



October 16, 2015

VIA DOCKET EFILING

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

Re: Tennessee Gas Pipeline Company, LLC, Northeast Energy Direct Project, Docket No. PF14-22-000

Dear Secretary Bose:

The Conservation Law Foundation (“CLF”) appreciates the opportunity to provide scoping comments to the Federal Energy Regulatory Commission (“the Commission”) during the pre-filing phase of the proceeding for docket PF 14-22-000, Tennessee Gas Pipeline Company’s (“Tennessee Gas,” “TGP,” or “the Company”) proposed Northeast Energy Direct Project (“NED” or “proposed project”). CLF offers these comments without prejudice to any and all legal rights CLF may have, which are hereby expressly reserved.

Founded in 1966, CLF is a non-profit advocacy organization with members across New England, including over 2,000 members in Massachusetts and approximately 500 in New Hampshire. CLF works to solve the environmental problems threatening the people, natural resources, and communities of New England. CLF’s advocates use law, economics and science to design and implement strategies that conserve natural resources, protect public health, and promote vital communities in our region.

CLF has serious concerns about the overall scope of the Commission’s review of this proposed project, the greenhouse gas and other environmental impacts of the proposed project, and the accuracy of the information before the Commission regarding the economic need for the proposed project. Importantly, in light of numerous proposals in the region to

construct new or expanded gas pipeline infrastructure, and the complex ways in which those proposals will interact with one another and with regional energy planning, CLF respectfully requests that the Commission stay this proceeding and perform a comprehensive programmatic Environmental Impact Statement (“EIS”) for natural gas pipeline projects in the Northeast. As part of a programmatic EIS, and /or as part of any assessment of the proposed project, the Commission must 1) study all reasonable alternatives to the proposed project—including siting and routing alternatives and the no-action alternative—and provide a well-supported rationale for excluding any alternatives from detailed review; 2) ensure that the “purpose and need” of the review is not defined too narrowly, to facilitate an adequately broad alternatives analysis and consideration of available alternatives that may run counter to the interests of the project proponent; 3) comprehensively assess the greenhouse gas impacts of the proposed project and alternatives; and 4) comprehensively assess the indirect, secondary and cumulative impacts of the proposed project and alternatives.

I. The Commission Should Prepare a Programmatic EIS.

This proposed 1.3 Billion Cubic Feet (Bcf) natural gas pipeline is just one among a number of proposed natural gas pipeline expansion projects into New England.¹ TGP’s own listing of Projects Potentially Contributing to Cumulative Impacts includes numerous other pipeline expansion projects. See Draft Resource Report 1, Attachment 1b, Table 1.9-2. In particular, the number and size of competing pipeline projects meant to deliver natural gas to New England squarely raise the question of whether and how much additional natural gas pipeline capacity is in the best interests of the New England region. In the interests of efficient use of agency resources, considering the number of current and future natural gas pipeline expansion projects the Commission is and will be reviewing, we urge the Commission to stay this proceeding and instead initiate a broad, comprehensive EIS to study (a) the nature and extent of New England’s need for additional natural gas pipeline capacity, taking into account the New England states’ energy policies and goals, including those related to legally mandated greenhouse gas reductions, and (b) the most efficient, least impactful means of meeting the region’s natural gas deliverability needs. Such a study would function as a programmatic EIS for natural gas pipeline capacity in New England.

¹ While FERC’s scoping notice states that the Project is proposed for up to 2.2 Bcf, a subsequent filing by TGP announced a reduction in size. *Compare* 80 Fed. Reg. 39,095 (July 8, 2015) *with* Draft Report Transmittal Letter at 2 (July 24, 2015), available at <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13939499>.

Given the complexity of assessing the cumulative impacts of separate project proposals, as well as potential redundancy, and in light of the need to assess whether each or any of the project proposals are in the best interests of New England, this broader, more comprehensive approach makes far more sense (and will result in far superior decision-making) than responding to individual projects in piecemeal fashion, as proposed by individual private entities, absent the broader context. Indeed, the Council on Environmental Quality (“CEQ”) has strongly acknowledged the value and benefit of such an approach, stating:

The preparation of an area-wide or overview EIS may be particularly useful when similar actions, viewed with other reasonably foreseeable or proposed agency actions, share common timing or geography. For example, when a variety of energy projects may be located in a single watershed. . . the overview or area-wide EIS would serve as a valuable and necessary analysis of the affected environment and the potential cumulative impacts of the reasonably foreseeable actions under that program or within that geographical area.

See Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,033 (Mar. 23, 1981) (“Forty Questions”).

CLF strongly urges the Commission to seize the opportunity to analyze TGP’s proposed project and other pipeline projects with a comprehensive geographic and policy approach, enabling a more efficient, better-informed decision-making process.

II. The Commission Must Conduct a Robust Alternatives Analysis.

Whether as part of a Programmatic EIS or a project-specific EIS, the Commission must conduct a thorough analysis and comparison of all reasonable alternatives and their impacts. The Commission’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 decisionmaker and the public.” 40 C.F.R. § 1502.14.

CEQ regulations make clear that the Commission 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) (emphasis added). The Commission must consider the “no action” alternative and all reasonable alternatives, including those that are not within the Commission’s or the applicant’s capabilities or jurisdiction. See 40 C.F.R. § 1502.14(c)-(d); Forty Questions, *supra* (“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)). The Commission’s alternatives analysis must also include any “appropriate mitigation” that has not yet been proposed. See 40 C.F.R. § 1502.14(f).

The Commission’s alternatives analysis must include, at a minimum, the following categories of reasonable alternatives to the proposed project: (a) alternative means of providing the end use energy resources, (b) alternative routes and sites for the proposed project, and (c) no action. CLF also notes the Commission’s obligations to justify—as supported by independent, expert analysis—the exclusion of any of these alternatives from detailed analysis in the EIS, and to provide a detailed and holistic comparison of the impacts and benefits of the analyzed alternatives, which must guide the Commission’s ultimate determination.

(a) Alternative Means of Providing Resources

To conduct an alternatives analysis that does not begin with the construction of the proposed project as a foregone conclusion, the Commission must assess the potential end uses for the pipeline’s capacity and alternative means to serve those end uses. One example of evidence of direct alternatives to the proposed project is a white paper by Skipping Stone, LLC, attached as Exhibit A to these comments. The white paper, *Solving New England’s Gas Deliverability Problem Using LNG Storage and Market Incentives* (Skipping Stone, LLC, 2015), analyzes natural gas utility sendout and electric market data in New England, concluding that the fabled “constrained pipeline capacity” issue in New England is in fact a very specific and targeted winter peak deliverability issue, which can be addressed at lower cost using existing

pipeline and LNG infrastructure in the region. Additionally, this white paper indicates a lack of actual need for the quantities of gas capacity contracted for by the Massachusetts gas utilities, which calls into question the economic need for this specific pipeline to be investigated in the Commission's Natural Gas Act review.

Ample resource alternatives are available for the end users of the proposed project's intended pipeline capacity, including the LNG solution described above, increased deployment of distributed generation, and ISO-NE electric market reforms like the Pay for Performance program and the interim Winter Reliability Program. Additionally, the Commission must also consider increased deployment of non-generation alternatives like energy efficiency and demand response. These alternatives should be considered separately and in combination, and should also be assessed as a means of reducing the capacity of the proposed project, which may facilitate, or improve the technical feasibility of, utilizing one or more alternative routes, configurations, and designs.

(b) Alternative Routes and Sites

The Commission must consider not only the route alternatives provided in the Company's Draft Resource Reports, but all other potential reasonable routes and configurations for the proposed project. To achieve this analysis, the Commission must obtain and analyze all routes considered and rejected by TGP. The Commission must independently review these potential routes, with the goal of identifying the route with the least environmental, cultural, and socio-economic impacts. In particular, the Commission should consider all route alternatives that avoid or minimize impacts to wetlands, drinking water aquifers, protected conservation lands under state, local, or private ownership, and historic and culturally significant sites. When assessing currently proposed route segments or alternatives that are co-located with existing utility rights of way, the Commission should pay special attention to the difference in nature and scale between the land use requirements and restrictions placed upon existing utility rights of way and those that would be placed upon the rights of way for a pipeline of this size. For example, the impacts on soil erosion and sedimentation will be different for a natural gas pipeline corridor and an overhead electric line crossing steep slopes. In addition, it is not yet clear whether "co-location" with existing utility corridors entails sharing the exact width of the corridor, additional clearing outside of an existing corridor, or an additional corridor somewhere in the vicinity of the existing corridor.

