October 16, 2015

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

Re: Tennessee Gas Pipeline Company, L.L.C., Docket No. PF 14-22-000
Northeast Energy Direct Project;
Scoping Comments of Massachusetts Attorney General Maura Healey

Dear Secretary Bose:

The Office of Massachusetts Attorney General Maura Healey (AGO) is pleased to submit the following scoping comments pursuant to the National Environmental Policy Act, as part of the pre-filing process for the Northeast Energy Direct interstate gas pipeline project ("NED Project"). These scoping comments are submitted in response to the Federal Energy Regulatory Commission's (FERC) June 15, 2015 Notice of Intent to Prepare an Environmental Impact Statement in connection with the Project’s application for a certificate of public convenience and necessity.

The AGO’s attached comments call on FERC to undertake a full assessment of the need for the NED pipeline in conjunction with other natural gas pipeline proposals for the region. The AGO’s comments also urge FERC to undertake a rigorous and comprehensive review of the proposed NED pipeline. Specifically, the AGO’s scoping comments:

- Insist that FERC undertake a full evaluation of the nature and extent of the regional need for new gas capacity. The AGO urges FERC to consider the results of the AGO’s Regional Electric Reliability Options Study, prepared by the Analysis Group, to evaluate options to address regional electricity reliability in New England, including natural gas capacity needs, through 2030.

- Propose that FERC combine its NEPA reviews of several pending New England pipeline projects into a single process (a combined Environmental Impact Statement) to avoid piecemeal review, to utilize a common analysis of regional gas demand, and to compare each projects’ impacts and benefits.
Focus on the need for FERC to scrutinize and condition any approval on adherence to two important Massachusetts policies – the protection of conservation lands under Article 97 of the Massachusetts Constitution, and the Massachusetts Global Warming Solutions Act greenhouse gas emissions reduction targets.

Insist on a thorough review of the many environmental and socioeconomic implications of the project (including its impacts on important ecological resources, public safety, and local communities), and all reasonable alternatives to the current proposal.

AG Healey would like to thank the Commission for this opportunity to provide detailed scoping comments on the NED Project.

Respectfully submitted,

Melissa A. Hoffer,
Chief, Energy and Environment Bureau,
Christophe Courchesne,
Chief, Environmental Protection Division,
Matthew Ireland,
Assistant Attorney General,
Environmental Protection Division
Scoping Comments of Massachusetts Attorney General Maura Healey to Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission for the Tennessee Gas Pipeline Company, L.L.C., Northeast Energy Direct Project, Docket No. PF 14-22-000

INTRODUCTION AND SUMMARY OF COMMENTS

The Office of Massachusetts Attorney General Maura Healey is pleased to submit the following scoping comments pursuant to the National Environmental Policy Act, as part of the pre-filing process for the Northeast Energy Direct interstate gas pipeline project (the "NED Project" or "the Project"). These scoping comments are submitted in response to the Federal Energy Regulatory Commission’s ("FERC" or the "Commission") June 15, 2015 Notice of Intent to Prepare an Environmental Impact Statement in connection with the Project’s application for a certificate of public convenience and necessity ("CPCN").

The NED Project proposed by the Tennessee Gas Pipeline Company, L.L.C. ("Tennessee Gas") is among the most significant energy infrastructure proposals in recent Massachusetts history. As proposed, the NED Project calls for construction of a 188-mile, 30-inch pipeline designed to deliver up to 1.3 billion cubic feet per day ("Bcf/day") of natural gas from Wright, New York, to Dracut, Massachusetts, at a total cost of at least $3 billion. As currently designed, 64 miles of pipeline would be located in Massachusetts.1 The NED Project also would construct nine new compressor stations and thirteen new meter stations, and modify an existing compressor station and twelve existing meter stations to service the new pipeline.2

If constructed, the NED Project would have major and lasting consequences for Massachusetts communities, the Commonwealth’s natural resources, and the economy and energy systems throughout the Northeastern United States. The NED Project would double the capacity of Tennessee Gas’s pipeline system in New England and increase New England’s total interstate natural gas pipeline capacity of 3.951 Bcf/day by nearly one-third in a single project.3

In New England and in Massachusetts in particular, there is intense debate regarding the nature and extent of the need for additional natural gas pipeline capacity—both for the

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1 See Tennessee Gas’s Updated Draft Environmental Resource Report for the NED Project, filed with FERC on July 24, 2015 ("RR"), RR 1 at 1-23.
2 Id.
projected future growth in demand for customers of local natural gas distribution companies ("LDCs") and for natural gas-fired power plants on which the region is increasingly dependent for electric power generation. Gas and electric utilities, gas pipeline developers, and the Independent System Operator ("ISO-NE") claim that there are capacity constraints in New England’s existing pipeline infrastructure during periods of peak winter demand—constraints that can lead to natural gas pricing volatility and corresponding spikes in wholesale electric prices—and have argued that significant new pipeline development is needed to alleviate these constraints, preserve electric system reliability, and lower market prices. Other stakeholders, including over fifty Massachusetts municipalities, regional planning organizations, clean energy advocates, property owners, environmentalists, community groups, power generators, and liquefied natural gas ("LNG") interests, have vigorously opposed new pipeline development, and the NED Project in particular, arguing that such development requires significant environmental and other impacts that are unacceptable to local residents and communities; new fossil fuel pipelines are antithetical to the region’s goals to reduce energy sector greenhouse gas emissions; and pipeline system constraints and incremental gas capacity needs, if any, are short in duration and can be addressed through better use of the existing natural gas system and alternative energy solutions like energy efficiency and renewables. The Attorney General’s Office ("AGO") will soon release a study it commissioned, discussed in more detail below, that examines the extent of New England’s need for additional energy supplies to ensure electric system reliability through the year 2030, and analyzes alternative solutions to meeting any such need, including the costs to ratepayers and effects on greenhouse gas emissions.

4 Tennessee Gas contends that the NED Project will “meet the growing energy needs in the Northeast U.S., and more specifically, in the New England Region, by adding significant pipeline capacity that will alleviate the transportation constraints in the region and lead to lower natural gas costs over time.” See Transmittal letter filed with the July 24, 2015, RRs. See also Reply Comments of the Massachusetts Attorney General, filed July 6, 2015, in An Investigation by the Department of Public Utilities into the Means by Which New Natural Gas Delivery Capacity may be added to the New England Market, Massachusetts Department of Public Utilities, D.P.U. 15-37, at pp. 2-3, attached as "Exhibit 1."

5 In public scoping meetings in Massachusetts, numerous stakeholders questioned the need for the NED project, stated that such a large pipeline project was inconsistent with efforts to reduce dependence on fossil fuels and promote the growth and development of clean energy technology and renewables, and further questioned the project’s impacts on local property owners, the environment, and the Commonwealth’s ability to meet greenhouse gas reduction goals, among other concerns. See e.g. Transcript of Public Scoping Meeting in Dracut, Massachusetts, August 11, 2015 ("Dracut Scoping Meeting"). See also, e.g. Northeast Municipal Gas Pipeline Coalition ("NMGPC"). a coalition of public officials from twelve Massachusetts municipalities and one New Hampshire town, written testimony filed at the August 11, 2015 Dracut Scoping Meeting; Trustees of Reservations scoping comments filed August 26, 2015, at pp. 1-2; Franklin Regional Council of Governments (FRCOG), scoping comments prepared by and filed jointly with five other Massachusetts and two New Hampshire regional planning commissions on September 23, 2015, at pp. 6-9; Northeast Energy Solutions, Inc. ("NEES") comments filed on August 18, 2015 at pp. 2-3; See also Reply Comments of the Massachusetts Attorney General, filed July 6, 2015 in D.P.U. 15-37, supra note 4.
Against the backdrop of this debate, pipeline developers have proposed multiple natural gas pipeline projects affecting New England, including the largest single project—the NED Project. FERC has recently approved Spectra Energy’s Algonquin Incremental Markets (“AIM”) project, now under construction, and is in the final stages of reviewing Tennessee Gas’s Connecticut Expansion project (“CT Expansion”), which together will add more than 0.4 Bcf/day of additional capacity to New England. A series of additional projects are at various stages of securing customers and applying for FERC CPCNs, including the NED Project, Portland Natural Gas Transmission System’s (“PNGTS”) Continent to Coast (“C2C”) project (currently 0.168 Bcf/day), Spectra Energy’s Atlantic Bridge project (currently 0.13 Bcf/day, in FERC pre-filing) and Access Northeast project (proposed jointly with Spectra Energy, National Grid and Eversource Energy, up to 1 Bcf/day) projects. Together with the AIM Project and the CT Expansion project, these projects total nearly 3.0 Bcf/day of additional capacity.

