



September 29, 2014

VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Comments on Algonquin Incremental Market Project Draft Environmental Impact Statement, Docket No. CP 14-96-000

Dear Secretary Bose:

Riverkeeper, Inc. (Riverkeeper) submits the following comments on the Draft Environmental Impact Statement (DEIS) for the Algonquin Incremental Market Project (AIM Project or Proposed Project), Docket No. CP 14-96-000. The DEIS was made available via notice of the Federal Energy Regulatory Commission (FERC or Commission) dated August 6, 2014.

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

For the reasons set forth below, the DEIS fails to comply with the requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4231 et seq., in several significant respects, and must be revised and reissued for public review and comment. These deficiencies include: 1) incomplete information; 2) inadequate evaluation of impacts to water resources; 3) failure to include consideration of the Atlantic Bridge Project, which impermissibly segments environmental review; and 4) failure to provide a comprehensive analysis of cumulative impacts. Further, a number of additional mitigation measures related to water resources, as well as public disclosure of all construction and post-construction information related to the AIM Project, should be evaluated and included in a revised DEIS.

I. Background

The AIM Project spans four states and involves the replacement and expansion of approximately 37 miles of the existing Algonquin pipeline system, the upgrade of multiple

compressor stations, and the upgrade of existing and construction of new metering and regulating stations along the pipeline route. In New York, the project involves the take up and relay of more than 13 miles of pipeline, replacing the existing 26 inch pipe with a 42 inch pipe, approximately 2 miles of new pipeline, and a new Hudson River crossing. The New York portion of the AIM Project also includes the upgrade of 2 compressor stations and 2 metering and regulating stations. In all, the Proposed Project involves 39 waterbody crossings, 77 wetland crossings, and disturbance of approximately 24 acres of wetlands in New York.

The majority of the New York portion of the Proposed Project is located within the Hudson River watershed, while approximately 2 miles of pipeline replacement and the expansion of the Southeast Compressor Station are located within the New York City (NYC) drinking water supply watershed, which provides drinking water for 9 million New Yorkers. Specifically, portions of the AIM Project are located within the sensitive Croton watershed, part of the East of Hudson NYC watershed, where drinking water supply reservoirs are already impaired for phosphorus and must be carefully protected in order to avoid further degradation.¹

Algonquin Gas Transmission, LLC (Algonquin or Applicant) submitted an application to FERC for a Certificate of Public Convenience and Necessity on February 28, 2014, following a pre-application and scoping process. Riverkeeper submitted comments regarding the scope of the DEIS on October 15, 2013² and on the application for a Certificate of Public Convenience and Necessity on April 8, 2014.³ In those comments, Riverkeeper identified a number of issues of concern regarding water quality and urged FERC to take a hard look, as required by NEPA, at the Proposed Project's likely impacts on both the Hudson River and NYC watersheds, as well as potential cumulative impacts.

II. The DEIS Fails to Provide the “Hard Look” at Environmental Impacts Required by NEPA.

Pursuant to NEPA, federal agencies must take environmental considerations into account in their decision-making “to the fullest extent possible.” 42 U.S.C. § 4332. Prior to approving any “major federal action significantly affecting the quality of the human environment,” federal agencies must comprehensively evaluate environmental impacts, including adverse environmental effects and the means of preventing them, in a “detailed statement.” *Id.* § 4332(2)(C). NEPA requires federal agencies to “take a ‘hard look’ at environmental consequences” and “provide for broad dissemination of relevant environmental information.”

¹The Proposed Project sites in the New York City (NYC) watershed drain to the New Croton Reservoir and the East Branch Reservoir, both of which are subject to a Total Maximum Daily Load for phosphorous. *See* New York State Department of Environmental Conservation (NYSDEC), Phase II Phosphorous Total Maximum Daily Loads for Reservoirs in the New York City Water Supply Watershed (2000), available at: http://www.dec.ny.gov/docs/water_pdf/nycjune2000.pdf.

² Riverkeeper Comments Regarding Scope of the Environmental Impact Statement for the Algonquin Incremental Market Project, Docket No. PF 13-16-000 (filed Oct. 15, 2013) (Scope Comments), incorporated fully by reference herein.

³ Riverkeeper Comments on Abbreviated Application of Algonquin Gas Transmission, LLC for Certificate of Public Convenience and Necessity, Docket No. CP 14-96-000 (filed Apr. 8, 2014) (Application Comments), incorporated fully by reference herein.

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (internal citations omitted).

The public availability of information regarding the environmental impacts of a proposed action is central to NEPA, which requires agencies to make “high quality” information available to “public officials and citizens *before* decisions are made and *before* actions are taken.” 40 C.F.R. § 1500.1(b) (emphases added). Accordingly, “public scrutiny [is] essential to implementing NEPA.” *Id.* The preparation of an environmental impact statement (EIS) serves this mandate by “provid[ing] a springboard for public comment,” as NEPA “guarantees that the relevant information [concerning environmental impacts] will be made available to the larger audience that may also play a role in the decisionmaking process and the implementation of the decision.” *Robertson*, 490 U.S. at 349. The opportunity for public participation guaranteed by NEPA ensures that agencies will not take final action until after their analysis of the environmental impacts of their proposed action has been subject to public scrutiny. In situations where “data is not available during the EIS process and is not available to the public for comment ... the EIS process cannot serve its larger informational role, and the public is deprived of their opportunity to play a role in the decision-making process.” *N. Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1085 (9th Cir. 2011).

In addition, an EIS must fully disclose and evaluate the complete range of environmental consequences of a proposed action, including “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, [and] cultural” impacts, “whether direct, indirect, or cumulative.” 40 C.F.R. §§ 1502.16(a), (b); 1508.8. As an “environmental full disclosure law,” *Monroe Cnty. Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697 (2d Cir. 1972), NEPA “ensures that an agency will not act on incomplete information, at least in part, by ensuring that the public will be able to analyze and comment on an action’s environmental implications.” *Ohio Valley Env’tl. Coal. v. U.S. Army Corps of Eng’rs*, 674 F. Supp. 2d 783, 792 (S.D. W. Va. 2009) (internal quotation marks and citations omitted).

If a DEIS “is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft.” 40 C.F.R. § 1502.9(a). As discussed below, the DEIS falls far short of the standards prescribed by NEPA such that it precludes meaningful analysis of the environmental impacts of the Proposed Project, and must be revised and reissued for public review and comment.

