

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICE OF ENERGY PROJECTS

In Reply Refer To:

OEP/DG2E

Tennessee Gas Pipeline Company, LLC
Northeast Energy Direct Project
Docket No. PF14-22-000
§ 375.308(z)

February 27, 2015

Mr. J. Curtis Moffat
Deputy General Counsel and Vice President
Gas Group Legal
Tennessee Gas Pipeline Company, LLC
1001 Louisiana Street, Suite 1000
Houston, TX 77009

Re: Comments on Draft Resource Reports 1 and 10

Mr. Moffat:

The enclosure contains the comments of the FERC staff on Tennessee Gas Pipeline Company, LLC's (Tennessee Gas) draft environmental resource reports (RRs) 1 and 10 for the planned Northeast Energy Direct Project (Project). The comments ask for clarifications of discrepancies and identify missing information that we believe necessary to begin substantive preparation of the draft environmental impact statement for the project.

Due to the large number of public comments and the complexity of the Project, we are requesting that Tennessee Gas incorporate the requested information in the revised RR's. In addition, when Tennessee Gas files its full set of draft RR's please ensure that the comments identified in the enclosure are fully addressed. To facilitate review of the draft RR's, Tennessee Gas should include a matrix that identifies the specific locations in the RR's (i.e., section and page number) where the information requested in these comments may be found.

When filing documents and maps, prepare separate volumes as outlined on the Commission's website at <http://www.ferc.gov/help/filing-guide/file-ceii/ceii-guidelines.asp>. Any plot plans showing equipment or piping details or other Critical Energy Infrastructure Information should be filed as non-public and labeled "**Contains Critical Energy Infrastructure Information – Do Not Release**" (18 CFR 388.112). Cultural resources material containing location, character, or ownership information

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should be marked **“Contains Privileged Information – Do Not Release”** and should be filed separately from the remaining information, which should be marked **“Public.”**

Thank you for your attention to this matter. If you have any questions, please contact me at (202) 502-8097.

Sincerely,

Eric Tomasi
Environmental Project Manager
Office of Energy Projects

Enclosure

cc: Public File, Docket No. PF14-22-000

ENCLOSURE**Northeast Energy Direct Project (Project)
Docket No. PF14-22-000****Comments on Draft Resource Reports 1 and 10****General Comments**

1. For information noted as being filed at a later date or upon completion, provide an estimated date for submittal. Draft copies of all noted mitigation plans should be included in the Application when filed.
2. Upon provision of the Environmental Construction Plans (ECPs), provide a summary table of how each State ECP differs from one another, and from the FERC *Upland Erosion Control, Revegetation, and Maintenance Plan (Plan)* and *Wetland and Waterbody Construction and Mitigation Procedures (Procedures)*.
3. Identify if odorization facilities would be constructed in conjunction with the Project facilities. If so, identify the locations where odorization equipment would be located and discuss any mitigation to reduce odors.
4. Identify any additional delivery points and provide information on any associated metering and regulation facilities.

Draft Resource Report 1

1. File alignment sheets as “privileged” that include landowner names above each parcel, or file a public version of the alignment sheets with tract numbers and provide a separate list of tract numbers with the landowner of the tract as “privileged”.
2. Update Table 1.0-1 and the associated text to reflect each facility by specific mileposts including compressor stations. Include the specific compressor station mileposts in Table 1.1-3. Milepost numbers should include an indicator identifying the pipeline segment (example MP SP1.0 = milepost Supply Path 1.0, etc.)
3. For each planned compressor station, provide a large scale (1:3,600 or greater) plot plan identifying the proposed engine/compressor units, buildings, piping and other equipment, site property line, and nearby noise-sensitive areas (such as residences, farms, or schools).
4. In Section 1.1.2.1, clarify why certain pipelines or laterals have a maximum allowable operation pressure (MAOP) equal to the maximum operating