With these projects on the table, New England is at crossroads in the development of new energy infrastructure. While many decisions about New England’s energy future will arise in other venues, FERC’s overriding siting authority for natural gas infrastructure encompasses the obligation to provide a comprehensive and rigorous review of all proposed interstate natural gas pipeline projects pending before it, including the NED Project.

Under both the Natural Gas Act and the National Environmental Policy Act (“NEPA”), FERC’s review must address a series of issues that are fundamental to New England’s and Massachusetts’s energy future: the nature and extent of the regional need for gas capacity; the reasonable alternatives to meeting that need, if any; and the environmental and socioeconomic impacts of those reasonable alternatives. Federal law also requires that FERC’s review address the full range of impacts from new gas pipelines (including the direct and indirect air and greenhouse gas emissions caused by the projects), the impacts to public and conserved lands, the economic burdens for residents and communities, and the many other impacts to natural resources as well as public health and safety. As evidenced by the thousands of scoping comments filed thus far expressing concerns about the NED Project, these issues are of significant concern to stakeholders throughout Massachusetts and New England.

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For the reasons set forth in these comments, the AGO believes that FERC should undertake an integrated, inclusive review of all pending pipeline projects affecting New England in one combined Environmental Impact Statement ("EIS") in order for FERC to meet its obligations under NEPA and the Natural Gas Act consistent with U.S. Supreme Court and other federal court authority. A combined EIS would reasonably consider the issues discussed above and the various projects as alternatives to each other in delivering additional energy to New England, along with the other reasonable alternatives consisting of alternative pipeline routes and alternative energy sources like energy efficiency, renewables, and LNG. The combined EIS should place the projects in the context of the region's overall need for gas pipeline capacity, which FERC should independently study. FERC's standard practice of reviewing individual projects piecemeal is simply not adequate to address the overriding and common issues affecting all pending proposals and could result in the approval of much more pipeline capacity than is consistent with the public interest.

Regardless of whether FERC prepares a combined EIS, the AGO also requests in these comments that FERC scrutinize the specific need for, and the full range of impacts from, the NED Project as proposed, including several concerns of special importance to the AGO and the Commonwealth. Foremost among these concerns is the availability of reasonable alternatives to the Project. Under NEPA, FERC must undertake a meaningful review of available pipeline and no-build alternatives that would allow the region to meet any identified need without the NED Project. Similarly, FERC must analyze all reasonable routing alternatives to the NED Project as proposed, including the use of Tennessee Gas's existing pipeline right-of-way and collocation with state and federal highways such as the Massachusetts Turnpike. With regard to the Project's impacts, FERC should place special emphasis on its evaluation of the Project's impacts on land protected under Article 97 of the Massachusetts Constitution, on the significant ecological resources along the proposed route, and on the Commonwealth's greenhouse gas emission reduction goals under the state's Global Warming Solutions Act ("GWSA"). Finally, FERC must review the public health impacts of the proposed Project, particularly compressor station emissions.

7 Global Warming Solutions Act, St. 2008, c. 298. See Massachusetts General Law ("M.G.L.") c. 21N, §§ 1-9.
ABOUT THE ATTORNEY GENERAL’S OFFICE AND THE ENERGY AND ENVIRONMENT BUREAU

Attorney General Maura Healey is the chief law enforcement officer for the Commonwealth of Massachusetts. The AGO, through its Energy and Environment Bureau, works to protect utility ratepayers and our environment, and to reduce the threat of climate change for the people and families of the Commonwealth. As the state’s Ratepayer Advocate, the Bureau’s Energy and Telecommunications Division represents consumers in matters involving the price and delivery of natural gas, electricity, water, and telecommunication services before state and federal regulators. The Bureau’s Environmental Protection Division and Environmental Crimes Strike Force enforce the laws that protect our air and water, preserve our lands and open space, require the cleanup of contaminated sites, and govern the use of pesticides and the handling and disposal of hazardous waste. The Bureau’s integration of energy and environmental advocacy ensures that our office speaks with one voice in addressing the intertwined ratepayer and environmental protection matters that impact the Commonwealth and our residents.

The AGO is committed to a clean energy future in Massachusetts built around cleaner, renewable energy sources that allow Massachusetts to achieve regional and federal climate goals, as well as to meet the mandates of the GWSA. Attorney General Healey also is seeking to protect ratepayers by ensuring that when the Commonwealth makes long-term decisions about additional gas capacity investments, it is done on the basis of facts that quantify future natural gas demand, and take into account all cost-effective sources that can be deployed to meet that demand, including energy efficiency, renewables, large scale hydropower, LNG, and natural gas.

DETAILED COMMENTS

I. FERC Should Undertake a Robust Assessment of the Need for Additional Natural Gas Capacity as the Starting Point for the EIS.

FERC’s NEPA review of the NED Project must begin with a complete and inclusive statement of the project’s “purpose and need.” 40 C.F.R. § 1502.13. An appropriate purpose and need statement is critical because “the range of alternatives that is deemed reasonable depends upon the underlying purpose and need to which the agency is responding.” NRDC v. Evans, 232 F. Supp. 2d 1003, 1038 (N.D. Cal. 2002). In other pipeline EISs, FERC has defined purpose and need with reference to applicant objectives, including

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See M.G.L. c. 21N, §§ 1-9.
its proposed pipeline receipt and delivery points and the volume of gas proposed to be delivered by the projects. Although FERC has committed to considering the need for the gas capacity and the related AGO study of the New England region's as part of its review of Tennessee Gas's application for a certificate of public convenience and necessity, FERC has indicated that this inquiry will not be part of the EIS.

That approach is insufficient here, and inconsistent with the Council on Environmental Quality's ("CEQ") NEPA guidance and federal court authority. For these reasons, the AGO urges FERC to evaluate New England's gas capacity needs in the EIS. In a purpose and need statement, "an agency cannot define its objectives in unreasonably narrow terms." Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgt, 606 F.3d 1058, 1070 (9th Cir. 2010). Because the purpose and need statement drives the selection of alternatives for study in the EIS, agencies "cannot define a project's purpose and need so narrowly that it contravenes NEPA's mandate to evaluate [all] reasonable alternatives." Coalition for the Advancement of Reg'l Transp. v. FHA, 576 Fed.Appx. 477, 487 (6th Cir. 2014), citing Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

Here, the NED Project proposes to increase gas pipeline capacity to New England to address a supposed need for fuel to serve electric generators and LDC load. The NED Project justifies its proposal with an unprecedented expectation that electric utilities may contract for more than a majority of the Project's capacity. However, the applicant's views of the project purpose and need are not controlling, and the EIS should be guided by FERC's independent judgment. See, e.g., Nat'l Parks & Conservation Ass'n, 606 F.3d at 1072 (agency erred by "adopting private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives"). Thus, as part of the EIS for the NED Project, it is FERC's obligation under NEPA to evaluate and define the nature and extent of New England's gas capacity needs. This task requires searching scrutiny of


10 The AGO is grateful for the Commission's interest in the findings of the study, as FERC indicated during the August 12, 2015 meeting FERC held with Massachusetts state agencies. See also AGO Comments filed with FERC on September 21, 2015, p. 2, attached as "Exhibit 3" (informing FERC that the AGO's Electric Reliability Study for the New England Region will be completed soon and will be filed thereafter, along with commentary on the study's implications for FERC's CPCN decision).

the supposed need for the NED Project to serve New England’s electric system and LDC load.

A. Electric System Needs

First and foremost, FERC must take into account and evaluate the need for Tennessee Gas’s unprecedented plan to support the balance of the NED Project’s capacity through contracts with electric utilities. Under this plan, electric utilities will purchase firm natural gas capacity and resell that capacity in the market to increase gas availability for electric generation, primarily during winter peak demand, which occurs only a few dozen days per year. Tennessee Gas recently announced an open season for the entire uncommitted portion of the NED Project’s capacity to achieve this objective.\(^\text{12}\) In the announcement, Tennessee Gas specifically referenced regulatory proceedings in four of the six New England states, including Massachusetts, which could advance approvals of such contracts.\(^\text{13}\)

The Massachusetts Department of Energy Resources petitioned the Massachusetts Department of Public Utilities (“DPU”) to open an investigation into how new natural gas delivery capacity may be added to the New England market, including through a proposed mechanism that would allow Massachusetts electric distribution companies (“EDCs”) to purchase pipeline capacity and recover costs from customers.\(^\text{14}\) The AGO was an active participant in the proceeding, filing detailed comments that urged the DPU to focus on finding the most beneficial and cost effective way to address spikes in winter electricity prices due to gas capacity constraints, and to undertake a rigorous regional economic study of new gas capacity and alternatives before considering any proposal to authorize EDCs to purchase gas capacity with ratepayer backing.\(^\text{15}\) The AGO also urged the DPU to consider the interrelationship of gas and electric markets in Massachusetts and to conduct a factual analysis of future demand and cost-effective energy efficiency resources before making any


\(^{13}\) See id. at p. 1, n. 1.


