near Hunt Hills Point), Weymouth; (3) Monatiquot Street/Vaness Road, Weymouth; (4) Germantown, Quincy; (5) Dee Road area, Quincy; (6) Weybosset Street/Fore River Avenue, Weymouth; (7) Roslind Road/Evans Road, Weymouth and; (8) the Johnson School, 70 Pearl Street Weymouth. In addition, the Company should provide noise impacts at the proposed property line.
- In Rehoboth, the Siting Board staff recommends that the Company identify receptors in the vicinity of the following locations: (1) Finnigans Way, Rehoboth; (2) Tremont Street, Rehoboth; (3) Oak Hill Avenue; Attleboro, (4) Cross Street/Carpenter Street, Rehoboth;

- (5) Cross Street/Carpenter Street, Seekonk; (6) Country Road, Attleboro. For the nearest residential receptor <u>and</u> nearest sensitive receptor (<u>e.g.</u>, school, day care center, senior citizen home) at each of the six locations listed above, the Company should provide modeled noise impacts. Algonquin should provide modeled noise impacts along each edge (<u>i.e.</u>, north, south, east, and west) of the property line. Based on the final placement of the compressor station and noise-producing equipment within the proposed parcel, the Company should consider modeling additional sensitive receptors and/or recompleting the noise analysis if noise-producing equipment moves closer to, or further from, sensitive receptors.
- For the West Bolyston M&R station, the Siting Board staff recommends that the Company identify and model the noise impacts at the nearest sensitive receptors in the vicinity of the following locations: (1) Century Drive, Worcester; (2) Cutler Road, Boylston; (3) Birdland Road, Boylston; (4) Kendall Road, Boylston; and (5) Upland Road, Boylston.
- The December 14, 2015, Rehoboth Board of Selectman meeting minutes indicate that Rehoboth may have a noise ordinance of 50 dBA. The Siting Board staff requests that the Company provide the noise bylaws and ordinances for Rehoboth and compare all noise ordinances in the town to the FERC and MassDEP guidelines. This discussion should state whether or not the compressor station would be in compliance with the noise ordinances in Rehoboth and include suggestions for noise mitigation to comply with the Rehoboth noise standards, if necessary. Similar noise reviews should be performed by the Company for other above-ground Project facilities in other municipalities.
- The noise analysis should discuss options for noise mitigation during normal operations and blowdowns. The noise analysis should include a description of mitigation practices at similar facilities and the effectiveness of such practices.
- The Siting Board staff asks that the Company include maps showing the location of all noise-producing equipment, station property boundaries, and all residential properties within a half-mile radius for all aboveground facilities.
- The noise analysis should also include the impacts of noise dispersion over water and the
 attendant impacts on receptors across the Weymouth Fore River in the Germantown
 neighborhood of Quincy and Kings Cove neighborhood in Weymouth.
- Additionally, the Company should provide a description of the anticipated frequency of blowdowns for the compressor stations, including a description of Company, federal, and industry requirements or recommendations for the frequency of blowdowns, as well as ambient noise measurements, both pre- and post-construction.

C. <u>Land Use Impacts</u>

1. Public Comment

Many commenters, particularly in Weymouth, noted the type of existing land uses located in the vicinity of the Project. In Weymouth, commenters were concerned about the development of additional industrial infrastructure and the density of residential and sensitive receptors. Furthermore, commenters at the Acushnet public hearing noted the residential and rural composition near the proposed Acushnet and Rehoboth facilities.

2. <u>EFSB Recommendations</u>

For each aboveground facility, the Company should determine and provide following data within a one mile-radius of the facility: (1) sensitive receptors (e.g., schools, hospitals, day care facilities, senior citizen communities). For each sensitive receptor Algonquin should identify the total number of individuals who attend or live at each location; (2) the number of residences, and residents; and (3) all conservation and recreational land or facilities. Algonquin should include a discussion of mitigation options and methods that it would employ, as necessary, during construction and operation to minimize the impacts on the above populations and land uses.

