

158 FERC ¶ 61,061
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, and Colette D. Honorable.

Algonquin Gas Transmission, LLC
Maritimes & Northeast Pipeline, LLC

Docket No. CP16-9-000

ORDER ISSUING CERTIFICATE AND AUTHORIZING ABANDONMENT

(Issued January 25, 2017)

1. On October 22, 2015, Algonquin Gas Transmission, LLC (Algonquin) and Maritimes & Northeast Pipeline, L.L.C. (Maritimes) (together, Applicants), jointly filed an application pursuant to section 7(c) of the Natural Gas Act (NGA)¹ and Part 157 of the Commission's regulations² for authorization to construct and operate certain pipeline and compression facilities in New York, Connecticut, and Massachusetts (the Atlantic Bridge Project).
2. For the reasons discussed below, we will grant the requested authorizations, subject to certain conditions.

II. Background and Proposal

3. Algonquin is a limited liability company organized and existing under Delaware law and an indirect, wholly-owned subsidiary of Spectra Energy Partners, LP. Algonquin is a natural gas company as defined in the NGA, engaged in the transportation of natural gas in interstate commerce subject to the jurisdiction of the Commission. Algonquin's natural gas pipeline system extends from points near Lambertville and Hanover, New Jersey, through New Jersey, New York, Connecticut, Rhode Island, and Massachusetts, to points near the Boston area.

¹ 15 U.S.C. § 717f(c) (2012).

² 18 C.F.R. pt. 157 (2016).

4. Maritimes is a limited liability company organized and existing under Delaware law and an indirect, partly-owned subsidiary of Spectra Energy Partners, LP. Maritimes is a natural gas company as defined in the NGA, engaged in the transportation of natural gas in interstate commerce subject to the jurisdiction of the Commission. Maritimes' natural gas pipeline system extends from points near Beverly and Dracut, Massachusetts, through Massachusetts, New Hampshire, and Maine to the United States-Canada border.

5. Algonquin proposes to construct, install, operate, and maintain the following new facilities as part of the Atlantic Bridge Project:

- the Weymouth Compressor Station, consisting of one new 7,700 horsepower (hp) natural gas-fired compressor unit in the Town of Weymouth, Norfolk County, Massachusetts;
- approximately 6.3 miles of 42-inch-diameter pipeline that will replace certain segments of 26-inch-diameter pipeline, including approximately 4.0 miles in Westchester County, New York, and approximately 2.3 miles in Fairfield County, Connecticut;³ and
- the Salem Pike Meter and Regulating (M&R) Station in the City of Norwich, New London County, Connecticut.

6. In addition, Algonquin proposes to add 31,950 hp of compression at three existing compressor stations in New York and Connecticut with the following modifications:

- uprate an existing compressor unit at Stony Point Compressor Station in the Town of Stony Point, Rockland County, New York, by removing a software control, to utilize an additional 3,300 hp;
- install a new 7,700 hp natural gas-fired compressor unit and a gas cooling unit for the compressor unit at existing Oxford Compressor Station in the Town of Oxford, New Haven County, Connecticut; and
- install a new 6,300 hp natural gas-fired compressor unit, replace two existing compressor units (6,950 hp and 7,700 hp each) with two new 7,700 hp compressor units, and install new gas cooling for the compressor

³ As such, Algonquin also requests authorization under section 7(b) of the NGA to abandon approximately 6.3 miles of pipeline in New York and Connecticut in conjunction with these replacements.

units at the existing Chaplin Compressor Station in the Town of Chaplin, Windham County, Connecticut.

Algonquin also proposes to construct and to make modifications at several M&R stations, regulator stations, and other aboveground facilities.⁴

7. Maritimes proposes to modify an existing M&R station within the fenced Westbrook Compressor Station site, in City of Westbrook, Cumberland County, Maine.

8. Algonquin and Maritimes state that the Atlantic Bridge Project will enable Algonquin to provide an additional 132,705 dekatherms per day (Dth/d) of firm transportation service from Algonquin's existing receipt points at Mahwah, New Jersey, and Ramapo, New York, to various new and existing delivery points on Algonquin's pipeline system, including its interconnection with Maritimes at Beverly, Massachusetts. The project will also enable Maritimes to provide 106,276 Dth/d of firm transportation service from Beverly to various existing delivery points on the Maritimes pipeline system.

9. Maritimes does not propose to add new capacity to its transmission system. Maritimes states that it will use existing capacity to transport gas to existing delivery points along its system, including delivery points on existing systems in Canada.

10. Applicants held an open season for the project from February 5, 2014, through March 31, 2014, and Algonquin held a reverse open season from January 16, 2015, through January 26, 2015. As a result of the open seasons, the Applicants executed precedent agreements with five local distribution companies, two manufacturing companies, and a municipal utility (collectively, the Project Shippers)⁵ for 100 percent of the firm transportation service to be made available by the project. That volume includes

⁴ These modifications will include the replacement of existing heaters and metering facilities, piping modifications, and facility uprates at its Yorktown M&R Station, Danbury M&R Station, Needham Regulator Station, Pine Hills M&R Station, and Plymouth M&R Station.

⁵ The Project Shippers on Algonquin's system are: Heritage Gas Limited, Maine Natural Gas Company, NSTAR Gas Company d/b/a Eversource Energy, Exelon Generation Company, LLC (as assignee and asset manager of Summit Natural Gas of Maine), Irving Oil Terminal Operations, Inc., New England NG Supply Limited, and Norwich Public Utilities.

106,276 Dth/d of firm transportation service that will facilitate south-to-north flow and deliveries to five of the project shippers' receipt points on Maritimes' system.⁶ Algonquin and Maritimes estimate the total cost of the Atlantic Bridge Project will be \$451,791,440.⁷

11. Algonquin proposes incremental recourse rates for Atlantic Bridge Project service. However, Algonquin and Maritimes state that they will provide services to the subscribing project shippers at negotiated rates. Algonquin states that while it does not request that the Commission find in this proceeding that there should be a presumption of rolled-in rate treatment for the cost of the Atlantic Bridge Project in a future section 4 rate proceeding, Algonquin reserves the right to seek rolled-in rate treatment in the future.

12. Maritimes' existing system recourse rates under Rate Schedule MN365 will apply to service on the capacity created by the project. Maritimes seeks a rolled-in rate predetermination.

13. Algonquin proposes to recover incremental fuel use and lost and unaccounted for fuel on the Atlantic Bridge Project facilities through incremental fuel retention percentages and to track charges for the incremental services. Algonquin states that it will adjust its periodic tracker mechanisms to ensure that existing customers do not subsidize the costs of the new incremental services.

III. Procedural Issues

A. Notice, Interventions, Comments, and Protests

14. Notice of Algonquin and Maritimes' application was published in the *Federal Register* on November 13, 2015.⁸ The parties listed in Appendix A filed timely,

⁶ The Project Shippers on Maritimes' system are: Heritage Gas Limited, Exelon Generation Company, LLC, Irving Oil Terminal Operations, Inc., Maine Natural Gas Company, and New England NG Supply Limited.

⁷ See Exhibit K of Algonquin and Maritimes' Application. Algonquin's facilities are estimated to cost \$449,791,440, and Maritimes' facilities are estimated to cost \$2,000,000.

⁸ 80 Fed. Reg. 70,196 (2015).

unopposed motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.⁹

15. On January 5, 2016, Liberty Utilities Corp. and Algonquin Tinker Gen Co. together, "Liberty Affiliates" jointly filed an untimely motion to intervene. We grant this motion to intervene.

16. Lori and Michael Hayden and a number of environmental advocacy groups,¹⁰ filing jointly, submitted protests with their interventions. Algonquin and Maritimes filed answers to comments and protests, and Repsol Energy North America Corporation (Repsol) filed a Motion for Leave to Answer and Answer. Although the Commission's Rules of Practice and Procedure do not permit answers to protests and answers,¹¹ we will accept the Applicants and Repsol's answers because they clarify the concerns raised and provide information that has assisted in our decision-making process.

17. Lori and Michael Hayden are landowners who live within one half mile of the proposed Weymouth Compressor Station and express concern about air quality, health, safety, noise, odor, property values, and the need for an environmental justice analysis to consider the project's impacts on low-income communities. The Haydens also request a formal hearing to address these issues. The environmental intervenors question the need for the project and express concern about its safety. They urge the Commission to examine all secondary and cumulative impacts of the proposed project, including the extraction of gas in the Marcellus Shale production region and the project's potential to make gas available for export from (liquefied natural gas) LNG facilities. The Haydens and environmental intervenors both maintain the need for a full Environmental Impact Statement (EIS) that considers the Atlantic Bridge Project together with the Algonquin Incremental Market (AIM) Project and Spectra's contemplated Access Northeast Project.

⁹ 18 C.F.R. § 385.214(c) (2016).

¹⁰ The following groups intervened and protested jointly: Food & Water Watch; Stop the Pipeline Expansion; Better Future Project; 350 MA; Sierra Club, Lower Hudson Group; Toxics Action Center; Fore River Residents Against the Compressor Station; 350 ME; 350 CT; Capitalism vs. The Climate; CT Fracked Gas Pipeline Group; Eastern Connecticut Green Action; Grassroots Environmental Education; Keep Yorktown Safe; Safe Energy Rights Group; Berkshire Environmental Action Team; No Fracked Gas in MASS; Stop NED – Northeast Energy Direct; and West Roxbury Saves Energy.

¹¹ 18 C.F.R. § 385.213(a)(2) (2016).

18. Although our regulations provide for a hearing, neither section 7 of the NGA nor our regulations require that such hearings be trial-type evidentiary hearings.¹² When, as is usually the case, the written record provides a sufficient basis for resolving the relevant issues, it is our practice to provide for a paper hearing.¹³ That is the case here. Mr. and Mrs. Hayden have raised no issues of material fact that cannot be resolved on the basis of the written record in this proceeding and all interested parties have had a full opportunity to present their views through multiple written submissions.¹⁴ As discussed in the environmental analysis below, the Environmental Assessment (EA) for Algonquin and Maritimes' proposed project fully considered the impacts of the project on air and water quality, health, safety, property values, odors and noise. We also address below the concerns raised regarding the need for an EIS, a health impact assessment, air quality testing, and liability insurance coverage. Thus, we will deny Mr. and Mrs. Hayden's request for a trial-type evidentiary hearing.

19. We received numerous comments on the proposed project filed by individuals and other interested parties. Hundreds of comments support the proposed project on the basis that, among other things, it will bring jobs and other economic benefits to the area. Conversely, a number of other comments raise concerns over the safety of the Atlantic Bridge Project, its potential environmental impacts and its economic impact on property values. These issues are addressed in staff's EA and in the environmental analysis below.

B. Motions to Compel Production

20. On February 2, 2016, Liberty Affiliates filed a Motion to Compel Production of Privileged Information Pursuant to Protective Agreement and Request for Shortened Answer Periods and Expedited Consideration (Motion to Compel). On February 9, 2016,

¹² See *Minisink Residents for Environmental Preservation and Safety v. FERC*, 762 F.3d 97, 114 (D.C. Cir. 2014) ("FERC's choice whether to hold an evidentiary hearing is generally discretionary.").

¹³ See *NE Hub Partners, L.P.*, 83 FERC ¶ 61,043, at 61,192 (1998), *reh'g denied*, 90 FERC ¶ 61,142 (2000); *Pine Needle LNG Co., LLC*, 77 FERC ¶ 61,229, at 61,916 (1996). Moreover, courts have recognized that even where there are disputed issues the Commission need not conduct an evidentiary hearing if the disputed issues "may be adequately resolved on the written record." *Minisink Residents*, 762 F.3d at 114 (quoting *Cajun Elec. Power Coop., Inc. v. FERC*, 28 F.3d 173, 177 (D.C. Cir. 1994)).

¹⁴ See, e.g., *Florida Gas Transmission Co., LLC*, 143 FERC ¶ 61,215, at P 27 & n. 22 (2013).

Algonquin and Maritimes filed an answer to Liberty Affiliates' Motion to Compel. On February 16, 2016, Liberty Affiliates withdrew their Motion to Compel.

21. On March 11, 2016, Liberty Affiliates filed a series of questions for Algonquin and Maritimes, requesting information on the amount of operationally available capacity that will be created on Maritimes' system by the project, the conditions and pressure requirements that Maritimes will require in agreements with customers for such capacity, and how much operationally available capacity will be created by Tennessee Gas Pipeline Company's (Tennessee Gas) Northeast Energy Direct (NED) Project, a greenfield pipeline expansion that would have interconnected with Maritimes' system in Dracut, Massachusetts.¹⁵ On March 28, 2016, Applicants filed an answer to Liberty Affiliates in which they declined to provide the requested information. On April 19, 2016, Liberty Affiliates filed a response, reiterating their earlier request for the information.

22. On April 11, and May 27, 2016, Sandra Peters, an intervenor, filed Motions to Compel Production of Additional Data. Specifically, she requested that Applicants provide the raw data used to evaluate project safety at the proposed Weymouth Compressor Station.

23. A certificate proceeding, unlike a trial-type hearing, does not involve discovery or require applicants to provide information in response to requests from other parties (applicants are, however, required to provide all information requested by the Commission). Thus, we will deny Ms. Peters' Motions to Compel Production. However, to the extent that the information requested by Liberty Affiliates and Ms. Peters is germane to our analysis, we address it in the EA and below in the environmental analysis.

IV. Discussion

24. Since the proposed facilities will be used to transport natural gas in interstate commerce and the facilities to be abandoned have been used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposed abandonment, construction, and operation of the facilities are subject to subsections (b), (c), and (e) of section 7 of the NGA.

¹⁵ On May 23, 2016, Tennessee Gas formally withdrew its certificate application for the NED Project in Docket No. CP16-21.

A. Application of Certificate Policy Statement

25. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.¹⁶ The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

26. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the proposed route or location of the new pipeline facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis where other interests are considered.

27. Algonquin's proposal satisfies the threshold requirement that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The Commission has determined, in general, that when a pipeline proposes an incremental rate for service utilizing proposed expansion capacity that is higher than the generally applicable system rate, the pipeline satisfies the threshold requirement that the project will not be subsidized by existing customers.¹⁷ Algonquin proposes an incremental recourse rate which, as is discussed below, exceeds its generally

¹⁶ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999); *order on clarification*, 90 FERC ¶ 61,128 (2000); *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

¹⁷ *See, e.g., Dominion Transmission, Inc.*, 155 FERC ¶ 61,106 (2016); *Transcontinental Gas Pipe Line Corp.*, 98 FERC ¶ 61,155, at 61,552 (2002).

applicable system rate and an incremental fuel percentage for firm project transportation service on its mainline facilities. Thus, we find that Algonquin's existing customers will not subsidize the project.

28. Maritimes' proposal also satisfies the threshold requirement that the pipeline must financially support the project without relying on subsidization from its existing customers. As discussed below, Maritimes has shown that the incremental revenue associated with the rates its shippers have agreed to pay for services using the Atlantic Bridge Project facilities would exceed the incremental cost of constructing and operating these proposed facilities. Accordingly, we find that Maritimes' existing customers will not subsidize the project.

29. We also find that there will be no adverse impact on other existing pipelines in the region or their captive customers. The Atlantic Bridge Project will enable Algonquin and Maritimes to provide 132,705 Dth/d of firm service to the Project Shippers' delivery points to accommodate increasing demand in the New England region. Nothing in the record suggests that Algonquin or Maritimes' existing customers will experience any degradation in service, nor have any of their shippers raised any objections to its proposal. Likewise, there is no evidence that the Atlantic Bridge Project will adversely affect other pipelines or their customers.

30. We are additionally satisfied that Algonquin and Maritimes have taken appropriate steps to minimize adverse impacts on landowners. The Applicants will construct approximately 90 percent of the proposed 6.3 miles of replacement pipeline utilizing existing right-of-way and previously disturbed property. In addition, modifications at existing M&R or regulator stations will be minor in nature and take place primarily within the existing fenced facilities. As further discussed below, Algonquin and Maritimes have made various route adjustments designed to minimize impacts on landowners and communities. Accordingly, for purposes of our consideration under the Certificate Policy Statement, we find that Algonquin and Maritimes have adequately minimized any adverse impacts on landowners and surrounding communities.

31. The proposed Atlantic Bridge Project will enable Algonquin and Maritimes to provide 132,705 Dth/d of incremental firm service to the Project Shippers' delivery points to accommodate increasing demand in the New England region. Based on the benefits the project will provide, the lack of adverse effects on existing customers and other pipelines and their captive customers, and the minimal adverse effects on landowners and surrounding communities, the Commission finds that Algonquin and Maritimes' proposals are consistent with the Certificate Policy Statement. Based on this finding and the environmental review, as discussed below, the Commission finds that the public convenience and necessity require approval and certification of the Atlantic Bridge Project under section 7 of the NGA, subject to the environmental and other conditions in this order.

B. Rates

1. Algonquin

a. Initial Rates

32. Algonquin proposes an incremental recourse reservation rate of \$55.6932 per Dth under its existing Rate Schedule AFT-1 for the project. Algonquin developed its recourse reservation charge by dividing the first year incremental annual cost of service of \$88,689,178¹⁸ by the annual project design billing determinants of 1,592,460 Dth,¹⁹ consistent with Commission regulations requiring the use of straight-fixed variable (SFV) rate design.²⁰ Algonquin's cost of service is based on the rate components, including the system depreciation rate of 1.81 percent, approved in Docket No. RP99-262-000.²¹ Algonquin also proposes to charge its generally-applicable system interruptible transportation rate for interruptible service on the project because it is an integrated mainline expansion.²²

33. Algonquin proposes a commodity rate of \$0.0115 per Dth based on a 70 percent load factor for both the expenses and the design determinants. Algonquin utilized an estimated throughput volume of 33,906,128 Dth as the volume determinant and identified \$389,793 of Transmission Operation and Maintenance (O&M) expenses that are variable costs that it proposes to recover in the usage charge.

34. Commission policy requires that incremental rates be charged for proposed expansion capacity if the incremental charge would exceed the maximum system-wide recourse charges. Algonquin's proposed incremental daily firm reservation charge of \$55.6932 per Dth is higher than its generally applicable Rate Schedule AFT-1 reservation charge of \$6.5734 per Dth. In addition, Algonquin's proposed incremental commodity charge of \$0.0115 is higher than its generally-applicable system commodity charge of

¹⁸ See Exhibit P, Schedule 2, Line 15.

¹⁹ 132,705 Dth per day * 12 months = 1,592,460 Dth.

²⁰ 18 C.F.R. § 284.7(e) (2016).

²¹ *Algonquin Gas Transmission, LLC*, 87 FERC ¶ 61,008 (1999).

²² See, e.g., *Texas Eastern Transmission, LP*, 139 FERC ¶ 61,138, at P 31 (2012); *Gulf South Pipeline Co., LP*, 130 FERC ¶ 61,015, at P 23 (2010); *Kern River Gas Transmission Co.*, 117 FERC ¶ 61,077, at PP 313-14, 326 (2006).

\$0.0112. We have reviewed Algonquin's proposed incremental recourse rates for the project and find them reasonable and consistent with Commission policy.²³

35. Additionally, we will approve Algonquin's proposal to assess its current system interruptible transportation rate for any interruptible service rendered on additional capacity made available on the Atlantic Bridge Project because it is an incremental expansion that is integrated with existing pipeline facilities.

b. Fuel, Lost and Unaccounted for Gas Charges

36. Algonquin proposes an initial Fuel Reimbursement Percentage of 2.61 percent to recover incremental fuel use and lost and unaccounted for fuel (LAUF) on the Atlantic Bridge Project. Algonquin states that it derived an incremental fuel reimbursement percentage of 2.61 percent using an assumed load factor and the total fuel requirement for the project on a winter peak day design.²⁴

37. Consistent with the Commission's incremental fuel methodology, Algonquin states that it will track changes in fuel costs for the new incremental service on an incremental basis through its Fuel Reimbursement Quantity (FRQ) mechanism set forth in section 32 of its General Terms & Conditions (GT&C). Algonquin states that it will adjust its periodic tracker mechanisms to ensure that existing customers do not subsidize the costs resulting from this new incremental service.

38. Algonquin's proposed incremental fuel reimbursement percentage is greater than its existing system fuel reimbursement percentages.²⁵ Therefore, we will approve Algonquin's proposed incremental fuel reimbursement charge for the Atlantic Bridge Project.

²³ See, e.g., *Dominion Transmission, Inc.*, 104 FERC ¶ 61,267, at P 57 (2003).

²⁴ See Exhibit Z-2, Sheet 1 of 2.

²⁵ Algonquin's currently effective Fuel Reimbursement Percentages for mainline capacity are 0.87 percent (Winter) and 1.08 percent (Spring, Summer, Fall) and 0.63 percent (Winter) and 0.71 percent (Spring, Summer, Fall) for Beverly Receipts/Non-Hubline Deliveries. Algonquin Gas Transmission, LLC, FERC NGA Gas Tariff, Algonquin Database 1; 12., Fuel Reimbursement Percentages, 8.0.0.

c. Reporting Incremental Costs and Revenues

39. Section 154.309 of the Commission's regulations²⁶ includes bookkeeping and accounting requirements applicable to all expansions for which incremental rates are approved to ensure that costs are properly allocated between pipelines' existing shippers and incremental expansion shippers. To ensure that costs are properly allocated between Algonquin's existing shippers and the incremental services proposed in this proceeding, we will require Algonquin to keep separate books and accounting of costs attributable to the proposed incremental services. Further, the books should be maintained with applicable cost-reference as required by section 154.309 of the Commission's regulations. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA general section 4 or 5 rate case and the information must be provided consistent with Order No. 710.²⁷

d. Compliance Filing

40. Algonquin proposes *pro forma* tariff records incorporating changes to Rate Schedule AFT-1 for the incremental firm transportation rates and the Fuel Reimbursement Percentages stating the seasonal incremental fuel percentages for the Atlantic Bridge Service. The Commission finds the changes as provided for by the *pro forma* tariff records acceptable and directs Algonquin to file actual tariff records not less than 30 days, or more than 60 days, before the in-service date of the Atlantic Bridge Project.

2. Maritimes

a. Initial Rates

41. Maritimes proposes to use its existing system recourse rate under Rate Schedule MN365 of \$14.9042 per Dth as the reservation charge for project service.²⁸ Maritimes states that it will provide services to the Project Shippers at negotiated rates in accordance with the negotiated rate authority in Maritimes' GT&C section 24. In response to a Commission staff data request, Maritimes estimated an incremental monthly firm

²⁶ 18 C.F.R. § 154.309 (2016).

²⁷ *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, FERC Stats. & Regs. ¶ 31,267, at P 23 (2008).

²⁸ Maritimes & Northeast Pipeline, L.L.C.; FERC NGA Gas Tariff; Maritimes Database1; 1., Forward Haul Rates, 6.0.0.

reservation rate of \$0.3451 per Dth would be necessary to recover its project cost of service.²⁹ Since the incremental rate would be lower than Maritimes' currently effective system-wide recourse reservation charge, we will approve the use of Maritimes' existing Rate Schedule MN365 rate as the initial recourse rate for services utilizing the new capacity created by the project.³⁰

42. Maritimes did not specifically discuss the rate it would charge for interruptible service associated with the new capacity. Thus, in accordance with Commission policy, we will require a Maritimes to charge its current system interruptible rate for any interruptible service using the expansion capacity.³¹

b. Rolled-in Rate Predetermination

43. Maritimes seeks a predetermination of rolled-in rate treatment. In support of its request, Maritimes references Exhibit N, Schedule 2 of the application, which shows an estimated year one total incremental cost of service of \$440,086 and estimated year one revenues of \$15,386,923, based on the minimum amount of capacity subscribed under the long-term precedent agreements and the negotiated rates agreed to by its Project Shippers. Because projected revenues in the exhibit exceed the projected cost of service, Maritimes states that existing customers will not subsidize the incremental service.