\(^{15}\) See Initial Comments of the Massachusetts Attorney General, Investigation by the Department of Public Utilities into the Means by Which New Natural Gas Delivery Capacity may be added to the New England Market, D.P.U. 15-37 (June 15, 2015), attached as attached as “Exhibit 6.”
decisions regarding additional gas capacity investments. The AGO warned that the proposed mechanism for the EDCs to procure gas capacity appeared contrary to state law.

A wide range of other stakeholders—including environmental groups, power generators, and clean energy advocates and businesses—also expressed strong objections to such a mechanism. Of the fifty-two sets of comments received in the DPU’s investigation, only eight commenters supported EDCs entering into long-term pipeline capacity contracts; of those eight commenters: five are EDCs or pipelines companies (National Grid, Eversource Energy, Tennessee Gas Pipeline, PNGTS, and Algonquin Gas Transmission / Spectra Energy) that stand to profit from the proposal; one commenter is an industry group that promotes natural gas; and one commenter, Coalition to Lower Energy Costs, is an end user group funded in part by, and represented by the same counsel as, Tennessee Gas. On October 2, 2015, the DPU nonetheless issued an order urging EDCs to file proposals to purchase natural gas pipeline capacity for resale to electric generators, finding no legal or other impediment to such proposals. Any such EDC proposals are likely to be vigorously opposed by numerous stakeholders, including the AGO, and any DPU approval of said proposals would likely be subject to legal challenge.

**The AGO’s Electric Reliability Options Study for the New England Region**

In light of the AGO’s call for a detailed factual analysis of gas capacity constraints and electric system options to address those constraints, if any, the AGO received a private grant to commission an independent and comprehensive study by The Analysis Group to evaluate all options to address any electricity reliability needs in New England through the year 2030. The study will provide an assessment of costs and benefits, including price impacts, of each option, consistent with the region’s energy and climate goals. The study will address both winter and summer reliability needs, and include an analysis of all potentially available resource options, in specific quantities, to meet those needs, including natural gas (both natural gas pipelines and LNG), oil, hydropower imports, energy

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16 See id., at 4-16.

17 See Reply Comments of the Massachusetts Attorney General, D.P.U. 15-37 (July 6, 2015), note 4 supra.


efficiency, demand response, and renewables. The study has benefited from significant input from a stakeholder advisory group, which provided feedback on modeling assumptions and inputs and included representatives from major utilities, electric generators, the natural gas industry, the business community, and clean energy advocates. The study will be completed soon, and the AGO will immediately submit the study to FERC for its consideration in this docket. At a minimum, the AGO urges FERC to consider and discuss all relevant findings of the study in defining the purpose and need for the project in the EIS, as well as in the EIS’s alternatives analysis.

B. LDC Needs

Second, FERC should consider whether the gas capacity amounts under Tennessee Gas’s precedent agreements with New England LDCs—the only transportation service commitments currently supporting the NED Project’s development—are justified not only by the LDC’s need but also an absence of reasonable alternatives. On August 31, 2015, DPU approved 20-year firm transportation service agreements between three LDCs and Tennessee Gas to purchase natural gas capacity on the NED Project. Pursuant to the precedent agreements between the LDCs and Tennessee Gas, Tennessee Gas will deliver a total of 151,962 dekatherms per day (“Dth/day”), 114,300 Dth/day, and 36,000 Dth/day of interstate pipeline capacity to the distribution systems of Boston Gas Company d/b/a National Grid, Bay State Gas Company d/b/a Columbia Gas of Massachusetts, and the Berkshire Gas Company, respectively.20 Separately, on October 2, 2015, the New Hampshire Public Utilities Commission approved a similar precedent agreement between Liberty Utilities, a New Hampshire LDC and Tennessee Gas for the delivery of 115,000 Dth/day of capacity on the NED Project.21 Tennessee Gas has also announced several other smaller LDC agreements.22


However, three of the NED Project commitments are in legal limbo because the DPU approvals by the Department of Public Utilities are now on appeal to the Massachusetts Supreme Judicial Court and there are numerous alternatives that allow these LDCs to meet their projected future gas demand without the NED Project but that the DPU failed to consider. In this latter regard, we direct FERC’s attention to the record before the DPU, where the AGO and other stakeholders opposed approval of the precedent agreements. Under these circumstances, FERC should consider the nature and extent of the LDC need for gas in the context of both pipeline and non-pipeline alternatives, in order to evaluate and define the overall purpose and need for the NED Project in the EIS.

II. FERC Should Undertake a Combined EIS Encompassing All Pending Gas Pipeline Proposals Affecting New England

As discussed in the introduction to these comments, FERC’s review of the NED Project coincides with pending and upcoming FERC reviews of several other gas pipeline proposals affecting New England. Together with the two pending incremental pipeline projects, these proposals would add up to 3 Bcf/day of additional natural gas capacity to the region. The following table lists these projects and their current status.

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about LCD interest in receiving natural gas from the NED Project. See October 8, 2015 FERC request for information to Tennessee Gas at pp. 2–3, ¶¶ 2–4 (requesting information about LCDs and their service areas that have expressed “direct interest” in receiving gas from the NED Project, other potential LDC “viable candidates” to receive NED gas, and with information about potential end-users/customers for capacity created by the NED Project). FERC’s October 8, 2015 request for information is further discussed in Section IV, infra.


24 See Attorney General’s Initial Brief, Petition of Boston Gas Company d/b/a National Grid for approval of a Precedent Agreement with Tennessee Gas for the NED Project, D.P.U. 15-34 (July 17, 2015), attached at Exhibit 7. See also See Attorney General’s Initial Brief, Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of a Precedent Agreement with Tennessee Gas for the NED Project, D.P.U. 15-39 (July 17, 2015); Attorney General’s Initial Brief, Petition of The Berkshire Gas Company for Approval of a Precedent Agreement with Tennessee Gas for the NED Project, D.P.U. 15-48 (July 17, 2015); See Reply Comments of the Massachusetts Attorney General, in D.P.U. 15-37 (July 6, 2015), at pp 2-3, note 4 supra.

### Table: Present and Proposed New England Natural Gas Pipeline Capacity

<table>
<thead>
<tr>
<th>Incremental pending projects</th>
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<tbody>
<tr>
<td>Spectra AIM</td>
<td>0.342 Bcf/day</td>
</tr>
<tr>
<td>Tennessee Gas CT Expansion</td>
<td>0.072 Bcf/day</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.414 Bcf/day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Announced projects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NED Project</td>
<td>1.3 Bcf/day</td>
</tr>
<tr>
<td>Spectra Access Northeast</td>
<td>≤1.0 Bcf/day</td>
</tr>
<tr>
<td>Spectra Atlantic Bridge</td>
<td>0.13 Bcf/day</td>
</tr>
<tr>
<td>PNGTS C2C</td>
<td>≤0.13 Bcf/day</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Up to 2.974 Bcf/day, approximately 75% of existing</td>
</tr>
</tbody>
</table>

These projects would collectively increase New England’s existing interstate natural gas pipeline capacity by approximately 75% within a relatively short period of time. With so many active natural gas pipeline projects, there is a real risk that, if FERC considers each new project in isolation, it will fail to capture the common, synergistic, and cumulative impacts presented by these similar projects during its NEPA reviews. Consequently, this method could threaten the legal integrity of the NEPA process and impair FERC’s ability to reach a well-informed decision on the respective applications for CPCNs under the Natural Gas Act. As the Supreme Court has noted, “when several proposals for [ ] actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together.” Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976). See 40 C.F.R. § 1508.25(a) (EIS must include other “connected,” “cumulative,” and “similar” actions). The First Circuit has likewise urged comprehensive review of multiple projects in a single EIS:

[0]ne initial comprehensive study, which could be referred to and supplemented by less comprehensive individual studies... would appear to reflect a better use of scarce resources. In such a case it would not seem sensible to adopt the piecemeal approach which [the agency] seeks to adopt, whereby it will prepare a modified impact statement separately for each proposed [project], an approach akin to equating an appraisal
of each tree to one of the forest. . . . It seems a perversion of NEPA for [the agency] to approach each parcel, wholly depending in its timing of environmental review on the filing of applications. . . . and considering anew the scene as it is changed by each subsequent approval. Not only would this be wasteful of bureaucratic resources, but the plurality of possible appeals would suggest a wasteful prolongation of time spent in litigation.