The Weymouth compressor station would be located in a Commonwealth of Massachusetts Designated Port Area ("DPA"). The Company should provide information on how the Project would comply with a MassDEP's Chapter 91 license, and how the Company would address public access in this area as required by Chapter 91.

The Draft Resource Reports to do not contain any information about the location of mainline valves or pig launcher and receiver sites. The Company should include detailed information about the location of these facilities. Algonquin should endeavor to site these facilities along the proposed pipeline, in areas that would be already disturbed by pipeline construction, and within the proposed operational right-of-way.

D. Weymouth Compressor Station

1. Public Comment

In addition to the air and noise impacts discussed above, the Siting Board staff received comments about other issues regarding the Weymouth compressor station. In particular, many commenters have voiced concern over the separate FERC proceedings that are occurring for the Company's Atlantic Bridge and Access Northeast projects. Commenters maintained that the projects have been improperly segmented at FERC to avoid a more comprehensive environmental review, noting that FERC issued an Environmental Assessment ("EA"), not an EIS, for the Atlantic Bridge project. Commenters argued that the Company referred to the

Weymouth compressor station location as an "existing" compressor station site, for which only "modifications" would be necessary, but also stated that the parcel is currently undeveloped, and no permit to construct has been issued by FERC for Atlantic Bridge.

Additionally, many commenters reiterated the same concerns that were expressed with regard to the Atlantic Bridge proceeding, specifically with respect to the land use impacts of the parcel. Many comments noted the high residential density in the area, and enumerated the many industrial and commercial businesses already located in the Fore River basin. Commenters contrasted the limited acreage of the parcel being sought to be developed at Weymouth with the much larger parcels proposed for compressor stations under Access Northeast (e.g., Stony Point-97.5 aces; Southeast-128.5 acres; Oxford-77 acres; Cromwell-38.2 acres; Chaplin-104 acres; Burrillville-269.7 acres).

2. <u>EFSB Recommendations</u>

a. <u>Cumulative Impact Analysis</u>

The Siting Board staff believes that Atlantic Bridge and Access Northeast projects represent essentially concurrent actions, with some overlapping locations and numerous potential interdependencies regarding optimal design and routing choices. Accordingly, we recommend that the environmental impacts should be evaluated cumulatively. The Siting Board staff made

The Company has not provided land use requirements for the Access Northeast Weymouth compressor station. In its Atlantic Bridge Application, the Company stated that the compressor station would be constructed on 4.3 acres of a 16.2-acre parcel. However, during the pre-filing stage, the overall parcel size was characterized initially as 10.2 acres.

¹¹ Currently the new turbines proposed for existing compressor stations are 15,900 hp at Stony Point (NY) and Southeast (CT); 10,320 hp at Chaplin (CT), Weymouth (MA) and Rehoboth (MA); and 18,020 hp (9,920 net increase) at Burillville (RI). Oxford and Cromwell (both CT) would not have new compressor buildings or horsepower added as part of Access Northeast, but additional compression is being added at both locations under Atlantic Bridge. The acreage for the parcel for the Rehoboth compressor station is not yet available.

The Siting Board staff has been actively involved in the Atlantic Bridge pre-filing and certificate application dockets at FERC. The Siting Board staff has submitted several comment letters to FERC outlining its environmental concerns with respect to the Weymouth compressor station, and will submit comments on the May 5, 2016 FERC-issued EA. The Siting Board submitted substantive comments in the pre-filing Docket No. PF15-12, on June 18 and July 24, 2015; and submitted comments in the certificate application docket, CP16-9-000, on December 21, 2015.

several recommendations, above, related to the cumulative air and noise impacts that would result from the construction of both Access Northeast and Atlantic Bridge. The Siting Board staff encourages the Company to evaluate the impacts of the proposed Project based on the existing ambient conditions (<u>i.e.</u>, without the construction of Atlantic Bridge), to fully identify and properly evaluate all environmental impacts of the Project.