A. The DEIS is Incomplete.

In Section 5.2 of the DEIS, Staff’s Recommended Mitigation, and throughout the DEIS, FERC identifies dozens of pieces of missing information and asks the Applicant to submit various documents either prior to the end of the comment period on the DEIS or prior to construction. The list of missing information includes, but is not limited to:

- ➔ Site-specific crossing plan for the Catskill Aqueduct.⁴ (Recommended Mitigation #14; DEIS Section 4.3.2.1)

⁴ Draft Environmental Impact Statement for the Algonquin Incremental Market Project (Aug. 2014) (DEIS) at 5-21.

- ➔ Additional details regarding minimization of trench dewatering in New York.⁵ (Recommended Mitigation #16; DEIS Section 4.3.2.6)
- ➔ Revised site-specific crossing plans incorporating additional avoidance or mitigation measures for two vernal pools in New York.⁶ (Recommended Mitigation #17; DEIS Section 4.4.3.2)
- ➔ Site-specific information regarding the location of wetlands the Applicant believes would meet criterion for non-saturated conditions at the time of construction.⁷ (Recommended Mitigation #18; DEIS Section 4.4.4)
- ➔ Final Compensatory Wetland Mitigation Plan.⁸ (Recommended Mitigation #19; DEIS Section 4.4.5)
- ➔ Documentation that the Hudson River crossing is consistent with New York coastal policies.⁹ (Recommended Mitigation #28; DEIS Section 4.8.4.1)
- ➔ Final AC/DC interference study for the West Point Transmission Project and any additional mitigation to address safety related concerns.¹⁰ (Recommended Mitigation #41; DEIS Section 4.12.3)
- ➔ Final conclusions regarding potential safety-related conflicts with Indian Point Energy Center following completion of a Hazards Analysis by Entergy and, if additional mitigation is required, a site-specific construction and mitigation plan.¹¹ (Recommended Mitigation #42; DEIS Section 4.12.3)
- ➔ Site-specific plan for Harriman State Park, including additional avoidance or mitigation measures.¹² (DEIS Section 4.6.1.5)

Riverkeeper agrees with FERC that the information identified above and in Section 5.2 of the DEIS is necessary in order to determine the Proposed Project's environmental impacts and that it must be submitted by the Applicant as soon as possible. It must also be included in a revised DEIS so that it may be reviewed and evaluated by the public and other interested agencies and government bodies. FERC may not base its decision regarding environmental impacts from the Proposed Project on an incomplete environmental impact statement, nor may it circumvent the public review process by relying on an incomplete DEIS. In order to comply with NEPA, all information identified by FERC as missing from the DEIS must be prepared and

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.* at 5-22.

¹⁰ *Id.* at 5-25.

¹¹ *Id.*

¹² *Id.* at 4-90.

submitted as soon as possible, and included and evaluated in a revised DEIS that is subsequently made available for public review and comment.

B. The Analysis of Impacts to Water Resources is Inadequate.

Several issues related to potential impacts on water resources are either inadequately evaluated in or completely missing from the DEIS. As with the missing pieces of information identified by FERC, discussed in section II.A, above, these must also be addressed in a revised DEIS.

1. The DEIS fails to address impacts and mitigation measures related to wetland buffers.

The applicant proposes to mitigate unavoidable, construction-related impacts to wetlands by implementing specific wetland protection and restoration measures listed in the DEIS.¹³ However, there is no direct consideration of wetland buffers and the only indirect consideration is the proposal to locate additional temporary workspace (ATWS) “at least 50 feet from wetland boundaries except where site-specific conditions warrant otherwise and FERC approval has been obtained...”¹⁴

The preservation and maintenance of buffer areas is critical to the protection of wetlands from construction activities and post-development stormwater runoff. Vegetated wetland buffers provide transitional areas that intercept stormwater from upland habitat before it reaches wetlands or other aquatic habitat. Buffers therefore maintain or improve water quality by trapping and removing various nonpoint source pollutants. Other water quality benefits of buffer zones include reducing thermal impacts (providing shade), nutrient uptake, infiltration, reducing erosion, and restoring and maintaining the chemical, physical and biological integrity of water resources. One hundred feet is considered the minimum buffer width recommended for water quality protection.¹⁵

Construction-related activities, including the establishment of ATWS, within 50 feet of wetlands not only pose threats to water quality but are subject to regulation at the state and local level, highlighting the importance of protecting buffer areas. The New York State Department of Environmental Conservation (NYSDEC) regulates activities within 100 feet of state wetlands.¹⁶ In the New York City Watershed, the Towns of Cortlandt¹⁷ and Yorktown¹⁸ also regulate activities within 100 feet of local wetlands, as does the New York City Department of Environmental Protection (NYCDEP).¹⁹ Nevertheless, the DEIS proposes construction activities within 50 feet of regulated wetlands and plans to request FERC approval for encroachment to

¹³ *Id.* at 4-61.

¹⁴ *Id.*

¹⁵ SCHUELER, T., *SITE PLANNING FOR URBAN STREAM PROTECTION*, Metropolitan Washington Council of Governments (1995), 111.

¹⁶ *See* N.Y. E.C.L. § 24-0701(2).

¹⁷ *See* Town of Cortlandt Town Code, Chapter 179, Freshwater Wetlands, Water Bodies, and Watercourses.

¹⁸ *See* Town of Yorktown Town Code, Chapter 178, Freshwater Wetlands.

¹⁹ *See e.g.*, Rules of the City of New York, Title 15, Chapter 18 § 18-39.

less than 50 feet for 23 existing wetlands within the project right of way (ROW).²⁰ Eleven of the proposed additional encroachments abut the wetland itself. While the DEIS claims these additional encroachments are necessary to create extra workspace for saturated soils and spoil storage, there is no analysis of the potential impacts to buffers or their associated wetlands due to the proposed wide-scale and intrusive disturbance from these construction activities.

Nor is there any mitigation proposed for impacts to wetland buffers. Although the DEIS proposes compensatory mitigation for wetland disturbances at a 2:1 ratio, it fails to demonstrate that the proposed ratio will result in the successful establishment of even a 1:1 ratio of wetlands when their buffers have been disturbed to within 0-50 feet of their delineated boundaries. As discussed earlier, buffers insulate wetlands from nutrient loading and other impacts, so impairing those functions will also impair the ability of the disturbed wetland to be restored.

