1.0 INTRODUCTION

On June 9, 2008, Algonquin Gas Transmission, LLC (Algonquin), an indirect wholly owned subsidiary of Spectra Energy Corp., filed an application with the Federal Energy Regulatory Commission (Commission or FERC) under section 7(c) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations. The application was assigned Docket No. CP08-420-000 and was noticed in the Federal Register on June 20, 2008. Algonquin is seeking a Certificate of Public Convenience and Necessity (Certificate) from the FERC to construct, install, own, operate, and maintain an expansion of its existing interstate natural gas pipeline system. The environmental staff of the FERC has prepared this draft Environmental Impact Statement (EIS) to assess the environmental impacts associated with the construction and operation of the facilities proposed by Algonquin in accordance with the requirements of the National Environmental Policy Act (NEPA).

Algonquin's proposal, referred to as the HubLine/East to West Project (E2W Project or Project), would involve the construction and operation of approximately 31.4 miles of various diameter pipeline, including 12.9 miles of new pipeline in Massachusetts, 7.5 miles of replacement pipeline in Massachusetts, 11.0 miles of replacement pipeline in Connecticut, and associated ancillary facilities. Algonquin also proposes to construct a new 10,310-horsepower (hp) compressor station in Massachusetts and modify three existing compressor stations in Rhode Island, Connecticut, and New Jersey. Aboveground over-pressure protection (OPP) regulation would be installed at two existing meter stations and two new regulator stations in Massachusetts, and pig[1] launcher and receiver facilities would be constructed to connect the proposed pipelines with existing Algonquin facilities in Massachusetts and Connecticut. The proposed pipeline facilities would be located within or adjacent to Algonquin's existing pipeline right-of-way and/or NSTAR Electric Company's (NSTAR) existing powerline right-of-way for the majority of their length.

Algonquin proposes to begin construction in June of 2009 and place the Project facilities in service by November of 2009. The proposed Project facilities and schedule are described in detail in section 2.0.

1.1 PROJECT PURPOSE AND NEED

The E2W Project was developed in response to significant interest from shippers that require transportation capacity to accommodate increased receipts of natural gas at the east end of the Algonquin system, including revaporized liquefied natural gas (LNG), for redelivery to high growth markets in the Northeast. When completed, the Algonquin system would be transformed from a system that, for the most part, received gas supplies originating from the Gulf Coast and Appalachian regions and transported these supplies east, into a Northeast header system that would provide customers with diversified access to regional supplies and that would accommodate projected growth in demand. The additional capacity on Algonquin's system would enable LNG suppliers to market new gas supplies from the Northeast Gateway and Neptune Deepwater Ports in offshore Massachusetts at the east end of the Algonquin system and the Canaport LNG Terminal in New Brunswick, Canada.

According to Algonquin, natural gas consumers, utilities, and electric generators located along the Algonquin system would benefit from increased supply access and enhanced competition among suppliers and upstream pipeline transportation providers. The E2W Project would increase Algonquin's system flexibility to manage contingencies such as operational or facility outages due to maintenance or repair, and would strengthen the operational ability to mitigate other capacity restrictions on the eastern end of the system.

[1] A pig is an internal tool that can be used to clean and dry a pipeline and/or to inspect it for damage or corrosion.

Specifically, the objectives of the proposed Project are to provide:

- 746,500 dekatherms per day (dth/d) of additional east to west natural gas transportation service to New England and other Northeast markets;

- increased diversity of supply by accessing natural gas from the LNG projects recently constructed or under construction offshore of Massachusetts and in New Brunswick, Canada; and

- increased reliability and security of the existing natural gas system by eliminating delivery bottlenecks in Algonquin's current pipelines.

Algonquin completed an open season as well as a reverse open season for its proposed E2W Project.[2] As a result, Algonquin currently has executed binding precedent agreements[3] for the entire proposed 746,500 dth/d of additional firm transportation capacity for contract terms of 10 years. This additional capacity, together with existing capacity, would allow Algonquin's customers to transport approximately 1 billion cubic feet per day (bcf/d) of natural gas from east to west on the Algonquin system by 2009. Table 1.1-1 lists Algonquin's shippers by contracted volumes.

TABLE 1.1-1

HubLine/East to West Project Precedent Agreements

Shipper	Maximum Daily Transportation Quantity (dth/d)
Excelerate Energy Limited Partnership	500,000
Suez LNG NA LLC	225,000
Narragansett Electric Co.	10,000
Yankee Gas Services Company	10,000
City of Norwich, Connecticut	1,500
Total Volume Contracted	746,500

On September 15, 1999, the FERC issued a Policy Statement that established criteria for determining whether there is a need for a proposed project and whether the proposed project would serve the public interest. The Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the FERC balances the public benefits against the potential adverse consequences. In evaluating new pipeline construction, the FERC's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain.

[2] An open season is the process by which a company solicits commercial interest from existing and potential new customers for additional transportation capacity. A reverse open season is the process by which a company solicits interest from existing customers in relinquishing contracted transportation capacity.

[3] A precedent agreement is a binding contract under which one or both parties has the ability to terminate the agreement if certain conditions, such as receipt of regulatory approvals, are not met.

1.2 PURPOSE AND SCOPE OF THIS EIS

Our[4] principal purposes for preparing this EIS are to:

- identify and assess the potential impacts on the natural and human environment that would result from the implementation of the proposed Project;
- describe and evaluate reasonable alternatives to the proposed Project that would avoid or substantially lessen any significant adverse effects of the Project on the environment;
- identify and recommend specific mitigation measures, as necessary, to avoid or minimize significant environmental effects; and
- encourage and facilitate involvement by the public and interested agencies in the environmental review process.