b. <u>Segmentation and Alternatives Evaluation</u>

With respect to the issue of the segmentation, the Siting Board recognizes that the market focus of the Access Northeast project (EDCs procuring gas capacity for resale, primarily to serve electric generators) is different than that for Atlantic Bridge (primarily local gas distribution companies). However, it is clear from the record in both cases that the development and proposal stages were occurring concurrently. The Siting Board staff notes that there are a variety of infrastructure interdependencies between the two projects, and that by evaluating the physical components together, the Company would have been able to minimize both the environmental impacts and the required infrastructure. By looking at each project independently, the Company has unduly narrowed the scope of its analysis, and overlooked potentially superior route and design options applicable to Atlantic Bridge and Access Northeast, in combination.

The Siting Board staff recommends that FERC take note of the following regarding the alternatives analyses presented for the Weymouth compressor station in Atlantic Bridge: (a) the Franklin and Holbrook alternative compressor sites, and reduced compression at Weymouth, were eliminated as alternatives based on the need for new pipeline (segments of the required pipeline were initially proposed for Atlantic Bridge, then deleted from Atlantic Bridge, and then proposed again in Access Northeast); and (b) a Rehoboth compressor station alternative location was eliminated in Atlantic Bridge and then proposed as a compressor station location in Access Northeast. Under the proposed scope of Access Northeast, over 20 miles of pipeline looping

In the summer of 2015, the Company began outreach in preparation for the pre-filing of the Project, and filed its request to begin pre-filing on November 5, 2015. With respect to Atlantic Bridge, the Company began the pre-filing process on January 30, 2015, entered the scoping period on April 27, 2015, and filed its certificate application on October 22, 2015.

For the Franklin alternative compressor station, the Atlantic Bridge EA states that approximately 25.1 miles of the required 30.8 miles of connecting pipeline would be constructed under Access Northeast. For the Holbrook alternative, the Atlantic Bridge EA states that approximately 4.3 miles of the required 16.3 miles of pipeline is proposed to be built under Access Northeast. Decreasing the compression of the turbine at Weymouth proposed in Atlantic Bridge to 6,300 hp was rejected due to two miles of pipeline that would be required along the Company's Q-1 system in Medway, Bellingham, and Franklin. For the Rehoboth alternative, the Atlantic Bridge Certificate Application states that over 50 miles of new pipeline would be required, but does not state if any of that pipeline is part of the Access Northeast scope. However, the Rehoboth

is proposed along the Q-1 loop, that would make the alternative locations for compressor stations identified in the Atlantic Bridge project significantly more feasible. The Siting Board staff notes that if the two projects were evaluated jointly, it is possible that the optimal design and routing options for both projects, in combination, would differ from such choices for each project evaluated independently.

c. <u>Alternatives Analysis</u>

With respect to alternatives, the Company states in its Draft Resource Report 10 that the additional horsepower proposed for the Weymouth compressor station is a modification to an existing compressor station, and that "[m]odifications at these existing sites will take place primarily within the existing fenced sites and will not require any expansion of the station sites ... an evaluation of alternatives was not deemed necessary" and therefore no alternative sites are provided (Draft Resource Report 10, at 10-37). As discussed above, the Siting Board staff does not consider the turbine proposed in Weymouth for Access Northeast to be a modification to an existing station. 16 The Siting Board staff concludes that by classifying the Weymouth compressor station as existing, Algonquin has improperly narrowed the scope of the analysis of environmental impacts of the infrastructure proposed in Access Northeast. The proposed compressor parcel in Weymouth is currently undeveloped and there is no existing fence line. The Siting Board staff disagrees with the Company's decision to eliminate an alternatives analysis of the Weymouth location, and encourages the Company to include a complete alternatives analysis in its certificate application and to revise each section of its Draft Resource Reports for which it has stated an analysis is not required because the Project is only "a modification." In the Company's certificate application, this mischaracterization should also be eliminated.