44. To receive authorization for rolled-in rate treatment, a pipeline must demonstrate that rolling in the costs associated with the construction and operation of new facilities will not result in existing customers subsidizing the expansion. In general, this means that a pipeline must show that the revenues to be generated by an expansion project will exceed the costs of the project. For purposes of making a predetermination in a certificate proceeding as to whether it would be appropriate to roll the costs of a project into the pipeline's system rates in a future NGA general section 4 proceeding, the Commission compares the cost of the project to the revenues generated utilizing actual contract volumes and the maximum recourse rate, when, as here, it is lower than the

²⁹ See February 25, 2016 Response by Maritimes to Staff's February 17, 2016 Data Request.

³⁰ See, e.g., *Texas Eastern Transmission, LP*, 146 FERC ¶ 61,086, at P 60 (2014), and *Gulf South Pipeline Company, L.P.*, 119 FERC ¶ 61,281, at P 33 (2007).

³¹ See, e.g., *Trunkline Gas Co., LLC*, 153 FERC ¶ 61,300, at P 62 (2015); *Texas Eastern Transmission LP, et al.*, 139 FERC ¶ 61,138, at P 31 (2012); *Gulf South Pipeline Co., LP*, 130 FERC ¶ 61, 015, at P 23 (2010); *Kern River Gas Transmission Co.*, 117 FERC ¶ 61,077, at PP 313-314, 326 (2006).

negotiated rate agreed to by the pipeline and its project shippers.³² Here, Maritimes has demonstrated that revenues calculated consistent with Commission policy are expected to be greater than the project cost of service.³³ Therefore, we will grant Maritimes' request for a predetermination of rolled-in rate treatment for the costs of the project in its next NGA general section 4 rate proceeding, barring a significant change in circumstances.

c. Negotiated Rates

45. Applicants and the seven Project Shippers have agreed to negotiated rates. The Applicants must file either their negotiated rate agreements or tariff records setting forth the essential terms of the agreements in accordance with the Alternative Rate Policy Statement³⁴ and the Commission's negotiated rate policies.³⁵ Such filings must be made at least 30 days, but not more than 60 days, before the proposed effective date for such rates.³⁶

³² See *Tennessee Gas Pipeline Co., L.L.C.*, 144 FERC ¶ 61,219, at P 22 (2013).

³³ See Exhibit N, Schedule 2 of Maritimes' application.

³⁴ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996), *reh'g denied*, 75 FERC ¶ 61,066 (1996), *petition for review denied sub nom. Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement).

³⁵ *Natural Gas Pipelines Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042, *reh'g dismissed and clarification denied*, 114 FERC ¶ 61,304 (2006).

³⁶ Pipelines are required to file any service agreement containing non-conforming provisions and to disclose and identify any transportation term or agreement in a precedent agreement that survives the execution of the service agreement. See, e.g., *Texas Eastern Transmission, LP*, 149 FERC ¶ 61,198, at P 33 (2014).

C. Environmental Analysis

1. Pre-filing Review and Scoping

46. On February 20, 2015, Commission staff began its environmental review of the Atlantic Bridge Project by granting the Applicants' request to use the pre-filing process and assigning Docket No. PF15-12-000. As part of the pre-filing review, staff participated in 13 open houses sponsored by the Applicants during the weeks of March 2, 9, 16 and 23, 2015 to explain our environmental review process to interested stakeholders.

47. On April 27, 2015, the Commission issued the *Notice of Intent to Prepare an Environmental Assessment for the Planned Atlantic Bridge Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI). The NOI was published in the Federal Register on May 12, 2015,³⁷ and sent to more than 2,300 interested entities on staff's environmental mailing list, including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners.

48. Between May 11 and May 14, 2015, Commission staff conducted public scoping meetings in Yorktown Heights, New York; Glastonbury, Connecticut; Weymouth, Massachusetts; and Franklin, Massachusetts, to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the EA. In total, 113 individuals provided verbal comments on the project at the scoping meetings.³⁸

49. In response to Commission staff's review of the initially planned routes and workspaces during the pre-filing process and comments received during scoping, Algonquin evaluated and adopted eleven changes to the pipeline's alignment and workspaces to avoid or minimize adverse impacts.³⁹ Algonquin included these modifications in its application and staff evaluated them in the EA.

50. Subsequent to the scoping meetings, the scope of the project was reduced. Accordingly, staff issued a Supplemental NOI on November 19, 2015. The

³⁷ 80 Fed. Reg. 27,162 (2015).

³⁸ Transcripts of the scoping meetings were entered into the public record in Docket No. PF15-12-000.

³⁹ See EA at 1-9.

Supplemental NOI was sent to the entire FERC environmental mailing list. During the two scoping periods, we received about 317 comment letters including four letters from federal agencies, 14 from state agencies and elected officials, 18 from local government bodies and officials; 17 from non-government organizations; one from Native American tribes; 255 comments from individuals, and eight unique form letters.

51. The primary issues raised during the scoping process included project purpose and need; segmentation; soil erosion and sedimentation; potential impacts on the New York City drinking water supply; wetland impacts; revegetation plans; proximity to homes, schools, and recreation areas; visual impacts; construction traffic impacts; property values; Environmental Justice communities; construction and operation air quality and noise impacts; climate change and greenhouse gas (GHG) emissions; safety; cumulative impacts, including the AIM and Access Northeast Projects; and alternatives.

52. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),⁴⁰ our staff prepared an EA to assess the potential impacts of the Applicants' proposal. The U.S. Environmental Protection Agency (EPA) participated in the preparation of the EA as a cooperating agency. The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, socioeconomics, cumulative impacts, and alternatives. The EA addresses all substantive issues raised during the scoping period.

53. The EA was issued on May 2, 2016, for a 30-day comment period. The Commission received about 290 comments on the EA, including comments from the EPA, the U.S. Army Corp of Engineers (Corps), Massachusetts Energy Facility Siting Board (Siting Board), New York City Department of Environmental Protection (NYCDEP), New York State Department of Environmental Conservation (NYSDEC), and the Massachusetts Attorney General; 10 comments from federal and state elected officials; 21 comments from local agencies and elected officials; 13 comments from companies and organizations; 236 comments from individuals, and 4 unique form letters.

54. The vast majority of the comments are associated with the proposed Weymouth Compressor Station site. Substantive comments on the EA are discussed in this order. Issues raised in these comments include the following topics: request for an extension of the comment period and other procedural concerns; preparation of an EIS rather than an EA; the purpose and need for the project; segmentation; geology and soils; water resources and wetlands; vegetation; wildlife and fisheries; land use; recreation and visual

⁴⁰ 42 U.S.C. §§ 4321-4370f (2012).

resources; socioeconomics and environmental justice; cultural resources; air quality and noise; reliability and safety; cumulative impacts; and alternatives.

2. Procedural and Process Concerns

55. Many commenters requested an extension of the EA comment period, claiming that there was not ample time to properly review both the EA and the scoping materials for the Access Northeast Project.⁴¹ It is the Commission's practice to consider all comments filed in natural gas infrastructure proceedings, even those filed after established deadlines, to the extent practicable without delaying Commission action. This order addresses comments that were filed well after the close of the comment period, and as such, we find no reason to extend it.

56. We received numerous comments about the Commission's use of a third-party contractor to assist Commission staff in its NEPA review. Commenters expressed concern about potential conflicts of interest associated with using a third-party contractor that may also work directly for industry and requested that the Commission prepare a new EA using a different contractor.

57. In 1994, the Commission issued a notice regarding its intent to use third-party contractors on natural gas pipeline projects,⁴² citing the Council on Environmental Quality (CEQ) regulations⁴³ on third-party contractor use. The Commission has organizational conflict of interest (OCI) procedures that it uses to identify real and perceived conflicts of interest associated with its third-party contractors. As described in the Commission's *Handbook for Using Third-Party Contractors to Prepare Environmental Documents*, each prospective contractor must prepare an OCI statement in

⁴¹ As currently-contemplated in the pre-filing process, the Access Northeast Project would involve modifications to the Weymouth Compressor Station proposed as part of the Atlantic Bridge Project. Commission staff issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Access Northeast Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* on April 29, 2016. Comments were due to the Commission on or before May 30, 2016.

⁴² See News Release issued February 9, 1994. Subsequent announcements were published in the Commerce Business Daily (March 25, 1994) and the Federal Register (April 20, 1994).

⁴³ See Question 16 of NEPA's Forty Most Asked Questions at <https://ceq.doe.gov/nepa/regs/40/40p3.htm>.

which it must disclose any recent or ongoing work and revenues for an applicant.⁴⁴ Commission staff reviews these statements carefully before choosing a contractor to support it in conducting a NEPA analysis. In general, if less than one percent of a contractor's business (for the current and preceding year) concerns a party that could be affected by the work being done, then the contractor is not considered to have a conflict of interest. The OCI review of the third-party contractor for the Atlantic Bridge Project found no conflicts of interest.⁴⁵ The contractor provided a supplemental OCI statement to the Commission on August 15, 2016. The OCI review of the third-party contractor's supplemental statement demonstrates that it continues to receive less than one percent of its income from Spectra Energy Corporation.

58. The work of the third-party contractors is conducted under the direction of Commission staff. The applicant, though it pays for the third-party contractor's work, has no control over the work done under the contract and is not able to review the work product before its release to the public. The Commission maintains the ultimate responsibility for full compliance with the requirements of NEPA. While the third-party contractor tracks comments and filings and prepares drafts of data requests and environmental documents, all material is reviewed, edited, and issued by Commission staff.

⁴⁴ See *Handbook for Using Third-Party Contractors to Prepare Environmental Documents For Natural Gas Facilities and Hydropower Projects* at 4-1, available at <https://www.ferc.gov/industries/hydropower/enviro/tpc/tpc-handbook.pdf> (August 2016). While the August 2016 document reflects some changes which have been made to the Commission's OCI revisions since the time the third-party contractor for Atlantic Bridge Project was selected (e.g., companies must now submit to the Commission copies of all proposals received in response to the Request For Proposals instead of only the top three as was previously required), those changes would have had no effect on the conflict of interest determination in this proceeding.

⁴⁵ The third-party contractor (Natural Resource Group [NRG], a wholly owned subsidiary of Environmental Resource Management) disclosed its relationship with Spectra Energy Corporation in its proposal to work on the Commission's environmental review of the Atlantic Bridge Project. Specifically, it disclosed that it provided Spectra Energy Corporation with services in support of various expansion projects and pipeline operations and maintenance programs. NRG indicated that the services were provided starting on January 12, 2012, and lasted until at least the date of the OCI review on January 12, 2015. NRG represented that revenues from this work totaled less than one percent of NRG's total revenue in each of the past three fiscal years.

59. The Town of Weymouth and the City of Quincy requested that the Commission delay issuing an order for the project until Algonquin has demonstrated compliance with the Coastal Zone Management Act (CZMA), the Massachusetts Environmental Policy Act, and the Massachusetts Chapter 91 waterway requirements. The Town of Weymouth also submitted a letter notifying the Commission of the Weymouth Conservation Commission's decision to deny Algonquin a permit under the Massachusetts Wetlands Protection Act and the Weymouth Wetlands Protection Ordinance to build the Weymouth Compressor Station.

60. The Commission routinely issues certificates for natural gas infrastructure projects subject to the federal permitting requirements of the CZMA and other federal statutes. The practical reason is that, in spite of the best efforts of those involved, it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission's issuance of its certificate without unduly delaying the project. The Commission may and routinely does issue an NGA certificate conditioned on the certificate holder subsequently obtaining necessary permits under other federal laws. Section 7(e) of the NGA vests the Commission with broad power to attach to any certificate of public convenience and necessity it issues "such reasonable terms and conditions" as it deems appropriate.⁴⁶

61. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.⁴⁷

62. We received comments that the EA did not identify or specify the number of attendees or speakers at the Weymouth Compressor Station scoping meeting, or the

⁴⁶ 15 U.S.C. § 717f(e) (2012).

⁴⁷ See 15 U.S.C. § 717r(d) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); see also *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

number of individuals that were opposed to the project. The EA describes the total number of attendees and people that spoke at the scoping meetings.⁴⁸ Not all attendees specifically identified whether they were opposed to the project, but the majority of speakers at the scoping meetings and letters received regarding the project have been negative and not in support of the project. The EA acknowledges and evaluated the various concerns and objections to the project.

63. James Root noted that section 2.5.7 of the EA incorrectly states that a scoping meeting was held in Danbury, Connecticut. We acknowledge this incorrect statement; however, section 1.4 of the EA lists the correct locations of the four public scoping meetings held in Yorktown Heights, New York; Glastonbury, Connecticut; Weymouth, Massachusetts; and Franklin, Massachusetts.

64. We received a comment asking about EPA's role in the EA process and why it is not involved in the Commission's approval process. Under the NGA, the Commission is designated as the sole federal agency responsible for authorizing the siting of interstate natural gas transmission facilities, and is the lead federal agency for the preparation of the EA in compliance with the requirements of the NEPA.⁴⁹ The EPA is a cooperating agency and assisted FERC in the preparation of the EA because it has special expertise with respect to environmental impacts associated with the proposal.⁵⁰

65. The EPA recommends that the Commission assure that the appropriate government agencies and the public be given notice of the submission of and an opportunity to review state permits and plans. The Commission does not maintain jurisdiction over other federal or state level permitting programs. It is the applicable permitting agency's responsibility to ensure that it complies with any required notice and review procedures for those permits.

66. We received comments asking how Algonquin will comply with the conditions in this order. Environmental Condition 6 requires that Algonquin file an Implementation Plan describing how it will comply with the conditions of this order. This Implementation Plan must be filed on the public record, for Commission review and approval, before the Commission will grant authorization to begin construction.

⁴⁸ See EA at 1-3 to 1-4.

⁴⁹ See EA at 1-1.

⁵⁰ See 40 C.F.R. § 1501.6 (detailing cooperating agencies' role).

3. Need for an EIS

67. Several commenters assert that, due to the project's scope and location, the Commission must prepare an EIS instead of an EA. In support of this position, two commenters cited the Commission's "*Suggested Best Practices for Industry Outreach Programs to Stakeholders*," which describes three project categories to help determine the appropriate level of outreach for natural gas transmission and LNG projects. The first category includes projects that require an EIS, which it characterizes as "projects comprised of large diameter pipelines in new rights-of-way and/or with new aboveground facilities near population centers."⁵¹

68. As an initial matter, the guidance document notes that "[i]nterstate natural gas transmission and LNG projects vary greatly in scope and complexity...[t]herefore, a company's outreach program should be tailored to meet the needs of an individual project."⁵² Additionally, the guidance document is intended to guide industry through the pre-filing and application review process. It is not intended to bind the Commission in its review of natural gas project applications. Rather, Commission staff must adhere to NEPA and its implementing regulations when reviewing project applications.

69. Under NEPA, federal agencies must prepare an EIS for major federal actions that may significantly impact the environment.⁵³ However, if an agency determines that a federal action is not likely to have significant adverse effects, it may rely on an EA for compliance with NEPA.⁵⁴ One of the purposes of an EA is to assist agencies in

⁵¹ Federal Energy Regulatory Commission, Office of Energy Projects, Division of Gas, Environment & Engineering's *Suggested Best Practices for Industry Outreach Programs to Stakeholders*, July 2015 at 11.

⁵² *Id.*

⁵³ 42 U.S.C. § 4332(2)(C) (2012); 40 C.F.R. § 1502.4 (2016).

⁵⁴ 40 C.F.R. § 1501.3-1501.4 (2016) (detailing when to prepare an EIS versus an EA). An EA is meant to be a "concise public document ... that serves to ... [b]riefly provide sufficient evidence and analysis for determining whether to prepare an [EIS] or finding of no significant impact." 40 C.F.R. § 1508.9(a) (2016). Pursuant to the Commission's regulations, if an EA is prepared first, "[d]epending on the outcome of the environmental assessment, an [EIS] may or may not be prepared." 18 C.F.R. § 380.6(b) (2016).

determining whether to prepare an EIS or a finding of no significant impact for a proposed project.⁵⁵

70. The Commission's regulations include a list of instances when an EA is typically prepared, including when, as is the case here, the applicant proposes to construct compression, metering, and pipeline facilities under section 7 of the NGA.⁵⁶ The EA explains that pursuant to 18 C.F.R. § 380.6(b) (2016), "[i]f the Commission believes that a proposed action...may not be a major federal action significantly affecting the quality of human environment, an EA, rather than an EIS, will be prepared first. Depending on the outcome of the EA, an EIS may or may not be prepared."⁵⁷ Based on the analysis in the EA, the extent and content of comments received during the scoping period, and the scope of the project, which primarily involves take-up and re-lay and modifications to existing facilities, section 4.0 of the EA concludes that the impacts associated with this project can be mitigated to support a finding of no significant impact. We agree with staff's recommendations as presented in the EA and find that the project will not result in significant impacts. Thus, an EIS is not required.⁵⁸

4. Project Purpose and Need

71. Several parties and commenters question the purpose of and need for the project, and express concern about the potential export of natural gas to Canada. They contend that the proposed capacity of the project exceeds the volume of natural gas committed for purchase by the Project Shippers, that the project will spur increased domestic natural gas production and that the excess project capacity will be used to supply gas for export as liquefied natural gas to countries outside of North America. Rebecca Haugh questions

⁵⁵ 40 C.F.R. § 1508.9 (2016).

⁵⁶ 18 C.F.R. § 380.5 (b)(1) (2016); *see also id.* at § 380.6(a)(3) (noting that an EIS will normally be prepared first for major pipeline construction projects under NGA section 7 using a right-of-way in which there is no existing natural gas pipeline). Here, the majority of the pipeline construction is in the same location (typically the same ditch) as the existing pipeline that is being removed. *See* EA at 1-4 (EA section 1.5.1). Accordingly, the project is not the type that the Commission would automatically prepare an EIS for.

⁵⁷ *See* EA at 1-3.

⁵⁸ *See Taxpayers of Mich. Against Casinos v. Norton*, 433 F.3d 852, 857 (D.C. Cir. 2006) (Once an agency issues a finding of no significant impact, it has fulfilled NEPA's documentation requirements).

the project capacity identified in section 1.2 of the EA, given other supplemental filings made in the proceeding.⁵⁹

72. Commenters state that any increase in demand can and should be met by relying on renewable energy sources and energy efficiency programs, which they claim would result in the greatest customer savings and reduction of greenhouse gas (GHG) emissions. In support of this position, many commenters point to a report commissioned by the Massachusetts Attorney General, which concludes that over the next 15 years the New England region is unlikely to face electric reliability issues and will instead be able to meet its energy needs through renewable energy sources and energy efficiency programs.⁶⁰

73. The Connecticut chapter of the Sierra Club (Sierra Club) acknowledges that in 2013, the Connecticut Department of Energy and Environmental Protection (Connecticut DEEP) issued its Comprehensive Energy Strategy (Energy Strategy), which recommends “initiatives to increase availability of low-cost natural gas.”⁶¹ Sierra Club states, however, that the Connecticut DEEP is in the process of revising the Energy Strategy and alleges with no support that “it is doubtful that the same reliance on natural gas will appear in the revised [version].”⁶² Sierra Club states that numerous organizations and individuals in Connecticut oppose the expansion of natural gas infrastructure and are engaged in the Connecticut DEEP’s process of revising its Energy Strategy.

74. The Applicants propose to construct the Atlantic Bridge Project based on commitments from the Project Shippers, which include five local distribution companies, two manufacturing companies, and a municipal utility. Applicants have executed precedent agreements with the Project Shippers for long-term, 15-year firm transportation

⁵⁹ Ms. Haugh’s comment references a March 25, 2016 data request response provided in response to an information request from the Commission’s Division of Pipeline Certificates. On June 16, 2016, the Applicants submitted responses to comments on the EA including additional information on project capacity.

⁶⁰ *Power System Reliability in New England: Meeting Electric Resource Needs in an Era of Growing Dependence on Natural Gas*, Analysis Group, Inc., November 2015, <http://www.mass.gov/ago/docs/energy-utilities/reros-study-final.pdf>.

⁶¹ Connecticut Chapter of the Sierra Club’s May 31, 2016 Comments at 2 (citing the Connecticut DEEP’s 2013 Comprehensive Energy Strategy for Connecticut, http://www.ct.gov/deep/lib/deep/energy/cep/2013_ces_final.pdf).

⁶² *Id.*

service agreements for 100 percent of the new firm transmission service that will be created by the proposed project. These service commitments constitute strong evidence that there is market demand for the project⁶³ and further, Ordering Paragraph (E) of this order requires that the Applicants execute final contracts for service at the levels provided for in their precedent agreements prior to commencing construction.

75. We note that while there are currently several proposals to export liquefied natural gas from the United States and Canada to overseas countries, there is no evidence that the Applicants are constructing the Atlantic Bridge Project for this purpose. The project shippers receiving gas in Canada are industrial and commercial users of natural gas within Canada, not companies involved in the export of LNG. We also note the Commission does not have jurisdiction over the export or import of natural gas as a commodity. Such jurisdiction resides with the U.S. Department of Energy (DOE), which must act on any applications for natural gas export and import authority.⁶⁴ Thus, the issue of whether the export of LNG will cause economic harm is beyond the Commission's purview.⁶⁵

76. Although state energy efficiency programs and conservation efforts have the potential to reduce the amount of additional pipeline capacity that will be needed in the future, the Project Shippers' commitment to long-term firm transportation agreements demonstrate a present market demand for the additional natural gas transportation capacity to be made available by Algonquin and Maritimes' Atlantic Bridge Project. Our environmental review considered the potential for energy conservation and renewable

⁶³ Certificate Policy Statement, 88 FERC at 61,748; *see also Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1311 (D.C. Cir. 2015) (rejecting argument that precedent agreements are inadequate to demonstrate market need); *Minisink Residents for Env'tl. Pres. And Safety v. FERC*, 762 F.3d 97, 112 n.10 (D.C. Cir. 2014) (same).

⁶⁴ *See Sierra Club v. FERC*, 827 F.3d 59, 62-63, 68 (D.C. Cir. 2016) (detailing respective regulatory roles of FERC and DOE).

⁶⁵ *See Corpus Christi Liquefaction, LLC and Cheniere Corpus Christi Pipeline, L.P.*, 149 FERC ¶ 61,283, at P 20 (2014) (explaining that, under section 3 of the NGA, "the Secretary of Energy delegated to the Commission authority to '[a]pprove or disapprove the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports.' The Secretary of Energy, however, has not delegated to the Commission any authority to approve or disapprove the import or export of the commodity itself...").

energy sources to serve as alternatives to the Atlantic Bridge Project. The EA concludes, as discussed under Alternatives below, that they do not currently serve as practical alternatives to the project because they would not meet the project purpose of supplying the demand for additional natural gas.⁶⁶

77. Whether, in the course of revising its Energy Strategy, the Connecticut DEEP decides to encourage additional initiatives to increase the availability of natural gas, or to focus instead on renewable sources of energy, is immaterial. The revised Energy Strategy is not final, and, even if it were, it is not a basis for our decision-making. As discussed above, the Project Shippers have executed agreements for the additional capacity created by the project, evidencing adequate market demand. While we recognize the concerns of the residents of Connecticut who oppose this project, we are satisfied that the Applicants have taken steps to minimize the project's potential impacts on landowners and communities.

5. Segmentation

78. The CEQ regulations require the Commission to include “connected actions,” “cumulative actions,” and “similar actions” in its NEPA analyses. An agency impermissibly ‘segments’ NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and impact of the activities that should be under consideration. “Connected actions” include actions that: (a) automatically trigger other actions, which may require an EIS; (b) cannot or will not proceed without previous or simultaneous actions; or (c) are interdependent parts of a larger action and depend on the larger action for their justification.⁶⁷

79. In evaluating whether multiple actions are, in fact, connected actions, courts have employed a “substantial independent utility” test, which the Commission finds useful for determining whether the three criteria for a connected action are met. The test asks “whether one project will serve a significant purpose even if a second related project is not built.”⁶⁸ For proposals that connect to or build upon an existing infrastructure

⁶⁶ See EA at 3-2.

⁶⁷ 40 C.F.R. § 1508.25(a)(1) (2016).