The topics addressed in this EIS include alternatives; geology; soils; groundwater; surface waters; wetlands; vegetation; wildlife and aquatic resources; special status species; land use, recreation, special interest areas, and visual resources; socioeconomics (including transportation and traffic); cultural resources; air quality and noise; reliability and safety; cumulative impacts; and growth-inducing impacts. The EIS describes the affected environment as it currently exists, discusses the environmental consequences of the proposed Project, and compares the Project's potential impact to that of various alternatives. The EIS also presents our recommended mitigation measures.

The FERC is the lead agency for the preparation of this EIS. The U.S. Army Corps of Engineers (COE) and the U.S. Environmental Protection Agency (EPA) are cooperating agencies. A cooperating agency has jurisdiction by law or special expertise with respect to environmental impacts involved with the proposal and is involved in the NEPA analysis. The roles of the FERC and the cooperating agencies in the Project review process are described below. The major federal, state, and local permits, approvals, and consultations for the Project are discussed in section 1.6.

1.2.1 Federal Energy Regulatory Commission

The FERC is the federal agency responsible for evaluating applications filed for authorization to construct and operate interstate natural gas pipeline facilities. As such, the FERC is the lead federal agency for the preparation of this EIS in compliance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations (CFR) Parts 1500-1508), and the FERC's regulations implementing NEPA (Title 18 CFR Part 380).

As the lead federal agency for the E2W Project, the FERC is required to comply with section 7 of the Endangered Species Act of 1973 (ESA), the Magnuson-Stevens Fishery Conservation and Management Act (MSA), section 106 of the National Historic Preservation Act (NHPA), and section 307 of the Coastal Zone Management Act of 1972 (CZMA). These and other statutes have been taken into account in the preparation of this EIS. The FERC will use the document to consider the environmental impact that could result if it issues Algonquin a Certificate under section 7 of the NGA.

The FERC will also consider non-environmental issues in its review of Algonquin's application. Authorization will be granted only if the FERC finds that the evidence produced on financing, rates,

[4] "We," "us," and "our" refer to the environmental staff of the Federal Energy Regulatory Commission's Office of Energy Projects.

market demand, gas supply, existing facilities and service, environmental impacts, long-term feasibility, and other issues demonstrates that the Project is required by the public convenience and necessity. Environmental impact assessment and mitigation development are important factors in the overall public interest determination.

1.2.2 U.S. Army Corps of Engineers

The COE has jurisdictional authority pursuant to section 404 of the Clean Water Act (CWA) (33 United States Code (USC) 1344), which governs the discharge of dredged or fill material into waters of the United States, and section 10 of the Rivers and Harbors Act (33 USC 403), which regulates any work or structures that potentially affect the navigable capacity of a waterbody. Because the COE must comply with the requirements of NEPA before issuing permits under these statutes, it has elected to cooperate in the preparation of this EIS. The COE would adopt the EIS per Title 40 CFR Part 1506.3 if, after an independent review of the document, it concludes that its comments and suggestions have been satisfied.

As an element of its review, the COE must consider whether the proposed Project represents the least environmentally damaging practicable alternative pursuant to the CWA section 404(b)(1) guidelines. The term practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall Project purposes.

Although this document addresses environmental impacts associated with the proposed Project as they relate to sections 404 and 10, it does not serve as a public notice for any COE permits. Algonquin filed an application for a section 404/10 Individual Permit with the COE on June 16, 2008. The public notice for this permit will be issued when the draft EIS is issued. The comment meetings on the draft EIS will also serve as the COE's comment meetings on the public notice. The COE's Record of Decision resulting from consideration of the EIS would formally document its decision on the proposed Project, including the section 404 (b)(1) analysis and required environmental mitigation commitments.

1.2.3 U.S. Environmental Protection Agency

The EPA has delegated water quality certification (section 401 of the CWA) to the jurisdiction of individual state agencies, but the EPA may assume this authority if no state program exists, if the state program is not functioning adequately, or at the request of a state. Water used for hydrostatic testing of pipelines that is point-source discharged into waterbodies requires a National Pollutant Discharge Elimination System (NPDES) permit (section 402 of the CWA) issued by the state with EPA oversight. In addition, the EPA has the authority to review and veto COE decisions on section 404 permits.

The EPA also has jurisdictional authority to control air pollution under the Clean Air Act (CAA) (42 USC Chapter 85) by developing and enforcing rules and regulations for all entities that emit toxic substances into the air. Under this authority, the EPA has developed regulations for major sources of air pollution. The EPA has delegated the authority to implement these regulations to state and local agencies, while state and local agencies are allowed to develop their own regulations for non-major sources. The EPA also establishes general conformity applicability thresholds, with which a federal agency can determine whether a specific action requires a general conformity assessment.

In addition to its permitting responsibilities, the EPA is responsible for implementing certain procedural provisions of NEPA (e.g., publishing the Notices of Availability of the draft and final EISs in the Federal Register) to establish statutory timeframes for the environmental review process.

1.3 COORDINATION OF NEPA/MEPA REVIEW

On August 27, 2007, Algonquin filed a request with the FERC to implement the Commission's pre-filing environmental review process (Pre-Filing Process) for the E2W Project. At that time, Algonquin was in the preliminary design stage of the Project and no formal application had been filed with the FERC. We approved Algonquin's request on September 10, 2007 and established a pre-filing docket number (PF07-15-000) to place information related to the Project into the public record. The purpose of the Pre-Filing Process is to encourage the early involvement of interested stakeholders, facilitate interagency cooperation, and identify and resolve issues before an application is filed with the FERC. The cooperating agencies agreed to conduct their environmental reviews of the Project in conjunction with the Commission's Pre-Filing Process.