d. Land Use

The parcel on which the Company seeks to develop the Weymouth compressor station is owned by Calpine, the current owners of the Fore River Energy Center. The Fore River Energy Center, a combined-cycle natural gas power plant, was approved by the Siting Board on February 11, 2000 (Sithe Edgar Development, LLC, EFSB 98-7 (2000) ("Final Decision")). The

compressor station location proposed in Access Northeast is situated along the Company's existing gas transmission pipeline, and no connecting pipeline is proposed under Access Northeast's current scope.

- The Siting Board is not endorsing any of the other sites; rather, it is stating that the alternative analysis of both projects lacks assumptions and justifications for dismissal of alternative sites.
- Furthermore, the information presented by the Company assumes that the Atlantic Bridge project would be granted a certificate and would be permitted, but does not address the impacts or assess alternatives under Access Northeast if Atlantic Bridge is not permitted.

Fore River Energy Center site is bisected by the Fore River Bridge into two sections: (1) a 16-acre section north of the bridge ("North Parcel"); and (2) a 41-acre area to the south of the bridge, where the Fore River Energy Center is located (Final Decision at 12). The Weymouth compressor station is proposed to be located on the North Parcel. The Final Decision approval included two conditions regarding the North Parcel that remain in effect and are still outstanding.¹⁷

Calpine informed the Siting Board in its response to the Siting Board's June 22, 2015 letter and in Calpine's December 2015 Status Report that it anticipated finalizing a potential purchase and sale agreement with Algonquin in 2015 and was confident that the agreement with Algonquin would preserve its ability to fully comply with Conditions F and L in the Final Decision. Correspondence from Calpine to the EFSB is attached as Appendix C. The certificate application and EIS should include a detailed discussion on the current ownership and availability of the parcel; the status of Algonquin's purchase of the North Parcel, or its option to do so; and how the Company and/or Calpine would comply with the each of the outstanding conditions set forth in the Siting Board's Final Decision.

E. Rehoboth Compressor Station

1. Public Comment

Commenters noted concerns about safety, land use, noise, and air impacts of the Rehoboth compressor station and its location in a residential community. Commenters also maintained that many of the abutters to the proposed stations were unaware of the proposed facility, and that there had not been enough information about the proposed project provided to the community.

2. EFSB Recommendations

The Draft Resource Reports provide no detailed information about the Rehoboth compressor station. The Siting Board staff requests that when the full set of Draft Resource

Condition L states: "In order to minimize land use impacts, the Siting Board requires the Company to work with Weymouth, Fore River Watershed Association and appropriate state agencies to develop and coordinate plans for providing additional public access, if and where appropriate, in the area of the northern portion of the site that Sithe (the original developer and predecessor to Calpine as Fore River owner) will improve as conditioned in Section III.F.2. (of the Final Decision), and in other parts of the site as may be agreed."

Condition F states: "In order to minimize visual impacts, the Siting Board requires the Company to provide landscaping that will provide vegetative screening and shoreline improvements along the northwestern shoreline of the northern portion of the proposed site which would serve as a continuation of the proposed King's Cove area."

Reports are submitted to FERC, they shall contain detailed land use information about the parcel and abutting parcels. As noted above, the Siting Board staff requests that the noise and air analyses include the parameters noted. The Company should also provide detailed information about pipeline and additional facilities that would be required to connect to the existing transmission gas pipeline; location of noise-producing equipment within the parcel; and mitigation proposed to minimize land use, noise, and air impacts. The Siting Board staff notes that it will provide additional comments and feedback on the Draft Resource Reports or any supplemental documentation provided by the Company regarding the Rehoboth compressor station as it becomes available.