For the above reasons, the DEIS must include an analysis of the impacts of proposed wetland buffer disturbances from construction activities, and must further propose mitigation measures for impacts. At a minimum, the applicant should restore disturbed wetland buffer areas to their natural grade and configuration, plant them with native vegetation, and monitor them for the successful establishment of plant communities. Unless the applicant can demonstrate that impacts to buffers can be avoided, minimized or adequately mitigated, FERC, NYSDEC and local municipalities should deny any requests for variances allowing further encroachment on and adverse impacts to wetland buffers, and require that the Proposed Project be revised to comply with state and local regulations regarding disturbance within 100 feet of regulated wetlands.

2. The DEIS fails to evaluate potential significant impacts from stormwater runoff.

The DEIS fails to include a meaningful evaluation of the impacts from increased stormwater runoff due to construction activities and long-term changes in surface drainage patterns caused by the Proposed Project. Rather, the DEIS merely mentions stormwater plans and management in passing, and, for the New York portions of the Proposed Project, references a Stormwater Pollution Prevention Plan (SWPPP) that has not been included in the DEIS.²¹

When construction activities remove vegetation and expose soils, forest canopies no longer intercept stormwater and root systems no longer hold soils in place. Stormwater runoff from construction sites may carry pollutants – such as debris, oil and other contaminants from equipment, and any herbicides used for vegetation clearing or ROW maintenance – from the project site to downstream wetlands, streams, and other waterbodies.²² Construction site runoff

²⁰ DEIS at 4-67—68.

²¹ Riverkeeper notes that on September 2, 2104 we received a copy of the Stormwater Pollution Prevention Plan (SWPPP) for the New York portions of the project from the Applicant, who requested feedback by October 1, 2014. We are currently reviewing the SWPPP and will provide comments under separate cover. However, this does not remedy FERC's failure to evaluate stormwater impacts, including providing a copy of the SWPPP, in the DEIS.

²² U.S. Environmental Protection Agency (EPA), Stormwater Discharges from Construction Activities, available at: <http://cfpub.epa.gov/npdes/stormwater/const.cfm>.

can also erode exposed soils and transport sediment to receiving waters.²³ Suspended sediment in aquatic systems degrades aquatic wildlife habitat, reduces species diversity and damages commercial and recreational fisheries.

In addition, nutrients and toxic materials, including pesticides, industrial wastes, and metals, can bind to silt and clay particles that runoff transports to waterbodies. Sediment particles also shield pathogenic microorganisms such as *Giardia* and *Cryptosporidium* from detection, which can result in waterborne disease outbreaks. Long-term changes in hydrology and surface drainage patterns may also result from construction activities, particularly in areas, such as steep slopes, where changes in ground cover and topography can increase stormwater runoff, reduce the ability of natural systems to filter pollutants, and permanently alter drainage patterns.²⁴

Consideration of impacts from stormwater runoff is important throughout the project, particularly so within the NYC watershed. As noted above, the NYC watershed provides drinking water to 9 million New Yorkers daily, and the Proposed Project is located within a sensitive portion of the East of Hudson NYC watershed that is already impaired and subject to enhanced water quality protection criteria. Riverkeeper raised the importance of evaluating stormwater impacts from the Proposed Project and requested inclusion of the SWPPP in the DEIS in previous comments to FERC on the scope of the DEIS and on the project application.²⁵ In a letter to the Applicant dated April 10, 2014, FERC also requested that the Applicant provide a copy of the SWPPP in preparation for the DEIS;²⁶ however, none has been included.

In order to protect against water quality degradation that may potentially result from stormwater runoff, FERC must include a full analysis of potential stormwater impacts, including a complete SWPPP, in a revised DEIS. This analysis must include a description of how the pipeline construction schedule will be phased to coordinate with control measures contained in the SWPPP, as well as a consideration of alternative construction practices that can be used to avoid or reverse soil compaction and thereby prevent runoff volume.

3. *The DEIS must include a detailed evaluation of likely impacts and mitigation measures for the 2 vernal pools located within the Hudson River watershed.*

The DEIS lists 2 vernal pools in New York, located within the Hudson River watershed in the Town of Cortlandt, that will be directly affected by construction of the Proposed Project.²⁷ In all, construction will directly impact nearly 2,000 square feet of vernal pool habitat. While the DEIS notes that, in general, vernal pools “provide habitat for many species” and that rare species are known to use vernal pools in the project area, there is no discussion or evaluation of the

²³ EPA, Construction Site Management Measure III. Construction Activities (last visited Sep. 29, 2014), available at: <http://water.epa.gov/polwaste/nps/czara/ch4-3a.cfm> .

²⁴ NYSDEC, New York Standards and Specifications for Erosion and Sediment Controls (Aug. 2005) at 1.3, available at: www.dec.ny.gov/docs/water_pdf/bluebook.pdf.

²⁵ Scope Comments at 4-5; Application Comments at 2-3.

²⁶ Federal Energy Regulatory Commission, Letter to Mr. Berk Donaldson, Director, Rates and Certificates NE, Spectra Energy Corporation, Re Environmental Data Request – Part 1 (Apr. 10, 2014).

²⁷ DEIS at 4-63, Table 4.4.3-2.

potential impacts upon the 2 vernal pools that would be directly affected by construction. In fact, as noted above in section II.A, the DEIS is missing final, site-specific crossing plans and avoidance and/or mitigation measures for these 2 vernal pools, which FERC has requested from the Applicant.

All information regarding site-specific crossing plans and avoidance and/or mitigation measures must be submitted by the Applicant as soon as possible and included in the DEIS. In addition, the DEIS must include a comprehensive, site-specific evaluation of the potential impacts to these 2 vernal pools. This must include a bioassay survey to determine the specific kinds of wildlife supported by each vernal pool, as well as discussion of restricted construction windows for pools that are assumed to support amphibians in the spring and fall. Without this information, FERC cannot assess the potentially significant impacts to these sensitive resources.

4. The DEIS must evaluate potential impacts to the Ramapo River Basin Aquifer System.

The Proposed Project would cross approximately 0.6 mile of the Ramapo River Basin Aquifer System, a U.S. Environmental Protection Agency (EPA) designated sole source aquifer that serves as the water source for more than 300,000 people in New York and New Jersey.²⁸ Even though EPA notes that the aquifer is “vulnerable to contamination from many sources” and that the “potential exists for incidents of surface water contamination to affect public supply wells,”²⁹ the DEIS includes no meaningful analysis of the AIM Project’s effect on this important resource. Rather, the Ramapo Basin Aquifer is only briefly mentioned before the DEIS concludes, without any real analysis, that the Proposed Project will not significantly impact groundwater resources.