(c) No Action

The Commission also must provide a fair and objective analysis of the “no action” alternative. While the proposed project has clear financial benefits to the Company and other stakeholders, it remains to be established what other interests are at stake, including the welfare of communities in path of the proposed pipeline, the interests of environmental protection and the reduction of greenhouse gases, and impacts on consumers. Until the Commission has identified each of the relevant interests and conducted a rigorous analysis as to how the proposed Project will impact the “public interest,” the Commission cannot reasonably foreclose the “no action” alternative. The Commission 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.

The National Environmental Policy Act (“NEPA”) requires the Commission to perform a robust and impartial assessment of the environmental, cultural, and socio-economic implications of simply denying the Company’s Petition. *See, e.g., Pit River Tribe v. U.S. Forest Service*, 469 F. 3d 768, 786 (9th Cir. 2006) (EIS inadequate for failure to consider no-action alternative); *Bob Marshall Alliance v. Hodel*, 852 F. 2d 1223, 1228 (9th Cir. 1988) (NEPA alternatives analysis requires “agency decisionmakers ‘[have] before [them] and take[] into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance’”).

III. The Commission Must Not Improperly Constrain “Purpose and Need.”

NEPA regulations require an EIS to “specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.” 40 C.F.R. § 1502.13. Simply adopting the purpose and need stated by the Company in its Resource Reports cannot substitute for the agency’s independent obligation to set the scope of its review broadly enough to encompass alternatives that are not preferable to the Company, or may not involve the Company at all. Otherwise, the alternatives analysis will be purposeless.

IV. The Commission Must Conduct a Comprehensive and Rigorous Assessment of the Impacts of the Proposed Project and Alternatives.

NEPA requires a comprehensive assessment of the environmental impacts of the proposed project, and alternatives, including those discussed above. The EIS must provide a “full and fair discussion” of these impacts that will serve as the “scientific and analytic basis” for meaningful and technically sound comparisons of alternatives. See 40 C.F.R. § 1502.16.

It is imperative that the Commission consider all relevant impacts associated with the proposed project, including direct, indirect, and cumulative impacts, whether they be local, regional, or national, including the environmental impacts of the natural gas extraction practices that will supply the natural gas to be carried by this proposed project. See *id.* Below, we briefly discuss certain environmental and other impacts that the Commission must address in the EIS. Our comments are not intended as an exclusive or exhaustive list; the Commission is obligated to consider all relevant impacts raised by other commenters or that emerge during the Commission’s independent study of the proposed project.

a) Greenhouse Gas Emissions Impacts

The proposed project’s Market Path is a new construction pipeline project that will bring up to 1.3 Billion cubic feet (“Bcf”) per day of natural gas capacity into New England. Draft Report Transmittal Letter at 2 (July 24, 2015), available at <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13939499>. Natural gas is composed primarily of methane, an extremely potent greenhouse gas.² According to the International Panel on Climate Change (“IPCC”), methane gas is 34 times more potent than carbon dioxide on a 100 year time frame and 70 times more potent than carbon dioxide on a 20 year time frame.³

²The EPA assumes a default of 95 percent methane to 1 percent carbon dioxide for GHG mole fraction in natural gas distribution pipeline systems. See 40 C.F.R. § 98.233(u)(2)(vii).

³See Climate Change 2013, The Physical Science Basis, The Working Group I Contribution to the IPCC Fifth Assessment Report, 8-58, Table 8.7, available at http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf. Nonetheless, the EPA and others, including Massachusetts typically use the now outdated and inaccurate global warming potential of 21 over a 100 year time frame which was established in the 2001 IPCC Report.