In its Draft Resource Report 10, Algonquin states that in 2008, it evaluated five alternative sites for a different project, which encompasses the proposed site (Draft Resource Report 10, at 10-36 to 10-37). The Company stated that FERC determined that none of those sites was found to be environmentally preferred to the proposed site in the HubLine/East to West Project ("HubLine"), FERC Docket No. CP08-420-000, -001. The Company states in its Draft Resource Report 10 that it is continuing to evaluate alternative locations for the Rehoboth compressor station. The Siting Board staff stresses that the alternatives analysis should not rely on the information gathered and conclusions made in 2008, and notes that the pre-filing process for HubLine began in September 2007. Therefore, many of the impacts used to evaluate the feasibility of alternative sites (e.g., land use, air, noise, gas transmission infrastructure), may have changed over the course of nine years. The Siting Board staff requests that the Company complete a new and complete alternatives analysis for the Rehoboth location. 18

V. LNG FACILITY

A. Scale and Capacity of Facility

1. Public Comments

Many commenters pointed to the size of the LNG facility, a total of 6.8 Bcf (two tanks at 3.4 Bcf each), both in relation to the existing on-site LNG facility and to other LNG facilities in Massachusetts and throughout the United States. Specifically, the capacity of the proposed facility is 13 times larger than the existing LNG facility (also two tanks), which totals 0.5 Bcf, and the existing facility does not currently liquefy natural gas into LNG. Commenters stated that

That is not to say that the Company should not evaluate any of the alternative sites analyzed in HubLine. Rather, the Company should evaluate any site alternatives based on the best available and most current information.

All commenters at the Acushnet public hearing were opposed to the proposed LNG facility. All written comments expressed opposition to the LNG facility except for two supporting - from a local New Bedford business owner and the NE Region of the Laborers International Union of North America.

the facility is larger than the Distrigas and the Commercial Point LNG tanks in the Boston area; would be the largest LNG on the east coast, and may well be the largest LNG facility in the United States. Some commenters described the scale of the proposed Acushnet LNG tanks as comparable to the footprint of a large football stadium, and 16 stories tall. Further, commenters asserted that the proposed LNG facility would expand New England's LNG storage capacity by 34 percent, and that 25 percent of the gas storage in New England would be located in Acushnet.

2. EFSB Recommendations

Draft Resource Report 1 does not provide the dimensions of the tanks. The tanks will be double the capacity of the Distrigas facility, which totals 3.4 Bcf. The Application and EIS should contain the dimensions of the tanks as well as a description and the dimensions of all other facility equipment. To better understand the scale of the proposed facility with regard to other LNG facilities, the Siting Board staff recommends that the Application and EIS include a description of the size and location of all LNG facilities in the United States that are over 3.4 Bcf. Specifically, the Siting Board staff requests for each identified LNG facility: the acreage that the LNG facilities are located on; the number of residents, businesses, or industrial facilities within a half-mile radius of each facility; the surrounding land use (industrial, commercial, and residential); the distance to the nearest residence from both the tank and the property line; and the year the facility was constructed.

There are no renderings or detailed, legible site plans of the proposed LNG facility. The Siting Board staff recommends that the Application and EIS include a greater than 1: 24,000 (1 inch = 2,000) scale rendering of the LNG facility (including the existing facility), with all components and property lines identified, which includes a key. Further, the Company should include visual images of the existing and proposed LNG facilities from a series of viewpoints that are representative of all directions and prominent viewpoints.

B. Residential and Sensitive Receptor Proximity

1. Public Comments

The overwhelming sentiment expressed at the public comment hearing is that Acushnet, as a suburban/rural community, is not the appropriate location for an LNG facility of the size proposed by the Company. The commenters all address the fact that the proposed LNG facility is to be located in the middle of a residential area, which is zoned residential. The proposed LNG facility will be directly abutting the backyards of residences along Peckham Road. Several commenters indicated that surrounding towns of Fairhaven, Freetown and Rochester are also almost exclusively residential, as well as the area in New Bedford that abuts the facility. Further, the proposed LNG facility is located within 1.5 miles of three schools with approximately 1,600 students (Acushnet Elementary and Acushnet Middle School and the Pulaski School in New Bedford). In addition there are other sensitive receptors such as a hospital, nursing homes and day care centers in close proximity.