⁶⁸ *Coalition on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 69 (D.C. Cir. 1987). See also *O’Reilly v. U.S. Army Corps of Eng’rs*, 477 F.3d 225, 237 (5th Cir. 2007) (defining independent utility as whether one project “can stand alone without requiring construction of the other [projects] either in terms of the facilities required or of profitability.”).

network, this standard distinguishes between those proposals that are separately useful from those that are not. While the analogy between the two is not apt in many regards, similar to a highway network, “it is inherent in the very concept of” the interstate pipeline grid “that each segment will facilitate movement in many others; if such mutual benefits compelled aggregation, no project could be said to enjoy independent utility.”⁶⁹

80. In *Delaware Riverkeeper Network v. FERC*, the court ruled that individual pipeline proposals were interdependent parts of a larger action where four pipeline projects, when taken together, would result in “a single pipeline” that was “linear and physically interdependent” and where those projects were financially interdependent.⁷⁰ The court put a particular emphasis on the four projects’ timing, noting that when the Commission reviewed the proposed project, the other projects were either under construction or pending before the Commission.⁷¹ In a later case, the same court indicated that in considering a pipeline application, the Commission need not jointly consider projects that are unrelated and do not depend on each other for their justification.⁷²

a. **The Access Northeast Project Does Not Constitute a Proposal**

81. As discussed above, the courts have found that the Commission is not required to consider in its NEPA analysis other potential projects for which the project proponent has not yet filed an application.⁷³ Section 102(C) of NEPA requires agencies to prepare an environmental document for “proposals” for major federal actions affecting the human environment.⁷⁴ The CEQ’s regulations state that “proposals” exist when the action is at the stage when “an agency subject to the Act has a goal and is actively preparing to make

⁶⁹ *Coalition on Sensible Transp., Inc. v. Dole*, 826 F.2d at 69.

⁷⁰ *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, at 1314 (D.C. Cir. 2014).

⁷¹ *Id.*

⁷² *See Myersville Citizens for a Rural Cmty. v. FERC*, 783 F.3d at 1326.

⁷³ *Id.*

⁷⁴ 42 U.S.C. 4332(2)(C) (2012).

a decision...and the effects [of that action] can be meaningfully evaluated.”⁷⁵ The courts have described proposed actions as “proposals in which action is imminent.”⁷⁶

82. Commenters allege that by finding that the Atlantic Bridge and Access Northeast Projects did not constitute proposals at the time it issued the AIM Order, and by finding that the Access Northeast Project did not constitute a proposal at the time staff reviewed the Atlantic Bridge Project, the Commission allowed Algonquin to shield its broader plans from a more comprehensive review. The Town of Weymouth adds that the Commission’s alleged segmentation inhibited the public’s ability to understand and evaluate project costs to the environment and communities, and provide meaningful comments.⁷⁷ Lori and Michael Hayden argue that, because the Access Northeast Project is under Commission review in pre-filing while the Atlantic Bridge application was pending, that the EA should have considered the two projects together.

83. We disagree. A project at the pre-filing stage is not a proposal, but is in its early stages of development and the NEPA process. The purpose of pre-filing is to involve interested stakeholders early in project planning and to identify and resolve issues before an application is filed.⁷⁸ During the pre-filing process Commission staff gathers information for its environmental review and solicits the public’s and agencies’ participation. Commission staff then determines the scope of issues to be addressed and identifies the significant environmental issues related to a proposed action. By raising environmental issues at an early stage, we avoid a situation where the pipeline completes planning and eliminates all alternatives to the proposed action before staff commences its environmental review.⁷⁹

⁷⁵ 40 C.F.R. 1508.23 (2016).

⁷⁶ *Wilderness Workshop v. Bureau of Land Mgmt.*, 531 F.3d 1220, 1229 (10th Cir. 2008) (citing *O’Reilly v. U.S. Army Corps of Eng’rs*, 477 F.3d 225, 236 (5th Cir. 2007)).

⁷⁷ Town of Weymouth’s June 2, 2016 Comments at 2.

⁷⁸ *See Weaver’s Cove Energy, LLC*, 107 FERC ¶ 61,022, at P 11 (2004).

⁷⁹ Our pre-filing process is consistent with section 1501.2(d) of the CEQ regulations, which provide in pertinent part:

Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect

(continued ...)

84. When Commission staff conducted and completed its environmental review of the AIM Project, both the Atlantic Bridge and Access Northeast Projects were in the early stages of project development. Commission staff did not begin its environmental scoping process for the Atlantic Bridge Project until nearly two months after its March 3, 2015 issuance of the AIM Order, when it issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Atlantic Bridge Project*. At the time, Spectra had only announced the Access Northeast Project on its website. Thus, both the Atlantic Bridge and Access Northeast Projects were not proposals in which action was imminent.

85. Nonetheless, in the AIM final EIS, Commission staff properly considered both the Atlantic Bridge and Access Northeast Projects in the cumulative effects analysis, finding that if the Atlantic Bridge Project moved forward based on the preliminary details known at the time of staff's environmental analysis, it would impact resources in many of the same areas as the AIM Project.⁸⁰ Because less information was available regarding the Access Northeast Project at the time, Commission staff could not determine whether it would result in cumulative impacts within the same project area or geographic scope as the AIM Project.⁸¹

86. Commission staff issued its *Notice of Intent to Prepare an Environmental Assessment for the Planned Access Northeast Project* on April 29, 2016, and at this time, environmental scoping for the Access Northeast Project is ongoing. Projects that are in the early stages of development have uncertain futures. Not all projects that enter the pre-filing process go on to be proposed in applications. Those that do, change in project scope, facilities, or location before an application is filed. Indeed, the Atlantic Bridge Project has been modified to eliminate originally contemplated facilities since Commission staff evaluated it in the AIM Project's final EIS using the generic details provided by Algonquin in September 2014. In January 2015, Algonquin and Maritimes filed a pre-filing request letter for the Atlantic Bridge Project that stated the scope of the project included fewer miles of pipe and less compression than the preliminary details that Algonquin previously provided. Since the time of that filing, the Atlantic Bridge

environmental values, to avoid delays later in the process, and to head off potential conflicts.

40 C.F.R. § 1501.2 (2016).

⁸⁰ AIM Final EIS at 4-290.

⁸¹ *Id.* at 4-283 (defining the geographic region considered for each resource where cumulative impacts could occur).

Project has undergone even more changes, further reducing its scope.⁸² As projects before and in the pre-filing stage are uncertain, without an application, the Commission cannot meaningfully evaluate the potential environmental effect of those future projects.

87. The fact that the EA for the proposed Atlantic Bridge Project evaluates the cumulative impacts of the Access Northeast Project does not mean that we found the Access Northeast Project to constitute a proposal. A cumulative impacts analysis is not limited to the cumulative impacts that can be expected from proposed actions. Rather, the cumulative impacts analysis extends to impacts that can be anticipated from proposed actions and “reasonably foreseeable actions,” i.e. contemplated actions.⁸³ Here, the EA discusses the Access Northeast Project using conservative estimates of what the project could entail.⁸⁴

b. Projects are not Connected, Cumulative, or Similar Actions

88. Commenters, including Food & Water Watch, Conservation Law Foundation, and the Town of Weymouth, argue that the EA improperly segmented its NEPA review by failing to analyze Algonquin’s proposed Atlantic Bridge Project, its approved AIM Project, and its contemplated Access Northeast Project in a single EIS as connected actions, similar actions, and cumulative actions.

i. Connected Actions

89. Citing *Delaware Riverkeeper*, commenters argue that the AIM Project, the Atlantic Bridge Project, and the Access Northeast Project should have been evaluated in one environmental document as connected actions. As discussed above, connected actions include actions that: (i) automatically trigger other actions, which may require environmental impact statements; (ii) cannot or will not proceed unless other actions are

⁸² The Atlantic Bridge Project’s design capacity was reduced by approximately 40 percent since the final EIS was issued (from 220,000 Dth per day to 137,705 Dth per day); its replacement pipeline was reduced by approximately 88 percent (52.5 miles to 6.3 miles); and the total additional compression was reduced by 11 percent (29,530 hp to 26,500 hp).

⁸³ 40 C.F.R. § 1508.7(a)(2) (2016).

⁸⁴ EA at 2-129 (noting that during the pre-filing process or upon submitting an application, the Access Northeast Project may be reduced in scope or otherwise modified).

taken previously or simultaneously; and (iii) are interdependent parts of a larger action and depend on the larger action for their justification.⁸⁵ We find that the AIM, Atlantic Bridge, and Access Northeast Projects fail to meet these three criteria.

90. While each project will construct or modify facilities at sites along Algonquin's linear pipeline system in the same four states, the facilities will be geographically separate. The AIM Project and Atlantic Bridge Projects have different start and end points. The AIM Project receives gas at Ramapo, New York, and delivers it to its project shippers' various city gates. In contrast, the Atlantic Bridge Project will receive gas at both Mahwah, New Jersey, and Ramapo, New York, and will deliver gas to its Project Shippers in New England and Canada. The Access Northeast Project, as currently contemplated, will receive gas at Mahwah, New Jersey; Ramapo, New York; and Brookfield, Connecticut, and will deliver gas to four aggregation areas in Rhode Island, Connecticut, Massachusetts, and Maine.⁸⁶ The fact that some of the projects' facilities will overlap does not mean that the projects are interdependent. Connectivity by itself does not equate to interdependence.⁸⁷ If this were the case, no project in the interstate pipeline grid could be independently proposed, evaluated, or constructed. The needs of customers with nearby geography would all be held captive by one another.

91. The three projects are also functionally independent. The AIM Project does not require or "trigger" construction or operation of the Atlantic Bridge Project, which in turn does not spur construction or operation of the Access Northeast Project. Likewise, the latter two projects do not rely on the first two for their justification. The expansion service on each project follows a discrete contract path dictated by the needs of each project's shippers. Like the AIM Project before it, the Atlantic Bridge Project is fully subscribed, and does not require the construction of subsequent facilities in order to begin operation. Nor does the construction of the AIM Project affect the scope of the facilities that need to be constructed to serve the Atlantic Bridge customers. The same is true with respect to the Atlantic Bridge and Access Northeast Projects. Further, if the Access Northeast Project fails to receive Commission authorization, the earlier two projects

⁸⁵ 40 C.F.R. § 1508.25(a)(1) (2016).

⁸⁶ Draft Resource Report 1 for the Access Northeast Project – Docket No. PF16-1.

⁸⁷ AIM Order at P 70.

would not be impacted. Additionally, there is no evidence that the three projects are financially interdependent.⁸⁸

92. Other commenters allege that the Atlantic Bridge and Access Northeast Projects are connected because they “cannot or will not proceed unless other actions are taken previously or simultaneously.” The Town of Weymouth and the Massachusetts Attorney General contend that Algonquin is not able to proceed with the Access Northeast Project until the Atlantic Bridge Project is approved and constructed. In support, both cite to the fact that Algonquin, in its application for the Access Northeast Project, proposes to install an additional compressor unit at the Weymouth Compressor Station, a new station proposed as part of the Atlantic Bridge Project. Therefore, the town and the Massachusetts Attorney General contend that “Access Northeast cannot move forward unless Atlantic Bridge is permitted as proposed.”⁸⁹ The town of Weymouth also questions the outcome of the Access Northeast Project if the Atlantic Bridge Project fails to become operational, and claims that the lack of a “no build” alternative in the EA “demonstrates that Access Northeast is dependent upon Atlantic Bridge.”⁹⁰

93. As discussed in the EA, the AIM, Atlantic Bridge and Access Northeast Projects are separate, distinct projects, each with independent utility.⁹¹ The fact that Algonquin proposes to add a compressor unit at the Weymouth Compressor Station as part of the Access Northeast Project in no way makes the Atlantic Bridge Project dependent on the that project. The Atlantic Bridge Project can proceed with or without Access Northeast. Conversely, if the Atlantic Bridge Project is not approved or constructed, the Access Northeast Project can proceed, albeit with the minor modification to build a compressor station to house the 10,320 hp unit that is necessary for that project.

94. Finally, commenters including the Siting Board and Conservation Law Foundation allege that the AIM, Atlantic Bridge, and Access Northeast Projects are interdependent parts of a larger action and depend on the larger action for their justification. Citing *Delaware Riverkeeper*, Conservation Law Foundation states that,

⁸⁸ Unlike in *Delaware Riverkeeper Network*, here there is no evidence that any of these three expansion projects will allow for the subsequent expansion projects to be achieved at a much lower cost. See *Delaware Riverkeeper Network*, 753 F.3d at 1316.

⁸⁹ Town of Weymouth’s June 2, 2016 Comments at 4.

⁹⁰ *Id.*

⁹¹ EA at 17.

“...the expansions are interdependent, as each serves as a separate piece of the larger system expansion. Indeed, the projects...go beyond those in *Riverkeeper* in their interdependence as they are in fact *dependent* on one another. For example, concurrent pipeline upgrades are planned by Atlantic Bridge and Access Northeast near the Southeast compressor station, the Cromwell compressor station, the Chaplin compressor station, and the Q-1 loop, and both the Oxford and Chaplin compressor stations add horsepower as part of the Atlantic Bridge in order to accommodate capacity increases from Access Northeast and AIM.”⁹²

95. Again, we disagree. As discussed above, the projects are not functionally connected. Each project has independent utility and will serve a distinct transportation purpose. Algonquin held separate open seasons and reverse open seasons for all three projects at various periods from 2010 to 2015.⁹³ As a result of these open seasons, Algonquin executed individual precedent agreements with ten project shippers for the AIM Project, seven project shippers for the Atlantic Bridge Project,⁹⁴ and seven memoranda of understanding for the Access Northeast Project. While there is some overlap in project shippers for the three projects, there are several other shippers that contracted for firm transportation service on only one of the projects.⁹⁵ Each agreement

⁹² Conservation Law Foundation’s June 1, 2016 Comments at 2-3.

⁹³ Algonquin held an open season for the AIM Project from December 13, 2010, through February 11, 2011, and from September 20, 2012, through November 2, 2012. Algonquin held a supplemental open season and a reverse open season for the AIM Project from June 11 through June 25, 2013. Algonquin held an open season for the Atlantic Bridge Project from February 5, 2014, to March 31, 2014, and a reverse open season from January 16 through January 26, 2015. Algonquin held an open season for the Access Northeast Project from February 18, 2015, through May 1, 2015, and a reverse open season from October 2 through October 30, 2015.

⁹⁴ On May 31, 2016, Algonquin entered into a precedent agreement with Emera Energy Services, Inc. for the remaining 7,599 dth/d of Atlantic Bridge Project capacity that had been unsubscribed. On July 28, 2016, Emera Energy Services, Inc. entered into an agreement to permanently assign its rights and obligations under that precedent agreement to Northern Utilities, Inc., a local distribution company primarily serving Maine and New Hampshire. *See* Algonquin’s August 9, 2016 filing.

⁹⁵ Norwich Public Utilities and NSTAR Gas Company are shippers in both the AIM and Atlantic Bridge Projects. The Narragansett Electric Company is a shipper in both the AIM and Access Northeast Projects.

for the AIM Project and Atlantic Bridge Project meets a project shipper's need to receive gas at a certain time and at unique receipt points. The projects also have different negotiated and recourse rates and separate in-service dates.

96. As discussed above, the *Riverkeeper* court found that the three proposals being considered were physically, temporally, and financially interdependent. Here, however, the projects do not depend on one another for access to the natural gas market. While an early plan of the AIM Project included some modifications that are now part of the Atlantic Bridge Project, such a plan merely demonstrates the uncertainty of a project in its early stages and not that Algonquin deliberately used the pre-filing process to shield itself from a more comprehensive review. Market demand drives each application for transportation service. It is unrealistic to expect a pipeline to defer requesting approval of projects designed to serve discrete markets, and to require the shippers which would be served by such projects to forgo receipt of needed service, until all projects on a pipeline's system can be packaged into one consolidated application.

ii. Cumulative Actions

97. Lori and Michael Hayden also argue that the projects are cumulative actions because they have similar timing and geography and would affect many of the same resources in the same area.

98. Cumulative actions are those "which when viewed with other proposed actions have cumulatively significant impacts..."⁹⁶ The courts have indicated that an agency is not required to analyze actions in a single EIS if that agency did not intend to segment review to minimize its cumulative impacts analysis.⁹⁷ Both the EIS for the AIM Project and the EA for the Atlantic Bridge Project explicitly discuss the cumulative impacts of each project when added to the other projects. Moreover, the Atlantic Bridge EA analyzes the cumulative impacts of the Access Northeast Project to the extent the impacts were reasonably foreseeable.⁹⁸

⁹⁶ 40 C.F.R. § 1508.25(a) (2) (2016).

⁹⁷ *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1305 (9th Cir. 2003) (*Earth Island*) (citing *Churchill Cnty v. Norton*, 276 F.3d 1060, 1079-80 (9th Cir. 2001)).

⁹⁸ EA at 2-129 through 2-130; *id.* at 2-131 through 2-143 (discussing impacts from Access Northeast Project on each specific resource area).

iii. Similar Actions

99. The Town of Weymouth contends that the Atlantic Bridge and Access Northeast projects are similar actions because they share similar project components, construction activities, and likely environmental impacts.

100. Actions are “similar” if they, when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.⁹⁹ Unlike connected and cumulative actions, analyzing similar actions is not always mandatory.¹⁰⁰ As the CEQ states, “[a]n agency *may* wish to analyze [similar] actions in the same impact statement. It *should* do so when the *best way* to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.”¹⁰¹ Given that Commission staff lacked the necessary information to assess potential impacts of the Atlantic Bridge and Access Northeast Projects, which were not at the application stage at the time Commission staff prepared the AIM EIS, and that each project has independent utility, we find that a single EIS was neither required nor the best way to assess Algonquin’s projects.¹⁰²

6. Cumulative Effects

101. The CEQ defines cumulative impacts as “the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.”¹⁰³ The requirement that an impact must be

⁹⁹ *San Juan Citizens’ Alliance v. Salazar*, CIV.A.00CV00379REBCB, 2009 WL 824410, at *13 (D.C. Colo. 2009) (citing 40 C.F.R. § 1508.25(a)(3) for the proposition that “nothing in the relevant regulations compels the preparation of a single EIS for ‘similar actions’”).

¹⁰⁰ 40 C.F.R. § 1508.25(a)(3) (2016).

¹⁰¹ *Id* (emphasis added). *See also Klamath-Siskiyou*, 387 F.3d 989, 1000-01 (9th Cir. 2004) (similarly emphasizing that agencies are only required to assess similar actions programmatically when such review is necessarily the best way to do so).

¹⁰² With respect to similar actions, “an agency should be accorded more deference in deciding whether to analyze such actions together.” *Klamath-Siskiyou*, 387 F.3d at 1000 (citing *Earth Island*, 351 F.3d 1291, 1306).

¹⁰³ 40 C.F.R. § 1508.7 (2016).

“reasonably foreseeable” to be considered in a NEPA analysis applies to both indirect and cumulative impacts.

102. The “determination of the extent and effect of [cumulative impacts], and particularly identification of the geographic area within which they may occur, is a task assigned to the special competency of the appropriate agencies.”¹⁰⁴ CEQ has explained that “it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”¹⁰⁵ Further, a cumulative impact analysis need only include “such information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well-nigh impossible.”¹⁰⁶ An agency’s analysis should be proportional to the magnitude of the environmental impacts of a proposed action; actions that will have no significant direct and indirect impacts usually require only a limited cumulative impacts analysis.¹⁰⁷

103. As we have explained, consistent with CEQ guidance, in order to determine the scope of a cumulative impacts analysis for each project, Commission staff establishes the geographic scope of resources that may be affected by a proposed project and by other past, present, and reasonably foreseeable future actions.¹⁰⁸ While the scope of our cumulative impacts analysis will vary from case to case depending on the facts presented, we have concluded that where the Commission lacks meaningful information about potential future natural gas production within the geographic scope of a project-affected

¹⁰⁴ *Kleppe*, 427 U.S. at 413.

¹⁰⁵ *Id.* at 8.

¹⁰⁶ *New York Natural Res. Def. Council, Inc. v. Kleppe*, 429 U.S. 1307, 1311 (1976) (citing *Natural Res. Def. Council v. Calloway*, 524 F. 2d 79, 88 (2d. Cir. 1975)).

¹⁰⁷ See CEQ, *Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis* at 2-3 (June 24, 2005) (2005 CEQ Guidance), http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PastActsCumulEffects.pdf.

¹⁰⁸ See, e.g., *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,225, at P 113 (2014).

resource, then production-related impacts are not sufficiently reasonably foreseeable so as to be included in a cumulative impacts analysis.¹⁰⁹

104. Commenters, including the Conservation Law Foundation, the Massachusetts Attorney General, the Massachusetts Siting Board, Almar, the City of Quincy, and Rebecca Haugh, believe that the EA's analysis of cumulative effects is inadequate. A number of comments relate to the Weymouth Compressor Station and its proposed expansion under the Access Northeast Project. Commenters also contend that the EA should have included a more thorough analysis of cumulative impacts on environmental justice communities.

105. In considering cumulative impacts, CEQ advises that an agency first identify the significant cumulative effects issues associated with the proposed action.¹¹⁰ The agency should then establish the geographic scope for analysis.¹¹¹ Next, the agency should establish a time frame for analysis, equal to the timespan of a proposed project's direct and indirect impacts.¹¹² Finally, the agency should identify other actions that potentially affect the same resources, ecosystems, and human communities that are affected by the proposed action.¹¹³ As noted above, CEQ advises that an agency should relate the scope of its analysis to the magnitude of the environmental impacts of the proposed action.¹¹⁴

¹⁰⁹ *Id.* P 120.

¹¹⁰ *See* 1997 CEQ Guidance at 11.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *See* CEQ, *Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis* at 2-3 (June 24, 2005) (2005 CEQ Guidance), http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PastActsCumulEffects.pdf. The 2005 CEQ Guidance notes that agencies have substantial discretion in determining the appropriate level of their cumulative impact assessments and that agencies should relate the scope of their analyses to the magnitude of the environmental impacts of the proposed action. Further, the Supreme Court held that determination of the extent and effect of cumulative impacts, "and particularly identification of the geographic area within which they occur, is a task assigned to the special competency of the agenc[y]. . . ." *See Kleppe*, 427 U.S. 390, 414-15 (1976).

106. The cumulative effects analysis in the EA takes the approach that the CEQ guidance advises.¹¹⁵ Sections 2.10.1 through 2.10.10 of the EA consider the potential cumulative impacts of all known projects within the geographic scope of the Atlantic Bridge Project (including the AIM and Access Northeast Projects) on geology and soils; waterbodies, groundwater, and aquatic resources; wetlands; vegetation, wildlife and habitat, and protected species; land use, recreation and special interest areas and visual resources; socioeconomics; cultural resources; air quality and noise; climate change; and reliability and safety. Because the project's impacts on these resources would be minimal, temporary, and contained within or adjacent to the temporary construction right-of-way or additional temporary workspaces, Commission staff selected proportionate, narrow geographic areas within which potential cumulative impacts might occur.¹¹⁶

a. The Access Northeast Project

107. The EA analyzes the potential cumulative impacts of both the AIM and Access Northeast Projects based on publicly available information and assumptions regarding pipeline distance, collocation, right-of-way width, and pipeline diameter. The AIM Project has been approved by the Commission, constructed, and placed in service; therefore, information about that project is well defined. While there is a small overlap in construction workspaces between the AIM and Atlantic Bridge Projects, the AIM facilities are completed in these areas and have been placed in-service before prior to commencement of any construction work for the Atlantic Bridge Project.

108. Conversely, the specific details about the Access Northeast Project are not fully developed and no application has been filed. As discussed above, projects that are in the early stages of development have uncertain futures and not all projects that enter the pre-filing process go on to be proposed in applications. However, the cumulative impacts analysis includes portions of the Access Northeast Project that are within the same geographic scope as the Atlantic Bridge Project and reflecting information that was publically available at the time the EA was published.

109. As discussed in the EA, the Atlantic Bridge Project will likely be constructed and its rights-of-way restored before construction of the Access Northeast Project would commence. For those Access Northeast Project facilities that are within the same geographic scope as the Atlantic Bridge Project facilities, impacts would be similar to

¹¹⁵ See 1997 CEQ Guidance at 15 that the “applicable geographic scope needs to be defined case-by-case.”