The DEIS’s generic discussion of impacts to groundwater water resources is insufficient. In order to ensure protection of a resource that serves as the sole source of drinking water for hundreds of thousands of people, the DEIS must include an assessment of the specific threats to the Ramapo River Basin Aquifer System and of measures to avoid, minimize, or mitigate those threats. This assessment must include alternatives to construction in the Ramapo Basin Aquifer.

C. FERC Has Impermissibly Segmented Environmental Review by Failing to Include an Evaluation of Algonquin’s Atlantic Bridge Project in the DEIS.

The DEIS must include an evaluation of the Atlantic Bridge Project, which will upgrade and expand additional segments of the Algonquin pipeline system. As with the Proposed Project, the Atlantic Bridge Project will be implemented by the Applicant and involves expansion of the Algonquin pipeline system in portions of New York, Connecticut, Rhode Island, and Massachusetts, with a projected in service date of November 2017. In New York, the Atlantic Bridge Project would cross approximately 4 miles of the East of Hudson NYC watershed, taking up the existing 26 inch pipe and replacing it with a 42 inch pipe, and involve

²⁸ EPA, Ramapo Aquifer Systems (Aug. 1992), available at: <http://www.epa.gov/region2/water/aquifer/ramapo/ramapo.htm>. Note that EPA’s count of population served by the Ramapo River Basin Aquifer Systems is likely highly underestimated, as the document dates to 1992.

²⁹ *Id.*

an additional upgrade of the Southeast Compressor Station, which is also located within the NYC watershed. Algonquin has completed an open season³⁰ for the project, and “plan[s] to move forward.”³¹

Pursuant to the regulations implementing NEPA, an EIS must include: 1) connected actions, including those that are “interdependent parts of a larger action and depend on the larger action for their justification;” 2) cumulative actions, “which when viewed with other proposed actions have cumulatively significant impacts;” and 3) similar actions, “which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together.” 40 C.F.R. § 1508.25(a). Accordingly, “[a]n 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.” *Delaware Riverkeeper Network, et al. v. Federal Energy Regulatory Commission*, 753 F.3d 1304, 1313 (D.C. Cir. 2014).

In *Delaware Riverkeeper Network*, the Court found that FERC violated NEPA when it segmented environmental review of four separate proposals by Tennessee Gas Pipeline Company to upgrade different sections of the Eastern Leg of its 300 Line. Finding that the four projects were “certainly ‘connected actions,’” the Court explained:

“There is a clear physical, functional, and temporal nexus between the projects. There are no offshoots to the Eastern Leg. The new pipeline is linear and physically interdependent; gas enters the system at one end, and passes through each of the new pipeline sections and improved compressor stations on its way to extraction points beyond the Eastern Leg. The upgrade projects were completed in the same general time frame, and FERC was aware of the interconnectedness of the projects ... [t]he end result is a new pipeline that functions as a unified whole thanks to the four interdependent upgrades.”

752 F.3d at 1308-1309. The Court went on to dismiss claims that there were logical termini between any of the new upgrade segments or that any possessed substantial independent utility apart from the others, finding that the projects were “inextricably intertwined” as part of the same linear pipeline. *Id.* at 1315-1317.

The Atlantic Bridge Project falls into all three categories of actions that must be evaluated in a DEIS pursuant to 40 C.F.R. § 1508.25(a). First, the Proposed Project and the Atlantic Bridge Project are clearly connected actions, as both are interdependent parts of a larger action: the upgrade of the Algonquin pipeline system. Both projects involve upgrade and

³⁰ The Applicant held an open season to gauge market interest in the Atlantic Bridge Project earlier this year. See Spectra, Atlantic Bridge Project: Open Season Notice for Firm Service February 5, 2014 – March 31, 2014 (last visited Sep. 28, 2014), available at: <https://infopost.spectraenergy.com/GotoLINK/GetLINKdocument.asp?Pipe=10076&Environment=Production&DocumentType=Notice&FileName=Atlantic+Bridge+Project+Open+Season.pdf&DocumentId=8a7842c943fed9190143ff70248c0028>.

³¹ Spectra, New Projects and Our Process: Atlantic Bridge Project (last visited Sep. 25, 2014), available at: <http://www.spectraenergy.com/Operations/New-Projects-and-Our-Process/New-Projects-in-US/Atlantic-Bridge>.

expansion of different segments of the Algonquin pipeline system, with several sections of both projects involving the take up of existing 26 inch pipe and replacing it with larger 42 inch pipe. The pipeline is linear, running in a line from New Jersey through New York, Connecticut, Rhode Island, and Massachusetts before branching. Further, the finished projects will function as a unified whole, as they involve replacing and expanding sections of the same linear pipeline system. The projects are also closely connected in time, as the Atlantic Bridge Project's projected in service date is only one year later than the AIM Project and there will be overlaps in construction.

Second, as discussed in section II.D below, the AIM and Atlantic Bridge Project are cumulative actions, as each would affect many of the same resources in the same area, including the NYC watershed, and the combined, incremental effect of each has the potential to be cumulatively significant. Finally, there is no question that the projects are similar actions, and that the Atlantic Bridge Project is a reasonably foreseeable action under NEPA. The Atlantic Bridge Project shares many similarities with the AIM project, as discussed above, and will be constructed within a similar timeframe.

Moreover, although the Applicant has not yet, to our knowledge, submitted an application to FERC for the Atlantic Bridge Project, the project has been announced and is moving forward. Algonquin has executed an agreement with Unitil, a natural gas distribution company, and has completed an open season for the project.³² The company has also scheduled informational meetings to review the project with members of the public. One such meeting is in fact scheduled in Yorktown Heights, New York on September 29, 2014,³³ the day that the public comment period on the AIM Project DEIS closes.

In addition, the portion of the Atlantic Bridge Project located in New York appears to overlap with an earlier version of the AIM Project that was proposed in the Applicant's initial draft Environmental Report in July 2013. According to a map submitted with the Applicant's July 2013 draft Environmental Report, attached as Appendix A, the AIM Project was initially proposed within a much larger section of the NYC watershed, spanning from Cortlandt, New York to Somers, New York. The AIM Project was later modified to the current proposal, wherein the portion of the project in the NYC watershed was shortened to an approximately 2 mile segment from Cortlandt, New York to Yorktown, NY. The Atlantic Bridge Project would include a 4 mile segment in the NYC watershed, beginning in Yorktown, NY and appearing to run northeast toward Somers, New York. *See* map attached as Appendix B. Therefore, it appears that at least the New York portion of the Atlantic Bridge Project was proposed as a part of the AIM Project, then later broken into a separate project.