The Project must also undergo an environmental review pursuant to Massachusetts Environmental Policy Act (MEPA) regulations. The MEPA process is specifically designed to inform Project proponents and participating agencies; ensure public participation in the state environmental permitting process; maximize consistency between agency actions; ensure that state permitting agencies have adequate information on which to base their permit decisions and section 61 Findings (see discussion below); and ensure that potential environmental impacts on state resources are fully described and avoided, minimized, or mitigated to the maximum extent feasible. The MEPA review does not alter the permitting authority of any agency; however, no Massachusetts agency can issue a permit until the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs (MEEA) has determined that the final Environmental Impact Report (EIR) is adequate and 60 days have elapsed following publication of the Notice of Availability in the Environmental Monitor.

To initiate the MEPA review and facilitate the Commission's Pre-Filing Process, Algonquin filed an Environmental Notification Form (ENF) with the Secretary of the MEEA on November 30, 2007. Algonquin included in the ENF a request to the Secretary of the MEEA to conduct a coordinated review of the Project with the FERC. On October 1, 2007, we participated in an interagency scoping meeting with the MEEA and the Massachusetts Energy Facility Siting Board (MEFSB). The MEFSB is an independent board that licenses major energy facilities in Massachusetts and is charged with ensuring a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. The MEFSB has no authority over the siting of interstate natural gas facilities; however, it represents the citizens of Massachusetts before the FERC on cases involving the construction of applicable energy infrastructure in Massachusetts. The purpose of the meeting was to discuss ways to coordinate the MEPA and NEPA requirements for the Project, the MEFSB's role in soliciting and relaying comments to the FERC, and the possibility of holding joint scoping meetings with the MEEA and the MEFSB in Massachusetts.[5]

On October 10, 2007, the Secretary of the MEEA issued a Certificate of the Secretary of Environmental Affairs Establishing a Special Review Procedure (Certificate Establishing an SRP). The Secretary of the MEEA issued a Certificate of the Secretary of Environmental Affairs on the ENF (Certificate on the ENF) on January 9, 2008. On January 22, 2008, we met with the Environmental Analyst assigned by the MEEA to conduct the MEPA review for the Project to discuss specific requirements identified in the Certificate Establishing an SRP and the Certificate on the ENF. Copies of the Certificate Establishing an SRP and the Certificate on the ENF are included in Appendix A.

[5] The MEEA did not participate in the FERC's public scoping meetings and held a separate hearing on December 20, 2007. The MEFSB participated in the FERC's scoping meetings and also held a separate hearing on August 14, 2008.

In the Certificate Establishing an SRP, the Secretary of the MEEA indicated that the Special Review Procedure would benefit the Project by allowing for a coordinated NEPA/MEPA review[6] of an EIS/EIR document consistent with the requirements and constraints imposed by FERC regulations. Under the established Special Review Procedure, the FERC's draft and final EISs will serve as a portion of the MEEA's draft and final EIRs. Following the release of the draft EIS, Algonquin will file a draft EIR Addendum with the Secretary of the MEEA to provide supplemental information to ensure that the combination of the draft EIS and the draft EIR Addendum adequately fulfill the requirements of the scope of the Certificate on the ENF. The MEEA will review the combination of the draft EIS and draft EIR Addendum as the draft EIR. Similarly, Algonquin will prepare a final EIR Addendum to be reviewed in combination with the final EIS as the final EIR. The MEEA will review the draft and final EIRs and will issue a decision following the close of the comment period for each document regarding the adequacy of the documents with respect to the MEEA's EIR requirements. This decision will be in the form of a Certificate. The comment period for the draft and final EIRs will be coordinated with the comment period for the draft and final EISs, respectively, to the maximum extent possible. If the MEEA determines that the draft or final EIR has not resolved all of the issues that are sufficiently important to the MEEA's review, Algonquin may be required to prepare a supplemental draft or final EIR.

Any Massachusetts agency that takes action on a project for which the Secretary of the MEEA requires an EIR must determine whether the project is likely, directly or indirectly, to cause any damage to the environment and make a finding describing the damage to the environment and confirming that all feasible measures have been taken to avoid or minimize that damage. This determination is referred to as section 61 Findings. Section 61 Findings must specify: 1) all feasible measures to be taken by the applicant or any other agency or person to avoid damage to the environment or, to the extent damage to the environment cannot be avoided, to minimize and mitigate the damage to the maximum extent practicable; 2) the agency or person responsible for funding and implementing mitigation measures, if not the applicant; and 3) the anticipated implementation schedule that would ensure that mitigation measures would be implemented prior to or when appropriate in relation to environmental impacts. Proposed section 61 Findings are prepared by the applicant to assist a participating agency in fulfilling its obligations.

Algonquin has indicated that it will file its proposed section 61 Findings as part of the draft EIR Addendum. After considering public comments on the proposed section 61 Findings, this draft EIS, and the MEEA's Certificate on the draft EIR, Algonquin will prepare revised section 61 Findings. The revised section 61 Findings will be filed with the FERC approximately 4 weeks prior to the anticipated date of the final EIS and will then also be filed with the Secretary of the MEEA as part of the final EIR Addendum. After considering public comments on the revised section 61 Findings, the final EIS, and the MEEA's Certificate on the final EIR, Massachusetts state permitting agencies will issue final section 61 Findings under MEPA as appropriate for each individual permit at the time of permit issuance. The proposed, revised, and final section 61 Findings will develop and finalize a clear commitment to mitigation, an estimate of individual costs of the proposed mitigation, and identify the parties responsible for implementing the mitigation. In addition, they will provide a schedule for the implementation of all mitigation measures, as specified in the Certificate on the ENF.