One major area of environmental impact not explicitly contemplated by the Commission's Notice of Intent to Prepare an Environmental Impact Statement for the Planned NED Project, 80 Fed. Reg. 39,095 (July 8, 2015) ("EIS NOI") is the impact of the proposed project and alternatives on greenhouse gas emissions, specifically direct emissions from the diverse array of greenhouse gas sources associated with the proposed project and alternatives. These sources include but are not limited to leaks and other emission points on the proposed project pipeline itself, leaks in the end distribution system for natural gas into which the proposed project will feed, production activities for the increased volumes of natural gas to be carried by the proposed project pipeline, and space heating and generating facilities utilizing the natural gas to be provided by the proposed project. The Air Quality and Noise section of the Draft Report mentions greenhouse gas emissions only with regard to the proposed compressor stations, which fall under the first of these categories (emissions points on the proposed pipeline itself). Draft Report at 9-18, § 9.1.2.4. It is silent as to the other, more significant, sources of greenhouse gas emissions listed above.

The Draft Resource Report also mentions greenhouse gas emissions to suggest, without economic or scientific basis, that the proposed project will reduce greenhouse gas emissions by displacing coal and oil-fired generation. Draft Report at 1-11. This unsupported and self-serving statement is factually incorrect; New England's system-wide average greenhouse gas emissions are already lower than the emissions from the most efficient new natural gas plant.⁴ New England's coal fleet is largely displaced already, and New England's oil units are of limited utility. New natural gas units will increasingly be displacing older natural gas units and represent de minimis GHG reductions. More importantly, excessive natural gas supply will impact the market for the cleaner resources that are critical to achieving GHG targets and mandates. A massive infusion of natural gas capacity in New England will have the effect of incentivizing the construction of additional natural gas-fired generating facilities, when the system has already moved well beyond needing natural gas generation to lower emissions from relatively higher-emitting sources.

A detailed and comprehensive assessment of greenhouse gas emissions impacts in an EIS is required under NEPA because greenhouse gas emissions from the production and

⁴ See generally 2013 ISO-NE Electric Generator Air Emissions Report, http://www.iso-ne.com/staticassets/documents/2014/12/2013_emissions_report_final.pdf (average system-wide emissions in 2013 of 730 lbs CO₂/MWh). The new Footprint Power combined cycle gas facility in Salem, Massachusetts, will be subject to an initial annual average CO₂ emissions limit of 895 lbs/MWh.

transmission of natural gas are significant, electricity generation is among the most significant sources of greenhouse gas emissions, and the Project has critically important implications for electric systems in New England.⁵

b) Energy Resources Impacts

CEQ regulations emphasize the importance, in all EISs, of describing the proposed action's energy implications, see 40 C.F.R. § 1502.16(e), and that task is especially crucial in the context of a natural gas pipeline project, and in the context of a proposed project of this size. As the exclusive federal regulator of interstate natural gas pipelines, the Commission has special responsibility to employ its technical expertise and resources in this review, while taking into account other federal, regional, and state policies. The EIS must comprehensively address impacts on energy resources, use, markets, reliability, and prices. In particular, the Commission must analyze the effects of the proposed project and all reasonable alternatives on renewable generation and non-generation resources, while accurately and thoroughly accounting for the potential to displace older fossil fuel generation.

A new pipeline project of this size will have profound effects on the development and maintenance of domestic energy resources, including new renewables such as solar, wind, efficient low-emitting biomass, and small-scale hydroelectric facilities. Federal and state public policies, including federal and state tax incentives and renewable portfolio requirements, promote new and continuing development of these resources. CLF has strongly advocated and supported these policies as critical to creating a clean energy future for New England and the nation that will move us away from reliance on inefficient and dirty power plants that contribute to climate change and threaten public health, including those that burn natural gas.

⁵ See Shanna Cleveland, CLF, *Into Thin Air: How Leaking Natural Gas Infrastructure is Harming our Environment and Wasting a Valuable Resource* (2012) (assessing the climate change impacts of methane leaks from the natural gas distribution system in Massachusetts), available at <http://www.clf.org/intothinair/>; EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013*, 3-1 (April 2015), available at <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf> ("Emissions from fossil fuel combustion comprise the vast majority of energy-related emissions."); CEQ, *Revised Draft NEPA Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change*, at 8 (Dec. 18, 2014), available at https://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance.pdf ("Federal agencies, to remain consistent with NEPA, should consider the extent to which a proposed action and its reasonable alternatives contribute to climate change through GHG emissions"); see also *Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1217 (9th Cir. 2008) ("The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.").