Given the interconnectedness of the Proposed Project and the Atlantic Bridge Project – which would upgrade and expand the same pipeline system, in the same area, affecting many of

³² *Id.*

³³ Town of Yorktown, New York, Algonquin Gas Transmission Will Hold Informational Meeting for Atlantic Bridge Expansion Project (last visited Sep. 25, 2014), available at: <http://www.yorktownny.org/community/algonquin-gas-transmission-will-hold-informational-meeting-atlantic-bridge-expansion>.

the same resources, over the same general time period – the DEIS must include a review and analysis of both projects.

D. The DEIS Fails to Provide a Comprehensive Analysis of Cumulative Impacts.

The cumulative impacts analysis in the DEIS is woefully inadequate and fails to evaluate a number of “past, present, and reasonably foreseeable future actions” that are likely to combine with the effects of the Proposed Project to create cumulative impacts on water resources, climate change, and other aspects of the environment. The cumulative impacts analysis must be revised to comply with the requirements of NEPA.

Under NEPA, an EIS must include an evaluation of cumulative impacts,³⁴ defined as:

“[T]he impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

40 C.F.R. § 1508.7. *See also Oregon Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1132–33 (9th Cir. 2007) (“One of the specific requirements under NEPA is that an agency must consider the effects of the proposed action in the context of all relevant circumstances, such that where several actions have a cumulative . . . environmental effect, this consequence must be considered in an EIS.”) (internal quotation marks and citations omitted). Assessing the impacts of a proposed action within the context of existing and foreseeable effects in the same area yields “a realistic evaluation of the total impacts” and ensures that an EIS does not impermissibly “isolate a proposed project, viewing it in a vacuum.” *Grand Canyon Trust v. Fed. Aviation Admin.*, 290 F.3d 339, 342 (D.C. Cir. 2002).

First, the DEIS must include an analysis of cumulative impacts from the Atlantic Bridge Project, discussed in section II.C above. The Atlantic Bridge project is being constructed in the same area of the Proposed Project, during the same general timeframe, and would affect many of the same resources, including the East of Hudson NYC watershed. It is also being undertaken by the Applicant, meaning that details regarding project plans and likely impacts should be readily available to FERC upon request.

The DEIS does include a brief mention of the Atlantic Bridge Project, before concluding that “[b]ecause the Atlantic Bridge Project would not occur at the same time as the AIM Project, and because details are not known, it is not considered further in this analysis.”³⁵ This is not sufficient to satisfy NEPA’s requirements. The projects will be constructed during similar timeframes, with the AIM Project scheduled for construction in 2015 and the Atlantic Bridge Project scheduled for construction in 2015 and 2016.³⁶ In addition to the overlap in 2015, the

³⁴ NEPA requires an analysis of “direct effects” and “indirect effects.” 40 C.F.R. § 1502.16(a),(b). The term “effects” includes those that are “direct, indirect, or cumulative.” *Id.* § 1508.8.

³⁵ DEIS at 4-272.

³⁶ *Id.*

timeframe for construction of the Atlantic Bridge Project is well within the timeframe of long-term, and even many short-term, impacts from the AIM Project.

Given that the projects will impact many of the same resources, using presumably many of the same construction methods by the same company, it is difficult to believe that FERC is unable to evaluate the expected environmental impacts from the Atlantic Bridge Project, as they should be remarkably similar to those of the AIM Project. For example, the Atlantic Bridge Project, as the AIM Project, would be constructed within the East of Hudson NYC watershed – replacing the existing 26 inch pipe with an expanded 42 inch pipe. Both projects risk causing short and long term impacts in the NYC watershed due to increased stormwater runoff, changes in drainage patterns, and disturbance of wetlands. These similar impacts must be considered together in the DEIS in order to provide a comprehensive evaluation of the potential impacts of the Proposed Project.

Second, the DEIS must include an analysis of any cumulative impacts from residential and/or commercial development projects in the East of Hudson NYC watershed that may be constructed within the same period of time as the Proposed Project. As part of the Environmental Report submitted with its application on February 28, 2014, the Applicant noted that various development and redevelopment projects in the NYC watershed may have cumulative impacts on resources when combined with the Proposed Project.³⁷ However, even this cursory identification of watershed development projects, which falls far short of NEPA's required cumulative impacts evaluation, is not included in the DEIS. Instead, the cumulative impacts analysis contained in the DEIS completely ignores the existence of residential and/or commercial development projects within the East of Hudson NYC watershed, projects which fall squarely within the zone of cumulative impacts analysis required by NEPA. Development projects which occur in the East of Hudson NYC watershed would have similar impacts upon water and wetland resources in that area, as they often result in grading during construction, clearing of trees and other vegetation, disturbance of wetlands and buffer areas, increased stormwater runoff, and long-term changes in drainage patterns. Moreover, development projects planned for construction in the same window of time as the Proposed Project are easily identifiable by contacting watershed towns, which must approve proposed projects and will have records of environmental impacts and anticipated construction windows.

The DEIS must include identification and evaluation of each residential and/or commercial development project planned for construction in the East of Hudson NYC watershed during the same anticipated construction timeframe as the Proposed Project. The likely impacts from these projects, along with the Applicant's plans for minimizing those impacts, must be detailed in the DEIS and comprehensively evaluated for potential cumulative impacts to the NYC watershed.

Third, the DEIS must include an evaluation of the impacts associated with increased industrial gas extraction activities that will be facilitated by the AIM Project, which will considerably expand natural gas delivery capacity in the Northeast region and therefore increase demand for gas extraction. The DEIS notes and quickly dismisses any potential cumulative

³⁷ Algonquin Incremental Market Project, Resource Report 1: General Project Description (Feb. 2014), Table 1.14-1, at 1-65 – 1-68.

impacts from increased natural gas extraction, concluding that shale development occurs too far outside the project area to be considered further.³⁸ This ignores the potential for regional level impacts on airsheds, watersheds, and other resources from increased industrial gas development, as well as the potential climate change impacts, discussed below.