1.4 AGENCY AND PUBLIC REVIEW AND COMMENT OPPORTUNITIES

As part of the Pre-Filing Process, Algonquin mailed notification letters to landowners, government and agency officials, and the general public informing them about the Project and inviting

[6] The term coordinated review as used in the Secretary of the MEEA's Certificate Establishing an SRP and in the MEPA regulations refers to the practice of allowing a single set of documents to serve simultaneously as both an EIS under NEPA and an EIR under MEPA. This is not the same as a joint review since both the FERC and the MEEA will retain independent authority to judge the adequacy of the information in the document pursuant to their respective statutory and regulatory responsibilities.

them to attend open houses to learn about the Project and to ask questions and express their concerns. Notifications of the open houses were also published in local newspapers and sent to local media and municipal offices. Algonquin conducted 18 open houses prior to filing its request with the FERC to implement the Commission's Pre-Filing Process. An additional 11 open houses were conducted in September and October of 2007 after the Pre-Filing Process was initiated to provide information obtained through survey activities to date. Another open house was held in March of 2008 to provide information and obtain comments on an alternative pipeline route (Cross Country Alternative 4) in the Canton/Stoughton, Massachusetts area that was under serious consideration. Table 1.4-1 lists the dates and locations of these open houses.

TABLE 1.4-1

Open Houses Conducted for the HubLine/East to West Project

State/Applicable Municipality	Date
Massachusetts	
Franklin	June 5, 2007
Norfolk and Millis	June 6, 2007
Walpole	June 11, 2007
Canton	June 12, 2007
Medway and Bellingham	June 13, 2007
Sharon	June 18, 2007
Randolph and Avon	June 19, 2007
Stoughton	June 20, 2007; October 1, 2007; March 24, 2008
Braintree	June 21, 2007
Holbrook	June 25, 2007
Rehoboth	June 26, 2007
Seekonk and Attleboro	June 27, 2007
Weymouth	June 28, 2007
Norfolk, Millis, Franklin, Medway, and Bellingham	September 25, 2007
Walpole and Sharon	September 26, 2007
Danvers, Peabody, and Middleton	October 2, 2007
Holbrook, Randolph, Avon, and Canton	October 3, 2007
Rehoboth, Seekonk, and Attleboro	October 4, 2007
Braintree and Weymouth	October 10, 2007
Boxford, North Andover, and Haverhill	October 11, 2007
Connecticut	
Preston	June 18, 2007
Norwich	June 20 and 28, 2007
Cheshire	June 21 and 26, 2007; October 10, 2007
Preston, Ledyard, North Stonington, and Norwich	September 25 and 27, 2007

We attended the open houses held in September and October of 2007 and on March 24, 2008 to explain the NEPA environmental review process to interested stakeholders and take comments about the Project and the alternatives under consideration. The questions and concerns raised by the public at the open houses are addressed in this EIS.

Additional contacts Algonquin has had with landowners regarding the proposed Project include establishing a single point of contact within Algonquin to answer questions and provide information, establishing a website with information about the Project at http://www.easttowestexpansion.com, and sending notification letters to affected landowners that its Certificate application was filed with the FERC.

On October 16, 2007, the Commission issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed East to West HubLine Expansion Project,*[7] *Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI). The NOI was published in the Federal Register and briefly described the Project and the EIS process. The NOI also provided a preliminary list of draft EIS issues identified by us, invited written comments on the environmental issues to be addressed in the draft EIS, listed the date and location of three public scoping meetings to be held in the Project area, and established a closing date for receipt of comments of November 21, 2007. The NOI was mailed to more than 2,800 individuals and organizations.

Three public scoping meetings were held to provide the general public an opportunity to learn more about the proposed Project and participate in the environmental analysis by commenting on the issues to be addressed in the draft EIS. These scoping meetings were held in Randolph, Massachusetts on November 5, 2007; North Andover, Massachusetts on November 7, 2007; and Norwich, Connecticut on November 8, 2007. Sixteen people commented at the meeting in Randolph and 29 people commented at the meeting in North Andover. No comments were made at the meeting in Norwich.

To solicit comments and concerns about the Project from other jurisdictional resource agencies, we conducted an interagency scoping meeting in the Project area on November 7, 2007. Agencies present at the meeting were the COE; the EPA; the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries); the Massachusetts Department of Conservation and Recreation (MassDCR), Areas of Critical Environmental Concern Program (ACEC Program); the Massachusetts Department of Environmental Protection (MassDEP); the Massachusetts Office of Coastal Zone Management (MassCZM); and the Massachusetts Department of Public Utilities, Siting Division (MassDPU).

We participated in two interagency field visits on March 7 and 18, 2008. The first field visit was organized in response to a request by the MassDCR, ACEC Program to examine the potential route alternatives through the Cranberry Brook Watershed Area of Critical Environmental Concern (ACEC). Representatives of the EPA; the MassDEP; the MassDCR, ACEC Program; and interested parties from the Towns of Braintree and Holbrook also participated. The purpose of the second field visit was to review potential route alternatives in the Canton/Stoughton, Massachusetts area with the EPA and the MassDEP.

On April 14, 2008, the Commission issued a *Supplemental Notice of Intent to Prepare an Environmental Impact Statement for the Proposed East to West HubLine Expansion Project and Request for Comments on Environmental Issues Related to an Alternative Pipeline Route Under Consideration* (Supplemental NOI). The alternative pipeline route under serious consideration was the Cross Country Alternative 4 in the Canton/Stoughton, Massachusetts area for which Algonquin held an open house in March of 2008 as described above. The Supplemental NOI was mailed to about 3,000 individuals and organizations and published in the Federal Register and opened a new comment period that closed on May 14, 2008. The Supplemental NOI discussed the alternative route and described the reduced scope of the proposed Project since the original NOI was issued. The reduction in scope included the removal of 12.2 miles of the Q-1 System Replacement in Norfolk County, Massachusetts; the entire 3.6 miles of the C-1 System Replacement in New Haven County, Connecticut; the Boxford Compressor Station and corresponding alternative Danvers Compressor Station in Essex County, Massachusetts; and modifications to the Chaplin Compressor Station in Windham County, Connecticut. Since the issuance of the Supplemental NOI, the scope has been further reduced to remove the modifications to the Southeast Compressor Station in Putnam County, New York and the installation of gas chromatographs at 29 meter

[7] Algonquin changed the Project name between the time the Pre-Filing Process was initiated and it filed its FERC application.

stations in Massachusetts, Connecticut, Rhode Island, New York, and New Jersey. The Cross Country Alternative 4 was subsequently adopted as part of the proposed route in Algonquin's filed application.