Similarly, the proposed project is likely to have significant impacts on non-generation energy resources like demand management, demand response, energy efficiency, and conservation. All of these resources reflect avoided energy use, with the unassailable benefit of reducing utilization of existing, polluting resources and virtually no adverse environmental impacts. The Commission should address, in detail, how substantial new pipeline capacity into the New England region may diminish the economic incentive for these resources to continue to grow—and the value of the many federal, state, local, and utility investments promoting them. As discussed above, non-generation alternatives that the Commission must consider in the EIS would have vastly different effects on these resources, which must also be quantified and described.

As described in Section IV(a) above, TGP's Resource Reports make self-serving and unsubstantiated statements about the proposed project's ability to facilitate the displacement of older fossil fuel generation sources. In order to include this possibility in its review of the proposed project's impacts, the Commission must accurately assess the impact that this pipeline could have in displacing older fossil fuel generation separately from the market dynamics that are already having this effect. The study currently being conducted by the Analysis Group for Massachusetts Attorney General Maura Healey and scheduled to be completed on October 31, 2015, will likely be valuable to the Commission's analysis of this dynamic in New England.

c) Impacts of Natural Gas Extraction Practices

All impacts associated with the source of the natural gas that would be conveyed by the proposed project are relevant, and indeed crucial, to a valid and complete impact assessment. The Commission does not conduct separate analyses of the physical pipeline and the supply resources for the pipeline; thus, the analysis of the former must include the latter. In addition to the greenhouse gas impacts of natural gas extraction in the supply region for the proposed project, discussed above, hydraulic fracturing in the Marcellus Shale has serious and sometimes catastrophic impacts on land, air, water, and local residents at the site of extraction.

As the CEQ has definitively stated, such an evaluation is a core and unambiguous requirement of NEPA. Indeed, the geographic scope of the potential impacts to be analyzed has been extended even beyond national boundaries. In this context, analysis of the impacts on an

adjoining region of the United States is amply covered by this requirement. See CEQ, Guidance on NEPA Analyses for Transboundary Impacts (July 1, 1997). Citing both federal case law and policy considerations, CEQ guidance states:

Neither NEPA nor [CEQ] regulations implementing the procedural provisions of NEPA define agencies' obligations to analyze effects of actions by administrative boundaries. Rather, the entire body of NEPA law directs federal agencies to analyze the effects of proposed actions to the extent they are reasonably foreseeable consequences of the proposed action, regardless of where those impacts might occur. Agencies must analyze indirect effects, which are caused by the action, are later in time or farther removed in distance, but are still reasonably foreseeable, including growth-inducing effects and related effects on the ecosystem, as well as cumulative effects. Case law interpreting NEPA has reinforced the need to analyze impacts regardless of geographic boundaries within the United States

Id. (citing, *inter alia*, *Swinomish Tribal Cmty. v. FERC*, 627 F.2d 499 (D.C. Cir. 1980); *Wilderness Soc'y v. Morton*, 463 F.2d 1261 (D.C. Cir. 1972)) (emphasis added). Any decision by the Commission to exclude hydraulic fracturing impacts from its environmental review would be erroneous as a matter of law and subject to reversal to ensure compliance with NEPA.

d) Secondary, Indirect, and Cumulative Impacts

Pipeline construction and maintenance, especially in wetlands and across conservation lands, is likely to result in impacts beyond so-called direct impacts: namely, secondary, indirect and cumulative impacts. Indeed, the secondary impacts of activities – impacts such as fragmentation of wildlife habitat, flooding, and the degradation of water quality caused by stormwater runoff from cleared earth or the use of herbicides to maintain the pipeline corridor, to name a few – can sometimes be more significant and more harmful than the direct impact associated with construction and maintenance practices themselves. CEQ regulations specifically require the consideration of indirect impacts and their significance. 40 C.F.R. § 1502.16(b). As the Commission's own staff comments exhaustively catalogue, the current Draft Resource Reports provided by the Company lack adequate information and detail upon which this analysis can be conducted. FERC Staff Comments on the July 24, 2015 Draft Resource

Reports (Oct. 8, 2015). In order to provide adequate opportunity for stakeholders and the public to review and respond to this crucial missing information, the Commission must ensure that each piece of missing information is supplied before issuing a draft EIS.

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Thank you for your consideration of these comments. Please do not hesitate to contact CLF with any questions.

Respectfully submitted,



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