*Jones v. Lynn, 477 F.2d 885, 890-91 (1st Cir. 1973).*

A well-established tool for addressing similar projects within a geographic area is a programmatic EIS. The NEPA implementing regulations urge agencies to consider conducting a programmatic EIS in several circumstances, including when an agency is considering approvals for multiple projects in one geographic region, or for multiple projects that are similar in other ways. See 40 C.F.R. § 1502.4(c)(1)-(2) (EISs on broad issues appropriate when federal actions share “relevant similarities, such as common timing, impacts, alternatives, [and] methods of implementation”). In addition, 40 C.F.R. § 1508.25(a)(3) requires agencies to consider preparing a singular, programmatic EIS for “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, such as common timing or geography.”

A recent CEQ memorandum emphasizes that agencies should prepare a regional or programmatic EIS when “approving multiple actions” that are “temporally or spatially connected and will have a series of associated concurrent or subsequent decisions.” This may include similar projects in a region, or a “suite of ongoing, proposed or reasonably foreseeable actions that share a common geography or timing, such as multiple activities within a defined boundary....” *Id.* See also *Churchill Cnty. v. Norton, 276 F.3d 1060, 1077 (9th Cir. 2001)* (“At least when the projects in a particular geographical region are foreseeable and similar, NEPA calls for an examination of their impact in a single EIS”) (internal quotations and citations omitted); *Nat’l Wildlife Fed’n v. Appalachian Reg’l Comm’n, 677 F.2d 883, 888 (D.C. Cir. 1981)* (“the environmental consequences of proposed actions must all be considered together in a single, programmatic EIS when their impacts will have a compounded effect on a region”).

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While a full programmatic EIS with full tiered supplemental EISs for each project may not be necessary, a combined EIS covering all pending projects would be efficient and avoid delay. See CEQ NEPA Guidance at 15 (encouraging combined programmatic and site-specific environmental analysis in single EIS when appropriate).

A combined EIS would achieve the same goal of addressing the projects in a comprehensive, integrated manner that ensures a single assessment of regional need, a common base of environmental information, methodological consistency, and a robust NEPA-compliant alternatives analysis.

A combined EIS would also most effectively and efficiently identify and evaluate system and route alternatives that avoid or minimize environmental impacts for the entire region, and provide a more comprehensive and informed cumulative impacts analysis than provided by separate, isolated NEPA reviews for each pending pipeline project. In a combined alternatives analysis, FERC would be able to compare the environmental impacts of all pending projects and determine the optimal combination and alignment of pipelines to deliver any needed gas to the New England market. At the end of the process, FERC can utilize the information in a combined EIS to reject proposals with capacity that exceeds the identified regional need or with inferior environmental impact profiles.

Given the current status of FERC review for all pending pipeline projects, combining them all into a single EIS would not cause delay, and would result in a more efficient and robust EIS which fulfills FERC’s mandate under NEPA.

Even if FERC declines to perform a combined EIS for all pending projects, in order to meet its NEPA mandate, FERC should, at the very least, conduct a comprehensive alternatives analysis that includes a detailed study of the wide range of pipeline and energy alternatives to the NED Project, as discussed in Section III below. Thereafter in Section IV, the AGO provides detailed comments concerning the environmental impacts that FERC


28 As discussed further in Section IV, infra, Tennessee Gas has not yet filed an application for the NED Project, and must first reply to all scoping comments and answer FERC’s October 8, 2015, request for information and comments on Tennessee Gas’s July 24, 2015 Draft Resource Reports. Likewise, applications have not been filed for Spectra’s Atlantic Bridge project, which is currently in pre-filing; Spectra’s Access Northeast project, which Spectra has announced will enter pre-filing this year; or PNGTS’s Continent-to-Coast project, which may enter pre-filing soon. The Atlantic Bridge, Access Northeast, and Continent-to-Coast projects are proposed along existing pipelines and therefore are unlikely to require the level of environmental analysis that the NED Project will require.
must address in its NEPA review of the NED Project, regardless of whether that NEPA review is pursued jointly with other projects.

III. FERC Should Include Detailed Study of the Wide Range of Pipeline and Energy Alternatives to the NED Project, including the No-Action Alternative, in the EIS.

FERC’s analysis of alternatives to the proposal is “the heart of the environmental impact statement,” and “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” 40 C.F.R. § 1502.14 (emphasis added). CEQ regulations make clear that FERC must “rigorously explore and objectively evaluate all reasonable alternatives... devot[ing] substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” 40 C.F.R. §§ 1502.14(a)-(b). FERC must consider the “no action” alternative and all reasonable alternatives, including those that are not within the applicant’s direct capabilities. See 40 C.F.R. § 1502.14(c)-(d). FERC also must: (i) justify—as supported by independent, expert analysis—the exclusion of any of these alternatives from detailed analysis in the EIS, and (ii) provide a detailed and holistic comparison of the impacts and benefits of the analyzed alternatives, which must guide FERC’s ultimate determinations on the application. See 40 C.F.R. §§ 1502.14(a)-(b).

A NEPA-compliant alternatives analysis depends on an appropriately framed purpose and need statement because the selected alternatives must meet the purpose and need for the project. As discussed above, the NED Project EIS’s purpose and need statement (or the statement in any combined EIS covering multiple projects) should build on FERC’s analysis of New England’s need for natural gas capacity or equivalent energy resources. That analysis will guide FERC in identifying the reasonable alternatives to the NED Project in the EIS.

FERC’s alternatives analysis should address, at a minimum, the following alternatives:

Alternative Pipeline Routes, including Existing Pipeline Rights-of-Way. Tennessee Gas has already proposed shifts to the route to its original NED Project proposal, including the

29 See also CEQ Executive Office of the President, Memorandum to Agencies, Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act, 2a, at http://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf (“In determining the scope of alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant”) (emphasis added).
relocation of the original proposed right-of-way to the north through southern New Hampshire. FERC should assess all reasonable alternative routes for the NED Project, especially routes that either make use of existing pipeline infrastructure like Tennessee Gas’s existing interstate pipeline, or follow disturbed rights-of-way like the Massachusetts Turnpike or railroad rights-of-way. In addition, FERC should analyze, on a mile-by-mile basis, those potential alternative routes that avoid or minimize impacts to conserved land and other community resources identified by commenters, and also environmental impacts like the disruption of wetland resources and priority habitat for species of special concern.

Alternative Pipeline Sizes and Configurations Given Current Contractual Commitments. FERC should analyze potential options for alternative pipeline sizes and configurations that would cost-effectively provide the pipeline capacity for which Tennessee Gas has currently entered into precedent agreements with New England LDCs, in lieu of the 1.3 Bcf/day identified in Tennessee Gas’s filings in this docket to date. In particular, FERC should study in depth those alternative configurations that would permit use of Tennessee Gas’s or another pipeline company’s existing pipeline infrastructure in New England.

Non-Pipeline Energy Alternatives. As discussed above, the purpose and need for the NED Project should be defined with reference to a comprehensive and independent assessment of regional gas capacity needs. To the extent that gas capacity needs are identified, FERC should analyze non-pipeline gas system alternatives, including LNG imports and LDC storage. Moreover, gas is only one of many energy resources that are capable of supplying electric and thermal energy to consumers. As numerous commenters have argued in submissions to this docket, these other resources—like gas and electric energy efficiency, renewable thermal energy, renewable electric generation, and electric system demand response—are readily available and viable means of meeting customer electric and thermal loads. As such, incremental additions of these resources are reasonable alternatives to the NED Project that should be studied in depth in the EIS. The AGO understands that FERC typically views such alternatives as beyond the scope of its required NEPA alternatives analysis for pipeline projects. However, in light of the evident public interest in non-pipeline alternatives and the clear command of NEPA that all reasonable project alternatives be included in an EIS, FERC should evaluate energy resources available to New England that would substitute for natural gas and provide equivalent amounts of electric and/or thermal energy to consumers.

**The No-Action Alternative.** NEPA itself requires FERC to perform a robust and impartial assessment of the environmental, cultural, and socio-economic implications of simply denying the project. 40 C.F.R. § 1502.14(d). See, e.g., Pit River Tribe v. U.S. Forest Serv., 469 F. 3d 768, 786 (9th Cir. 2006) (EIS inadequate for failure to consider no-action alternative). In the context of the ongoing debate about the nature and extent of the need for new gas capacity in New England and FERC’s potential findings in assessing the purpose and need for the project, FERC should be open to deciding in the EIS that the impacts of the proposed project and other reasonable “action alternatives” are unacceptably significant and that the “no-action” alternative is the preferred alternative.

**IV. FERC Should Conduct a Comprehensive and Robust Evaluation of All Environmental Impacts of the NED Project Proposal and Alternatives**

**Introduction**

As a part of its NEPA-mandated analysis, FERC must evaluate the proposed NED Project’s effects on natural resources and affected ecosystems, along with the direct, indirect, and cumulative impacts of the project’s aesthetic, historic, cultural, economic, social, and health effects. See 40 C.F.R. § 1508.8. In addition, FERC must evaluate strategies to mitigate any identified harmful effects to the environment that would result from the proposed NED Project.