2. EFSB Recommendations

Draft Resource Report 1 does not provide any information on the land use details of the areas surrounding the proposed LNG facility. Given the size of the proposed LNG facility and the location in a residentially zoned area, the Application and EIS should provide a detailed analysis of the residential and sensitive receptors in the vicinity of the proposed LNG facility. The Siting Board staff recommends the Application and EIS include a table, or a series of tables that include the number of residences, schools, hospitals, nursing homes and day care centers within 500 feet, 1,500 feet, 0.5 mile, 1.0 mile, 1.5 mile, and 2.0 miles (from both the tank and the facility fence); the table(s) should also identify the residences and sensitive receptors by towns and cities.

C. Safety

1. Public Comments

The majority of the commenters were concerned about the safety of locating a LNG facility of the proposed size and capacity in a residential area. The first issue of importance concerned the potential for fire and/or explosion and the ability of Acushnet and the surrounding communities' emergency responders to adequately ensure the safety of the surrounding communities given the scope of the facility. Specifically, a retired first responder pointed out that Acushnet is served by a combination permanent and on-call fire department (three permanent and 25 on-call fire fighters; Freetown is served by a small combination fire department; Rochester is all on-call; and the closest New Bedford fire station is three miles away. Therefore, relying on mutual aid would still leave the area lacking in firefighting capability. The same individual recalled a fire in 2003 at the SEMASS Waste to Energy Plant in Rochester that required aid from 36 towns; and also asked what the recourse is when equipment fails.

Questions were raised as to what is the established vapor zone and the thermal exclusion zone; what is included in the calculation and where the radius is measured from. Commenters also questioned the safety record of Spectra, in general and in light of the explosion in Salem Township, Pennsylvania last month. They noted that the impact of the Salem Township blast radius was actually double what was calculated previously by Pipeline and Hazardous Materials Safety Administration ("PHMSA") (1,320 vs. 671 feet).

State Representative Robert Koczera commented on the National Fire Protection Association ("NFPA") and the requirements Algonquin should follow in constructing this LNG facility. Specifically, NFPA 59A Chapter 15 is a new chapter detailing a qualitative risk assessment which would go beyond the current federal standards (the current requires compliance with Chapter 5), and which would expand the impact area to surrounding towns.

The Acushnet LNG Advisory Committee (of which Fire Chief Gallagher is Chair) has requested that Algonquin follow Chapter 15; however Algonquin has not yet responded to the request.

Residents also expressed concern with the ability to evacuate given that Peckham Road is a narrow, highly traveled two lane road. Finally, many commenters cited homeland security and the potential for terrorist attacks, especially aerial attacks on such a prominent target.

2. EFSB Recommendations

Safety is an overriding concern of all commenters as well as public officials. The Company states in Draft Resource Report 1 that the facility will be operated and maintained in accordance with the USDOT's PHMSA Federal Safety Standards for LNG Facilities (49 CFR part 143), which incorporates the NFPA 59A standard.

The Siting Board staff recommends that the following be included in the Application and EIS:

- A complete and in-depth detailed description of all fire and public safety
 procedures that will be implemented by Algonquin. Such procedures should be at
 the least consistent with and ideally greater than, other existing LNG procedures
 and operations in Massachusetts.
- A review and description of the contingency plans and staffing levels at the existing LNG facility and what updates would be necessary with the substantial increase in capacity.
- Any revisions necessary to mutual local fire department aid levels and the statewide mobilization plan and what cities and towns will be called upon in the case of an emergency. Information should also be provided as to what training and equipment will be provided to Acushnet, New Bedford, Freetown, Fairhaven, and Rochester as well as other communities and how such training and equipment will be funded and what compensation is to be provided to the communities. Further, Algonquin should include a cost sharing plan indentifying the mechanisms for funding the project-specific security and emergency management costs that would otherwise be borne by state and local officials.
- A full description of the type of fire departments (municipal or on-call) that exist in all communities in a ten-mile radius.
- An explanation of all parameters and assumptions that are input into the development of the established vapor and thermal exclusion zones, as well as the requirements that must be met and what are the final quantified measurements for said zones for the LNG facility.