On July 7, 2008, we met with the COE and the EPA to discuss EIS preparation, coordination of the draft EIS comment meetings with the COE's section 404/section 10 Individual Permit public notice comment meetings, the wetland mitigation plan, and the proposed route and the alternatives under consideration.

The transcripts of the public scoping meetings, summaries of the interagency scoping meetings, and all written scoping comments are part of the public record for the E2W Project and are available for viewing on the FERC Internet website (http://www.ferc.gov).[8] The major issues raised during the scoping process included the siting of the Boxford Compressor Station (subsequently removed from the Project scope); impacts on land use at the proposed Rehoboth Compressor Station; safety and loss of screening associated with collocation of pipelines with existing NSTAR electric transmission corridors; impacts on NSTAR's future use of its rights-of-way; proximity of the pipelines and construction activities to homes, schools, and a hospital; impacts on sensitive vegetative communities, wetlands, and forest lands; and impacts on community infrastructure and water supplies. Table 1.4-2 lists the environmental issues that were identified during the scoping process described above if the comment is still applicable to the currently proposed Project and indicates the section of the draft EIS in which each issue is addressed. Table 1.4-2 also lists some of the relevant issues raised by the Secretary of the MEEA in its Certificate on the ENF, comments relayed by the MEFSB, and environmental comments raised by intervenors[9] in the FERC's proceeding. Additional issues we independently identified are also addressed in the draft EIS.

Some issues that were raised during the scoping process are not environmental issues (e.g., rate changes, fuel charges, and service to existing shippers). These issues will be addressed during the Commission's non-environmental review of Algonquin's application.

As of December 26, 2006, the Commission is required to issue a Scheduling Notice in compliance with its responsibilities under the Energy Policy Act of 2005. The Scheduling Notice for an EIS must be issued within 90 days after an applicant files a complete application for a Certificate and the FERC accepts the application and issues the Notice of Application. The purpose of the Scheduling Notice is to inform federal and state agencies that have federal permitting responsibilities of the FERC's environmental review schedule and planned date for issuance of the final EIS. Under the Energy Policy Act of 2005, agencies with federal permitting responsibilities are required to issue their permits within 90 days of the FERC's issuance of the final EIS, unless other statutory frameworks exist.

[8] Using the "eLibrary" link, select "General Search" from the eLibrary menu and enter the docket number excluding the last three digits in the "Docket Number" field (i.e., PF07-15 and CP08-420). Select a date range of October 16, 2007 to September 24, 2008.

[9] Intervenors are official parties to the proceeding and have the right to receive copies of case-related Commission documents and filings by other intervenors. Likewise, each intervenor must provide 14 copies of its filings to the Secretary of the Commission and must send a copy of its filings to all other intervenors. Only intervenors have the right to seek rehearing of the Commission's decision.

TABLE 1.4-2

Issues Identified and Comments Received During the Scoping Process for the HubLine/East to West Project

Issue/Specific Comment	EIS Section Addressing Comment
GENERAL	
Project purpose and need	1.1
Coordination of National Environmental Policy Act and Massachusetts Environmental Policy Act documents	1.3
Pre-Filing environmental review process, its use in Project development, agency coordination, landowner notifications and communications, public participation	1.3, 1.4
Changes to the Project since it was originally proposed	1.4
Compliance with environmental permits	1.6
Plans for abandonment of the pipeline segments that are being replaced	2.2.1.4, 2.3.2, 4.8.1
Right-of-way width requirements and configurations	2.2.1.2, 4.8.1
Depth of cover	2.3.1
Cumulative need for access for operations and maintenance by NSTAR Electric Company (NSTAR) and Algonquin Gas Transmission, LLC (Algonquin) during construction and operation	2.3.2
Timeframe and cost estimate for the proposed facilities	2.4, 4.9.7
Future Project expansion	2.7
Measures to avoid, minimize, and mitigate adverse impacts on the environment	4.0, Appendix F, Appendix G, Appendix I, Appendix J, Appendix K, Appendix L, Appendix M
ALTERNATIVES	
Consideration of alternative routes and compressor station sites (including the no-build alternative)	3.0
Consideration of the use of existing Algonquin right-of-way rather than the NSTAR right-of-way	3.3.2.3
Evaluation of the NSTAR Alternative	3.4.2.3, 4.0
GEOLOGY	
Impacts of blasting and proposed mitigation measures related to residences/structures, water wells, and wildlife	2.3.2, 4.1.3.5, Appendix K
SOILS	
Erosion and sediment control	4.2.2, Appendix F
WATER QUALITY AND AQUATIC RESOURCES	
Impacts of the proposed route on the Glen Echo Lake ecosystem, including existing hydrology	4.3.1.5
Storage of hazardous materials and fuel oil, and spill reporting procedures	4.3.1.7, Appendix G
Impacts on groundwater, reservoirs, existing hydrology, and drinking water supply, including Wellhead Protection, and Public Water Supply Areas	4.3.1.7
Dewatering methods and procedures	2.3.1, 2.3.2, 2.5, 4.3.1.7, 4.3.2.2, 4.3.2.10, Appendix F
Waterbody crossing time windows, methods, and mitigation and restoration measures	2.3.2, 4.3.2.2, 4.3.2.3, 4.3.2.7, 4.6.2.2, 4.6.2.3, Appendix F, Appendix I
Impacts of horizontal directional drill crossings, including frac-outs, drilling spoils, bentonite wash, and drilling vibrations	4.3.2.4, 4.3.2.7, 4.6.2.3, 4.6.2.4, Appendix I
Impacts on fishery resources, including spawning runs, coldwater fishery streams, and essential fish habitat	4.6.2.2, 4.6.2.3, 4.6.2.4