At the outset, FERC’s preparation of a thorough and accurate EIS depends on full and complete information from Tennessee Gas about its NED Project proposal and its impacts. Despite the flexibility of the pre-filing process, Tennessee Gas’s filings and submissions to date have failed to provide FERC and the public with sufficiently detailed information about the NED Project, its route, its impacts, and the alternatives considered by Tennessee Gas. The AGO is concerned that Tennessee Gas’s Draft Resource Reports filed to date do not adequately address, among many other data gaps, NED Project impacts on conservation land protected by both Massachusetts constitutional and statutory provisions, or adequately evaluate the Project’s greenhouse gas emissions and effect on Massachusetts’ ability to meet GWSA greenhouse gas reduction targets.

Therefore, FERC should require Tennessee Gas to complete all surveys, studies, data compilations, and evaluations undertaken during pre-filing preparation of Draft Resource Reports and to provide FERC with all information and documents necessary to clarify deficiencies and to supply missing information, as requested in FERC’s October 8, 2015 comments on Tennessee Gas’s July 24, 2015 Draft Resource Reports. This thirty-three (33) page information request includes one hundred and sixty-six (166) paragraphs identifying missing or incomplete data—often simply identified by Tennessee Gas as “TBD” (to be determined)—on nearly every environmental or natural resource impacted by the NED
Project proposal, as well as missing or deficient information concerning pipeline route and compressor station location alternatives. The AGO’s comments below highlight some specific deficiencies that Tennessee Gas must address.

In addition, the Commission should require that Tennessee Gas address all comments timely filed by all stakeholders before the close of the public scoping comment period. Despite the massive volume of comments filed to date, FERC should insist that Tennessee Gas specifically respond to all individually filed comments and to all specific issues, concerns and questions raised by individuals, governmental entities, elected officials, or non-governmental groups and organizations.

The AGO strongly urges that FERC not initiate formal NEPA review, including any substantive preparation of a draft EIS, until Tennessee Gas has responded to all timely-received stakeholder comments (filed during the scoping period ending October 16, 2015). Further, FERC should not commence NEPA review until Tennessee Gas has fully addressed FERC’s October 8, 2015 request for information—or until Tennessee Gas has otherwise remedied all deficient or incomplete data and documentation that is required to be provide to FERC, such that FERC has a complete and sufficiently detailed record to enable formal NEPA review.

FERC and its consultant should complete all of its own pending evaluations, surveys, and studies in advance of formal NEPA review. The AGO also urges FERC to identify, develop, perform, or contract for performance of all additional research, surveys and studies necessary for FERC to develop a robust and comprehensive EIS that enables FERC to meet its mandate under NEPA.

The scoping comments that follow address many, but not all, of the resource areas identified in the Commission’s June 15, 2015 Notice of Intent to prepare an EIS. However, rather than providing comprehensive scoping comments on all resource areas impacted or potentially impacted by the NED project preferred route and alternatives, the following comments focus on a few areas of particular interest and concern to the AGO. First, the AGO discusses conservation land protected by both Massachusetts constitutional and statutory provisions, and urges FERC to condition any CPCN on Tennessee Gas’s

31 In its October 8, 2015 request for information, FERC noted that much of the still-missing data had been previously requested in FERC’s May 15, 2015 request for information.

32 Stakeholders across Massachusetts and New England have filed thousands of comments with FERC that carefully analyze the NED Project’s impacts on specific resource areas, raising multiple questions and concerns regarding the Project’s preferred pipeline route and laterals, compressor station locations, and other Project components and alternatives. FERC should carefully and thoroughly consider all of these comments as part of its NEPA review.
compliance with all substantive and procedural legal protections afforded such conservation land under state law. Second, FERC must examine Tennessee Gas’s plans and proposals to reduce greenhouse gas emissions, and fully assess the effect of NED Project-related emissions on Massachusetts’s ability to meet its GWSA reduction targets. Third, the AGO urges FERC to scrutinize Tennessee Gas’s plans and proposals to address and reduce methane emissions, including opportunities to implement new and state-of-the-art methane emission reduction technologies during pipeline construction, as well as during pipeline and compressor station operation and maintenance. Finally, and in general, FERC should assess the NED project’s net effect on greenhouse gas emissions in accordance with the recent draft CEQ guidance on addressing climate impacts in NEPA analysis.

A. The Commonwealth’s Substantial Investment in Constitutionally-Protected Conservation Land Should Not Be Subject To Eminent Domain by the NED Project When Less Disruptive Alternatives Can Meet the Same Gas Needs

Natural resource conservation and protection is an important part of the Commonwealth’s identity and heritage. Beyond traditional state and local regulatory controls or land recording mechanisms such as conservation easements, “conservation and environmental protection are express obligations of the [state] government,” enshrined in Article 97 of the Massachusetts Constitution.33 As Massachusetts’s highest court recently noted, the environmental benefits provided by protected conservation land “extend beyond the parcel of land itself,” and include sustaining wildlife and species habitat, purifying the air by filtering harmful particulates, maintaining clean drinking water sources by filtering contaminants from groundwater, controlling the damaging effects of storm water runoff, and promoting “ecosystem resilience” in the face of climate change.34

Approved and ratified in 1972, Article 97 of the Amendments to the Massachusetts Constitution superseded Article 49 of the Amendments (“Article 97”) and provides, in pertinent part:

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

34 Id. at 150-151.
In the furtherance of the foregoing powers, the general court shall have the power to provide for the taking, upon payment of just compensation therefor, or for the acquisition by purchase or otherwise, of lands and easements or such other interests therein as may be deemed necessary to accomplish these purposes.

Lands or easements taken or acquired for Article 97 conservation purposes shall not be subject to any change in use or other disposition except by law enacted by a two-thirds vote of each branch of the legislature, taken on a roll call vote. See Article 97.

Many conservation parcels subject to Article 97 are also subject to specific controls and prohibitions imposed by deed through various forms of conservation-based restrictions established by Massachusetts statutory provisions, including conservation, preservation, watershed and agricultural restrictions. See M.G.L. c. 184 §§ 31-33. Conservation restrictions may be held by a state or local government entity or by a charitable corporation or trust dedicated to land and natural resource conservation. M.G.L. c. 184, § 32, ¶ 2. Approvals and releases of said restrictions must be certified and recorded by the Secretary of Energy and Environmental Affairs ("EOEEA"), the Massachusetts Historical Commission secretary, the commissioner of food and agriculture, the town selectmen, or the Mayor or city council, as applicable. See M.G.L. c. 184, § 32, ¶ 1, 4.

Conservation Land Impacted by the NED Project

Although incomplete, Tennessee Gas has identified fifty-six (56) parcels subject to protection under Article 97, including those protected by M.G.L. c. 184, § 31 conservation-based restrictions, which would be directly impacted by Tennessee Gas’s preferred NED route. The Commission should insist that Tennessee Gas completely identify and

35 See also Brear v. Fagan, 447 Mass. 68, 74 (2006) (the restrictions established by M.G.L. c. 184 § 31 were “explicitly designed to supplant . . . common-law rules with clearer, more definitive, and more efficient methods of resolving the enforceability of land restrictions”).

36 See also M.G.L. c. 44B, § 12 (a), which authorizes municipalities to appropriate funds for purchase of open space “community preservation” lands so long as the parcels are encumbered by conservation restrictions held by another government entity or nonprofit organization.

37 A two-thirds vote of the legislature allowing for dissolution of Article 97 protections may be required for geotechnical surveys that require soil boring or excavation work, or for any other land surveys or evaluations that require vegetation disturbance, destruction or removal. Such invasive surveys may also violate specific provisions of conservation restrictions and may also require compliance with Article 97 procedural and substantive requirements.

38 See RR 8, 8-95 – 8-97 (noting information about impacted conservation land from state and local government, private land trusts, other conservation organizations and private property owners, and further noting that Tennessee Gas “is still in the process of determining title and compiling a complete list of all
evaluate all such conservation parcels directly and indirectly impacted by the NED Project, not only by the company's preferred pipeline route and compressor station locations, but also by all alternative routes, laterals, and compressor station locations.

FERC and its consultants should conduct their own accounting, assessment, and evaluation of all conservation land—including all land subject to M.G.L. c. 184, § 31 restrictions and Article 97—impacted by the NED Project preferred route, laterals, and compressor stations, and by all alternative routes and compressor station locations during preparation of the draft EIS and final EIS.