- A complete description of NFPA Chapters 5 and 15 of 59A, as well as any other
 pertinent chapters and standards. An explanation of what is required in
 Massachusetts under the NFPA 59A, what is recommended, and whether
 Algonquin will comport with the more stringent Chapter 15 qualitative risk
 assessment. If Algonquin will not follow Chapter 15, an explanation of why not
 should be addressed.
- A detailed history of Spectra Energy's safety record, which would include failures, incidents, and accidents on LNG facilities within the Company's portfolio. The information should include the cause of the incident, the quantity of leaked gas and other environmental impacts, and any related injuries or fatalities. Additionally, the Company should provide information on incidents and accidents at any LNG facility across the United States in the past ten years, and the potential relevance to the Acushnet site.

D. Noise Impacts

1. Public Comments

Many commenters expressed concern about the noise impacts of the LNG facility during construction and operation.

2. EFSB Recommendations

Since there are limited details in Draft Resource Report 1 concerning any specifics relating to the noise associated with the construction and operation of the LNG facility, or any details about the nearest receptors, the Company should prepare a full analysis in conformance with both FERC and MassDEP noise requirements (incorporating items listed in Section IV.B.2, as applicable). In addition, the noise analysis should: (1) include the new LNG and new on-site Acushnet Meter Station, and describe all noise sources associated with any new facilities to be constructed on-site; (2) provide information on noise increases based on ambient levels without the existing LNG facility operating and with the existing LNG facility operating; and (3) include at least measurements at the closest residences receptor in all eight directions (including locations on Peckham Road, Tobey Street, Crescent Street, Sharon Street, Nestles Lane, Wood Duck Road, and Keane Road).

E. <u>Health and Emissions</u>

1. Public Comments

Commenters expressed concern with emissions from the LNG facility and the associated impacts on health, such as on cancer rates and respiratory disease. The proximity of a number of schools to the LNG facility and the health impacts to children were raised, as were impacts from methane leaks – both from a health and climate change perspective.

2. EFSB Recommendations

The Siting Board staff recommends that the Application and the EIS include a robust air analysis of the existing air quality and estimated air quality impacts of the proposed LNG facility and the Acushnet Meter Station, including emissions of nitrogen oxides, volatile organic compounds, carbon monoxide, particulate matter, sulfur dioxide, greenhouse gases, and other potential emissions associated with the LNG facility and meter station.

Algonquin should mitigate the Project's construction-related air emissions. The Siting Board staff recommends that Application and the EIS include a discussion of the potential use of USEPA-verified (or equivalent) emission control devices, such as oxidation catalysts or other comparable technologies (to the extent that they are commercially available), on the exhaust system side of the diesel combustion engine of diesel-powered non-road construction equipment with engine horsepower ratings of 50 and above to be used for 30 or more days over the course of Project construction. Mitigation measures of this type would be consistent with Siting Board practices.

F. Wetlands and Natural Resources

1. Public Comments

Commenters pointed out that of the approximately 200-acre site owned by Eversource, Algonquin is intending to clear cut over 150 acres for the new LNG facility. Further, they stated that at least 40 percent of the property is wetlands, and that altering and filling the wetlands will negatively impact the existing vegetation and wildlife, as well as increase stormwater runoff and create flooding of nearby properties. Commenters questioned the distinction made by Algonquin in its FERC filing concerning temporary versus permanent environmental impacts and argued that all clearing and filling, whether for the actual structures themselves or for construction, would have a detrimental, permanent impact.