TABLE 1.4-2 (cont'd)

Issues Identified and Comments Received During the Scoping Process for the HubLine/East to West Project

Issue/Specific Comment	EIS Section Addressing Comment
WETLANDS	
Impacts on wetlands, including Atlantic Cedar Swamps, vernal pools, and wetlands within the Cranberry Brook Watershed Area of Critical Environmental Concern (ACEC)	4.4.2, 4.4.4, 4.6.1.4
Restoration of wetlands and wetland mitigation	4.4.4, Appendix F, Appendix M
VEGETATION	
Impacts on mature trees, including restoration plans	4.5.2, 4.8.1.3, Appendix F
Revegetation of areas cleared during construction	4.5.2, Appendix F, Appendix M
Impacts of construction and vegetation clearing on the Cranberry Brook Watershed ACEC	4.5.3
Plans for invasive species control (e.g., common reed)	4.5.4, Appendix L
WILDLIFE	
Impacts of the Rehoboth Compressor Station on habitat	4.6.1.2
SPECIAL STATUS SPECIES	
Agency coordination and requirements	4.7
Evaluation of potential impacts on threatened or endangered species and their habitat	4.7.2, 4.7.3, 4.7.4
LAND USE	
Construction impacts on R&M Realty's telecommunications tower and facilities	2.3.2
Compatibility of the Rehoboth Compressor Station with existing zoning	4.8.1
Impacts on future expansion/reconfiguration of NSTAR's facilities, including the loss of right-of-way resources	4.8.1
Eminent domain and compensation process	4.8.2
Control of off-road vehicle traffic	4.8.3.1
Impacts on existing residences and structures during construction and operation	2.3.2, 4.8.3.1, Appendix J
Impacts on recreational and special interest areas (e.g., Article 97 lands)	4.8.4
Impacts of landfill crossings	4.8.5
Visual impacts along the right-of-way and at the Rehoboth Compressor Station	4.8.6
SOCIOECONOMICS	
Employment opportunities for local contractors and laborers	4.9.1
Assessment of and impacts on community public safety resources	4.9.3
Traffic impacts associated with the Project	4.9.4
Impacts on house, business, and land values, potential for increased insurance rates	4.9.6
Community compensation	4.9.7
CULTURAL RESOURCES	
Tribal consultation and impacts on tribal lands and areas of cultural importance to Native American tribes	4.10.2
Impacts on culturally and historically significant properties	4.10.4

TABLE 1.4-2 (cont'd)

Issues Identified and Comments Received During the Scoping Process for the HubLine/East to West Project

Issue/Specific Comment	EIS Section Addressing Comment
AIR QUALITY	
Consistency with the emissions limits and standards	4.11.1.2
Impacts on air quality resulting from compressor station operation	4.11.1.3
Greenhouse gas (GHG) emissions and consistency with the Massachusetts Executive Office of Energy and Environmental Affairs' GHG Emissions Policy and Protocol	4.11.1.4
NOISE	
Potential noise impacts resulting from compressor station operation and proposed mitigation measures to reduce impacts	4.11.2.3
RELIABILITY AND SAFETY	
Sensitive receptors (e.g., schools and hospitals) near the Project facilities and pipeline density standards	4.12.1
Emergency response plans, evacuation plans and coordination with community public safety services	4.12.1
Remote detection of potential issues (e.g., pipeline leaks), safety of pipeline operation	4.12.1
Safety and reliability of constructing and maintaining the pipeline in the proximity of high voltage transmission lines, including impacts of ground faults, broken live wires, and supporting foundations	4.12.2
Impacts on NSTAR's ability to use heavy equipment on the shared right-of-way and access to its facilities during an emergency	4.12.2
Ability of pipelines to withstand damage from natural events (e.g., lightning strikes, earthquakes)	4.12.3
Potential impacts associated with acts of terrorism	4.12.5
CUMULATIVE IMPACTS	
Analysis of cumulative impacts associated with existing energy facilities (e.g., NSTAR facilities)	4.13

On September 18, 2008, the Commission issued a *Notice of Schedule for Environmental Review of the HubLine East to West Project*. This notice identified our planned schedule for completion of the final EIS for the Project and provided the 90-day federal authorization decision deadline. If a schedule change becomes necessary, an additional notice will be provided so that the relevant agencies are informed of the Project's progress.

This draft EIS has been filed with the EPA and mailed to federal, state, and local government agencies; elected officials; Native American tribes and regional organizations; local libraries and newspapers; intervenors in the FERC's proceeding; and other interested parties (i.e., affected landowners, other interested individuals, and environmental and public interest groups who provided scoping comments or asked to remain on the mailing list). The distribution list for the draft EIS is in Appendix B. A formal notice (Notice of Availability) indicating that the draft EIS is available for review and comment was published in the Federal Register. The public has 45 days after the date of publication in the Federal Register to review and comment on the draft EIS both in the form of written comments and at public meetings to be held in the Project area. The dates and locations of these public meetings are listed in the "To the Party Addressed" letter that is included in the front of this draft EIS and in the Notice of Availability. All comments received on the draft EIS related to environmental issues will be addressed in the final EIS. As discussed in section 1.2.2, the public meetings on the draft EIS will also serve as the COE's meetings on the section 404/10 Individual Permit public notice.

1.5 NONJURISDICTIONAL FACILITIES

Under section 7 of the NGA, the FERC is required to consider, as part of its decision to certificate interstate natural gas facilities, all factors bearing on the public convenience and necessity. The facilities for the E2W Project that would be under the FERC's jurisdiction include approximately 31.4 miles of pipeline, a new compressor station, modifications at three existing compressor stations, four OPP regulators, five pig launchers, three pig receivers, and eight valves. The proposed facilities are described in detail in section 2.1.