¹¹⁶ EA at 2-124 and 2-125.

those of the Atlantic Bridge Project. For example, air emissions and noise impacts during compressor station operation would overlap with the operational air emissions and noise impacts of the Atlantic Bridge Project. Although the same geographic scope would be affected, the temporal scale for construction impacts of the projects is different and does not overlap.

110. As part of its cumulative impacts analysis for the Atlantic Bridge Project, Algonquin performed cumulative air quality modeling that included the expansions to the Weymouth and Chaplin compressor stations contemplated by the Access Northeast Project.¹¹⁷ As a result of this modeling, the EA found that there would not be any significant cumulative impacts on regional air quality.¹¹⁸ Additionally, both projects would be subject to federal and state regulations designed to protect ambient air quality (thereby protecting public health and welfare) and prevent significant cumulative impacts.

b. Environmental Justice

111. A number of commenters contend that the EA should have performed an analysis of the cumulative impacts of current and reasonably foreseeable future actions on environmental justice communities, especially those surrounding the proposed Weymouth Compressor Station. The Town of Weymouth notes that there are currently a number of existing industrial uses in the area, including a chemical plant, two power plants, and a hazardous waste facility, and expressed concern that impacts related to the Atlantic Bridge Project would have a cumulative effect on environmental justice communities when added to the impacts of these other facilities.¹¹⁹

112. The EA found that the primary issues associated with environmental justice communities for the proposed project are visual impacts, air quality, and noise. A majority of the Atlantic Bridge Project facilities would either be buried (i.e., the pipeline) or adjacent to existing facilities of similar appearance. The Weymouth Compressor Station would be constructed on a peninsula that is currently a mixture of open and industrial land surrounded by the Fore River and other industrial sites. The proposed station would be situated behind a row of existing mature evergreen trees which would be preserved in order to provide a visual screen to motorists in the area along the eastern and northwestern sides of the site. While the compressor station would be visible to residents

¹¹⁷ EA at 2-140.

¹¹⁸ *Id.*

¹¹⁹ Town of Weymouth's June 2, 2016 Comments at 223.

across the Fore River, the EA found that it will be designed to blend in with the existing building on the peninsula and would not be out of character with the current visual landscape. Therefore, the EA determined that visual impacts on environmental justice communities will be adequately minimized.¹²⁰

113. The air quality modeling performed for the Weymouth Compressor Station includes the current design for the additional compression at this station under the Access Northeast Project and other nearby large emission sources identified by Massachusetts DEP (e.g. the two power plants and other industrial facilities). With respect to cumulative air quality impacts, the EA concluded that impacts would be below established thresholds to protect human health and welfare.¹²¹ It also found that the combined impact of multiple construction projects in the same airshed and timeframe as the Atlantic Bridge Project could temporarily add to the air impacts in the project area. However, with the mitigation measures proposed by the Applicants, the construction and operation of the project facilities are expected to remain in compliance with the NAAQS and are not expected to have a significant impact on air quality in the project area. Moreover, because the construction and operation of other projects analyzed as part of the cumulative impacts analysis are located over a large area, have varying construction schedules, and must adhere to federal, state, and local regulations for the protection of air quality, the EA concludes that significant cumulative impacts to air quality are not anticipated.¹²²

114. The EA also presents the cumulative noise impact for operation of the Weymouth Compressor Station, combining background noise measurements taken at the nearby noise sensitive areas (NSAs) with the projected sound levels from the compressor station.¹²³ The EA concludes that operation of the Weymouth Compressor station will not result in a perceptible increase in noise at any NSAs. The EA also explains that if the Access Northeast Project is constructed, Algonquin would be required to meet our 55 dBA L_{dn} requirement for the total facility (including both the Atlantic Bridge and Access Northeast Project equipment) at the NSAs.¹²⁴

¹²⁰ EA at 2-136.

¹²¹ EA at 2-138.

¹²² See EA at 2-140.

¹²³ See EA at 2-104 and 2-109 through 2-110.

¹²⁴ See EA at 2-141.

c. Natural Gas Production

115. Commenters, including Food & Water Watch and the Massachusetts Chapter of the Sierra Club, allege that the EA does not adequately consider the cumulative impacts of natural gas production. Food & Water Watch alleges that the EA should have considered impacts of Marcellus shale development even though those development activities would occur well over 10 miles from the project construction area, and cites to the EPA's comments on the EIS for the AIM Project for the proposition that, "[g]eographic proximity is not in and of itself the standard for NEPA's requirement to consider impacts that have a reasonably close causal relationship to the proposed federal action."¹²⁵

116. The CEQ guidance on cumulative impacts assessments advises that agencies have substantial discretion in determining the appropriate level and scope of cumulative impacts analysis.¹²⁶ CEQ states that an agency should relate the scope of its analysis to the magnitude of the environmental impacts of the proposed action. Due to the limited scope of the Atlantic Bridge Project, the broader cumulative effects analysis sought by Food & Water Watch and the Massachusetts Chapter of the Sierra Club is not required under NEPA.

117. Nevertheless, to provide the public additional information and to inform our public convenience and necessity determination under section 7(e) of the Natural Gas Act,¹²⁷ Commission staff, after reviewing publically-available DOE and EPA methodologies, has prepared the following analyses regarding the potential impacts associated with unconventional natural gas production and downstream combustion of natural gas. As summarized below, these analyses provide only an upper bound estimate of upstream and downstream emissions. In addition, these estimates are generic in nature and reflect a significant amount of uncertainty.

¹²⁵ Food & Water Watch's June 1, 2016 Comments at 7 (citing EPA Region 1's Comments on FERC's Final Environmental Impact Statement for Spectra's AIM Expansion Project, CP14-96-000, March 2, 2015 at 5).

¹²⁶ The Supreme Court has held that "determination of the extent and effect of [cumulative impacts], and particularly identification of the geographic area within which they may occur, is a task assigned to the special competency of the appropriate agencies." *Kleppe v. Sierra Club*, 427 U.S. 390, 414 (1976).

¹²⁷ 15 U.S.C. § 717f(e) (2012).

118. With respect to upstream impacts, Commission staff estimated the impacts associated with the production wells that would be required to provide 100 percent of the volume of natural gas to be transported by the Atlantic Bridge Project, on an annual basis for GHG emissions, and for the life of the project for land-use and water use within the Marcellus shale basin.¹²⁸ This estimate also assumes the maximum capacity is transported 365 days per year, which is rarely the case because many projects are designed for peak use. Additionally, as noted before, it assumes that 100 percent of the incremental capacity resulting from the project will be new gas produced in the Marcellus Shale, as opposed to produced in other regions or withdrawn from storage. According to a 2016 study by the DOE and National Energy Technology Laboratory (NETL), approximately 1.48 acres of land is required for each natural gas well pad and associated infrastructure (road infrastructure, water impoundments, and pipelines).¹²⁹ Based upon the project capacity and the expected estimated ultimate recovery of Marcellus shale wells,¹³⁰ between 290 and 560 wells would be required to provide the gas over the estimated 30-year lifespan of the project. Therefore, on a normalized basis over the life of the project,¹³¹ these assumptions lead us to an upper-bound estimate of between 15 and 30 additional acres of land per year that may be impacted by well drilling.¹³² This estimate of the number of wells is imprecise and subject to a significant amount of uncertainty.

¹²⁸ Commission staff assumed the project will have a 30-year lifespan.

¹²⁹ Dep't. of Energy and Nat'l Energy Tech. Laboratory, *Life Cycle Analysis of Natural Gas Extraction and Power Generation*, DOE/NETL-2015/1714, at 22, Table 3-6 (August 30, 2016) (2016 DOE/NETL Study).

¹³⁰ U.S. Energy Info. Admin., *The Growth of U.S. Natural Gas: An Uncertain Outlook for U.S. and World Supply* (June 15, 2015), <http://www.eia.gov/conference/2015/pdf/presentations/staub.pdf>; Dep't of Energy and Nat'l Energy Tech. Laboratory, *Environmental Impacts of Unconventional Natural Gas Development and Production*, DOE/NETL-2014/1651, (May 29, 2014) (2014 DOE/NETL Study).

¹³¹ Normalized yearly impacts are estimated based on the overall impacts for the life of the project averaged on a per year basis.

¹³² The 2016 DOE/NETL Study estimates the land-use fractions of the Appalachian Shale region to be 72.3 percent forested lands, 22.4 percent agricultural land, and 5.3 percent grass or open lands. 2016 DOE/NETL Study at 24, Table 3-8.

119. We also estimated the amount of water required for the drilling and development of these wells over the 30 year period using the same assumptions. The 2014 DOE/NETL Study finds that an average Marcellus shale well requires between 3.88 and 5.69 million gallons of water for drilling, and well development, depending on whether the producer uses a recycling process in the well development.¹³³ Therefore, the upper bound estimate of the production of wells required to supply the project could require as much as 40 to 110 million gallons of water per year over the 30-year life of the project.

120. With respect to impacts from GHGs, the EA discusses the direct GHG impacts from construction and operation of the Atlantic Bridge Project and other projects that were considered in the Cumulative Impacts analysis, the climate change impacts in the region, and the regulatory structure for GHGs under the Clean Air Act. The EA also quantifies GHG emissions from construction (17,391 metric tons per year, CO₂-equivalent [tpy CO_{2e}]) and operation (207,579 metric tpy CO_{2e}) from the project, and addresses consistency with regional/state climate goals.¹³⁴ The EA does not include upstream emissions. However, we conservatively estimated the upstream GHG emissions has an upper bound of: 110,000 metric tpy CO_{2e} from extraction, 210,000 metric tpy CO_{2e} from processing, and 130,000 metric tpy CO_{2e} from non-project upstream pipelines.¹³⁵ Again, this is an upper-bound estimate that involves a significant amount of uncertainty.

121. With respect to downstream GHG emissions, Commission staff used an EPA-developed methodology to estimate the downstream GHG emissions from a project, assuming all of the gas to be transported is eventually combusted. As such, we conservatively estimated the GHG emissions from the end-use combustion of the natural gas to be transported by the projects. About 46 percent of the project volumes transported on Algonquin's system will be delivered to Maritimes' system. Those volumes transported on Maritimes' system to Canada would ultimately be delivered

¹³³ 2014 DOE/NETL Study at 76, Exhibit 4-1.

¹³⁴ EA at 2-93 through 2-96.

¹³⁵ The upstream GHG emissions were estimated using the methodology in the 2014 DOE/NETL Study. Generally, the average leak and emission rates identified in the analysis for each segment of extraction, processing, and transport were used. The method is outlined in Section 2 of the DOE/NETL Study, and the background data used for the model is outlined in Section 3.1. GHG emission estimates were based on the results identified in Tables 4.3, 4.4, and 4.5. New NSPS Oil & Gas rules or other GHG mitigation were not accounted for. Additionally, the length of non-project pipeline prior to the gas reaching project components was conservatively estimated.

utilizing existing capacity on existing transmission systems. Therefore, avoiding double counting of the Canadian-bound volumes that will use existing capacity, the project can deliver up to 75,099 Dth/d of new volumes to end-use customers in the United States, which can produce 2.9 million metric tpy CO_{2e} from end-use combustion. We note that this CO_{2e} estimate represents an upper bound for the amount of end-use combustion that could result from the gas transported by this project. This is because some of the gas may displace other fuels, which could actually lower total CO₂ emissions. It may also displace gas that otherwise would be transported via different means, resulting in no change in GHG emissions. This estimate also assumes the maximum capacity is transported 365 days per year, which is rarely the case because many projects are designed for peak use. As such, it is unlikely that this total amount of GHG emissions would occur, and emissions are likely to be significantly lower than the above estimate and downstream GHG emissions may in fact fall due to fuel displacement.

122. As discussed above, we conclude that the EA adequately considers cumulative impacts for the Atlantic Bridge Project.

7. Geology and Soils

123. Commenters expressed concern about the potential for flooding and impacts from hurricanes on the Atlantic Bridge Project. One commenter states that because the proposed Weymouth Compressor Station site is below sea level and is located in a floodplain, the Commission should fulfill its obligations under the Clean Water Act Executive Order 11988. The Executive Order, which refers to federal flood risk management, states that “[i]f an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains.”¹³⁶

124. As an initial matter, Executive Order 11988 only applies to executive departments and agencies, and therefore does not apply to the Commission, which is an independent regulatory agency.¹³⁷ Nevertheless, as part of the NEPA review process, the EA addresses floodplains, and acknowledges that portions of the Weymouth Compressor Station construction workspace are within the 100-year flood zone.¹³⁸ Thus, temporary

¹³⁶ Exec. Order No. 11,988, 42 Fed. Reg. 26,951 (May 24, 1977), *reprinted as amended in* 80 Fed. Reg. 6425 (Jan. 30, 2015).

¹³⁷ *See id* at Section 1, stating that “*executive departments and agencies* should avoid...long-and short-term adverse impacts associated with the occupancy and modification of floodplains.”

¹³⁸ EA at 1-2.

impacts may occur on floodplains should a flood occur at the same time as construction of the Weymouth Compressor Station, resulting in minimal impacts on flood storage capacity. However, the permanent station facility footprint will not be within any flood zone. Moreover, the EA considered several alternatives for the proposed compressor station site, but determined that they are not preferable to the Weymouth site.¹³⁹

125. Additionally, we note that the site of Weymouth Compressor Station is not below sea level. Algonquin has stated that it will increase the grade of the Weymouth Compressor Station such that the area beneath the compressor station buildings and the courtyard area will be raised to an elevation of about 19 feet above sea level.¹⁴⁰ The finished floor elevations of the structures will be about 19.5 feet above sea level with the grade gradually sloping away from the structures.¹⁴¹ The EA explains that the Weymouth Compressor Station will be designed to mitigate the effects of projected climate change-induced sea level rise and storm surge over a 50-year period, using the most conservative calculations from the Corps and National Oceanic Atmospheric Administration.¹⁴² We agree with the EA's conclusion that the proposed design will minimize the risk of sea level rise, storm surges, and flooding on the Weymouth Compressor Station.

126. The EPA comments that the EA fails to note that portions of the Stony Point Take-up and Re-lay are within Federal Emergency Management Agency (FEMA) flood hazard areas, including what permits and approvals will be required for the work within those areas. As a summary document, the EA focuses its discussion of potential floodplain impacts on the Weymouth Compressor Station to address scoping comments.¹⁴³ However, the pipeline has been designed to preclude impacts from high velocity flows at waterbody crossings in flood hazard areas, largely by controlling erosion.¹⁴⁴ In response to comments on the EA, Algonquin provides a table of flood zones crossed by the project in Westchester County associated with six waterbody crossings along the Stony Point Take-up and Re-lay. Any effect on floodplain storage will be temporary (limited to active construction) given that the pipeline will be buried and the pre-construction grade

¹³⁹ See EA at section 3.5.1.

¹⁴⁰ EA at 2-3.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ See EA at 2-3.

¹⁴⁴ See section 6.6.7 of Resource Report 6 of the Applicants' application.

and contours will be restored. Algonquin will keep additional pumps on stand-by for dam-and-pump crossings; use appropriately sized flumes to handle storm flows or flume crossings; design equipment crossings to handle higher flow volumes that could be anticipated from storm events; and periodically inspect each waterbody crossing for signs of erosion.¹⁴⁵ Further, Algonquin will implement best management practices identified in its Erosion and Sediment Control Plan (E&SCP) and site-specific wetland and waterbody crossing plans included with the New York State Stormwater Water Pollution Prevention Plan. No additional floodplain permits are required.

127. One commenter claims the EA states that according to the US Geological Survey , there is no likelihood of a 6.0 earthquake near Weymouth, Massachusetts, and questions the EA's use of a magnitude level of 6.0 in assessing seismic risks. As an initial matter, the EA makes no such statement. The EA evaluates seismicity impacts in terms of the peak ground acceleration, and uses USGS seismic hazard mapping to conclude that the seismic risk in the area of the project facilities in New York, Connecticut, Massachusetts, and Maine is low.¹⁴⁶ The EA also references a study on the seismic performance of gas transmission lines from southern California which demonstrates that modern electric arc-welded gas pipelines perform well in seismically active areas (including analysis of 11 earthquakes with a magnitude of 5.8 or greater).¹⁴⁷ The EA notes that the project facilities will not cross USGS database surface or subsurface quaternary-aged (past 1.6 million years) faults that are believed to be sources of earthquakes of greater than 6.0 magnitude.¹⁴⁸ We find that the EA appropriately describes the seismic risks for the project.

128. We received comments, including one from Dr. Curtis Nordgaard, MD, expressing concern about the presence of arsenic and coal ash, and the characterization and safety risk of disturbing these soils at the Weymouth Compressor Station site. As discussed in the EA, Algonquin conducted a Phase I Environmental Site Assessment at the Weymouth Compressor Station site.¹⁴⁹ The results of this assessment revealed historic site use and historic filling of the site with coal ash, indicating the presence of hazardous substances at the property. Soil and groundwater samples collected in 1992 indicate the property is

¹⁴⁵ See EA at 2-3.

¹⁴⁶ See EA at 2-2.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ See EA at 2-8.

underlain by varying amounts of anthropogenic materials (such as brick and wood debris, coal fragments, and coal ash) and contaminants such as arsenic. Algonquin will implement an acceptable *Unexpected Contamination Encounter Procedure* in addressing how contaminants will be handled if encountered.¹⁵⁰ This plan includes measures to isolate any contaminated area encountered, notify the appropriate agencies, gather information, monitor hazardous conditions, and properly dispose of hazardous material.

129. Since the issuance of the EA, the Applicants filed additional information in response to some of the EA comments.¹⁵¹ Algonquin states it will construct the project “in accordance with a soil and groundwater management plan that describes the procedures and protocols developed to assist in soil and groundwater reuse, recycling, and disposal.”¹⁵² Additionally, it states that a Licensed Site Professional will oversee soil and groundwater management activities at the Weymouth site during construction for compliance with the applicable provisions of the Massachusetts Contingency Plan and related Massachusetts Department of Environmental Protection (Massachusetts DEP) polices and guidance. We find the Applicants’ efforts to identify and manage any contamination in compliance with state requirements sufficient to address concerns associated with the safety risks of disturbing contaminated soils at the Weymouth Compressor Station site.

130. One commenter contends that the EA fails to mention the use of silt fences during construction, specifically at the Weymouth Compressor Station. The Applicants will utilize the erosion and sedimentation controls outlined in the project E&SCP to minimize or avoid potential impacts due to soil erosion and sedimentation. The EA notes that the E&SCP incorporates the requirements identified in the FERC’s *Upland Erosion Control, Revegetation, and Maintenance Plan* and *Wetland and Waterbody Construction and Mitigation Procedures*, including the use of silt fences.¹⁵³ With the Applicants’ implementation of the E&SCP, we do not expect significant soil erosion during or after project construction.

131. Some commenters believe that the pipeline will warm the surrounding soil and possibly impact vegetation in the project area. Based on our experience with existing

¹⁵⁰ *Id.*

¹⁵¹ Algonquin’s June 16, 2016 Response to Comments on Environmental Assessment

¹⁵² *Id.* at 14.

¹⁵³ *See* EA at 2-3 and 2-6.

natural gas pipeline projects, this project will not have a significant effect on vegetation caused by the warming of soils surrounding the proposed pipeline. We also note that the project involves the replacement of existing pipeline, and any pipeline-related temperature effects already exist in the areas crossed by the project. Further, while no agricultural lands will be impacted by the project, studies conducted on crop production show no effects on available water for plants in the rooting zone or the overall yield of annual crops.¹⁵⁴

132. Almar comments that vegetation clearing, soil compaction, and construction on steep slopes threatens waterbodies on Almar's property near the west side of the Taconic Parkway. Almar also claims the EA lacks information on how slope stability and the handling and disposal of large volumes of dirt and rocks may affect its property.¹⁵⁵ The EA states that the project is located in an area with a low incidence of landslides, and slope failure is not anticipated from the project.¹⁵⁶ As noted throughout section 2.1.2 of the EA, Algonquin will take steps to minimize erosion, compaction, and rutting impacts during construction, as well as the potential risks from landslides, by using the measures outlined in its E&SCP. These measures include: use of temporary erosion controls including slope breakers and sediment barriers, use of permanent erosion controls installed as needed to ensure successful restoration, use of low-ground-weight equipment and/or the installation of timber equipment mats to minimize compaction, and, where topsoil segregation occurs, use of plowing or other deep tillage equipment to alleviate subsoil compaction. The EA also states that rock that is not returned to the trench is considered construction debris and will be removed from the work area, unless approved by the appropriate landowner for another construction use.¹⁵⁷ The horizontal directional drill (HDD) entry location will be located on the east side of the Taconic Parkway HDD.¹⁵⁸ Therefore, truck traffic and the removal of drill cuttings will be primarily located within Woodlands Legacy Field Park and not the commenter's property. Further, the volume of drilling cuttings is unlikely to generate significant truck traffic, with an

¹⁵⁴ Dunn, G., C. Lorne, G. Fryer, and M. Pockar. 2008. Effects of Heat from a Pipeline on Crop Growth – Interim Results. Environmental Concerns in Rights-of-Way Management: Eighth International Symposium.

¹⁵⁵ See Almar's June 1, 2016 Comments at 12.

¹⁵⁶ See EA at 2-2 through 2-3.

¹⁵⁷ See EA at 2-7.

¹⁵⁸ See Algonquin's June 16, 2016 Supplemental Filing.

estimated one vehicle trip per day for removal and disposal of these materials. We find Algonquin's implementation of its E&SCP sufficient to address these concerns.

133. Almar, however, comments that the E&SCP created for the project is too generic and requests a specific erosion control plan for the Almar property. The E&SCP is designed as a project-wide plan and includes best management practices. Details on site-specific erosion control methods will be developed in the Stormwater Pollution Prevention Plan and in any agreements that Algonquin makes with the landowner. Additional site-specific mitigation and erosion control information may be developed through landowner agreements between the Algonquin and Almar.

134. Almar also argues that there has been no demonstration of the need for the additional right-of-way and construction workspace on its property outside of the 75-foot-wide right-of-way, which is proposed for the majority of the pipeline work. Table 2.2.2-3 in the EA indicates that the extra workspace on the Almar property will accommodate the temporary storage of spoil, which is anticipated to include saturated subsoils. The extra work space on Almar's property will also be used for equipment and staging at the HDD exit site. We find this justification sufficient to warrant the use of the additional workspace.

8. Water Resources and Wetlands

135. The EPA recommends that all fuel storage and equipment refueling activities for the entire project be located more than 500 feet from public or private water supply wells. In support, it cites a Massachusetts law prohibiting the storage of liquid petroleum products within a designated Zone II Groundwater Protection Area.¹⁵⁹ However, the project does not cross any Zone II Groundwater Protection areas, and EPA provides no justification on why a Massachusetts law should apply to the portions of the project located in New York.¹⁶⁰ Algonquin responded to this comment stating that in general, construction equipment and vehicle refueling and lubricating will occur in upland areas at least 100 feet from the edge of a waterbody, wetland, or water well.¹⁶¹ Additionally, bulk storage of any hazardous fluid must be kept within secondary containment.¹⁶² We

¹⁵⁹ EPA Region 1's June 6, 2016 Comments at 3.

¹⁶⁰ EA at 2-11.

¹⁶¹ See Algonquin's June 16, 2016 Response to Comments at 6.

¹⁶² EA at 2-20.

conclude that Algonquin's proposed refueling distances and secondary containment will minimize the risk of any groundwater contamination.

136. We received many comments about the potential impacts on the Fore River and areas of critical environmental concern in the Weymouth Compressor Station area, which contains salt-marshes. According to the Massachusetts Department of Conservation and Recreation areas of critical environmental concern viewer tool,¹⁶³ the Weymouth Compressor Station is not within an area of critical environmental concern, and the nearest such area (the Weymouth Back River) is about 1.6 miles to the east of the compressor station. Further, the compressor station will not require the construction of any marine facilities and will not have direct impacts on the Fore River, as there will be no dredging or other in-water construction. Thus, project construction will not have a direct impact on the river or an area of critical environmental concern.