**EOEEA's No Net Loss Policy**

Tennessee Gas has committed to “working to avoid” impacts to conservation land subject to protection by recorded conservation-based restrictions and Article 97 “to the extent feasible.” Tennessee Gas has also acknowledged EOEEA’s longstanding policy to assure “no net loss” of Article 97 lands under the control or ownership of the Commonwealth or its political subdivisions. This policy requires that disposition of Article 97 land should only be pursued in cases of “exceptional circumstances,” when all other options to avoid Article 97 disposition have been explored and no feasible and substantially equivalent alternatives exist. In addition, any proposed disposition or change in use must not destroy or threaten a unique or significant resource, including habitat for state-listed and protected rare species, unique or unusual terrain, or areas of significant public recreation. Tennessee Gas expects that, “to the maximum extent practicable,” any disposition of Article 97 lands sought or required by the NED Project “will

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39 See RR 8, 8-95.


41 Id.

42 The Massachusetts Endangered Species Act (“MESA”) is administered and enforced by the Massachusetts Division of Fisheries and Wildlife’s (“DFW”) Natural Heritage and Endangered Species Program (“NHESP”). The NHESP maps Priority Habitat to screen proposed projects for the potential to cause a rare species “take” prohibited by MESA. See M.G.L. c. 131A, §§ 2-4, and 321 C.M.R. 10.11 – 10.25. See also RR 8, 8-95-96. As discussed in Section IV D, infra, FERC should require that the NED Project fully comply with all substantive MESA statutory and regulatory requirements, including MESA’s “take” prohibition, either by avoiding a prohibited take, by altering the NED Project with conditions allowing a take, or by full MESA conservation and management review and permitting.

43 See EOEEA Article 97 Land Disposition Policy, Section II, note 40 supra.
be evaluated and determined to meet the policy conditions identified above” [the conditions noted in this paragraph].

However, EOEEA’s “no net loss policy” requires more: the loss of any disposed Article 97 land must be mitigated, including by protecting replacement real estate “of equal or greater fair market value or value in use of proposed use, whichever is greater, and significantly greater resource value.”

**The Commonwealth’s Investment in Conservation Land Should Not Be Subject to Eminent Domain Taking Without Adequate Demonstration of Need and Public Benefit**

The Commonwealth invested over $360 million in land protection between 2007 and 2014, acquiring significant state-owned conservation land including wildlife management areas, protected core habitat areas, and priority habitat lands for state-listed species, which does not include the significant expenditures on conservation land made separately made by charitable trusts and nonprofits.

As identified by the Massachusetts Division of Fisheries and Wildlife (“DFW”), the NED Project preferred pipeline path and laterals alone impact large areas of conservation and wildlife management land owned, managed, and controlled by DFW, or land subject to conservation restrictions held by DFW. These areas include the Chalet Wildlife Management Area, the Montague Plains Wildlife Management Area, the Peru Wildlife Management Area, the Upper Westfield River Management Area, and the Windsor Brook Wildlife conservation restriction.

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44 See RR8, 8-95.

45 See EOEEA Article 97 Land Disposition Policy, Section II, note 40 supra.

46 See pre-filing comments of EOEEA Secretary Bartlett dated September 16, 2014 for the NED Project, p. 3. See also Massachusetts Division of Fisheries and Wildlife’s annual reports 2009-2013.

47 In its October 8, 2015 request for information, FERC asked Tennessee Gas to explain why its proposal for the NED Project’s centerline to cross the Montague Plains Wildlife Management Area does not at least co-locate the pipeline immediately adjacent to an existing utility right-of-way (instead of passing through primarily forested habitat approximately 100 to 140 feet away from the existing right-of-way). See FERC October 8, 2015 request for information at p, 11, ¶49. See also RR 3, 3-39.

48 See RR 8, at 8-95, citing correspondence from DFW Director Jack Buckley dated April 29, 2015 and other information (Darcey 2014). See also RR 8, 8-894 – 8-97, and RR 3, 3-34 -3-44, further discussing the DFW-owned or managed Wildlife Management Areas, and other conservation land subject to Article 97 protection in which the DFW or the Massachusetts Department of Conservation and Recreation (DCR) have an interest, including by holding a conservation restriction, by owning and managing conservation land, or partnering with charitable or other non-governmental, private-property owners to manage conservation land.
The Massachusetts Fisheries & Wildlife Board has raised concerns about the “the long-term effects” of governmental and private entities’ ability to acquire and hold land in trust for conservation purposes in the event of any change in use or dissolution of Article 97 land to accommodate the NED Project, especially by an eminent domain taking.49 “The reputational cost to those entities charged with protecting public lands is significant and needs to be understood and evaluated.”50

FERC should require that the NED Project fully comply with all substantive and procedural protections afforded Article 97 conservation land by the Massachusetts Constitution, including an express requirement that Tennessee Gas seek legislative approval by a two-thirds, roll call vote of a bill allowing a change in use or disposition of Article 97 land. To the extent that Tennessee Gas is able to secure legislative approval for the disposition of Article 97 land—whether owned or controlled by the Commonwealth, a municipality, or a private individual, land trust or other non-governmental organization—to accommodate NED pipeline impacts, FERC should condition any CPCN on Tennessee Gas’s strict compliance with EOEEA’s No Net Loss Policy, including that policy’s mitigation and replacement land goals and requirements. Further, FERC should expressly require that Tennessee Gas prepare a detailed plan for each Article 97 parcel detailing all proposed mitigation and land replacement plans for review and approval by the Commonwealth prior to any disposition.

Given the longstanding, strong, and unique constitutional protection afforded conservation land in the Commonwealth, any CPCN for the NED Project should strongly encourage Tennessee Gas to avoid preemption at all costs by securing legislative approval for any Article 97 dispositions or land use alterations and fully complying with EOEEA’s No Net Loss Policy. To the extent that Tennessee Gas seeks eminent domain land takings or easements through conservation land protected by Article 97 or conservation-based restrictions, the Commission must not only weigh the impacts to constitutionally and statutorily protected resources reflected in the NEPA assessment, it must also determine that the Project’s public benefit is sufficient to justify the extent of eminent domain takings required by the Project when making its ultimate CPCN determination.51

49 See pre-filing comments of the Massachusetts Wildlife Board filed on August 27, 2015 for the NED Project., p. 2.

50 Id.

51 See FERC Statement of Policy PL99-3-000, p. 27 (88 FERC ¶ 61,277) (“[i]f the applicant provides support for the benefits of its proposal that justifies the issuance of a certificate and the exercise of the corresponding eminent domain rights … [t]he strength of the benefit showing will need to be proportional to the applicant’s proposed exercise of eminent domain procedures (emphasis added).
As discussed above, FERC’s NEPA review should independently analyze the need for the NED Project by collectively evaluating all currently pending pipeline proposals together, as well as alternatives potentially capable of meeting any regional need for additional capacity. FERC’s ultimate determination on a Tennessee Gas application for a CPCN should weigh any need by the NED Project to exercise eminent domain takings against less environmentally disruptive alternatives.

B. FERC Should Scrutinize the NED Project’s Greenhouse Gas Emissions, Including Assessment of Compliance with GWSA Reduction Targets

Massachusetts has led the nation in combatting climate change, including by playing a leading role in the fight to regulate greenhouse gases under the federal Clean Air Act. The Commonwealth led a coalition of states, in coordination with numerous environmental groups, in the landmark case of Massachusetts v. EPA. Massachusetts has also been a national leader in promoting a clean energy economy. The Commonwealth has taken cost-effective measures to reduce carbon emissions from the power sector, including establishing renewable portfolio standards to encourage greater reliance on clean energy, implementing energy efficiency programs, and participating in market-based programs, such as the Regional Greenhouse Gas Initiative ("RGGI"). For the past four years, Massachusetts has topped the American Council for an Energy-Efficient Economy’s State Energy Efficiency Scorecard, leading the nation on energy efficiency efforts.

FERC should scrutinize Tennessee Gas’s plans and proposals to reduce greenhouse gas emissions, including by evaluating opportunities for the NED Project to implement new and state-of-the-art methane emission reduction technologies during pipeline construction, as well as during pipeline and compressor station operation and maintenance. The AGO

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52 See discussion in Section III supra.

53 See Massachusetts v. EPA, 549 U.S. 497 (2007). In April 2007, the U.S. Supreme Court ruled in favor of Massachusetts and concluded that EPA had authority to regulate greenhouse gas emissions under the Clean Air Act. The United States Court of Appeals for the District of Columbia has since upheld EPA’s subsequent regulations, in response to Massachusetts v. EPA.


urges FERC to assess the NED Project’s net effect on all greenhouse gas emissions in accordance with the recent draft CEQ guidance on addressing climate impacts in NEPA analysis, and to fully evaluate the Project’s effect on Massachusetts’s ability to meet GWSA greenhouse gas reduction targets.