- pressure (MOP), and others are designed to have a MOP of approximately half of the MAOP.
5. In Table 1.1-2, specify the distance between the existing and proposed permanent rights-of-way and indicate the potential for further overlap that would allow abutting of the permanent rights-of-way in the associated text. In addition, specify the maximum overlap of existing rights-of-way allowable by the law, as stated throughout Resource Report 1.
 6. In Section 1.1.2.1.3, expand the text in the bullets to clarify what other states the laterals would extend into if they would not be wholly located in Massachusetts.
 7. In Section 1.1.2.4.2, clarify in the bullet list that the Granite/Pleasant St. and Cranston-Providence meter stations are existing meter stations that would be modified to increase flow.
 8. In Section 1.2.3, provide a table listing the new and modified access roads that are proposed for use, including the location by milepost, the size, and the type of modification required on existing roads. If this information is not available, identify when it will be provided. Indicate whether Tennessee would use temporary or permanent access roads proposed for the Constitution Pipeline Project where it is co-located.
 9. Update Table 1.2-6 to indicate the percentage of landowners where access has not been requested and add a footnote indicating how many landowners granted, then rescinded, survey permission, as well as how rescinded landowner permissions were accounted for in the table.
 10. In Section 1.3.1.4, discuss when the results of any scour analysis will be incorporated in to the Resource Reports and provide a cross-reference to where a detailed discussion is provided.
 11. Regarding the construction procedures listed in Section 1.3.2:
 - a. discuss the procedures and depth of burial for crossing railroads, foreign pipelines, and utilities; and
 - b. provide a table listing all known foreign pipelines, utilities, railroads, and roads that would be crossed, by milepost.
 12. In Section 1.3.2.2, include a cross-reference as to the section of the Resource Reports that fully describe the criteria for whether groundwater wells and springs within 200 feet of the construction right-of-way will be tested, the testing procedures for water quality and quantity, the timeframe for testing, and

- measures that would be implemented in the event that water testing indicates an impact on a well.
13. In Section 1.3.2.2.2, discuss the circumstances under which the stove-pipe construction method would be used instead of the drag-section construction method.
 14. Include discussion and consideration of direct pipe trenchless pipeline installation technology in section 1.3.2.5.
 15. In Section 1.3.2.9, ensure that the forthcoming table listing and justifying deviations from the FERC Plan and Procedures, if applicable, include the section of the Plan or Procedures for the requested deviation, the deviation itself, justification for the deviation, and how the deviation would provide equal or greater mitigation. If major modifications to the FERC Plan and Procedures are proposed, Tennessee should provide its own modified versions of the documents that would be used during construction and operation of the Project.
 16. In Section 1.3.3.3, update the text to include New Hampshire in the list of states where air quality impact modeling will be conducted, and associated applications will be filed.
 17. In Section 1.3.4:
 - a. provide the expected construction start date for each segment of pipeline, pipeline lateral, and compressor station, when known;
 - b. discuss the number of spreads and workers per spread required for the proposed laterals;
 - c. clarify whether the construction workers and timeframes provided for compressor and meter stations are those required for each individual facility, or for each type of facility combined;
 - d. provide the number of permanent staff anticipated during operation; and
 - e. provide locations for the new operations offices or district offices that would be required for operation, or clarify that none would be needed.
 18. In Section 1.3.5, provide a more detailed discussion on the environmental training that would be conducted for construction personnel if the Project were approved. Specify which construction personnel would receive training, when and how often the training would occur, and what documents would be provided (e.g., the FERC Plan and Procedures, or the Tennessee Plan and Procedures, as appropriate). In addition, discuss measures to ensure contractor compliance with the required mitigation.

19. In Section 1.4.1, clarify that the proposed annual vegetation maintenance in uplands would only occur over a 10-foot-wide corridor centered on the pipeline, and that edge-to-edge maintenance would only occur once every three years, as specified in the FERC Plan.
20. Update Table 1.6-1 to include all required permits/consultations for New Hampshire as no Section 106, state listed species, or air quality permits/consultations are listed.
21. In Section 1.7, specify whether power, water, or other utility lines would be constructed for the proposed aboveground facilities.
22. Include contact information in the Stakeholder List for the libraries and newspapers identified in Tables 1.8-1 and 1.8-2.
23. Consult with land managing agencies, state and local planning agencies, and other appropriate entities to identify past, present, and reasonably foreseeable future projects (e.g., roads, bridges, mining, utility projects, other pipelines and compressor stations, large commercial/industrial/residential developments, etc.) in the potential resource area of impact that could be affected by the Project. Tennessee should describe how it defines the area of impact for each resource, and include a table that identifies:
 - a. the project(s) type/name and county;
 - b. approximate distance and direction of the project(s) from the proposed Project facilities;
 - c. a description of the project(s); and
 - d. the current status and schedule of the project(s) (e.g., proposed for October 2015, under construction, completed).

Include a description of cumulative and/or overlapping impacts these projects and the planned Project would have on each environmental resource. Also include descriptions of the measures that would be implemented to minimize these impacts. Lastly, include a map showing the identified projects in relation to the planned Project.