137. Project construction could indirectly impact water quality if disturbed soils erode and runoff into the waters surrounding the compressor station site, or if there is a spill of hazardous materials that enters the water. The EA explains, however, that the potential for these impacts will be minimized by Algonquin's implementation of its E&SCP and Spill Prevention Control and Countermeasure Plan, which includes measures to minimize erosion and control the offsite movement of sediments, as well as measures to minimize the potential for a spill, and to control and clean up a spill should one occur.¹⁶⁴ Additionally, the fence line of the Weymouth Compressor Station will be about 90 feet from the water's edge, thereby allowing ample room for erosion controls to prevent impacts on the waterbody.

138. We received a comment that the Weymouth Compressor Station will emit gases that will ultimately settle into the Fore River. The amount of dissolved gas a body of water can hold (saturated solution) depends on several factors, including water temperature and salinity. Given the anticipated volume of the emissions of pollutants described in section 2.7.4 of the EA, relative to the volume of water surrounding the Weymouth Compressor Station site, as well as the mixing and dilution of the emission gases both atmospherically and in the water, any effect of dissolved pollutants in the water due the Weymouth Compressor Station will be minor.

¹⁶³ Massachusetts Department of Conservation and Recreation, 2016. DCR Areas of Critical Environmental concern Viewer. Available online at: http://maps.massgis.state.ma.us/map_ol/acecs.php.

¹⁶⁴ See EA at 2-22.

139. Rebecca Haugh asks where Algonquin will obtain water for hydrostatic testing and dust control for the Weymouth Compressor Station, given that the current property owner is not on the Town of Weymouth's water system and the town has water capacity issues. The EA states that Algonquin will obtain 20,000 gallons of water from municipal sources for hydrostatic testing.¹⁶⁵ According to the Town of Weymouth's website, the town's water supply comes from two sources, the Great Pond Reservoir and the Mill River basin, which has four bedrock wells. The estimated safe yield (i.e., the amount the water sources could produce in a 100-year drought) is estimated to be about 4.9 million gallons per day. Additionally the water used for hydrostatic testing and dust control at the compressor station site will be a one-time use during construction. Further, in the event that the water cannot be obtained from Weymouth, it could be trucked to the site from other municipal sources.

140. Ms. Haugh also expresses concerns that the discharge of hydrostatic test water could not be contained on the site. The EA explains that following the completion of hydrostatic testing, Algonquin will discharge the test water into appropriately sized dewatering structures, with energy dissipating devices, within the construction work area in accordance with the E&SCP and applicable permits.¹⁶⁶ The discharge rates will be regulated to range between 1,000 and 1,200 gallons per minute. Most of this water will infiltrate the soil and recharge the local groundwater system. Algonquin's use of dewatering and energy dissipation devices will minimize erosion and the suspension of sediments, and prevent flooding, scour, or excessive flow should any of the discharge water reach the surface waters surrounding the compressor station site.

141. Almar argues that the EA does not adequately consider the impacts resulting from an inadvertent return of HDD fluid, specifically on the Croton Watershed and a tributary to Hunter Brook on its property, or disclose the additives that Algonquin will use in the drilling fluid.¹⁶⁷ As discussed in the EA, HDD drilling fluid consists of nontoxic materials, primarily water and bentonite clay.¹⁶⁸ The EA discusses the geotechnical borings conducted at the HDD location near the Almar property, indicating that the subsurface materials appear to be favorable for the HDD method.¹⁶⁹ These subsurface

¹⁶⁵ See EA at 2-16.

¹⁶⁶ See EA at 2-16 through 2-17.

¹⁶⁷ Almar's June 1, 2016 Comments at 11.

¹⁶⁸ See EA at 2-18.

¹⁶⁹ See EA at 2-1.

conditions, the fact that the HDD entry and exit holes (the most likely locations of an inadvertent return) are set back from the edges of the tributary to Hunter Brook, and the fact that the HDD path will be about 80 feet below the surface of the tributary all minimize the risk of an inadvertent return. The EA explains that Algonquin will also implement measures identified in its Best Drilling Practices Plan and Monitoring and Clean-up of Horizontal Directional Drilling Inadvertent Returns Plan to minimize the risk and impact of a release of drilling fluid, should one occur.¹⁷⁰ While material safety data sheets are not included in the Spill Prevention Control and Countermeasure Plan, the plan does state that the compilation of material safety data sheets requires any drilling fluid additives to be non-toxic to the aquatic environmental and non-hazardous.

142. Almar also comments that the HDD method is not described in detail in the EA and that the EA fails to analyze the Stormwater Pollution Prevention Plan, which is currently incomplete. The EA is intended as a summary document and, as such, it does not contain all of the detail that is included in the application. However, it describes the HDD construction and stream-crossing methods, and measures to minimize the risk and impact of a release of drilling fluid.¹⁷¹ Additional details regarding the HDD are included in section 4.4 of the Applicants' E&SCP, and in section 1.5.1.7 of Resource Report 1 of the application.

143. The EA also considers the potential project impacts on resources from runoff associated with the project during storm events and trench and hydrostatic test dewatering. Algonquin's E&SCP outlines several measures to minimize the impacts from these events, including temporary and permanent erosion and sediment control measures, and the inspection and maintenance of the erosion control measures daily, weekly, and within 24 hours of each 0.5 inch rainfall event. Based on these and other measures identified within Algonquin's E&SCP, the impacts associated with runoff, regardless of source, will be adequately mitigated.

144. Additionally, Algonquin is preparing its New York State Stormwater Pollution Prevention Plan in accordance with the State Pollution Discharge Elimination System permit requirements.¹⁷² The Stormwater Pollution Prevention Plan would likely include additional site-specific measures to be implemented during and after construction to further reduce impacts. These measures include the use of temporary erosion control

¹⁷⁰ See EA at 2-19.

¹⁷¹ See EA at 1-22 and 2-17 through 2-19.

¹⁷² EA at 2-21.

devices, runoff piping, swales, and check dams.¹⁷³ When completed, the Stormwater Pollution Prevention Plan will be submitted to the NYSDEC and NYCDEP for review and approval.

145. The NYSDEC determined that, due to the amount of disturbance in sloped areas, the project does not qualify for a State Pollutant Discharge Elimination System General Permit. Rather, the state will require an Individual Permit with site-specific conditions. Algonquin provided additional information in response to comments on the EA stating that it modified the construction workspace so it will now disturb about 1.8 acres (falling under the 2 acre maximum) of defined steep soils within the Croton River Class AA watershed.¹⁷⁴ Algonquin states it filed the results of its evaluation of the reduction of workspace with the NYSDEC in June 2016.¹⁷⁵ Algonquin must apply for any applicable State Pollutant Discharge Elimination System Permit that the NYSDEC determines is appropriate.

146. The NYCDEP identifies a discrepancy between the wetland numbers presented in appendix D of the EA and the numbers presented in the Corps' public notice for the project, noting that wetland A15-SPL-15W is missing from appendix D.¹⁷⁶ The NYSDEC also comments that the EA does not mention wetlands in adjacent areas, which are regulated by the NYSDEC pursuant to Article 24 of the Environmental Conservation Law.¹⁷⁷

147. Wetland A15-SPL-15W is listed as an access road in appendix D of the EA, which indicates that it would temporarily impact 0.04 acres of land.¹⁷⁸ When this 0.04 acres of temporarily impacted land is added to the 9.17 acres expected to be temporarily impacted by the Stony Point Take-up and Re-lay, the result is a total of 9.21 acres of temporary impact in New York, which is consistent with the acreage in the Corps' public notice. The EA also describes wetlands directly impacted by the project.

¹⁷³ *Id.*

¹⁷⁴ Algonquin's June 16, 2016 Filing at 11.

¹⁷⁵ *Id.* at 10.

¹⁷⁶ NYCDEP's June 1, 2016 Comments at 3.

¹⁷⁷ *Id.* at 2.

¹⁷⁸ EA at D-2.

148. In its application to the NYSDEC for a Section 401 Water Quality Certificate, Algonquin identifies wetlands and mitigation measures in adjacent areas. It also identifies measures to minimize impacts on these wetlands, including minimizing the width of the construction workspace where possible, installing and maintaining erosions controls along the edges of workspaces where necessary to protect adjacent wetlands, permanently stabilizing upland areas near wetlands as soon as practicable after trench backfilling to reduce sediment run-off, implementing, where possible, a 50-foot setback from wetlands for additional temporary workspaces, and revegetating disturbed areas immediately following construction.

149. Commenters expressed concern about impacts on wetlands within the Weymouth Compressor Station site, and argue that the wetland impact numbers represented in table 3.5.1-1 of the EA are incorrect. Algonquin performed field delineations of wetlands on all tracts where survey access was granted, including the Weymouth site.¹⁷⁹ Algonquin identified wetlands on inaccessible tracts by using USGS maps, aerial imagery, and federal and state geographic information system-based resource data. No wetlands are located within the construction workspaces of the Weymouth Compressor Station site. Therefore, no wetlands will be impacted at the Weymouth site. The wetlands listed in table 3.5.1-1 of the EA will be directly affected (i.e., within proposed construction workspaces) by the project. Prior to construction, Algonquin must delineate all wetlands within the construction footprint in accordance with any Clean Water Act permitting requirements and obtain appropriate federal permits for those impacts (including mitigation). Mitigation measures to minimize potential impacts on wetlands in other areas of the Atlantic Bridge Project are discussed in the EA and in more detail within the project E&SCP and the Wetland Mitigation Plan.¹⁸⁰

150. The NYCDEP identified a discrepancy in the number of replacement trees for forested wetlands identified in the EA and requests that replanting be performed based on the amount of area cleared, not individual number of trees removed. The NYCDEP states that scrub-shrub wetlands should be replanted with native shrubs, and that all wetlands be over-seeded with native wetland mixes. The NYCDEP also requests that post-construction maintenance and monitoring include all wetlands, not just forested wetlands.

151. Onsite restoration of forested wetlands temporarily impacted by construction will include replanting with locally-sourced, native species. Algonquin's Wetland Mitigation Plan describes the restoration methods that will be implemented during and after construction of the project, and is subject to review and approval by the Corps pursuant to

¹⁷⁹ See EA at 2-23.

¹⁸⁰ See EA at 2-25 through 2-27.

Section 404 of the Clean Water Act, as well as the appropriate state agencies pursuant to Section 401 of the Clean Water Act. Replanting plans will be finalized with the applicable permitting agencies, following final restoration of the temporary workspaces. The quantity of plants restored will depend on the pre- and post-construction conditions. Therefore, the final amount of tree replanting required will be established based on the permits received from the appropriate agencies.

152. Because the impacts on scrub-shrub wetlands will be minimal, Algonquin does not propose replanting.¹⁸¹ We agree that replanting is not necessary for such small disturbance; however, Algonquin will be required to perform adequate restoration, including over-seeding all wetlands and using recommended seed mixes specified by relevant land management agencies.¹⁸² The Invasive Plant Species Control Plan states that restored wetland areas will be seeded with an approved, weed-free seed mix of wetland plant species. Based on these commitments, it is our understanding that all wetlands will be seeded with native wetland mixes. Further, the Wetland Mitigation Plan states that post-construction maintenance and monitoring of the right-of-way in all affected wetlands will be conducted to assess the success of restoration and revegetation and to provide data for the suggestion of additional remediation measures. All restored wetlands, not limited to forested wetlands, will be monitored for at least the first three years following construction and right-of-way restoration pursuant to the wetland monitoring procedures identified in the E&SCP.

153. The NYCDEP requested a table listing wetland crossings where narrower right-of-way crossings are feasible and intended. Appendix D of the EA includes a table of all wetlands crossed or otherwise affected by the Atlantic Bridge Project. In accordance with the E&SCP, all wetland crossings are limited to a 75-foot-wide right-of-way, except as identified in table 2.2.3-1 of the EA. This table identifies locations where the construction right-of-way will be greater than 75 feet-wide in wetlands, and provides justifications for each wetland crossing. Therefore, the information requested by the NYCDEP is already available in the EA.

9. Vegetation, Wildlife, and Fisheries

154. Some commenters claim that the Weymouth Compressor Station will impact fish (including Alewife herring and rainbow smelt) and whales in the Fore River and Boston Harbor, the local fishing industry, and a yacht club recreation and swimming area. As stated in the EA, the project will not cross any waters designated as essential fish

¹⁸¹ See EA at 2-24.

¹⁸² EA at 2-26.

habitat.¹⁸³ As discussed above, the compressor station will have no direct impacts on the Fore River or Boston Harbor, as there will be no dredging or other in-water construction.¹⁸⁴ As such, it will not have a direct impact on fishery resources or any recreation or swimming areas.

155. Some commenters are concerned that vibration associated with the construction and operation of the Weymouth Compressor Station will impact fish and wildlife in the Fore River. Studies have shown that sheet pile driving activities and other underwater construction may generate underwater sound pressure waves that can affect nearby marine organisms.¹⁸⁵ The degree to which an individual fish exposed to sound waves would be affected is dependent upon variables such as peak sound pressure level and frequency, as well as the species, size, and condition of a fish. Algonquin will use drills and augers rather than pile driving to minimize construction noise. This, and the fact that these activities will be conducted onshore and not in the water, will minimize vibrations from construction of the compressor station. Given the existing industrial nature of the Weymouth Compressor Station site, and the existing ship traffic, it is unlikely that compressor station operations will cause significant sound levels to deter or harm fish in the Fore River.

156. Commenters also believe that construction of the Weymouth Compressor Station will disrupt the nesting grounds of the federally protected piping plover and impact migratory wildlife. The EA explains that the shoreline surrounding the Weymouth Compressor Station site does not appear to provide suitable habitat for the piping plover and other bird species, and therefore concludes that the project will have no effect on the piping plover.¹⁸⁶ Since the issuance of the EA, the U.S. Fish and Wildlife Service (FWS) issued a concurrence letter stating that the FWS has “no information to refute the no effect determination submitted for those species” (including the piping plover).¹⁸⁷ The

¹⁸³ See EA at 2-47.

¹⁸⁴ See EA at 3-22.

¹⁸⁵ National Oceanic and Atmospheric Association Fisheries (2003); Non-fishing Impacts to Essential Fish Habitat and Recommended Conservation Measures, Editor: J. Hanson, M. Helvey, and R. Strach; Alaska Regional-Northwest Region-Southwest Region. Hastings, M.C. 2002. *Clarification of the Meaning of Sound Pressure Levels and the Known Effects on Fish*. Unpublished document prepared in Support of the San Francisco Bay Bridge East Span Seismic Safety Project.

¹⁸⁶ See EA at 2-42.

¹⁸⁷ Algonquin’s June 8, 2016 Filing (citing FWS’s May 10, 2016 concurrence).

EA also summarizes mitigation measures to minimize the potential impacts on migratory birds.¹⁸⁸ The FWS concurred that the project has been designed to minimize and avoid adverse impacts on migratory birds found within the project area.¹⁸⁹ Therefore, we find that consultation with the FWS for migratory birds and threatened and endangered species is complete, and environmental recommendations 14, 15, and 16 from the EA are no longer needed and have been removed as conditions of this order.

157. One commenter reports bald eagle sightings near the Weymouth Compressor Station. Algonquin reviewed available information and consulted with the FWS and Massachusetts state agencies regarding threatened and endangered species and other rare or sensitive species, including the bald eagle. The EA found that the project will not be located in known areas of concern for the bald eagle.¹⁹⁰ However, if a bald eagle winter roost or nest is identified within the project area, Algonquin will comply with the National Bald Eagle Management Guidelines, minimizing any effect.¹⁹¹

158. We received comments expressing concern about the use of herbicides for right-of-way maintenance. As stated in the E&SCP, herbicides or pesticides will not be used in or within 100 feet of a wetland or waterbody, unless previously approved or specified by the appropriate federal or state agency.

159. The NYCDEP cautioned that the project may result in the spread of invasive species. The Applicants prepared an acceptable Invasive Plant Species Control Plan,¹⁹² including mitigation measures to minimize the introduction of new invasive plants or contain existing invasive populations. These measures will be prioritized in wetlands and within existing populations where feasible methods can be implemented and have the greatest impact. Any chemical treatments that could potentially be required for invasive species management will be applied by state licensed applicators and adhere to state regulations.¹⁹³

¹⁸⁸ See EA at 2-38 through 2-41.

¹⁸⁹ Algonquin's June 8, 2016 Filing.

¹⁹⁰ EA at 2-41.

¹⁹¹ *Id.*

¹⁹² The Invasive Plant Species Control Plan was filed as Appendix 3F to Resource Report 3 in the Applicants' October 22, 2015 application.

¹⁹³ See EA at 2-34.

160. The NYCDEP identifies a discrepancy in the EA for the dates of tree clearing in New York. To clarify, tree clearing in New York may only occur between October 1 and March 31, to avoid the summer maternity season for bats. The NYCDEP also expresses concern that early tree clearing will increase erosion and sedimentation during the winter freeze/thaw cycles. While we acknowledge that a delay between tree clearing and the subsequent stages of construction may increase the risk of erosion, this risk must be balanced with the need to protect other resources (e.g., threatened and endangered species and migratory birds). The E&SCP provides measures for the minimization of erosion and sedimentation, including measures specific to winter construction. Also, the amount of tree clearing will be minimized by Algonquin's implementation of take-up and re-lay construction, which maximizes the use of existing cleared right-of-way. Therefore, the potential for increased erosion and sedimentation has been sufficiently minimized.

161. The NYCDEP requests a detailed study to identify the impacts associated with continuous timber matting of steeply graded wetlands and streams on hydrology, temperature, vegetation, and wildlife in the area of the proposed HDD. During its project design, Algonquin compared conventional pipeline trench construction techniques with HDD construction to minimize impacts on environmental resources and landowners where possible. Based on our experience with pipeline construction through wetlands, potential impacts on wetland hydrology and vegetation associated with timber matting are temporary and can be mitigated using the appropriate construction equipment and during restoration. In addition, the proposed alignment and construction will be in accordance with the project E&SCP, Stormwater Pollution Prevention Plan, and 401 Water Quality Certificate, which were filed with the NYSDEC. These requirements are performance based, ensuring water flow is not hindered along the construction right-of-way. As such, we conclude that an additional study is not needed.

162. Almar comments that the amount of forest clearing on its property will increase forest fragmentation and water temperatures, thereby impacting habitat. The EA acknowledges that the expansion of Algonquin's existing right-of-way could result in incremental fragmentation of forest habitat and decrease the quality of habitat for forest wildlife species.¹⁹⁴ However, the EA states that the potential for habitat fragmentation resulting from the project will be minimized because the project utilizes existing utility rights-of-way (which is the case on the Almar property) and the amount of forest clearing (about 13.4 acres for the entire project) is small. After construction, forest within temporary workspaces will be allowed to recover. While this could take years, the additional fragmentation associated with this clearing will not be permanent. Along the pipeline segments, including on the Almar property, the project will only permanently

¹⁹⁴ See EA at 2-33.

convert about 0.5 acre of forested upland and less than 0.1 acre of forested wetland to herbaceous cover. As such, we find that the impacts of forest fragmentation on the Almar property will be negligible.

163. Regarding water temperature impacts, the EA acknowledges that tree removal at waterbody crossings may reduce shading, which could result in elevated water temperatures and a reduction of dissolved oxygen that can negatively influence fisheries habitat quality.¹⁹⁵ However, given the narrowness of the construction right-of-way, these effects will be highly localized. Following construction, as stated in the E&SCP, Algonquin will limit routine vegetation mowing or clearing practices adjacent to waterbodies to allow a riparian strip that measures 25 feet back from the waterbody's mean high water mark. This riparian strip will be allowed to permanently revegetate with native plant species across the entire construction right-of-way. We conclude that these measures will maximize regrowth of riparian vegetation and minimize the potential for long-term impacts associated with the lack of shade and cover.

10. Land Use, Recreation, and Visual Resources

164. James Root comments that the EA fails to address the greenfield construction for nearly one mile of the proposed Southeast Discharge Take-up and Re-lay where it deviates from the existing right-of-way. We disagree. In this area, Algonquin currently operates multiple natural gas transmission pipelines. Mr. Root appears to be mistaking the placement of the project with another existing facility. As shown in the project alignment sheets, which were provided in appendix 1B of Resource Report 1 of the application, the proposed alignment Mr. Root comments about is located within Algonquin's existing pipeline right-of-way, and will replace that existing pipeline in the same location. Another existing Algonquin pipeline in the area (Line 30B) splits away from the proposed alignment at milepost 0.0 of the Southeast Discharge Take-up and Re-lay, and heads northeast between Maple Ridge Road and Farm Street, which we assume explains the alignment concern referred to in Mr. Root's comment.

165. One commenter states that the residential structures listed in table 3.5.1-1 of the EA do not account for residential structures containing multiple owners. The footnote to this table states that the number of structures is based on a residential structure count and that it does not distinguish between single family and multi-family structures. The multi-family structures are included in the count; however, the number of units within each structure are not counted separately.

¹⁹⁵ See EA at 2-49.

166. We received comments that the Weymouth Compressor Station will stop or preclude economic development, including commuter boating, shopping, restaurants, and condominiums, and will destroy waterfront recreation areas. The compressor station will be located on previously disturbed industrial property that is currently unoccupied open land. The compressor station will not have direct impacts on the Fore River and therefore, will not impact existing or future commuter boating. Algonquin's development of the site for the Weymouth Compressor Station, which is surrounded by other industrial developments to the west and north and water to the east and south, will not preclude the development of restaurants, condominiums, or shopping areas in the surrounding area. The compressor station will not directly impact any recreational areas; however, as described in the EA, construction of the Weymouth Compressor Station will occur on land that is near two privately-owned parcels with conservation restrictions (the Kings Cove and Lovells Grove Parcels).¹⁹⁶

167. Neither the Kings Cove Parcel nor the Lovells Grove Parcel will be used during construction. The Lovells Grove parcel is over 200 feet southwest of the proposed compressor station site boundary, on the opposite side of the Fore River Bridge, and does not abut the property. After issuance of the EA, Algonquin filed several supplements clarifying that Calpine Fore River Energy Center, LLC (Calpine) will retain ownership of the 2.9-acre King's Cove Parcel, located adjacent to the compressor station site. Noise, dust, and visual impacts during construction, and to a lesser extent noise and visual impacts during operation, could affect use of the Lovells Grove and Kings Cove Parcels by the public.¹⁹⁷ During construction, Algonquin will implement measures in the project E&SCP to prevent disturbance to the Lovells Grove and Kings Cove Parcels and other off-site areas. Algonquin has also committed to coordinating with the Town of Weymouth and the property owners to address specific issues related to construction and operation of the proposed facility. Therefore, we conclude that recreation impacts on the Lovells Grove and Kings Cove Parcels will be sufficiently minimized.

168. Rebecca Haugh states that the map of the Weymouth Compressor Station provided in appendix A of the EA misrepresents the actual location of the compressor station. The overview maps presented in appendix A are provided to show the general vicinity of the proposed facilities. A more detailed map of the Weymouth Compressor Station is

¹⁹⁶ See EA at 2-65 through 2-66.

¹⁹⁷ See EA at 2-135.

presented in figure 2.8.3-4 of the EA and within the aerial alignment sheets filed on the docket.¹⁹⁸

169. We received comments that the Weymouth Compressor Station site is in a designated port area and should not be used for a compressor station. We also received comments regarding Massachusetts Chapter 91 waterway requirements and a claim that the compressor station is not a water dependent project. The EA addresses the Weymouth Compressor Station siting within the Weymouth Fore River Designated Port Area, and explains that the facility is subject to review pursuant to the Massachusetts DEP Chapter 91 waterways license process.¹⁹⁹ Designated Port Areas have particular physical and operational features important for water dependent industrial uses such as commercial fishing, shipping, and other vessel related marine commercial activities and/or for manufacturing, processing, and production activities that require marine transportation or need large volumes of water for withdrawal or discharge. Algonquin filed with the Massachusetts DEP for its Chapter 91 waterways license at the end of 2015. A waterway license has not yet been issued; however, a Massachusetts DEP March 9, 2016 notice of application states that the proposed project has been determined to be an ancillary facility to a water dependent industrial use.