In recent revised draft guidance, CEQ requires that federal agencies assess climate impacts during NEPA review ("2014 CEQ Climate Impact Guidance"). This draft guidance specifically addresses how agencies should analyze greenhouse gas emissions during EIS preparation. The 2014 CEQ Climate Impact Guidance directs agencies to perform and publish an estimate of a project’s net effect, both direct and indirect, on greenhouse gas emissions if they are likely to be above 25,000 metric tons of CO₂-e (Carbon dioxide-equivalent). Agencies are further instructed to assess not only a proposed project’s greenhouse gas emissions and other potential impacts to climate change, but also to evaluate how climate change may potentially impact the project in ways requiring climate change adaptation planning and measures, including from sea-level rise, more frequent and intense storms, and increased occurrences of wildfires and drought conditions.

**The Massachusetts GWSA**

In 2008, the Massachusetts legislature set ambitious goals for ensuring greenhouse gas emissions reductions over time by enacting the GWSA. The GWSA sets a 25 percent (25%) greenhouse gas emission-reduction target (from 1990 levels) for 2020, and an 80 percent (80%) reduction target for 2050. With these important state targets in place, the EIS should analyze the net effect of the NED Project on energy-related greenhouse gas emissions against the GWSA targets. In addition, the GWSA includes mandatory emissions reporting from facilities that emit more than 5,000 tons of greenhouse gas per year. As part of any CPCN for the NED Project, FERC should mandate full compliance with all GWSA reporting requirements.

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56 2014 CEQ Climate Impact Guidance, note 11 supra.
57 “Climate change is a fundamental environmental issue, and the relation of Federal actions to it falls squarely within NEPA’s focus.” 2014 CEQ Climate Impact Guidance at 2, note 5 ("NEPA recognizes ‘the profound impact of man’s activity on the interrelations of all components of the natural environment.’ (42 U.S.C. § 4331). It was enacted to, inter alia, ‘promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.’ (42 U.S.C. § 4321)").
58 2014 CEQ Climate Impact Guidance at 18.
60 See M.G.L. c. 21N, §§ 1-9.
61 Id. at § 4(a).
More broadly, as part of its analysis of cumulative impacts in the EIS, FERC must scrutinize all NED Project-related cumulative impacts of greenhouse gas emissions and the effect of such cumulative impacts on Massachusetts' ability to meet GWSA targets. This NEPA-required cumulative impact analysis should evaluate the potential combined greenhouse gas emissions from the NED Project together with emissions from the AIM and Tennessee Gas CT Expansion projects, from all NED Project systems alternatives, from all other pipeline project proposals currently pending in the New England region. See discussion in Section III, above. FERC should evaluate the extent to which these cumulative impacts impair Massachusetts's achievement of its GWSA targets.

C. Methane Emission Reduction Technology and Efforts

FERC should scrutinize Tennessee Gas's plans and proposals to address and reduce methane emissions, including opportunities to implement new and state-of-the-art methane emission reduction technologies during pipeline and new compressor station construction, as well as during pipeline and compressor station operation and maintenance.

Natural gas is primarily composed of methane, a potent greenhouse gas that is over thirty (30) times more powerful than carbon dioxide in its ability to trap heat in the atmosphere over a 100-year time frame, and is eighty-six (86) times more potent over a twenty-year timeframe. According to the EPA, methane emissions from the oil and gas sector are the largest industrial source of methane emissions in the United States, accounting for about 30 percent of total U.S. methane emissions.

The climate impacts of natural gas must be analyzed in terms of life-cycle greenhouse gas emissions (i.e. from “wellhead to burner tip”). When methane leaks throughout the entire natural gas production and delivery system are taken into account, the climate benefits of natural gas is significantly diminished in the short term (over a few decades). Recent studies have demonstrated that if total fugitive emissions (gas leaks) from the production, transmission, and distribution systems are greater than about two and a half to three percent (2.5% - 3%), the benefits from natural gas as a substitute for coal disappear.

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62 See Gunnar Myhre et al., Anthropogenic and Natural Radiative Forcing, 714 tbl. 8.7 (Daniel Jacob et al. eds., 2013).
63 See http://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html
The EPA recently proposed new rules for methane emissions reduction from the oil and gas sector, and also to further limit emissions levels of volatile organic compounds ("VOCs"), such as benzene and formaldehyde, from the oil and gas sector. FERC should require that the NED Project address EPA's new rules and the CPCN should require compliance with all prospective regulatory changes.

**Pipeline Infrastructure Leaks and Blowdowns**

FERC should evaluate Tennessee Gas's current and proposed methods and schedules for identifying and repairing leaks from its existing pipeline infrastructure and from the new pipeline and laterals proposed for the NED Project. Any CPCN for the NED Project should require that Tennessee Gas's pipeline leak monitoring schedules and methodology utilize state-of-the-art leak detection and repair technology, including infrared camera technology, to the greatest extent possible.

The AGO also urges FERC to evaluate Tennessee Gas's current practice and proposed plans for managing pipeline blowdown frequency, including ongoing efforts to reduce blowdown frequency without sacrificing public safety.

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produce net climate benefits relative to efficient, new coal plants using low-gassy coal on all time frames as long as leakage in the natural gas system is less than 3.2% from well through delivery at a power plant. Given limited current evidence, it is likely that leakage at individual natural gas well sites is high enough, when combined with leakage from downstream operations, to make the total leakage exceed the 3.2% threshold beyond which gas becomes worse for the climate than coal for at least some period of time."

See also Bob Howarth, A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas, Energy Sciences & Engineering, Vol. 2, Issue 2 (May 2014), available at http://onlinelibrary.wiley.com/doi/10.1002/ese3.35/full (noting that "break-even point" is 2.8%, not 3.2% using updated estimates for the radiative forcing of methane from the 2013 IPCC assessment, and further noting that if the uncertainty in the radiative forcing of methane of 30% or more is taken into account, this "break-even" value becomes a range of 2.4—3.2%). [citations omitted]. See also Stefan Schwietz et al., Global Bottom-up Fossil Fuel Fugitive Methane and Ethane Emissions Inventory for Atmospheric Modeling, ACS Sustainable Chemistry & Engineering, Vol. 2 Issue 8 (June 2014), available at http://pubs.acs.org/doi/pdf/10.1021/sc500163h.

Recent studies have scrutinized fugitive methane emissions from various sources of natural gas infrastructure, raising new concerns about greenhouse gas emissions. For instance, a recent study found that fugitive methane emissions from natural gas gathering facilities are approximately eight times higher than EPA estimates. See Environ. Sci. Technol., 2015, 49 (17), pp 10718–10727 http://pubs.acs.org/doi/abs/10.1021/acs.est.5b02275. Natural gas leaks from aging urban infrastructure are also a major problem. A recent study from the Proceedings of the National Academy of Science (PNAS) found that fugitive natural gas emissions in Boston are two-to-three times larger than predicted by existing inventory methodologies and industry reports, suggesting that natural-gas-consuming regions may be larger sources of climate-impacting methane emissions than is currently estimated. See PNAS, Methane Emissions from Natural Gas Infrastructure in the Urban Region of Boston, MA, December 12, 2014, http://www.pnas.org/content/112/7/1941.full, (last visited Oct. 10, 2015).
Compressor Station Emissions

FERC should scrutinize the NED Project’s new compressor station construction proposals and plans and require that Tennessee Gas demonstrate that its plans appropriately evaluate and incorporate compressors and pneumatics that decrease methane emissions to the greatest extent possible using available, state-of-the-art technology. In addition to evaluating the necessary horsepower, FERC should analyze Tennessee Gas’s turbine proposals, and evaluate the extent to which the NED Project has employed waste heat electric (cogeneration) or other turbine technology.67

The AGO also urges FERC to evaluate Tennessee Gas’s proposed plan for directed inspection and maintenance of compressor stations to prevent and repair methane emissions from gas leaks. In its NEPA review for the NED Project, FERC should carefully analyze Tennessee Gas’s plans for regular monitoring of compressor stations, with a special focus on Tennessee Gas’s use of state-of-the-art leak detection technology and methodology, including, without limitation, infrared cameras, acoustic leak detection technology, and electronic screening.