In addition to the clear cutting of the forested Eversource property and the effect on wildlife, such as deer, birds, and other species, two conservation areas are in the vicinity of the 24-inch pipeline connection and the LNG facility, the Betsy Tabor Bird Sanctuary and the Acushnet River Reserve.

Several commenters noted that although Eversource has owned some of the acreage since the early 1970s, the Company acquired additional property after September 11, 2001 when Eversource stated it wanted more land surrounding the existing LNG facility for protection. Some commenters questions the arrangements by which Eversource acquired the additional residentially zoned land.

Residents stated that many use wells for drinking water, and were concerned with the effects on the quality of their well water supply given the construction of the LNG facility and the connecting pipeline to the Algonquin mainline. In addition, some comments questioned how any leaks or explosions would affect their water supply.

2. EFSB Recommendations

Eversource owns approximately 210 acres, and all but the 15 acres associated with the existing LNG facility are heavily wooded. The site will be clear cut and wetlands will be filled. Wetlands protection practices in Massachusetts under the Massachusetts Wetlands Protection Act ("WPA") are, as a rule, more stringent than protections at the federal level under the Clean Water Act ("CWA"). The Application and EIS should specifically address flooding and stormwater runoff impacts to surrounding residents and property owners and required mitigation to prevent damage to such properties. The Siting Board staff recommends that the Application and EIS include measures the Company will take to prevent, reduce, and mitigate any impacts to wetlands and public water supplies associated with Project construction and operation.

G. Alternatives

1. Public Comments

The public questioned why there was no comparison of an actual alternative site to the Acushnet site for the LNG facility, and whether there is a requirement by FERC for the Company to put forth an alternative site.

2. EFSB Recommendations

In Draft Resource Report 10 Algonquin identified six existing on and off shore Massachusetts LNG facilities and quickly dismissed them, relying on the lack of "operational flexibility" as a main drawback to meeting the purpose and need the Project. The Siting Board staff recommends that the Application and EIS include an analysis of different variations of capacity that could be added to two or more of the existing LNG facilities to meet the purpose and need. In addition, the analysis should include how the 6.4 Bcf capacity was determined to be the necessary capacity and whether a smaller sized Acushnet LNG facility could be facilitated by expanded use or modifications of other existing LNG facilities.

The Siting Board staff recommends that Algonquin be required to go beyond the cursory site selection analysis contained in Draft Resource Report 10. This Draft Resource Report only identifies one alternative site, and the analysis is limited. Further, in reviewing Draft Resource Report 10 it is unclear how the Acushnet site was selected over the Burrillville site given that Table 10.10-1, Acushnet and Burrillville LNG Site Comparison, contains incomplete information. Algonquin should be required to conduct a robust comparison between the proposed Acushnet site for the LNG facility and a number of viable site locations, as well as provide more information on a final site comparison between Acushnet and one selected site,

whether it is Burrillville or not. There should also be an in-depth explanation for the new 17.7 miles of new 24-inch pipeline looping that would be need for the Burrillville site as well as additional horsepower required at the proposed Rehoboth Compressor Station if the Burrillville site was selected.

VI. <u>CLOSING COMMENTS</u>

In summary, the Siting Board staff appreciates the opportunity to file comments on the available Draft Resource Reports for the Access Northeast Project, Docket No. PF16-1-000. We look forward to the Company's response to the comments we are submitting today.

Sincerely yours,

Robert). Shea

Robert J. Shea Presiding Officer

cc: Jon Bonsall, Esq., Keegan Werlin LLP

Enclosures:

Appendix A – Transcripts of EFSB Public Comment Hearings

Appendix B – Written Comments Submitted to EFSB

Appendix C – Correspondence Between Calpine Fore River and EFSB