Finally, the DEIS must include substantive consideration of the Proposed Project's likely cumulative impacts on climate change. Emissions of greenhouse gases (GHGs) associated with natural gas extraction, production, processing, transport, and infrastructure will be significantly increased by the AIM Project. According to the DEIS, taken together, potential estimated emissions of carbon dioxide equivalent (CO₂e) from the Proposed Project's modifications to compressor stations alone will total more than 325,000 tons per year.³⁹ In addition to emissions from operation of the pipeline and related infrastructure, there are also likely to be increases in methane emissions associated with the increased extraction of natural gas facilitated by the AIM Project. Because methane is a significantly more potent greenhouse gas than carbon dioxide⁴⁰ and recent studies have found that the amount of methane currently emitted into the atmosphere from the natural gas supply chain has been considerably underestimated by regulators,⁴¹ increased methane emissions as a result of this project have the clear potential to be a contributor to global climate change that must also be addressed in the DEIS.

The DEIS mentions climate change only briefly, as part of the cumulative impacts analysis, before concluding that "there is no standard methodology to determine how a project's relatively small incremental contribution to GHGs would translate into physical effects on the global environment."⁴² This statement is, in fact, incorrect. EPA and other federal agencies use the social cost of carbon protocol to estimate climate benefits of agency actions and the economic costs associated with small increases in carbon dioxide.⁴³ In fact, a federal court recently rejected an environmental review conducted by federal agencies under NEPA for failing to estimate the costs associated with increases in GHG emissions. The Court disagreed with the agencies' assertion that it was not possible to estimate the incremental effects of GHG emissions, precisely due to the availability of the social cost of carbon protocol. *High County Conservation Advocates, et al. v. United States Forest Service, et al.*, 44 E.L.R. 20144 (Dist. Colo. 2014) (finding it was "arbitrary and capricious to quantify the *benefits* ... and then explain that a similar analysis of the *costs* was impossible when such an analysis was in fact possible") (emphasis in original). Accordingly, an evaluation of the Proposed Project's cumulative impacts

³⁸ DEIS at 4-276.

³⁹ *Id.* at 4-231 – 4-233, Tables 4.11.1-7 – 4.11.1.11.

⁴⁰ According to the Intergovernmental Panel on Climate Change (IPCC), methane is at least 86 times more potent than carbon dioxide over a 20 year period, and at least 34 times more potent over a 100 year period. See IPCC, Climate Change 2013, The Physical Science Basis: Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2013), Chapter 8, Table 8.7, at 714.

⁴¹ See Miller, et al, "Anthropogenic emissions of methane in the United States," *Proceedings of the National Academy of Sciences*, Vol. 110(50) (published ahead of print Nov. 25, 2013), available at: <http://www.pnas.org/gca?allch=citmgr&submit=Go&gca=pnas%3B110%2F50%2F20018>; Brandt, et al, "Methane Leaks from North American Natural Gas Systems," *Science*, Vol 343, No. 6172 (Feb. 14, 2014), available at: <http://www.sciencemag.org/content/343/6172/733.summary>.

⁴² DEIS at 4-286.

⁴³ EPA, The Social Cost of Carbon (last visited Sep. 28, 2014), available at: <http://www.epa.gov/climatechange/EPAactivities/economics/scc.html>.

on climate change must be included in the DEIS to the fullest extent possible given the court acknowledged tools that are available.

III. The DEIS Should Include Additional Mitigation and Public Disclosure Measures.

NEPA requires that an EIS contain a discussion of “mitigation measures” for avoiding, minimizing, rectifying, reducing, or compensating for environmental impacts. 40 C.F.R. §§ 1502.16; 1508.20. The following additional mitigation measures should be evaluated and included in the DEIS in order to minimize impacts on water resources. The DEIS should also discuss measures to ensure that information related to construction and post-construction activities is made available to the public in a timely and accessible manner.

1. The Applicant should be required to implement additional mitigation measures for the Hudson River HDD crossing.

The Applicant plans to use horizontal directional drilling (HDD) to install a section of new, 42 inch pipeline under the Hudson River. Riverkeeper agrees with FERC’s assessment that if the use of HDD in the location identified by the Applicant is unsuccessful, the Applicant is required to obtain new authorizations for any requested change in location or crossing method.⁴⁴

However, FERC should require the Applicant to include additional mitigation measures for the planned Hudson River HDD crossing. According to the discussion provided in the DEIS, “results of the preliminary hydraulic fracture evaluation suggest a relatively high potential for hydraulic fracture in the soft sediments of the Hudson River HDD alignment.”⁴⁵ While the Applicant has agreed to implement “proper containment structures” should an inadvertent release of drilling fluid occur, there is no discussion of preventative measures that would be taken to ensure that an inadvertent release does not occur. Given the admittedly high likelihood of an inadvertent release, as well as the very real possibility that such a release would be difficult to observe due to river traffic and existing turbidity, the Applicant should be required to implement containment structures prior to beginning drilling in the nearshore area. It is far easier and less environmentally risky to implement preventative measures to avoid a release than to attempt to contain a release that is already occurring.

The DEIS should also assess the benefits of real time monitoring of the HDD drilling operation and water quality in the vicinity of the drilling, to ensure that any loss of drilling fluid into the environment would be quickly discovered and stopped. Riverkeeper called for an evaluation of monitoring of HDD operations in our comments on the scope of the DEIS,⁴⁶ but it has not been included in the current draft.

⁴⁴ DEIS at 2-36.

⁴⁵ *Id.* at 4-45.

⁴⁶ Scope Comments at 2-3.

2. *The Invasive Species Control Plan should be revised to require seeding, planting, and monitoring of native wetland vegetation.*

The DEIS references the Applicant’s Invasive Species Control Plan (ISCP) when describing mitigation for construction related impacts to wetlands.⁴⁷ The ISCP proposes to control the spread of common reed, purple loosestrife, Japanese knotweed and glossy buckthorn, which are invasive plant species that in many cases are well established and comprise over 90% of the vegetative cover.⁴⁸ Common reed (*Phragmites*) and purple loosestrife are in fact well-suited to wetland soils and hydrology because they are obligate hydrophytes that establish and persist in such conditions.

The ISCP, however, proposes to seed restored wetland ROWs with ryegrass, an upland species not suited for establishment in wetlands, within six days of regrading. Ryegrass is well suited to stabilize disturbed soils in upland areas, but it is unlikely to establish in wetland areas, especially where standing water exists. Instead, the ISCP should require seeding, planting and monitoring of native wetland vegetation where wetlands have been disturbed by construction activities.