Occasionally, proposed projects have associated facilities that do not come under the jurisdiction of the FERC. These "nonjurisdictional" facilities may be integral to the need for the proposed project (e.g., a new or expanded power plant at the end of a pipeline that is not under the jurisdiction of the FERC) or they may be merely associated as a minor, non-integral component of the jurisdictional facilities that would be constructed and operated as a result of the proposed facilities.

We have determined that the only nonjurisdictional facilities associated with the E2W Project are the underground power and communications lines that would be needed for the proposed Rehoboth Compressor Station. These underground lines would be installed within existing roads and within the footprint of the new permanent access road that would extend from an existing road to the compressor station. Because the portion of the underground lines that would be installed within existing roads would not result in environmental impacts, we are not including them in our analysis in this EIS. The portion of the underground lines that would be installed within the footprint of the new permanent access road to the compressor station is included in our analysis of the environmental impacts of that road.

1.6 PERMITS, APPROVALS, CONSULTATIONS, AND REGULATORY REQUIREMENTS

Table 1.6-1 lists the major federal, state, and local permits, approvals, and consultations identified for the construction and operation of the E2W Project. Table 1.6-1 also provides Algonquin's anticipated date for commencing formal permit and consultation procedures. Algonquin would be responsible for obtaining all permits and approvals required to implement the proposed Project regardless of whether they appear in this table.

TABLE 1.6-1

Major Permits, Approvals, and Consultations for the HubLine/East to West Project [a]

Agency	Permit/Approval/ Consultation	Agency Action	Status/Anticipated Date for Commencing Formal Permit and Consultation Procedures
FEDERAL			
Advisory Council on Historic Preservation	Section 106 Consultation, National Historic Preservation Act (NHPA)	Has the opportunity to comment if the Project may affect cultural resources that are either listed on or eligible for listing on the National Register of Historic Places (NRHP).	Consultation will be initiated by the FERC, if necessary
Federal Energy Regulatory Commission (FERC)	Certificate of Public Convenience and Necessity	Determine whether the construction and operation of a natural gas pipeline project is in the public interest. Assess environmental impacts under the National Environmental Policy Act (NEPA).	4th Quarter 2007 - ongoing
U.S. Department of the Army Corps of Engineers (COE)	Section 404, Clean Water Act (CWA) Permit	Consider issuance of a section 404 permit for the placement of dredge or fill material into waters of the United States, including jurisdictional wetlands.	Application submitted June 16, 2008
	Section 10 Rivers and Harbors Act Permit	Consider issuance of a section 10 permit for crossing navigable waterways.	Application submitted June 16, 2008
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries)	Section 7 Endangered Species Act (ESA) Consultation	Lead agency for finding of impacts on federally listed or proposed threatened and endangered species and their habitat.	Consultation ongoing
	Marine Mammal Protection Act Consultation	Provide comments to prevent loss of and damage to wildlife resources.	Consultation ongoing
	Magnuson-Stevens Fishery Conservation and Management Act Consultation	Assess impacts and provide comments to prevent loss of and damage to essential fish habitat.	Consultation ongoing
U.S. Environmental Protection Agency (EPA), Region I	Section 404, CWA	Review CWA, section 404 wetland dredge-and-fill applications to the COE with 404(c) veto power for wetland permits issued by the COE.	Consultation through the COE process
	Notice of Intent for a National Pollutant Discharge Elimination System Remediation General Permit in Massachusetts (MAG910000) for the discharge of hydrostatic test water	Consider issuance of a general permit for the discharge of hydrostatic test water.	2nd Quarter 2009

TABLE 1.6-1 (cont'd)

Major Permits, Approvals, and Consultations for the HubLine/East to West Project [a]

Agency	Permit/Approval/ Consultation	Agency Action	Status/Anticipated Date for Commencing Formal Permit and Consultation Procedures
U.S. Fish and Wildlife Service	Section 7 ESA Consultation	Lead agency for finding of impacts on federally listed or proposed species.	Consultation ongoing
	Fish and Wildlife Coordination Act	Provide comments to prevent loss of and damage to wildlife resources.	Consultation ongoing
	Migratory Bird Treaty Act	Provide comments to prevent loss of and damage to wildlife resources.	Consultation ongoing
MASSACHUSETTS			
Executive Office of Energy and Environmental Affairs, Coastal Zone Management Office	Coastal Zone Management Act (CZMA) (Massachusetts General Law (M.G.L.) c. 21A, § 4A; 301 Code of Massachusetts Regulations (CMR) 20.00 and 21.00)	Review consistency of the Project with the CZMA.	Application submitted June 6, 2008
Executive Office of Energy and Environmental Affairs, Massachusetts Environmental Policy Act (MEPA) Office	Compliance with MEPA regulations (M.G.L. c. 30, §§ 61, through 62H; 301 CMR 11.00)	Determine whether the EIS satisfies MEPA requirements.	4th Quarter 2008
Massachusetts Energy Facilities Siting Board (MEFSB)	Review and comment on FERC-regulated energy projects (M.G.L. c.164, §§ 69H, 69J; 980 CMR)	Solicit and relay comments regarding the proposed Project to the FERC.	No formal application required
Massachusetts Department of Environmental Protection	Water Quality Certification pursuant to section 401 of the CWA (M.G.L. c.21, § 27; 314 CMR 4.00 and 9.00)	Review and consider issuance of water quality certification.	Application submitted July 2, 2008
	Chapter 91 Waterways License (M.G.L. c.91, 310 CMR 9.00)	Consider issuance of a Chapter 91 Waterways License.	4th Quarter 2008
	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00) (will be sought from local Conservation Commissions)	Consider issuance of a certificate of compliance.	Application submitted at local municipal level, see below.
	Minor Comprehensive Plan Approval (M.G.L. c.111, §§ 142A to 142J; 310 CMR 7)	Consider issuance of a minor comprehensive plan approval.	Application submitted June 6, 2008
Massachusetts Division of Marine Fisheries	Marine fisheries consultations	Provide comments to prevent loss of and damage to marine fisheries resources.	Consultation ongoing
Massachusetts Department of Conservation and Recreation	Consultation regarding public land resources and designated Areas of Critical Environmental Concern	Participate as part of the MEPA process.	No formal application required