170. The Siting Board comments that EA does not discuss the status of Algonquin's purchase of the compressor station property. Since issuance of the EA, Algonquin filed supplemental information stating that Algonquin and Calpine entered into a settlement agreement to transfer land to Algonquin for the construction and operation of the Weymouth Compressor Station.²⁰⁰ On August 31, 2016, Algonquin further clarified that this agreement includes the transfer of 15.8 acres to Algonquin, of which 12.3 acres will be used for construction of the Weymouth Compressor Station.²⁰¹ Rebecca Haugh comments that the EA should be revised to reflect the new acquired acreage. We disagree. Throughout the EA, impacts on resources are evaluated for the disturbance of 12.9 acres to construct the Weymouth Compressor Station. Although the size of the property Algonquin has acquired is larger, impacts from construction of the compressor station will remain at or below the acreage identified in the EA. The remaining 3.5 acres will not be impacted by the project.

¹⁹⁸ Updated alignment sheets were provided as part of the Applicants' February 22, 2016 supplemental filing (Accession number 20160223-0568).

¹⁹⁹ See EA at 2-66 to 2-77.

²⁰⁰ See Algonquin's August 3, 2016 Filing.

²⁰¹ See Algonquin's August 31, 2016 Filing.

171. Commenters are concerned about the project's conversion of farmland, recreational land, and other existing land uses to industrial energy transportation use. As described throughout section 2.4.1 of the EA, construction of the project will impact a total of about 215.7 acres of land, but little of this land will be permanently converted to an industrial energy transportation use. The majority of the project includes same-ditch replacement of the existing pipeline, using Algonquin's existing right-of-way. Following construction, areas associated with the Applicants' existing pipeline rights-of-way and aboveground facility sites will continue to be maintained as before. Other temporary work spaces will be relinquished back to the landowner and allowed to revert to pre-construction uses. About 8.9 acres of land will be newly and permanently encumbered by operation of the project. Therefore, the project will not have a significant impact on land use.

172. Almar argues that the EA fails to classify a swimming pond on its property as recreational use, and fails to consider the construction impacts on the pond and an "old" dam structure that forms this pond. The project workspaces do not cross the pond, but are within 50 feet of the pond. Further, recreational facilities are generally considered those available for public use. Almar provides no information regarding the pond's public use or how construction may impact the public's recreational use of this pond. However, the EA addresses impacts on surface water resources, including this pond, throughout section 2.2.2. In regard to the dam structure, Algonquin states that it is modifying the temporary construction workspace at Almar's request and is willing to continue to meet with the landowner to address site-specific preventative measures which can be part of the land agreement.²⁰² Additionally, Algonquin states that any potential impacts on water resources will be addressed through the Stormwater Pollution Prevention Plan. However, given the close proximity of construction workspaces to the dam, we have added Environmental Condition 23, requiring that, with landowner permission, Algonquin assess the condition of the dam using pre- and post-construction surveys.

173. Almar also comments on the potential for light pollution associated with the proposed HDD crossing of the Taconic Parkway. While there could be some light pollution impacts associated with the HDD, Algonquin's plan is to perform the HDD pullback (the HDD activity on Almar's property) over a one-week period. The residence on Almar's property is located about 1,150 feet from the HDD exit point, and the potential impacts associated with the HDD operation will be short term in nature. Algonquin has agreed to develop additional mitigation measures through individual

²⁰² See Algonquin's June 16, 2016 Response to Comment at 22.

negotiations with the landowner. We find that the potential for light pollution impacts has been sufficiently minimized.

11. Socioeconomics

174. Rebecca Haugh claims that the construction workforce estimates, locally-hired worker estimates, and construction payroll estimates provided in the EA differ from those presented in Resource Report 5 of the application. Ms. Haugh also asks if union workers will be used for the construction of the project.

175. On February 10, 2016, the Applicants filed updated workforce estimates.²⁰³ Thus, the EA reflects the updated peak construction workforce estimate totaling 752 workers. The EA states that, depending on the facility, locally-hired workers would comprise between 5 and 27 percent of the peak workforce, and would include surveyors, welders, equipment operators, and general laborers.²⁰⁴ The EA did inadvertently report \$75,415,585 for the total estimated construction payroll. Using the updated workforce estimates, the correct total estimated construction payroll will be \$121,050,961.

176. To our knowledge, employees have not been hired for the potential construction work. In any event, the Commission does not control the hiring of construction crews. Further, the difference between union and non-union workers bears no impact on the analysis presented in the EA.

177. Commenters claim that the project will not result in any economic benefit to the community given that it will only create three permanent jobs, which will not have a major economic benefit. However, the EA identifies that the project will also provide economic benefits associated with the number of people employed during construction²⁰⁵ and the wages paid to these workers, as well as from the annual ad valorem taxes that will be paid to operate the project facilities²⁰⁶.

²⁰³ See Algonquin's February 10, 2016 Filing.

²⁰⁴ EA at 2-70.

²⁰⁵ See EA at table 2.5.1-2 identifying a total peak construction workforce for the project of 752 workers.

²⁰⁶ See EA at figure 2.5.6-1 identifying a total construction payroll for workers of \$75,415,585, and annual ad valorem taxes to be paid by Algonquin during operation of its facilities.

178. Many area landowners believe that construction and operation of the Weymouth Compressor Station will devalue their property. Specifically, commenters state that the property value studies referenced in the EA are in relation to pipelines and not compressor stations. The Commission has previously found that when noise and visual impacts are sufficiently mitigated, a compressor station will not significantly impact property values.²⁰⁷ The EA explains that the Weymouth Compressor Station will be situated on a previously disturbed industrial property that is currently owned by Calpine, between an existing water treatment facility and electric power plant.²⁰⁸ While the station will introduce a new visual element to the site, it will not significantly alter the visual character of the area (which already includes a number of industrial facilities). Also, the compressor station will not result in a perceptible increase in noise at any NSA or significantly increase the safety risk in the surrounding communities. We continue to find that the Weymouth Compressor Station will not significantly impact adjacent property values.

179. Numerous commenters continue to be concerned about traffic impacts along Route 3A in Weymouth, Massachusetts. The EPA claims that the EA does not address the combined traffic impacts for construction of the Weymouth Compressor Station and the Fore River Bridge Replacement Project.

180. The EA states that traffic flows in the project area could be affected by the commuting of the construction workforce and the movement of construction vehicles and delivery of equipment and materials to construction work areas.²⁰⁹ Algonquin will encourage construction workers to share rides or take public transportation, and in some cases, construction contractors may provide buses to move workers from a common parking area to the construction work area. Algonquin will typically deliver materials and equipment to the job site during the early morning and evening hours to minimize disruptions of traffic on local roads. Also, construction at the Weymouth Compressor Station will be conducted in accordance Algonquin's Weymouth Compressor Station Traffic Management Plan.²¹⁰ This plan includes a construction vehicles route map

²⁰⁷ See Environmental Assessment for Millennium Pipeline Co, LLC's Minisink Compressor Project at pp. 22-23, Docket No. CP11-515-000 (Feb. 29, 2012).

²⁰⁸ EA at 2-74.

²⁰⁹ EA at 2-73.

²¹⁰ The applicants' Access Management and Traffic Management Plans were included as appendices 5A and 5B to Resource Report 5 in its October 22, 2015 application (Accession No. 20151022-5282).

depicting the required construction material delivery route, which was developed based on traffic observations, and the inventory and nature of existing roadways between the material site and the proposed compressor station site.

181. The EA addresses cumulative traffic impacts, explaining that depending on the completion date for the Fore River Bridge Replacement Project, construction of the Atlantic Bridge Project may overlap with the final stages of construction for the bridge.²¹¹ If this were to occur, there could be temporary cumulative impacts on traffic associated with the commuting of workers in the vicinity of the proposed Weymouth Compressor Station. The Weymouth Compressor Station Traffic Management Plan states that Algonquin is coordinating with officials from the Town of Weymouth, property owners in the affected neighborhoods, and representatives of other construction projects planned in the area, including the Fore River Bridge Replacement Project. This communication will ensure coordination of construction schedules between various projects to maintain safe and efficient traffic flows in the area.

182. Several commenters claim that any incident at the Weymouth Compressor Station will close or impact the Fore River Bridge, affecting traffic and infrastructure in the area. Algonquin currently operates a natural gas pipeline under the Fore River Bridge and a meter station at the site of the Weymouth Compressor Station. Therefore, the new compressor station will not increase the likelihood or impact of an incident on the Fore River Bridge. Further, as discussed in the EA, Algonquin assessed the potential for an incident to affect the bridge, considering ignition at various locations at the compressor station site.²¹² All of the scenarios considered will not result in an impact on the structural integrity of the bridge.

183. We received comments regarding the lack of an evacuation plan for the area surrounding the proposed Weymouth Compressor Station, and the lack of adequate emergency responders in the case of an incident. The EA explains that the Department of Transportation – Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for prescribing pipeline safety standards and that, pursuant to PHMSA's regulations, Algonquin will develop an Emergency Response Plan specific to the Weymouth Compressor Station prior to placing it into service.²¹³ Key elements of the plan, as required by PHMSA, include making personnel, equipment, tools, and materials available at the scene of an emergency. Local first responder organizations in the

²¹¹ EA at 2-137 to 2-138.

²¹² EA at 2-120.

²¹³ EA at 2-121.

Weymouth area will be trained in how to coordinate a response with Algonquin in the unlikely event of an emergency at the compressor station. The Emergency Response Plan will be reviewed annually, all associated personnel will receive yearly training, and annual emergency response exercises will be conducted. Algonquin will also expand its public liaison program with Weymouth elected and public safety officials before the facilities are placed in service and will also communicate with the public that live and/or work near the proposed compressor station. If an evacuation is warranted, the evacuation zone depends on the nature, extent, and location of the incident. If access to the Fore River Bridge were impeded during an evacuation, there are other local roads available for public use heading south to maneuver around the Fore River, or traffic could head east along 3A to exit the area. We understand that these are detours and not as direct a route as 3A; however, these other roads could be used, if needed, to leave the area.

184. One commenter asks if the Applicants will repair roads damaged by construction of the project. Algonquin states in Resource Report 5 of its application that if any roadways are damaged by the project, Algonquin will assess the damage and will repair the roadways as necessary, at its expense.

12. Environmental Justice

185. Many commenters note that there are several environmental justice (i.e., low income or minority) communities surrounding the Weymouth Compressor Station. Commenters identify an existing gasoline/oil depot, chemical plant, two power plants, a pellet plant, and a sewage pump station in this area, and state that the community should not be burdened with yet another industrial facility. One commenter argues that the environmental justice analysis in the EA uses outdated data that is three to six years old. Another commenter requests that we require Algonquin to follow the Massachusetts 2002 Environmental Justice Policy regulations. Some commenters believe that public participation was inadequate for these communities, and the EPA encourages us to review the environmental justice analysis before conducting further outreach during the project construction phase.

186. The project is not subject to the Massachusetts Environmental Policy Act and, as such, is not required to demonstrate compliance with the Massachusetts 2002 Environmental Justice Policy requirements. However, the EA's consideration of environmental justice matters is consistent with NEPA and the CEQ regulations. Further, the EPA offers special expertise on environmental justice concerns and was a cooperating agency in the preparation of the EA.

187. The EA identifies the presence of low income and minority populations and environmental justice communities surrounding the Weymouth Compressor Station,

using U.S. Census Bureau data from 2010 and 2013 and the EJScreen tool recommended by EPA.²¹⁴ These source materials are considered reliable and appropriate. The EA also defines environmental justice populations using the Massachusetts Executive Office of Energy and Environmental Affairs environmental justice criterion. Impacts on environmental justice communities in the Weymouth/Quincy area were evaluated by analyzing the existing environment, and the cumulative impacts of the Atlantic Bridge Project when added to other reasonably foreseeable actions in the geographic scope of the project. Based on the information gathered, the EA concludes that the Atlantic Bridge Project will not result in any disproportionately high or adverse environmental or human health impacts on minority or low-income communities.

188. With respect to public participation, the EA identifies the numerous opportunities provided for community involvement.²¹⁵ All public documents, notices, and meetings were readily available to the public during our review of the Atlantic Bridge Project. Further, Algonquin translated several fact sheets on its website into Spanish, Mandarin, and Cantonese. In regards to EPA's comment encouraging additional public outreach during construction, the Commission does not construct or operate the project, and public outreach by the Commission has concluded. However, Algonquin stated in its response to comments on the EA that it is prepared to consult with EPA in regard to any additional outreach measures the project should consider during the construction phase of the project.

189. The Conservation Law Foundation argues that the EA's reliance on a comparison with the National Ambient Air Quality Standards (NAAQS) to assess air impacts on environmental justice communities is inappropriate. It maintains that these standards are established at the national level and compliance with the NAAQS is for regional purposes, and therefore, is not sufficient for an analysis of environmental justice community impacts. We disagree. The NAAQS are established by EPA as thresholds to be protective of human health and public welfare, including sensitive subpopulations (e.g. asthmatics, children, and the elderly). To address air quality on a local or regional scale, states may adopt the NAAQS as established by EPA or establish standards that are more stringent than the NAAQS. The EA states that Massachusetts DEP has adopted the federal NAAQS;²¹⁶ therefore, these standards are appropriate for consideration of air quality in Weymouth. Although attainment demonstrations with the NAAQS are performed at a regional scale to develop regional planning needs, the EA performs no

²¹⁴ See EA at 2-77 through 2-79.

²¹⁵ See EA at 2-76.

²¹⁶ See EA at 2-87.

such analysis. Instead, as explained in detail below, the EA includes a cumulative air modeling analysis for the Weymouth Compressor Station, identifying the localized air impact.

13. Cultural Resources

190. We received comments about the historical significance of the Weymouth Compressor Station site. The EA explains that background research and field reconnaissance surveys completed by Algonquin established that the proposed Weymouth Compressor Station had been previously surveyed for archaeological resources as part of the Algonquin HubLine Project (Docket No. CP01-5-000).²¹⁷ The area was assessed as having no/low archaeological sensitivity. As part of its Section 106 consultation, Algonquin also consulted with the Massachusetts State Historic Preservation Officer (SHPO). The survey for historic architectural properties identified 23 resources that were 50 years old or older within the project's indirect area of potential effect. Of these, a total of 22 properties were recommended by Algonquin as not eligible for listing in the National Register of Historic Places. The remaining property (Procter and Gamble Manufacturing Company) was recommended by Algonquin as potentially eligible for listing in the National Register of Historic Places. However, Algonquin's assessment indicates that construction of the proposed compressor station would not alter the setting or any other characteristics of the Procter and Gamble Manufacturing Company's integrity or significance; therefore, the project would have no adverse effect on the property.

191. In a supplemental filing on June 7, 2016, Algonquin provides the Massachusetts SHPO comments, dated November 22, 2015, stating that the project was unlikely to affect historic or archaeological resources. We agree. Therefore, consultation in Massachusetts is complete. This supplemental filing also provides the Connecticut SHPO comments, dated May 6, 2016, regarding the revised cultural resources survey reports submitted for review on February 9, 2016. The Connecticut SHPO states that no historic properties would be affected by the project. We concur and therefore, consultation in Connecticut is complete. Environmental Condition 17 has been revised to reflect the current status of consultation.

192. Algonquin filed comments from the New York and Connecticut SHPO regarding Ceremonial Stone Landscape (CSL) studies provided by the Narragansett Tribe, Mohegan Indian Tribe, Wampanoag Tribe of Gay Head (Aquinnah) and Mashantucket (Western) Pequot Tribal Nation (Tribes).²¹⁸ In an email dated August 22, 2016, the

²¹⁷ See EA at 2-85.

²¹⁸ See Algonquin's September 1, 2016 Filing.

Connecticut SHPO chose to refrain from providing comments on the report. The New York SHPO, in a letter dated August 26, 2016, states that these sites would not meet the eligibility requirement of the National Register of Historic Places as sites of religious and cultural significance. The New York SHPO states,

The Historic Context section of the [report] ...does not provide a strong historic and cultural context focused on the behavior, beliefs, and knowledge that are important for understanding the cultural significance of these stone landscapes...the National Park Service (NPS) Bulletin 38, entitled Guidelines for Evaluating and Documenting Traditional Cultural Properties, [suggests] the nomination of natural features without sound documentation of their historical or cultural significance is discouraged.²¹⁹

The New York SHPO provides suggestions to Algonquin and the Tribes for additional documentation about land-use history in combination with the historical importance of these landscapes to consider these resources further.

193. We respectively considered the documentation provided by the Tribes. However, we agree with the New York SHPO that the resources identified as CSLs by the Tribes would not meet the eligibility requirement of the National Register of Historic Places. Unfortunately, the tribes did not provide additional documentation of the continuity of religious or cultural use of the resources, historical importance, and land-use history, and therefore, we concur with the SHPO's determination that these are not historic properties.

14. Air Quality

194. Multiple commenters question the location of the monitoring sites used to determine background ambient air quality concentrations for the Weymouth Compressor Station and ask why the data was not collected at the compressor station site. Dr. Curtis Nordgaard submits two reports regarding background concentrations of particulate matter (PM) with a diameter of 2.5 micrometers or less (PM_{2.5}). One of the reports (Fore River PM Report) details a study of PM_{2.5} conducted by a community organization which suggests that background concentrations of PM_{2.5} are higher in the vicinity of the proposed Weymouth Compressor Station than the background air quality monitoring information used to complete the air quality analysis presented in the EA. The other report, an April 2016 report (Brooklyn Township PM_{2.5} Report), is based on a study in Pennsylvania that suggests that air quality near a compressor station in Brooklyn Township, Pennsylvania may be worse than regional air quality monitors report. Based

²¹⁹ See Algonquin's September 1, 2016 Filing at 4-5.

on the information in these two reports, Dr. Nordgaard concludes that PM_{2.5} impacts are underestimated in the EA for the proposed Weymouth Compressor Station.

195. The EPA and state agencies operate a network of ambient air quality monitors to track air quality throughout the United States, and for use in air permitting. Data from these monitors is validated and quality-assured on a regular basis. The nearest existing air quality monitoring stations to the Weymouth Compressor Station were used to estimate existing background ambient air quality. The background monitoring data was provided by the Massachusetts DEP, which ensures that the data has been appropriately validated and quality-assured.

196. Standard methodology for use of background ambient air quality data is to monitor for a period of 1 to 3 years to allow for seasonal and meteorological variability, providing an accurate representation of air quality in a region. The monitoring referenced in the Fore River PM Report was conducted over a period of approximately 2 months and was not validated or quality-assured by an air pollution control agency. The Brooklyn Township PM_{2.5} Report was prepared in reference to a particular compressor station located in Brooklyn Township, Pennsylvania. The report does not conclude that the compressor station in the vicinity of the study area resulted in any violations of PM_{2.5} NAAQS, and further notes several limitations associated with the data collected, including a limited monitoring period, use of a monitoring methodology that is not federally approved, and lack of supporting information. Furthermore, the Brooklyn Township PM_{2.5} report states that the conclusions drawn in the report “should not be generalized to all natural gas compressor stations.”²²⁰

197. We find that the air quality modeling for PM_{2.5} presented in the EA accurately estimates air quality impacts associated with the Weymouth Compressor Station and that the background air quality data used in the analysis is appropriate. The EA concludes that the air dispersion modeling performed for the Weymouth Compressor Station demonstrates that the emissions from the station, when combined with existing background air quality, will not violate the NAAQS, which are protective of human health and the environment.²²¹ We also note that the PM_{2.5} data collected during the monitoring period referenced in the Fore River PM Report, when combined with the predicted maximum facility impact, does not result in a violation of the NAAQS.

198. The Massachusetts Attorney General asks that a condition be added requiring full compliance with the Clean Air Act (CAA). The Massachusetts Attorney General also

²²⁰ See Dr. Nordgaard’s May 13, 2016 Filing at 20.

²²¹ See EA at 2-98.

requests that we require Algonquin to ensure that there will be no increased adverse health risk from blowdowns or other emissions of criteria pollutants. Condition 9 of this order requires that Algonquin obtain all federal permits prior to construction of the project, including those under the CAA. Further, Algonquin is required to comply with all applicable aspects of the CAA. The EPA has delegated authority to the Massachusetts DEP to administer the CAA in Massachusetts. The Weymouth Compressor Station does not trigger any federal CAA air permitting requirements. However, Algonquin has submitted a state-level air permit application to the Massachusetts DEP for the construction and operation of the Weymouth Compressor Station. Algonquin also submitted an air dispersion modeling analysis for all criteria pollutants for which a NAAQS has been developed. Based on the results of the air dispersion modeling presented in table 2.7.4-6 of the EA, the Weymouth Compressor Station will not cause or contribute to a violation of the NAAQS. Air impacts from blowdowns are addressed throughout the EA, providing an estimate of emissions, explaining that methane is non-toxic and buoyant (dispersing rapidly in air), and summarizing a past health risk assessment performed on a similar facility. We find that air impacts from operation of the compressor station and blowdown events have been adequately addressed.

199. The Massachusetts chapter of the Sierra Club asks how the project will affect Massachusetts and New England's ability to meet Clean Power Plan requirements and adhere to the Massachusetts Global Warming Solutions Act, including a goal to develop a 100 percent clean and renewable energy economy. The Massachusetts Sierra Club also asks if the project will need to be leakage-free to be compliant with the CAA and Massachusetts Global Warming Solutions Act.²²²

200. The Clean Power Plan focuses on the reduction of GHG emissions from power plants. On February 9, 2016, the Supreme Court stayed implementation of the Clean Power Plan pending judicial review. Therefore, compliance with this plan is not required at this time. However, notwithstanding the legal status of the Clean Power Plan, the EA discloses the GHG emissions from constructing and operating the project, and addresses the impacts of GHG emissions on the environment (i.e. climate change).

201. The Massachusetts agencies are responsible for enforcing the Global Warming Solutions Act established in August 2008. To this end, the EA provides a comparison of the project against state and regional climate change goals.²²³ Specifically, the EA notes that the project is consistent with the Massachusetts Executive Office of Energy and Environmental Affairs' Strategic Plan for 2013 to 2016, issued in 2013, that recommends

²²² Mass. Gen. Laws ch. 21N § 1 et seq. (2014).

²²³ See EA at 2-143.

“initiatives to increase availability of low-cost natural gas, like getting more natural gas into distribution systems and more pipeline capacity across the Commonwealth.” Further, the Massachusetts Executive Office of Energy and Environmental Affairs issued a *Global Warming Solutions Act 5-Year Progress Report* in January 2014. This report attributes the current progress toward the Act’s 2020 GHG reduction goal to “A combination of economic factors (especially the decline in natural gas prices...)” The report also makes recommendations towards the achievement of 2050 GHG reduction goals, stating:

The Commonwealth’s approach to the 2050 Roadmap should explicitly account for the GHG implications of an increased role for natural gas, in addition to other policy considerations like fuel diversification, local economic development, and long-term price risks (Energy Modeling Forum 2013).

We find that the EA appropriately considered the GHG emission and climate change implications of the project.

202. As discussed in sections 2.7.1 and 2.7.4 of the EA, Algonquin must comply with applicable GHG related CAA requirements (e.g., Mandatory Reporting of GHG Rule and the New Source Performance Standards for the oil and gas industry, once finalized).²²⁴ These standards establish requirements for leak detection and repair programs.

203. We received a comment questioning what further permitting and/or health impact studies will be done if the proposed Weymouth Compressor Station expands to operate larger or additional turbines in the future. The EA, and associated air quality and health impact analyses, was developed based on the potential operation of the proposed equipment by Algonquin. If the compressor station is proposed to be expanded in the future, it would be subject to additional reviews and/or permits.²²⁵ The specific permits needed would be dependent on the scope and impacts of such expansion, and would be addressed in any associated review of such action. The Massachusetts DEP is responsible for ensuring that any future modifications are in compliance with all federal or state air quality regulations. Our certificate for any future project would require that

²²⁴ 40 C.F.R. Part 98, Subpart W and 40 C.F.R Part 60, Subpart OOOOa (2016).

²²⁵ Algonquin has entered the Pre-filing Process for its Access Northeast Project (Docket PF16-1), which includes a planned expansion of the Weymouth Compressor Station. Should Algonquin file a formal application with the Commission for this project, that includes this expansion, it would be evaluated under NEPA and for applicability for any additional review and/or air permits.

Algonquin obtain all federal approvals prior to construction and/or operation specific to that project.