3. *The DEIS should include an explicit prohibition on the use of chemical additives in hydrostatic test water.*

In our comments on Algonquin’s application for a Certificate of Public Convenience and Necessity, Riverkeeper urged FERC to include a prohibition on the use of chemical additives during hydrostatic testing – which risks contaminating waterbodies and watersheds when the test water is disposed of – as a condition of project approval.⁴⁹ Algonquin agreed to this request within the NYC watershed in its response to our comments.⁵⁰ However, the DEIS merely notes that the Applicant is “not proposing to use any chemicals for testing or for drying the pipeline following hydrostatic testing.”⁵¹ The DEIS should include as a recommended condition for approval a prohibition on the use of chemical additives in hydrostatic test water throughout the project, including but not limited to the portions located within the NYC watershed.

4. *The Applicant should be required to provide third-party, pre- and post-construction testing and monitoring for water supply wells within the project area.*

The DEIS lists dozens of water supply wells within 150 feet of the construction work area for the Proposed Project, some of which may be proximal to blasting. The list includes 47 water supply wells in New York. The Applicant has agreed to offer pre-and post-construction

⁴⁷ DEIS at ES-4, ES-10, 4-62.

⁴⁸ Algonquin Incremental Market Project, Resource Report 3: Fish, Wildlife, and Vegetation (Feb. 2014), Appendix F, *Invasive Species Control Plan*.

⁴⁹ Application Comments at 4.

⁵⁰ Motion for Leave to Answer and Answer of Algonquin Gas Transmission, LLC, Docket No. CP14-96-000 (Apr. 23, 2014) at 19.

⁵¹ DEIS at 4-54.

monitoring of well yield and water quality and has been instructed to report water supply well complaints within 30 days of placing the AIM Project in service.⁵²

While well monitoring and reporting of complaints are a good first step, Riverkeeper urges FERC to require the Applicant to conduct comprehensive, third-party pre- and post-construction well testing and ongoing monitoring of all potentially affected water supply wells. The Applicant should be required to test and monitor for a specified list of potential contaminants, which should be included in the DEIS, as well as for water yield. Finally, any reports regarding water supply well complaints and/or contamination should be made available to the public, as well as to FERC.

5. The Applicant should be required to implement additional mitigation measures to protect fisheries resources and aquatic biota.

Section 4.6.2.3 of the DEIS discusses impacts and mitigation measures regarding fisheries and aquatic resources that could be affected by construction of the Proposed Project. While Riverkeeper agrees with the use of the mitigation measures recommended by NYSDEC and included in the DEIS,⁵³ they alone are insufficient to protect fisheries and aquatic biota that may be negatively impacted by the 39 waterbody crossings planned in New York. In addition to the mitigation measures detailed in the DEIS, the Applicant should be required to collect baseline data regarding pre-construction waterbody and water quality conditions. This should include photo documentation of the pre-existing stream conditions, as requested by the Connecticut Department of Energy and Environmental Protection,⁵⁴ as well as pre-construction water quality testing. The Applicant should then be required to follow up with post-construction water quality testing in order to ensure that restoration measures have been successful, and, if they have not, with the implementation of additional measures.

6. The Applicant should be required to publicly disclose all construction and post-construction plans, reports, and monitoring.

Given the significant public interest in the Proposed Project, as well as the number of individuals and communities that will be affected, the Applicant should be required to disclose all construction and post-construction plans, reports, and monitoring on a publicly accessible website. To the extent that this information is already included in the Environmental Report and the DEIS, it should be relatively easily for the Applicant to include it on a dedicated website, which can then be updated with construction and post-construction information as it becomes available.

IV. Conclusion

For the reasons set forth above, the DEIS contains substantial flaws and fails to meet NEPA's mandate that FERC take a hard look at the potentially significant environmental impacts associated with the AIM Project. Accordingly, the DEIS must be revised and resubmitted for

⁵² *Id.* at 4-34.

⁵³ *Id.* at 4-98 – 4-99.

⁵⁴ *Id.* at 4-98.

public review and comment before FERC makes any decision regarding the Applicant's request for a Certificate of Public Convenience and Necessity.

Sincerely,

A handwritten signature in blue ink that reads "Misti Duvall". The signature is written in a cursive style.