Draft Resource Report 10

1. Update Resource Report 10 to:
 - a. clarify which alternatives and deviations are still being considered and which have been incorporated into the proposed route;
 - b. provide representative figures and tables detailing the locations of incorporated alternatives and deviations, as well as comparisons of impacts

- for relevant resources and the ultimate reason for its incorporation;
- c. include at least one alternative for each segment of the proposed Project, including the laterals;
 - d. specify and evaluate any reasonable route alternatives that were suggested by the public or agencies, as well as the feasibility of those alternatives. List and describe the rationale for any alternatives that were determined to be unreasonable and dismissed without evaluation; and
 - e. specify and evaluate system alternatives that were suggested by the public or agencies, as well as the feasibility of those alternatives. Include pipeline system alternatives, conservation alternatives, as well as renewable energy alternatives. List and describe the rationale for any alternatives that were determined to be unreasonable and dismissed without evaluation.
2. Provide a table of the proposed and/or estimated capacities of the pipeline systems reviewed in Section 10.2.2, based on the sources reviewed by Tennessee. In addition, provide a tabular comparative analysis of system alternatives as presented in table 10.2-1 of the FERC's Guidance Manual for Environmental Report Preparation. Depict on maps the locations of the all potential system alternatives, including Portland Natural Gas Transmission System and Granite State Gas Transmission, which appear to be missing from the mapping provided. Consider whether pipeline segments or facilities from different system alternatives could be combined into a hybrid system alternative.
 3. Existing and proposed pipelines, such as the proposed Constitution Pipeline, may be routed along ridge lines in steep terrain. Evaluate the constructability of the proposed NED route where it would be collocated with existing pipelines in steep terrain and where the most suitable location for construction may already be encumbered. Further, identify and describe any other potential constraints associated with collocation with other pipelines or electrical transmission lines including side slopes, urbanized areas, or other factors.
 4. Evaluate whether the lift and lay construction method could be used at any looped pipeline segments operated by Kinder Morgan, and along any existing pipeline segment besides the Haverhill Lateral.
 5. Include data categories in all alternatives comparison tables for miles or feet of expected side-slope construction (including data for both moderate and severe side slope), shallow bedrock, karst geology, landslides, numbers of landowners affected, residences located within 125 and 250 feet of a proposed work area, and miles or acres of interior forest.

6. Where the proposed route deviates significantly away (at least 0.5 mile) from the original Northeast Exchange Alternative for a substantial length (at least 1 mile), provide an analysis and comparison of the two routes with particular emphasis regarding the avoidance of potential constraints associated with collocation with the Constitution Pipeline.
7. For each major alternative in Section 10.3.1, clarify whether modification, addition, or removal of laterals along the proposed route would be required.
8. Regarding the Constitution Route 1 Alternative:
 - a. specify whether any laterals or aboveground facilities would be required along this alternative at the interconnection with the potential shipper identified in Section 10.3.1.1.1;
 - b. identify the location of the potential project shipper connection with Route Alternative 1 in Figure 10.3-1; and
 - c. clarify the discrepancy in the total length of co-located pipeline in Section 10.3.1.1.1 and Table 10.3-1.
9. Provide comparison tables for the Article 97 Avoidance and Co-location Route Alternatives and list and describe the subject properties in Resource Report 10, as and depict them in mapping as well.
10. In Section 10.3.3.2, provide documentation of consultation with Massachusetts agencies to identify and evaluate agency requested minor route deviations and provide alternatives comparison tables. List and describe the Areas of Critical Environmental Concern in Resource Report 10, as and depict them in mapping as well.
11. Provide a table similar to table 10.3-10 containing all of the landowner-requested and agency-requested minor route deviations and include an additional data column indicating whether the stakeholder's concerns have been resolved. Provide updates of this table as appropriate throughout the course of the project.
12. Once alternative compressor station locations are available, provide in Section 10.4:
 - a. details on the sizing, locations, limitations, and environmental impacts (including noise and visual impacts) of each alternative;
 - b. an assessment of technology alternatives for compression equipment, providing sufficient data to identify the alternative(s) with the lowest emissions; and

- c. a specific examination of the feasibility of installing waste heat recovery systems at proposed new and modified compressor units.
13. Provide an alternatives analysis for all of the compressor stations and for all other permanent, above-ground facilities such as meter stations and mainline valves where appropriate, such as where there could be visual or noise impacts to sensitive receptors.
14. Provide a discussion of the feasibility of using electric-motor-driven compressors at the proposed compressor stations. Provide the rate of electricity required and the number of electric motors required. Compare the size of the electric transmission line necessary under the current proposal with what would be required for the electric motors.
15. Provide a discussion regarding the feasibility of using waste heat electric generation (cogeneration) for the proposed turbines at the proposed compressor stations. Provide the rate of electricity potentially generated on a kilowatt/month basis and compare this with the amount of electricity used by the compressor station(s) per month. Describe the average load factor of the facility and any impediments that would prevent the operation of the compressor station continuously at 60% minimum load. Compare the size of the electric transmission line necessary under the current proposal with what would be required under a cogeneration system with return to the electric grid.

Document Content(s)

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