204. Almar suggests that the construction emission analysis for HDD activities presented in the EA fails to consider all of the different equipment needed for construction. We disagree. Section 2.7.3 of the EA discusses construction-related emissions and mitigation measures that Algonquin has committed to implementing during construction activities, including HDD activities. Algonquin's construction emission estimates include emissions from non-road and on-road equipment, fugitive dust emissions, blowdowns or purges that will occur during the construction period, and indirect emissions from commuting workers.²²⁶ The EA considers these emissions estimates and the methodology used to generate the emission estimates and finds them appropriate. We conclude that the construction emission analysis adequately assesses the potential construction emissions, including HDD activities.

205. Many commenters express concern about the human health impacts from hazardous air pollutant (HAP) emissions from the proposed Weymouth Compressor Station, including acetaldehyde, benzene, ethylbenzene, formaldehyde, toluene, and xylenes. Two commenters suggest that the human health risk assessment for HAPs in the EA that Commission staff prepared for the New Market Project,²²⁷ which is discussed in the Atlantic Bridge EA, is not applicable to the Atlantic Bridge Project because the two projects are not similar. Specifically, commenters argue that the New Market Project compressor stations are located on large parcels of land, while the Weymouth Compressor Station is located on a smaller property in a densely populated area. Commenters request a unique health impact assessment be performed specific to the Weymouth Compressor Station. One commenter also believes that the benchmarks identified in the study are applicable to large sources, not the proposed facility.

206. The pollutants referred to by commenters are all considered HAPs and are regulated by the CAA. The CAA establishes certain HAP thresholds for a facility to be considered a major source. If a facility has the potential to emit 10 tons or more of a single HAP or 25 tons or more of any combination of HAPs, it is considered a major source and is subject to additional HAP limitations and air permitting and review. Table

²²⁶ See EA at table 2.7.3-1.

²²⁷ New Market Project Environmental Assessment – Appendix B (Docket CP14-497) issued October 2015 (New Market EA). On April 28, 2016, the Commission authorized Dominion Transmission, Inc. to construct and operate the New Market Project, which included compression and related facilities in Chemung, Herkimer, Madison, Montgomery, Schenectady, and Tompkins Counties, New York.

2.7.4-3 of the EA demonstrates that the largest single HAP emitted by the Weymouth Compressor Station is hexane at about 0.1 ton per year (1 percent of the major source threshold), and the potential total combined HAP emissions for the Weymouth Compressor Station is approximately 0.8 ton per year (3.2 percent of the major source threshold). Thus, the HAP emissions from the Weymouth Compressor Station will be well below major source threshold for HAPs, and are not significant.

207. Comparatively, one of the New Market Project compressor stations will emit 37 percent of the combined HAP major source threshold. Further, the analysis in the New Market Project EA clearly explains that numerous commenters provided widely varying studies and viewpoints on health impacts, and as such, the study was performed to independently analyze impacts. No such contradictory studies were provided in this case. In general, performing a detailed modeling analysis for facilities with such small HAP emissions, as is the case for the Weymouth Compressor Station, is overly burdensome and unnecessary. The mere scale of emissions in relation to major source thresholds is sufficient to determine that impacts are not significant for the purposes of NEPA.

208. However, to address public concerns regarding health impacts, the EA discusses the potential health impacts from compressor stations and HAPs based on the previous detailed health risk assessment in the New Market Project EA.²²⁸ This health risk assessment considers the cancer and non-cancer risks from direct exposure for adults and sensitive populations (e.g. children) using benchmarks established by EPA. The New Market Project analysis states that the emissions from each of the New Market Project compressor stations will be below a level of health concern.²²⁹ Further, the EA for the Atlantic Bridge Project explains that the New Market Project analysis includes overly-conservative assumptions (e.g., assuming that impacted individuals will be exposed to maximum concentrations at the property line from full-capacity facility operations for 24 hours per day, 350 days per year), and uncertainty factors to overestimate risks. Realistically, individuals will be exposed at further distances than the property line and the majority will be in their homes or outside of the immediate area for large portions of time, reducing their level of exposure.

209. The compression at the Weymouth Compressor Station will be smaller and emit lower quantities of pollutants than any of the compressor stations analyzed in the New Market Project EA. While the compressor stations for the New Market Project may be on larger parcels of land, the Weymouth Compressor Station is surrounded by water on

²²⁸ See EA at 2-98.

²²⁹ See New Market EA at 88-89.

three sides. In consideration of the low emissions of HAPs identified above, regulatory oversight for HAPs under the CAA, and assumptions to overestimate impacts in a similar analysis, we agree with the EA's conclusion that the health risks from HAPs associated with operation of the Atlantic Bridge Project facilities will not be significant.

210. Rebecca Haugh compares the air quality near the Oxford and Chaplin Compressor Stations, which already have compressor units in operation, to the air quality near the Weymouth Compressor Station site, and notes that the levels of SO₂, NO₂, and PM at the Weymouth site are either higher than, or approaching, the levels of those pollutants at the Oxford and Chaplin sites.²³⁰ Ms. Haugh is concerned that ambient air concentrations will increase further as a result of the proposed Weymouth Compressor Station. Several commenters believe that coastal inversions and sea breeze will direct air emissions inland and prevent air dispersion.

211. Ambient air quality concentrations vary from location to location based on a variety of different factors including other air emission sources, land use in the vicinity of a facility, and metrological and geographical differences. Algonquin conducted separate air dispersion modeling analyses for each compressor station. As part of its air permit application with the Massachusetts DEP, Algonquin performed air dispersion modeling for the Weymouth Compressor Station in order to estimate the impact that proposed emissions may have on nearby air quality. Each modeling analysis was based on site-specific terrain, ground cover, historical meteorological data (including wind speed, wind direction, and inversions), and proposed air emissions from each compressor station. Facility air impacts were added to background air quality concentrations to estimate future air quality near each facility and compare the future air quality to the NAAQS. As detailed in the EA, the emissions associated with each of these compressor stations, when combined with local background ambient air quality, will not cause or contribute to a violation of the NAAQS.²³¹ Therefore, we conclude that the air quality analysis presented in the EA accurately represents the potential impacts on air quality near the Weymouth Compressor Station site.

212. One commenter requests that the EA include oil tank emissions and emissions from vehicles that cross the Fore River Bridge into the air quality analysis. The air quality analysis in the EA encompasses background ambient air quality data for the region, including existing stationary and mobile sources that contribute to the air quality in the region. Therefore, the air quality analysis incorporates the emission sources the commenter seeks.

²³⁰ See Rebecca Haugh's June 1, 2016 Filing (accession number 20160601-5260).

²³¹ See EA at 2-97.

213. The Massachusetts Chapter of the Sierra Club suggests that an increase in the volume of natural gas transported through the area will increase the pressure in the existing local pipelines and lead to a greater volume of natural gas leaks from the local pipelines. We presume that the comment is referring to local distribution pipelines. This project involves a natural gas transmission pipeline system, which operates at higher pressures than the local natural gas distribution system. Before delivery into a shipper's facilities, the pressure of the gas is reduced to meet the operating pressure of the local distribution system. Therefore, this project will not increase the pressure in local distribution pipelines. Additionally, fugitive gas leaks associated with the project and Algonquin's preventative maintenance program to reduce and repair gas leaks are described in the EA.²³²

214. Several commenters express concern about GHG emissions from blowdowns and fugitive pipeline leaks, assert that the EA's use of a Global Warming Potential (GWP) of 25 for methane is inaccurate, and state that methane is more potent than carbon dioxide. There are numerous published GWPs based on varying data and time periods. We agree that methane has a higher GWP than carbon dioxide and the EA uses a GWP of 25 for methane and 1 for carbon dioxide.²³³ The EA justifies these selected values over other published GWPs because these are the values used by the EPA for reporting GHG emissions and for air permitting requirements, allowing for a consistent comparison with regulatory requirements. Section 2.7.4 of the EA estimates blowdown, fugitive pipeline, and methane emissions associated with the project and discusses the practices and programs that Algonquin will implement to minimize blowdown, fugitive pipeline, and methane emissions. We conclude that methane emissions associated with blowdowns and other fugitive emission sources are adequately addressed in the EA.

215. Several commenters, including the Connecticut Chapter of the Sierra Club, disagree with the EA's analysis of radon, and express concern about the buildup of radon and its decay products on pipeline interiors, as well as the potential for this material to be released into the environment. The EA summarizes the results of numerous studies regarding radon and natural gas facilities, including Pennsylvania Department of Environmental Protection's recent Technologically Enhanced Naturally Occurring Radioactive Materials Study Report issued in January 2015, which all demonstrate that indoor radon concentrations from Pennsylvania Marcellus Shale-sourced gas will remain below the EPA action level and the Indoor Radon Abatement Act long-term goal.²³⁴

²³² See EA at 2-96.

²³³ See EA at 2-87.

²³⁴ EA at Section 2.7.5.

Further, the EA acknowledges the potential for radioactive solids to be present within the pipeline, and explains that Algonquin routinely cleans its operational pipelines, and that any solids or liquids removed during pipeline cleaning activities will be collected and tested prior to disposal. In the event that such debris contains radioactive materials, they will be managed in accordance with applicable federal, state, and local waste management regulations pertaining to these types of hazardous materials. While Sierra Club argues that federal law exempts oil and gas facilities from categorizing this waste as “hazardous,” that does not mean the materials are not still subject to other, non-hazardous waste regulations.²³⁵ In any event, we find that the EA takes a hard look in addressing radon, based on available studies, and Algonquin’s commitment to comply with federal, state, and local regulations is appropriate.

216. The Massachusetts Chapter of the Sierra Club requests that the EA discuss the carbon content of the GHG emissions from project construction and operation and the climate pollutants resulting from leakage and burning of fossil fuels. The Massachusetts Chapter of the Sierra Club also contends that the EA should have discussed a price on carbon emitted from the project. The EA clearly states that the primary GHGs emitted by fossil fuel-fired projects are carbon dioxide, methane, and nitrous oxide.²³⁶ As previously noted, the EA includes GHG emission estimates from construction and operation of the project, which include GHG emissions from fugitive leaks as well as fossil fuel combustion. These estimates are provided as carbon dioxide equivalents, accounting for the GWP of each GHG to be emitted by the project. The EA also states that GHG emissions are regulated under the CAA and presents the regulatory programs that apply to the project. None of these regulatory programs place a price on carbon as part of the permitting process. However, section 2.10.9 of the EA addresses the impact of GHG emissions (and climate change). We find that GHG emissions and climate change have been sufficiently addressed.

15. Noise

217. Almar states that the noise analysis for HDD construction is incomplete as it does not discuss the Town of Yorktown noise regulations. We acknowledge that the Town of Yorktown noise regulations prohibit construction equipment noise between the hours of 11:00 p.m. and 7:00 a.m. Sunday evenings through Friday mornings and between 10:00

²³⁵ See, e.g., Resource Conservation and Recovery Act, Subtitle D, 42 U.S.C. § 6901 *et. seq.* (1976); Pipeline Safety Improvement Act of 2002, 42 U.S.C. § 60,101 *et. seq.* (2002).

²³⁶ See EA at 2-87.

p.m. and 8:00 a.m. Friday evenings through Sunday mornings.²³⁷ While we encourage applicants make reasonable efforts to comply with state and local noise regulations, to the extent practicable, HDD construction is primarily a 24-hour per day activity. Thus avoidance of construction at night is not always possible. However, the EA uses a noise criterion for HDD construction of 55 A-weighted decibels (dBA) day-night sound level (L_{dn}) at nearby NSAs. Based on the noise assessment conducted by Algonquin and presented in table 2.8.2-1 of the EA, the potential noise generated by HDD activities, including proposed mitigation measures, will be below 55 dBA L_{dn} at the nearest NSA. Environmental Condition 18 to this order will ensure that noise mitigation measures are properly implemented. Additionally, Algonquin has committed, to the maximum extent practicable, to limit the use of construction equipment to comply with the Town of Yorktown noise regulations and to work with affected landowners to provide a stipend or alternative accommodations during the period when 24-hour activities are required.²³⁸ We conclude that the noise assessment completed for HDD activities appropriately presents potential noise impacts associated with HDD activities and mitigation measures that will be implemented.

218. We received a comment regarding the potential construction noise impacts associated with the use of the new 2.3 acres of temporary staging area located on Calpine's existing utility yard at the Fore River Energy Center, south of Bridge Street. The commenter identifies past noise complaints from the site during the Power Plant construction, including night-time noise complaints. As identified by the commenter, the workspaces are part of an existing industrial staging area that has been used for other construction projects, and Algonquin's use will be consistent with those prior uses. At its closest point, the proposed staging areas will be between 120 and 190 feet from nine homes on Monatiquot Street and Bluff Road. Construction equipment in these staging areas will generate additional noise that is likely to be audible in the surrounding area. The noise impact will be temporary, lasting for several months, and intermittent. Importantly, Algonquin will not perform construction at this site during night-time hours under most construction conditions. Therefore, we find construction noise impacts will not be significant.

219. The City of Quincy requests that several conservation areas, including the Lovell's Grove and King's Cove conservation areas, as well as parks, playgrounds, and beaches in Quincy, be included as NSAs in the noise analysis conducted for the Weymouth

²³⁷ Yorktown Town Code Chapter 216-2.D.4.

²³⁸ As stated in Attachment A to the Applicants' response to EA comments (Accession number 20160616-5147)

Compressor Station. The city also argues that the Germantown neighborhood across the Fore River from the Weymouth Compressor Station will be negatively impacted.

220. The Weymouth Compressor Station site and the Lovells Grove and King's Cove areas are located near a significant transportation corridor and a developed industrial area. As shown in table 2.8.3-1 and figure 2.8.3-4 of the EA, this area is characterized by recorded ambient noise levels of 70.4 dBA L_{dn} . Based on the logarithmic addition of sound, a receptor located 100 feet from the noise producing equipment at the compressor station could experience a 1 dBA increase in noise above ambient levels. Similarly, a noise receptor at 70 feet away could experience a 2 dBA increase. An increase of 1 to 2 dBA is well below the threshold of the human ear's perception of change.²³⁹ The Lovells Grove area is over 500 feet away from the noise producing equipment (e.g., the compressor units), and therefore, will not experience a perceptible increase in noise. At its closest point, the Kings Cove conservation area is about 80 to 90 feet away from the noise producing equipment. Therefore, the Kings Cove area could experience up to a 2 dBA noise increase, which is not perceptible. We find that the addition of the Weymouth Compressor Station will not significantly modify the noise character of this area.

221. The noise analysis presented in table 2.8.3-1 and figure 2.8.3-4 of the EA includes the closest NSA in Germantown (NSA 2), and includes calculations to incorporate sound travel over water, per the request of the Siting Board. As identified in table 2.8.3-1, the noise generated by the compressor station will be well below the Commission's sound level requirement of 55 dBA L_{dn} at this NSA, and will not result in a perceptible increase in noise. Because sound levels decrease with distance, areas in Germantown further from the compressor station site than NSA 2 will experience less noise impact than NSA 2. Therefore, the Weymouth Compressor Station will not result in significant impacts on the Germantown neighborhood.

222. The Massachusetts Chapter of the Sierra Club believes that ambient noise levels near the Weymouth Compressor Station will increase because compressor stations are known to be noisy. Multiple noise sources are added logarithmically, and noise attenuates logarithmically with distance. Noise levels at the NSAs closest to the compressor station are already dominated by a major roadway.²⁴⁰ Also, the noise level estimates from the compressor station include numerous mitigation measures identified in

²³⁹ See EA at 2-99. "The human ear's threshold of perception for noise change is considered to be 3 dBA."

²⁴⁰ See Algonquin's Resource Report 9, Appendix 9G.

the EA, including building enclosures, mufflers/silencers, and insulation.²⁴¹ The EA accurately presents the projected noise impacts and increase in ambient levels from the Weymouth Compressor Station.

223. Several commenters are concerned about potential long-term health effects from exposure to high decibel and low-frequency noise from blowdowns at the Weymouth Compressor Station, stating that blowdowns have been recorded over 98 decibels. Commenters also ask about the frequency of blowdowns. The EA states that blowdown events occur infrequently and for short durations (1 to 5 minutes).²⁴² It is unclear how many blowdowns may occur each year; however, the conditions warranting a blowdown occur infrequently. Specifically, the EA explains that blowdowns are planned and unplanned ventings of natural gas to accommodate maintenance activities, testing of safety systems and equipment, or emergency shutdowns. Algonquin will install a blowdown silencer to ensure that noise attributable to blowdown events will be at or below 60 dBA at a distance of 300 feet. The non-routine and short duration of the blowdown events, along with the proposed mitigation, will not expose individuals to high decibel noise, or result in significant impacts.

224. One commenter requests that background air quality and noise surveys for the Weymouth Compressor Station be conducted at different times of day to account for changes in air currents, traffic, and varying noise levels. The air dispersion modeling analysis completed for the Weymouth Compressor Station incorporates meteorological data provided by Massachusetts DEP, comprising five years of hourly air quality data that measures wind speed and direction to determine appropriate air currents. Section 2.8.3 of the EA explains that the background sound survey conducted at the NSAs near the Weymouth Compressor Station (between 600 and 4,200 feet from the compressor station) includes daytime and nighttime ambient sound measurements, accounting for varying traffic conditions and the exclusion of the Fore River Bridge construction. We find that the background air quality and noise surveys accurately represent the existing conditions near the Weymouth Compressor Station site.

16. Reliability and Safety

225. Commenters are concerned about the siting of a high-pressure pipeline in urban or developed settings near facilities such as schools, residential areas, and hospitals. The Massachusetts Chapter of the Sierra Club states that the project's construction of a

²⁴¹ See EA at 2-109.

²⁴² See EA at 2-111.

pipeline through the densely populated areas of Weymouth and Braintree, Massachusetts, is contrary to government and industry safety standards.

226. As an initial matter, we note that the Atlantic Bridge Project does not involve the construction of any pipeline in Massachusetts. However, the EA describes PHMSA's role in the development of safety regulations for the design and operation of natural gas pipeline facilities.²⁴³ These regulations define area classifications, based on population density near the pipeline infrastructure and include provisions for enhanced design and inspection criteria for infrastructure located in increasingly populated areas or near schools, hospitals, and playgrounds.²⁴⁴ The EA also identifies the various class locations in the project area and describes the more rigorous safety requirements that would apply to certain areas. Based on Algonquin's commitment to comply with these requirements, we find that the siting of these facilities will not result in a significant increase in risk to the nearby public.

227. The Siting Board states that although the EA acknowledges that the Weymouth Compressor Station area will be sited in a high consequence area, it only addresses requirements applicable to the pipeline and fails to address the specific elements of Algonquin's integrity management program that apply to the Weymouth Compressor Station. To clarify, PHMSA's regulations define "pipeline" to include all physical facilities through which gas moves in transportation (including pipe, valves, compressor units, metering stations, etc.).²⁴⁵ Section 2.9.1 of the EA discloses some of the general measures in PHMSA's regulations. However, the integrity management program is a requirement of PHMSA's regulations, and as such, PHMSA enforces compliance and applicability of specific measures. The EA properly discloses that Algonquin has committed to complying with applicable PHMSA regulations.

228. Michael Lang states that the Weymouth Compressor Station site violates the PHMSA pipeline safety criteria Title 49 part 192.163(a), because it is sited in close proximity to a sewage pumping station, and he is concerned that a fire at the compressor station will spread to the pumping station. The regulation cited by Mr. Lang does not specify a minimum setback distance and does not specify criteria to address a fire at the compressor station spreading to other structures. Instead, this regulation requires that the compressor building "must be far enough away from adjacent property, not under control of the operator, to minimize the possibility of fire being communicated to the compressor

²⁴³ See EA at 2-113 through 2-117.

²⁴⁴ *Id.*

²⁴⁵ 49 C.F.R 192.3 (2016).

building from structures on adjacent property.” Beyond a generic statement that Mr. Lang believes the compressor station violates this criteria, he provides no scientific basis to demonstrate that Algonquin will violate this regulation. We find that Algonquin has committed to complying with PHMSA regulations, and PHMSA is responsible for ensuring compliance with its regulations.

229. Many commenters assert that the Weymouth Compressor Station site is too small compared to other existing compressor stations. A number of commenters also argue that a compressor station has never been built in such a densely populated area. In general, the proposed equipment at the Weymouth Compressor Station is of lower horsepower and the facility is smaller in scope than many other compressor stations along Algonquin’s system. However, as comparison, Transcontinental Gas Pipeline Company constructed its 25,000 horsepower Compressor Station 303 on 7.1 acres of land, with a permanent footprint of 6.6 acres.²⁴⁶ The Weymouth Compressor Station is a 7,700 hp compressor station that will have a permanent footprint of about 4.0 acres.²⁴⁷

230. Algonquin has committed to design, install, inspect, test, construct, operate, replace, and maintain the facility in accordance with PHMSA safety standards. As such, Algonquin will need to design the compressor station such that the various equipment components are properly spaced and fit within the proposed site, in accordance with PHMSA regulations. We find no basis to believe that the site is too small. Also, aboveground natural gas transmission facilities are routinely sited in populated areas (e.g., aboveground meter and/or regulating stations and mainline valves are sited in areas such as Manhattan, New York, and Jersey City, New Jersey). At the Weymouth Compressor Station site, Algonquin currently operates an aboveground meter and regulating facility. The primary operating impacts from a compressor station on residences are air quality, noise, and visual. As discussed above, the Weymouth Compressor station will not significantly alter the visual character of the area, will not result in a violation of the NAAQS, will not result in a perceptible increase in noise at any NSA, and will not significantly increase the safety risk in the surrounding communities. Therefore, impacts on the nearby population, regardless of density, have been sufficiently minimized.

231. Two commenters argue that Algonquin should be required to submit its Emergency Response Plan prior to the Commission’s decision. We disagree. The Emergency Response Plan is a regulatory requirement under PHMSA’s jurisdiction. The

²⁴⁶ Environmental Assessment for the Northeast Supply Link Project, August 2012 (Accession No. 20120801-4001)

²⁴⁷ EA at 1-8 and 1-11.

Commission's approval herein has no bearing on the adequacy or approval of the Emergency Response Plan for compliance with PHMSA's regulation. The EA adequately summarizes the required elements of an Emergency Response Plan, and Algonquin's commitment to comply with the regulations.

232. Algonquin is a subsidiary of Spectra Energy Corporation (Spectra). Many commenters question Spectra's safety record and note a recent pipeline explosion in Pennsylvania on April 29, 2016. Another commenter argues that new pipelines fail at rates faster than older pipelines. Spectra's reportable incident and leak rates compared to the industry wide rates are disclosed in table 2.9.2-1 of the EA. At the time of the EA's issuance, an investigation of the Pennsylvania incident on Spectra's Texas Eastern Transmission pipeline on April 29, 2016 was still ongoing. However, a preliminary investigation shows evidence of corrosion on the pipeline, which may indicate a possible flaw in the coating material used in weld joints at the time of construction in 1981.

233. Pipeline construction methodology and technology have advanced significantly since 1981. Notwithstanding this incident, as indicated in table 2.9.2-1, Spectra's incident and leak rates are significantly lower than industry averages. Further, incident statistics in New York, Connecticut, and Massachusetts and nationwide demonstrate that pipelines continue to be a safe and reliable means of transporting natural gas.²⁴⁸

234. The Massachusetts Chapter of the Sierra Club requests documentation of the effect of an explosion on the pipeline in terms of loss of life, injuries, and property damage. As stated in the EA, after construction, the potential impact radius along the new pipeline segments in New York and Connecticut is 845 feet.²⁴⁹ The potential impact radius is defined by PHMSA as the radius of a circle within which the potential failure of a pipeline could have significant impact on people or property.

235. Sierra Club also asks how long it will take to turn off the gas along the project, in the case of an emergency. The Applicants' Gas Control Center monitors system pressures, flows, and customer deliveries on its entire system. The project facilities will be equipped with remote control shutoff valves. In the event of an emergency, the Gas Control Center will send a command signal to the remote control valves to indicate the closure of the valve.²⁵⁰ While exact timing is unknown and varies depending on the

²⁴⁸ See EA at 2-118 and 2-119.

²⁴⁹ See EA at 2-115.