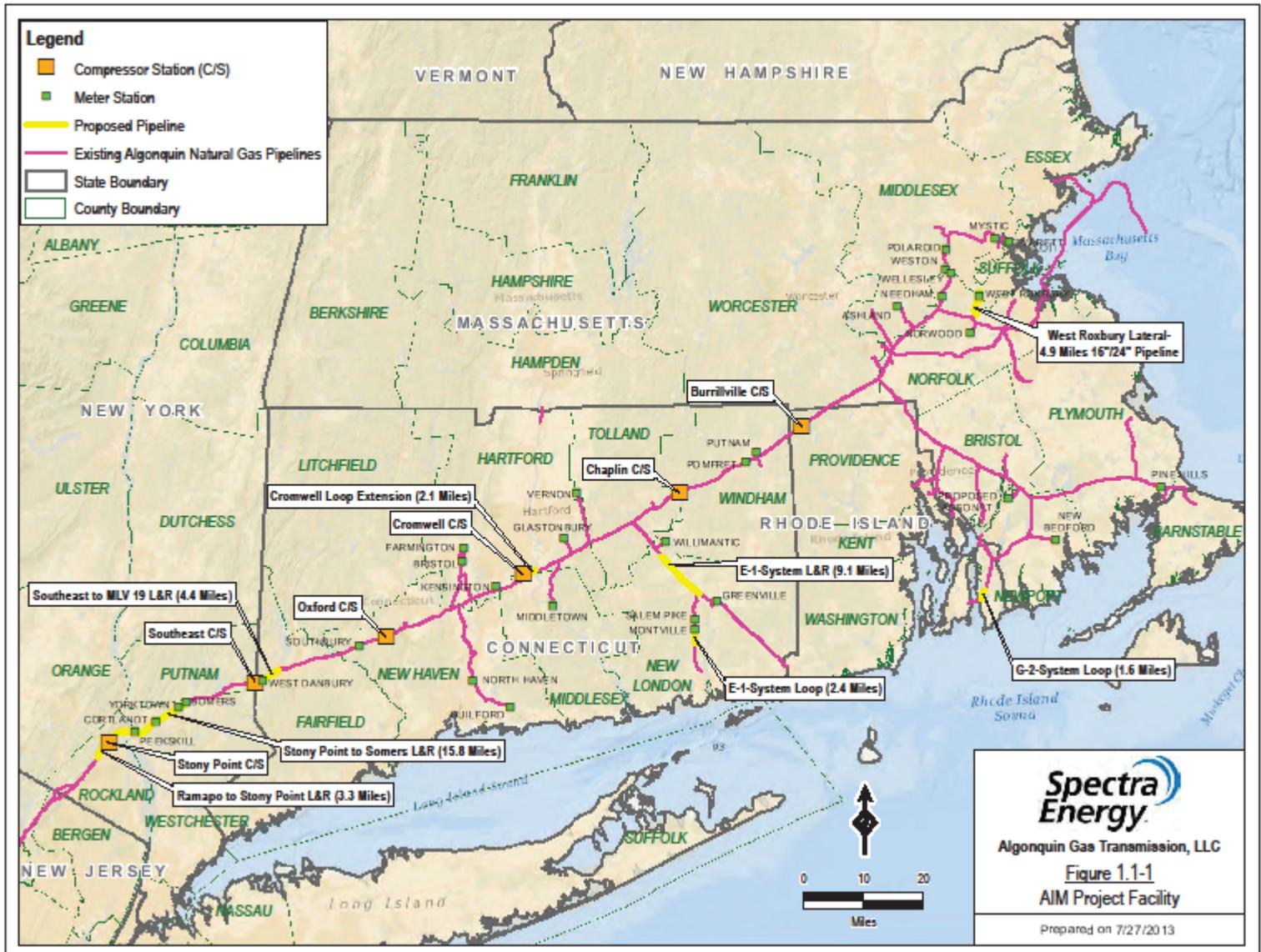
Misti Duvall
Staff Attorney

A handwritten signature in blue ink that reads "William Wegner". The signature is written in a cursive style.

William Wegner
Staff Scientist

APPENDIX A

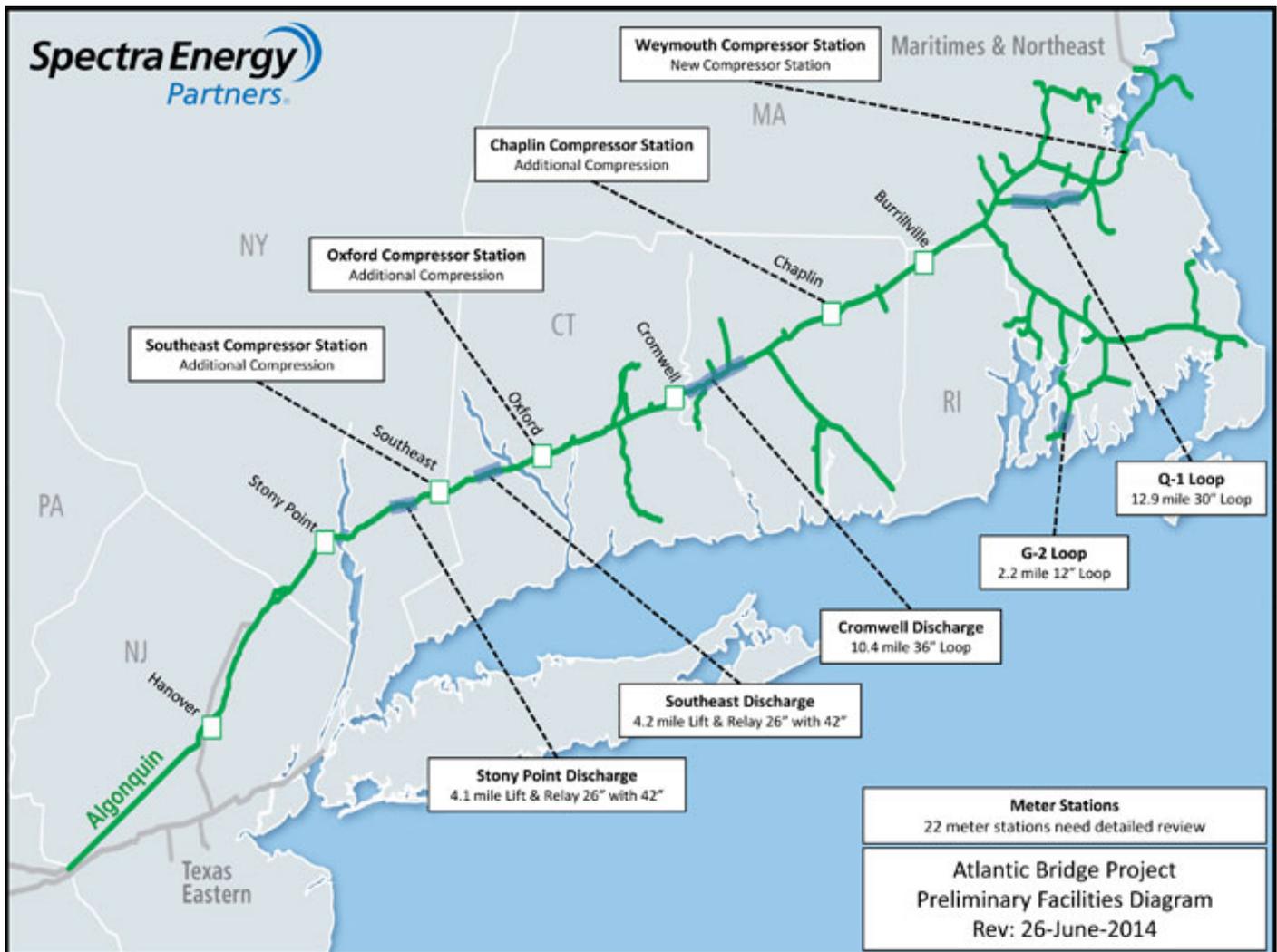
July 2013 Proposed Project Map



Source: Algonquin Incremental Market Project, Resource Report 1: General Project Description, Pre-Filing Draft, Docket No. PF13-16-000 (Jul. 2013) at 1-2, Figure 1.1-1.

APPENDIX B

Atlantic Bridge Project Map



Source: Spectra Energy, Atlantic Bridge Project (last visited Sep. 29, 2014), available at: http://www.spectraenergy.com/content/inline-images/Maps/map_atlantic_bridge_full2.jpg.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at White Plains, NY this 29th day of September, 2014.



Misti Duvall
Staff Attorney
Riverkeeper, Inc.