FERC should also require that Tennessee Gas record and report emission reductions from all leak detection monitoring and repair, and other procedures to minimize fugitive emissions during blowdowns.68

D. Additional Environmental Impacts of Concern, including Those Which Tennessee Gas Has Failed to Address Adequately to Date

Many stakeholders across Massachusetts have raised a multitude of concerns about impacts to specific environmental resources from the NED Project’s preferred pipeline and lateral routes, and from the construction and operation of new compressor stations.69 In

66 See generally, EPA Natural Gas STAR Methane Challenge Program: Proposed Framework, July 23, 2015 stakeholder review draft,

67 See also FERC’s October 8, 2015 request for information at pp. 25, ¶¶ 124-125, requesting information from Tennessee Gas about the specific manufacturer and model for proposed compressor turbines, including turbine horsepower and other ratings.

addition, many of these stakeholders have carefully analyzed the Tennessee Gas Draft Resource Reports filed to date, noting missing information and deficient data, including some of the incomplete information noted in FERC’s October 8, 2015 request for information to Tennessee Gas. While not intended to be comprehensive, the AGO raises the following concerns we share with other stakeholders about the NED Project’s impacts and the scope of NEPA review. In addition, the AGO is particularly concerned about the following issues regarding the scope of NEPA review for the NED Project:

- **Wildlife and Massachusetts-Listed and Protected Endangered Species**
  The Commonwealth is home to a rich diversity of plant and animal species, including many which are listed and protected under the Massachusetts Endangered Species Act ("MESA"), and for which DFW’s Natural Heritage and Endangered Species Program ("NHESP") has delineated protected upland and wetland habitat. Habitat destruction is also widely recognized to be a significant threat to species. Thus, maintaining large, continuous tracts of various ecosystems is important for protecting and maintaining biodiversity.⁷⁰ In any draft and final EIS, FERC should thoroughly evaluate NED Project’s compliance with all applicable MESA-required project review procedures, including requirements that Tennessee Gas perform all necessary wildlife or vegetation studies for MESA-listed and protected species (in addition to the surveys for federally listed and protected species which Tennessee Gas has already begun).⁷¹ Any CPCN for the NED Project should include conditions expressly requiring that the NED Project fully comply with all substantive MESA statutory and regulatory requirements, including MESA’s “take” prohibition, either by avoiding a prohibited take, by altering the NED Project with conditions allowing a take, or by full MESA conservation and management review and permitting.⁷²

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⁶⁹ In July and August, 2015, FERC held public scoping meetings in Dracut, Lunenburg, Greenfield, and Pittsfield, Massachusetts, each of which were attended by hundreds of area residents and other concerned stakeholders. More than 500 individuals attended the Dracut public scoping meeting, with approximately 75 individual stakeholders presenting oral testimony raising a multitude of concerns about impacts from the NED Project and Dracut compressor station on the area's natural resources and local economy, as well as the Project's effects on property values and homeowners' insurance premiums, among other concerns. See transcript Dracut Scoping Meeting.

⁷⁰ See Massachusetts Department of Fish & Game and the Nature Conservancy, “BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World,” 10-12 (2010). See also RR 3, 3-34-44 and RR 8, 8-94-97 discussing NED Project Impacts to the Commonwealth’s wildlife and MESA-listed and protected species, including discussion of BioMap2 Priority Natural Communities, Core Habitat, Vernal Pool Core Habitat, and MESA-listed Species of Special Concern habitat mapping.

⁷¹ See RR 8, 8-95-96.

⁷² See M.G.L. c. 131A, § 2.
• **Public Safety**
Many residents, public safety officials, and elected town officials have raised several concerns and questions about public safety and emergency preparedness. In some cases, the proposed pipeline route passes not only within residential areas, but within 50 feet of homes. Several communities have expressed concern about local emergency response capacity to take on the additional burden of responding to pipeline-based emergencies. Many commenters have raised concerns about the need for first responder trainings in and around affected areas. Public safety is of paramount importance, thus the AGO urges FERC to include a rigorous analysis of these issues in the draft EIS and final EIS.

• **Public Health and Air Emissions**
Many residents, especially those living near proposed new compressor stations, have expressed concern over air emissions from the NED Project, including from pipeline blowdowns and compressor station blowdowns. In its July 24, 2015 Resource Report, Tennessee Gas stated that “detailed air emissions for the [newly proposed] compressor stations are not yet available.” FERC should condition any CPCN on Tennessee Gas making publically available all chemical constituents of transported gas. Tennessee Gas must ensure that those living within a mile of a compressor stations will suffer no increased adverse health risk from blowdown or other emissions of criteria pollutant levels, including carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution (both small particle, PM$_{2.5}$, and large, PM$_{10}$), and sulfur dioxide, as well as VOC emissions.

• **Property Values and Homeowners Insurance**
Property owners living near the preferred pipeline route, near proposed laterals, and near newly proposed compressor station locations are very concerned about the NED Project’s effect on the value of their homes and property, which is often the single largest lifetime investment made by an individual or family. These concerns include fears about home re-sale value and the cost or availability of adequate homeowners, property, or

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73 See e.g. FRCOG scoping comments filed September 23, 2015 at pp 15-24; Town of Deerfield scoping comments filed on August 2015 at pp 1-2.

74 RR 8, Vol. 2, Table 8.2-2, listing locations by milepost designation of hundreds of residential and commercial buildings within 50 feet of the pipeline. See also RR 1, 1.3.2.2, p. 1-83-85.

75 See e.g. Health Care without Harm scoping comments filed August 27, 2015, pp 1-3; Pipeline Awareness Network for the Northeast, Inc. (“PLAN”) scoping comments filed August 28, 2015, pp 1-4.

76 See RR 9, 9-25.

77 As noted in Section IV C, above, EPA has recently proposed new emissions levels for volatile organic compounds (“VOCs”), such as benzene and formaldehyde, from the oil and natural gas industry.

78 See e.g. FRCOG scoping comments filed September 23, 2015, pp 12-15.
business insurance. The AGO urges FERC to review and seriously consider all resident and business owner concerns about the NED Project's effect on property values, as well as the many concerns raised about the need for eminent domain takings for a pipeline proposal that may ultimately export a large amount of its transported gas capacity. The AGO encourages FERC to follow through on the commitment it made publically to contract for new research study analyzing natural gas pipeline effects on property values.

As FERC has acknowledged, existing studies cited by Tennessee Gas in its Resource Reports are old and outdated, and/or were commissioned by pipeline interests or by representatives of the natural gas industry.

- **Noise**
  Many stakeholders have expressed serious concern about noise impacts on their homes and business from pipeline construction, operation and maintenance, including blowdown and other noise impacts from compressor stations. Increase in ambient noise levels resulting from the proposed project is an important consideration which FERC must fully address in any draft EIS and final EIS. MassDEP has established a Noise Level Policy for implementing Massachusetts law, 310 C.M.R. 7.10, regarding noise pollution. Namely, the ambient sound level, measured at the property line of the facility or at the nearest inhabited buildings, may not be increased by more than 10 decibels due to the sound from the facility during operating hours.

  Additional ambient noise has implications both for public health and for local wildlife. The current NED Resource Report on Air Quality and Noise is incomplete and missing data about decibel increases in ambient noise from proposed NED Project facilities. These must be addressed in the draft and final EIS.

- **Environmental Justice communities**
  Many stakeholders have raised concerns about the NED project’s impacts on environmental justice communities, including low-income rural communities in portions of Western Massachusetts. The AGO urges FERC to review and

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79 Id.

80 During the August, 12, 2015 meeting FERC held with Massachusetts state agencies, FERC noted that it would conduct, or contract with a consultant to conduct, such a study.

81 See e.g. PLAN scoping comments filed August 28, 2015, pp 5-6; FRCOG scoping comments filed September 23, 2015, pp 32-33


83 See e.g. RR 9, Tables 9.2.2, 9.2.4, 9.2.6. See also FERC’s October 8, 2015 request for information at pp. 27-28, ¶¶ 134 -143 (requesting additional information concerning NED Project noise impacts and mitigation measures).
seriously consider all stakeholder concerns about the NED Project's impact or disparate impact on environmental justice communities.

The AGO would like to thank FERC for the opportunity to submit these scoping comments for the NED Project.

Respectfully submitted,

[Signature]

Melissa A. Hoffer,
Chief, Energy and Environment Bureau,
Christophe Courchesne,
Chief, Environmental Protection Division,
Matthew Ireland,
Assistant Attorney General, Environmental Protection Division

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See e.g. FRCOG cover letter to scoping comments filed September 23, 2015 at p. 1. See also FERC's October 8, 2015 request for information at pp. 16-17, ¶¶ 85, 92 (requesting additional information concerning Environmental Justice communities).
### Appendix: Table of Attached Exhibits

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Exhibit 3</strong></td>
<td>AGO comments filed with FERC on September 21, 2015 (informing FERC that the AGO's Electric Reliability Study for the New England Region will be completed by the end of October and will file thereafter, along with commentary on the study's implication's for FERC’s CPCN decision).</td>
</tr>
<tr>
<td><strong>Exhibit 6</strong></td>
<td><em>Initial Comments of the Massachusetts Attorney General</em>, Investigation by the Department of Public Utilities into the Means by Which New Natural Gas Delivery Capacity may be added to the New England Market, D.P.U. 15-37 (June 15, 2015).</td>
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<tr>
<td><strong>Exhibit 7</strong></td>
<td><em>Attorney General’s Initial Brief</em>, Petition of Boston Gas Company d/b/a National Grid for approval of a Precedent Agreement with Tennessee Gas for the NED Project, D.P.U. 15-34 (July 17, 2015).</td>
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