²⁵⁰ See EA at 2-117.

situation, the valves are capable of closing quickly to isolate a section of pipeline from the rest of the system.

236. Commenters ask about the potential for a “domino” safety effect, whereby an incident at the Weymouth Compressor Station could trigger other incidents at nearby facilities. Many commenters present numerous “potential” incident scenarios, and ask that the EA address the safety risk of such incidents (e.g., an incident occurring at the same time an oil tanker is traveling under the Fore River Bridge or industrial strength fireworks are launched over King’s Cove for the Fourth of July). Sandra Peters requests the supporting information used in Algonquin’s evaluation of a range of plausible events at the compressor station site. Section 2.9.3 of the EA discloses the results of Algonquin’s initial evaluation of potential events, covering the compressor station components, a full range of operation parameters at the compressor station, and plausible compressor station incidents of gas release, based on historical incident reports to PHMSA by gas pipeline operators. The analysis also assesses the impact of an incident on both the suction and discharge sides of the proposed Weymouth Compressor Station site. Algonquin’s evaluation concludes that if a major event were to occur at the Weymouth Compressor Station, it is unlikely to pose a threat on the structural integrity of nearby infrastructure. As such, it is also unlikely that an event at the Weymouth Compressor Station could trigger a “domino” effect involving other facilities and infrastructure. While this analysis is useful to disclose potential impacts for NEPA purposes, as identified above, the Weymouth Compressor Station will be located in a high consequence area, and will require the development of an integrity management program under PHMSA regulation. This program requires an identification of threats to facilities, including data integration and a risk assessment, and provisions to remediate conditions found in the integrity assessment. The program also requires continual evaluation. Algonquin has committed to compliance with this regulation. Thus, we find no need to supplement the record with additional supporting information, as Ms. Peters requests.

237. One commenter asks if natural gas releases from the Weymouth Compressor Station could affect passing airplanes heading to or from Boston Logan International Airport. Natural gas compressor stations have been sited near airports in the past.²⁵¹ The Weymouth Compressor Station site is located about 7.5 miles from the Boston Logan Airport runway, much further than many other natural gas compressor stations. Natural

²⁵¹ For example, Transcontinental Gas Pipe Line’s Compressor Station 120 is located approximately 10.5 miles from Hattfield-Jackson Atlanta International Airport in Georgia, and its Compressor Station 35 is approximately 7.75 miles from George Bush Intercontinental Airport (Houston) in Texas.

gas releases, or blowdowns occur infrequently, and Algonquin has estimated that they will last between 1 and 5 minutes on average. Methane, the primary component of natural gas, is lighter (less dense) than air and thus rises into the atmosphere. The amount of methane released during a blowdown event is very minor compared to the overall atmospheric gas volume, and methane will quickly mix with the air, reducing its concentration to de minimis levels. There is no evidence that a ground-level blowdown event will adversely impact the ability of a passing plane to stay airborne.

238. Many commenters express concern that the Weymouth Compressor Station could become a target for terrorism. One commenter states that the EA fails to address the potential risk from cyber terrorism. Safety and security are important considerations in any action undertaken by the Commission. In addition to various security measures (e.g. fencing, patrolling, and monitoring the facility), the EA addresses terrorism concerns, explaining that the likelihood of future acts of terrorism or sabotage occurring at or along the project facilities, or at any of the myriad natural gas pipeline or energy facilities throughout the United States, is unpredictable given the disparate motives and abilities of terrorist groups.²⁵² Algonquin will continue to participate in various activities in close collaboration with the U.S. Department of Homeland Security's Transportation Safety Administration (TSA) and key industry groups concerning security as part of the project. Regarding cyber terrorism, matters of natural gas pipeline cyber security also falls under the jurisdiction of the TSA. Accordingly, TSA has issued Pipeline Security Guidelines, recommending that companies establish and implement Corporate Security Program plans that include, among other things, cyber security measures. The continuing need to construct facilities to support future natural gas pipeline infrastructure is not diminished from the threat of any such future acts.

17. Alternatives

239. Commenters ask that we reconsider the no action alternative. The EA addresses the no action alternative, concluding that if the project facilities are not constructed, the project shippers will presumably need to obtain an equivalent supply of natural gas from new or existing pipeline systems.²⁵³ In response, the Applicants or another natural gas transmission company would likely develop a new project or projects to provide the volume of natural gas contracted through the project's binding precedent agreements with the project shippers. The EA concludes that construction of new pipelines or other natural gas infrastructure is likely to result in environmental impacts equal to or greater than those of the project, and therefore, are not preferable to the applicants' proposal.

²⁵² See EA at 2-122 to 2-123.

²⁵³ See EA at 3-2.

240. Commenters also suggest that renewable energy sources could eliminate the need for the project, and that the use of renewable energy, as well as gains realized from increased energy efficiency and conservation, should be considered alternatives to the project. We also received comments suggesting that the burning of oil is cleaner than the burning of natural gas. The EA discusses the generation of electricity from alternative energy sources, and concludes that it is not a reasonable alternative because it would not meet the project purpose of supplying customers with the additional natural gas they indicate they need.²⁵⁴ Authorizations related to how the northeast will meet demands for electricity are not part of the application before the Commission and their consideration is outside the Commission's jurisdiction. Further, the Commission cannot require individual energy users to use different or specific energy sources. Therefore, the generation of electricity from renewable or other energy sources (e.g., fuel oil, nuclear, etc.) or the gains realized from increased energy efficiency and conservation were not considered or evaluated further in our analysis.

241. Almar argues that the EA fails to address the environmental impacts that would occur if the Taconic Parkway HDD is unsuccessful and another pipeline installation method is required. As discussed above, Algonquin conducted an HDD feasibility study for the Taconic Parkway crossing, and the geotechnical borings demonstrate that the crossing materials are favorable for HDD installation techniques. Therefore, at this time, there is no reason to believe an HDD failure is likely. However, we will include Environmental Condition 13, which requires that in the event of an unsuccessful HDD, Algonquin shall file a site specific alternate plan for the crossing. If a plan is developed, it will be filed concurrently with applicable permitting agencies for their review and approval as well, prior to using the alternate method.

242. Almar also states that the EA fails to analyze the potential to extend the length of the Taconic Parkway HDD to the west side of Stoney Street. While this alternative was not previously identified or requested such that it could be included in the EA, it appears the modification in the HDD exit location suggested by Almar avoids impacts on wetlands and streams on the Almar property between mileposts 0.0 and 0.4 of the Stony Point Discharge Take-up and Re-lay; and therefore, consideration of this alternative is warranted.

243. To accomplish the goal of avoiding wetland and stream impacts on the Almar property and extending the HDD exit point to the west side of Stony Street, the HDD needs to be increased in length by about 2,000 feet. While not necessarily infeasible, longer HDDs generally have a higher incidence of complications than shorter HDDs. A longer HDD also increases the impact on Granite Knolls West Park. The project, as

²⁵⁴ *Id.*

currently designed, crosses 0.1 mile of the park. If the HDD is extended to the west, the workspace for the HDD would cross about 0.8 mile of the park. Another issue with the alternative HDD is the limited amount of space west of Stony Street to connect the HDD segment to the east end of the AIM Project pipeline. Given that the AIM Project pipeline ends just west of the street it may not be possible to connect the two without lifting and potentially removing a portion of the AIM Project pipeline, which would likely require interruption of gas service. Most importantly, extending the length of the HDD would increase the length of the pull-back area required west of Stony Street. This longer pull back area impacts at least one stream and several wetlands, thus negating much of the advantage to be gained by avoiding impacts on wetland and streams on the Almar property. Based on these impacts and issues, we do not find the HDD alternative suggested by Almar preferable to the proposed design.

244. Numerous commenters request evaluation of alternative sites for the Weymouth Compressor Station because of population density (including the number of children, schools, and senior living facilities) and the existing industrial facilities near the Weymouth Compressor Station. Other comments disagree with the EA's analysis of alternative compressor station sites.

245. The EA evaluates seven site alternatives for the Weymouth Compressor Station.²⁵⁵ The evaluation is based on several factors, including existing land uses, availability of the property, the resources to be affected by development of the site, and the ability of the alternative to meet the purpose and need of the project. Other factors considered include the additional infrastructure (i.e., additional connecting pipeline) required to develop the site, proximity of residences and schools, and site access. The EA concludes that the Weymouth site is preferable to the alternative sites evaluated.

246. One commenter asks why the objection of the owner of the camp at the Franklin Alternative site should be the determining factor in our rejection of that alternative, compared to the broad public opposition and numerous comments regarding safety concerns with the proposed site. The camp owner's objection to the use of the Franklin site was just one factor in the EA's evaluation. This objection would require the use of eminent domain to procure the property; the taking of which would preclude the landowner from using the property and results in a significant land use impact. The proposed site results in no such impact as the property has been acquired by Algonquin, and will not result in any significant environmental impacts. With respect to residences and schools, the Franklin site is preferable to the proposed site at Weymouth. However, as described in the EA, the Franklin site requires construction of 30.4 miles of suction and discharge pipelines, increasing land disturbance impacts, particularly forest land, and

²⁵⁵ See EA at 3-16 through 3-23.

the amount of new permanent easement needed.²⁵⁶ These pipelines also increase impacts on wetlands and waterbodies and cross an Estimated Rare Wildlife Habitat area and a Priority Rare Species Habitat area, as identified by the National Heritage and Endangered Species Program. Therefore, we agree with the EA's conclusion that the Franklin site is not environmentally preferable.

247. The Siting Board states that the EA dismisses the Franklin, Holbrook, and Rehoboth alternative sites for the Weymouth Compressor Station, in part, because they would both require additional pipeline infrastructure. The Siting board argues that some of this additional pipeline and the Rehoboth Compressor Station are currently proposed under the Access Northeast Project, and the EA should consider this as part of the alternatives analysis.

248. As identified above, no application has been filed for the Access Northeast Project, and its future is uncertain. At this time it is not reasonably foreseeable to assume that this infrastructure will be built under the Access Northeast Project. However, the EA also notes that additional pipeline, beyond that currently planned under the Access Northeast Project, is required for the Franklin and Holbrook alternatives (5.7 more miles for Franklin and 12 miles for Holbrook), including associated impacts on resources and landowners being encumbered by an easement.²⁵⁷ Further, as the Siting Board notes, the additional pipeline infrastructure was only one of several reasons why each alternative was dismissed. The Rehoboth Compressor Station alternative is located on Algonquin's G-System. To meet customer agreements, the Atlantic Bridge Project requires transportation of gas along Algonquin's Q-System. Therefore, the Rehoboth Compressor Station alternative requires over 50 miles of pipeline to transport gas from the G-System into the Q-System. Although this compressor station and a portion of the 50 miles of pipeline is currently contemplated under the Access Northeast Project, significant additional pipeline infrastructure would still be needed to meet the Atlantic Bridge Project commitments, and would result in additional impacts on resources and landowners. We agree with the EA's conclusions that these alternatives are not preferable to the proposed Weymouth Compressor Station site.

249. We received a comment stating that table 3.5.1-2 is inaccurate in reporting the number of schools within 0.5 mile of the Weymouth Compressor Station site. We reexamined the distance of schools near the proposed facility and determined that the information in table 3.5.1-2 regarding schools within 0.5 mile of the site is accurate. The two closest schools are the Snug Harbor Community School in Quincy and Johnson Early

²⁵⁶ See EA at 3-20.

²⁵⁷ See EA at 3-18 through 3-21.

Childhood Center in North Weymouth. Both schools are more than 0.5 mile from the site.

250. Nathaniel Wales comments that the Children's Island Alternative addressed in the EA²⁵⁸ site is preferable to the proposed Weymouth Compressor Station site. Mr. Wales' reasons include the remoteness of the island, which has no residences nearby, the infrequent use of the site by the YMCA as a recreational camp, and the temporary nature of the marine impacts if it were developed. He also questions Algonquin's contention that the site is too small, needs a new dock, requires a longer time to construct due to marine construction time restrictions, and could not be easily accessed in the event of an emergency.

251. As an initial matter, the EA's analysis of the Children's Island site does not consider the site too small and this was not a factor in our rejection of the site. The EA acknowledges Algonquin's concerns about the inadequacy of the dock, and the potential for regulatory restriction on marine activities to extend construction over two seasons; however, these are not the primary issues that led to the EA's conclusion that the site is not preferable to the Weymouth site. As described in the EA, the marine impacts of the Children's Island site are substantial; whereas, use of the Weymouth site would not have any direct marine impacts. In addition, the EA indicates that Children's Island is owned by the YMCA, considered a recreational area, and inaccessible from the mainland by road. Development of the site could permanently impact the current recreational uses of the island. For these and other reasons described in the EA, we conclude that it is not be preferable to the Weymouth site.

18. Environmental Analysis Conclusion

252. We have reviewed the information and analysis contained in the EA regarding potential environmental effects of the Atlantic Bridge Project. Based on our consideration of this information and the discussion above, we agree with the conclusions presented in the EA and find that the project, if constructed and operated as described in the EA, and in compliance with the environmental conditions in the appendix to this order, does not constitute a major federal action significantly affecting the quality of the human environment.

D. Conclusion

253. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto,

²⁵⁸ See EA at 3-21 through 3-24.

submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued authorizing Algonquin and Maritimes to construct and operate the Atlantic Bridge Project, as described in this order and in their application.

(B) The certificate authority issued in Ordering Paragraph (A) shall be conditioned on the following:

- (1) Algonquin and Maritimes' completion of construction of the authorized facilities and making them available within two years from the date of this order, pursuant to section 157.20(b) of the Commission's regulations;
- (2) Algonquin and Maritimes' compliance with all applicable regulations under the NGA including, but not limited to, Parts 154 and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;
- (3) Algonquin and Maritimes; compliance with the environmental conditions listed in Appendix B to this order.

(C) Permission and approval are granted to Algonquin to abandon approximately 4.0 miles of pipeline in Westchester County, New York, and approximately 2.3 miles of pipeline in Fairfield County, Connecticut;

(D) Algonquin shall notify the Commission within 10 days of the effective date of the abandonment of the facilities referenced in Ordering Paragraph (C).

(E) Algonquin and Maritimes shall execute firm contracts for the capacity levels and terms of service represented in signed precedent agreements, prior to commencing construction.

(F) Algonquin's incremental recourse rates for the Atlantic Bridge Project are approved, except as more fully discussed above.

(G) Algonquin's proposed incremental Fuel Reimbursement Percentage for the proposed Atlantic Bridge Project mainline expansion is approved.

(H) Algonquin must file actual tariff records setting forth its incremental recourse rates in accordance with section 154.207 of the Commission's regulations and other proposed changes to its tariff records implementing the Project not less than

30 days or more than 60 days prior to placing the Atlantic Bridge Project in service, as more fully discussed above.

(I) Maritimes' request for predetermination supporting rolled-in rate treatment for the costs of the Project in its next NGA general section 4 rate proceeding is granted, barring a significant change in circumstances.

(J) Maritimes' request to charge its currently-effective Rate Schedule MN365 recourse rates as the initial rates is approved for service on the project.

(K) Algonquin and Maritimes shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Algonquin or Maritimes. The Applicants shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(L) The late motions to intervene are granted.

(M) The motion for a formal hearing is denied.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A**Timely, Unopposed Motions to Intervene**

- Allegheny Defense Project
- Almar LLC
- Calpine Energy Services, LP
- City of New York, New York
- City of Quincy, MA
- Consolidated Edison Company of New York, Inc.; and Orange and Rockland Utilities, Inc.
- Eversource Energy Service Company
- Exelon Corporation
- Food & Water Watch; Stop the Pipeline Expansion; Better Future Project; 350 MA; Sierra Club, Lower Hudson Group; Toxics Action Center; Fore River Residents Against the Compressor Station; 350 ME; 350 CT; Capitalism vs. The Climate; CT Fracked Gas Pipeline Group; Eastern Connecticut Green Action; Grassroots Environmental Education; Keep Yorktown Safe; Safe Energy Rights Group; Berkshire Environmental Action Team; No Fracked Gas in MASS; Stop NED – Northeast Energy Direct; and West Roxbury Saves Energy
- GDF Suez Gas NA LLC
- John Gary Peters
- Lori and Michael Hayden
- Massachusetts Energy Facilities Siting Board
- Mobil Natural Gas Inc.
- National Grid Gas Delivery Companies
- New England Local Distribution Companies
- New England NG Supply, Ltd.
- New Jersey Natural Gas Company
- New York State Office of the Attorney General
- New York State Department of Environmental Conservation
- New York State Electric & Gas Corporation
- NJR Energy Services
- Pipe Line Awareness Network for the Northeast, Inc. (PLAN)
- Portland Natural Gas Transmission system
- PSEG Energy Resources & Trade LLC
- Rebecca Haugh
- Repsol Energy North America
- Riverkeeper, Inc.
- Sandra Peters
- Stephen J. Cole-Hatchard, Sr.

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- Tenaska Marketing Ventures
- Town of Weymouth, MA

Appendix B

Environmental Conditions for Algonquin and Maritimes Atlantic Bridge Project

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As recommended in the Environmental Assessment (EA) and modified herein, this authorization includes the following conditions:

1. The Applicants shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the EA, unless modified by this Order. The Applicants must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Project. This authority shall allow:
 - a. the modification of conditions of this Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to ensure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from construction and operation of the Project.
3. **Prior to any construction**, the Applicants shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EIs' authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities for the Project.

4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available and before the start of construction**, the Applicants shall file with the Secretary any revised detailed survey alignment maps/sheets for the Project at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

The Applicants' exercise of eminent domain authority granted under the Natural Gas Act section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. The Applicants' right of eminent domain granted under Natural Gas Act section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. The Applicants shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage and ware yards, new access roads, and other areas for the Project that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.

This requirement does not apply to extra workspace allowed by the Applicants' Erosion and Sediment Control Plan and/or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;

- c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
- 6. Within 60 days of the acceptance of this Certificate and before construction begins,** the Applicants shall file an Implementation Plan for the Project for review and written approval by the Director of OEP. The Applicants must file revisions to the plan as schedules change. The plan shall identify:
- a. how the Applicants will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by this Order;
 - b. how the Applicants will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;
 - c. the number of EIs assigned per spread, and how the Applicants will ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions the Applicants will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel changes), with the opportunity for OEP staff to participate in the training session;
 - f. the company personnel (if known) and specific portion of the Applicants' organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) the Applicants will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of on-site personnel;
 - iii. the start of construction; and

- iv. the start and completion of restoration.
7. The Applicants shall employ one or more EIs per construction spread. The EIs shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, the Applicants shall file updated status reports **on a weekly basis for the Atlantic Bridge Project until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update of the Applicants' efforts to obtain the necessary federal authorizations;
 - b. the current construction status of each spread of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;

- e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints that may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by the Applicants from other federal, state, or local permitting agencies concerning instances of noncompliance, and the Applicants' response.
- 9. Prior to receiving written authorization from the Director of OEP to commence construction of any Project facilities,** the Applicants shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
10. The Applicants must receive written authorization from the Director of OEP **before commencing service on each discrete facility of the Project.** Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities for the Project into service,** the Applicants shall file an affirmative statement, certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions the Applicants have complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. **Within 30 days of placing the facilities in service,** Algonquin shall file a report with the Secretary identifying all water supply wells/systems damaged by construction and how they were repaired. The report shall also include a discussion of any other complaints concerning well yield or water quality and how each problem was resolved.
13. **In the event of an unsuccessful horizontal directional drill at the Taconic Parkway,** Algonquin shall file with the Secretary a plan for the crossing of the parkway. This shall be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. Algonquin shall file

this plan concurrent with the submission of its application to applicable agencies for a permit to construct using this alternative path. The Director of OEP must review and approve this plan in writing before construction of the alternative crossing.

14. **Prior to construction in Connecticut**, Algonquin shall file with the Secretary any additional correspondence from the Connecticut Department of Energy and Environmental Protection regarding the survey results for the hairy-fruited sedge and whether any additional avoidance measures in potentially suitable habitat will be implemented.
15. **Prior to construction**, Algonquin shall file with the Secretary, for the review and written approval of the Director of OEP, a revised set of Residential Construction Plans that incorporate and address the comments Algonquin received from affected landowners.
16. **Prior to construction of the Weymouth Compressor Station**, Algonquin shall file with the Secretary a copy of the Massachusetts Office of Coastal Zone Management's determination of consistency with the Coastal Zone Management Act.
17. Algonquin shall not begin construction activities in New York **until**:
 - a. Algonquin files other reports, evaluations studies, plans, or special studies not yet submitted;
 - b. the Advisory Council on Historic Preservation is provided an opportunity to comment on the undertaking if historic properties would be adversely affected; and
 - c. the Commission staff reviews and the Director of OEP approves all cultural resources survey reports and plans, and notifies Algonquin in writing that any necessary treatment plans/mitigation measures may be implemented or that construction may proceed.

All material filed with the Secretary containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **“CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE.”**

18. Algonquin shall file **in the weekly construction status reports** the following for the Taconic Parkway horizontal direction drill entrance site:
 - a. the noise measurements from the nearest noise sensitive area (NSA) for each drill entry site, obtained at the start of drilling operations;

- b. the noise mitigation that Algonquin implemented at the start of drilling operations; and
 - c. any additional mitigation measures that Algonquin will implement if the initial noise measurements exceeded a day-night sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at the nearest NSA and/or increased noise is over ambient conditions greater than 10 dB.
- 19. Prior to construction during nighttime hours (10:00 p.m. to 7:00 a.m.) between mileposts 0.5 and 0.7 along the Southeast Discharge Take-up and Relay, Algonquin shall file with the Secretary for review and written approval by the Director of OEP, a nighttime construction noise analysis and mitigation plan for all NSAs within one half mile of the construction work areas where nighttime construction is requested. The plan shall include:**
- a. the length of time nighttime construction would occur;
 - b. clear identification of all NSAs within one half mile of the construction work areas where nighttime construction is requested, and the projected noise levels of construction activities at night at the NSAs;
 - c. specifications regarding the input parameters that were modeled (particularly the number of each equipment and the consideration of back-up alarms); and
 - d. details for mitigation measures that Algonquin commits to implementing (e.g. height and material of movable barriers, use of a spotter over back up alarms, the availability of lower pitched back up alarm).
- 20. Algonquin shall file a noise survey with the Secretary **no later than 60** days after placing the new Weymouth Compressor Station in service. If a full load condition noise survey of the entire station is not possible, Algonquin shall file an interim survey at the maximum possible horsepower load and file the full load survey **within 6 months**. If the noise attributable to the operation of the new compressor station at full or interim power load conditions exceeds an L_{dn} of 55 dBA, Algonquin shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. Algonquin shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls**
- 21. Algonquin shall file noise surveys with the Secretary **no later than 60** days after placing the authorized units at the Stony Point, Oxford, and Chaplin Compressor Stations in service. If a full load condition noise survey of the entire station is not**

possible, Algonquin shall file an interim survey at the maximum possible horsepower load and file the full load surveys **within 6 months**. If the noise attributable to the operation of the modified compressor station at full or interim power load conditions exceeds existing noise levels at any nearby NSAs that are currently at or above an L_{dn} of 55 dBA, or exceeds 55 dBA L_{dn} at any nearby NSAs that are currently below 55 dBA L_{dn} , Algonquin shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. Algonquin shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

22. Algonquin shall file noise surveys with the Secretary **no later than 60 days** after placing the modified Yorktown and Danbury Meter and Regulating (M&R) Stations, the modified Needham Regulator Station, and the proposed new Salem Pike M&R Station in service. If the noise attributable to the operation of any M&R station or regulator station at full load exceeds an L_{dn} of 55 dBA at any nearby NSA, Algonquin shall file a report on what changes are needed and shall install the additional noise controls to meet the level **within 1 year** of the in-service date. Algonquin shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.
23. Algonquin shall perform pre- and post-construction surveys, with landowner permission, of the dam near milepost 0.2 of the Stony Point Discharge Take-up and Relay. **Within 30 days of placing the Stony Point Discharge Take-up and Relay in service**, Algonquin shall file a report with the Secretary identifying any damaged caused by construction on the dam, and how it was resolved.

Document Content(s)

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