TABLE 1.6-1 (cont'd)

Major Permits, Approvals, and Consultations for the HubLine/East to West Project [a]

Agency	Permit/Approval/ Consultation	Agency Action	Status/Anticipated Date for Commencing Formal Permit and Consultation Procedures
Massachusetts Department of Agricultural Resources	Comment on MEPA proceedings	Provide comments regarding impacts on agricultural resources.	No formal application required
Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program	State-listed threatened and endangered species consultations (M.G.L. c.131, § 5B; 321 CMR 10.00)	Consult on state endangered species that may be affected by the Project.	Consultation ongoing
	Massachusetts ESA "take" determination	Issue a determination on whether the proposed Project will result in a "take" of state-listed species.	4th Quarter 2008
Office of the State Archaeologist, Massachusetts Historical Commission	Comment on the Project under section 106, NHPA (16 United States Code (USC) § 470(f)) and M.G.L. Chapter 9, sections 26-27C; 950 CMR 70-71	Has the opportunity to comment if the Project may affect cultural resources that are either listed on or eligible for listing on the NRHP.	Consultation ongoing
Massachusetts Highway Department	Non-vehicular Access Permit	Consider issuance of access permit for activities in state highway rights-of-way.	4th Quarter 2008
Massachusetts Legislature	Easements for Article 97 properties	Consider issuance of easements for pipeline crossings of Article 97 properties.	4th Quarter 2008
Avon Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	Project approved October 13, 2008.
Stoughton Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Canton Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Randolph Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Sharon Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Braintree Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Holbrook Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	Application submitted October 2, 2008

TABLE 1.6-1 (cont'd)

Major Permits, Approvals, and Consultations for the HubLine/East to West Project [a]

Agency	Permit/Approval/ Consultation	Agency Action	Status/Anticipated Date for Commencing Formal Permit and Consultation Procedures
Weymouth Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Rehoboth Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
Attleboro Conservation Commission	Wetlands Protection Act Order of Conditions (M.G.L. c.131, § 40; 310 CMR 10.00; local wetlands by-laws)	Consider issuance of wetland crossing permits.	4th Quarter 2008
CONNECTICUT			
Connecticut Siting Council	Review and certification of energy facilities	Consultation regarding the E-3 System Replacement and the Shetucket River crossing.	Consultation ongoing
Connecticut Department of Environmental Protection	Water Quality Certification pursuant to section 401 of the CWA; Water Diversion Permit (section 22a-377 of the CT General Statutes (CGS);	Review and consider issuance of water quality certification.	Application submitted June 27, 2008
	Inland Wetlands and Watercourses - Wetland Permit (sections 22a-36 through 22a-45a) (will be sought from local inland wetlands commissions)	Consider issuance of wetland crossing permits.	Filed at local municipal level, see below.
Connecticut Department of Environmental Protection – Hydrostatic Testing	General Permit for discharges of hydrostatic water from new tanks and pipelines to waters of the U.S. (section 22a-430b of the CGS)	Consider issuance of permit for hydrostatic discharge.	2nd Quarter 2009
Connecticut Department of Environmental Protection – Stormwater and Dewatering Wastewater from Construction Activities	General Permit for discharges of hydrostatic water from new tanks and pipelines to waters of the U.S. (section 22a-430b of the CGS)	Consider issuance of permit for stormwater and dewatering from construction.	2nd Quarter 2009
Connecticut Department of Transportation	Encroachment Permit	Consider issuance of encroachment permit for activities in state highway rights-of-way.	4th Quarter 2008
Connecticut Department of Environmental Protection – Wildlife Division	State-listed threatened and endangered species consultations	Consult on state endangered species that may be affected by the Project.	Consultation ongoing

TABLE 1.6-1 (cont'd)

Major Permits, Approvals, and Consultations for the HubLine/East to West Project [a]

Agency	Permit/Approval/ Consultation	Agency Action	Status/Anticipated Date for Commencing Formal Permit and Consultation Procedures
Connecticut Commission on Culture and Tourism	Comment on the Project under section 106, NHPA	Has the opportunity to comment if the Project may affect cultural resources that are either listed on or eligible for listing on the NRHP.	Consultation ongoing
Connecticut Office of the State Archaeologist	Comment on the Project under section 106, NHPA	Has the opportunity to comment if the Project may affect cultural resources that are either listed on or eligible for listing on the NRHP.	Consultation ongoing
Norwich Inland Wetlands & Watercourses Commission	Inland Wetlands and Watercourses - Wetland Permit (sections 22a-36 through 22a-45a of the CGS)	Consider issuance of wetland permit.	Application submitted August 26, 2008
Preston Inland Wetlands & Watercourses Commission	Inland Wetlands and Watercourses - Wetland Permit (sections 22a-36 through 22a-45a of the CGS)	Consider issuance of wetland permit.	Application submitted September 9, 2008
North Stonington Inland Wetlands & Watercourses Commission	Inland Wetlands and Watercourses - Wetland Permit (sections 22a-36 through 22a-45a of the CGS)	Consider issuance of wetland permit.	Project approved October 8, 2008
Ledyard Inland Wetlands & Watercourses Commission	Inland Wetlands and Watercourses - Wetland Permit (sections 22a-36 through 22a-45a of the CGS)	Consider issuance of wetland permit.	Project approved September 16, 2008

[a] Consultations with Native American tribes are discussed in section 4.10.2.