

139 FERC ¶ 61,161
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
and Cheryl A. LaFleur.

Tennessee Gas Pipeline Company, L.L.C.

Docket No. CP11-161-000

ORDER ISSUING CERTIFICATE AND APPROVING ABANDONMENT

(Issued May 29, 2012)

1. On March 31, 2011, Tennessee Gas Pipeline Company, L.L.C.¹ (Tennessee) filed an application under section 7(c) of the Natural Gas Act (NGA)² and Part 157 of the Commission's regulations³ for a certificate of public convenience and necessity authorizing Tennessee to construct, install, modify, operate, and maintain certain pipeline and compression facilities to be located in Pennsylvania and New Jersey that will increase natural gas delivery capacity on Tennessee's existing 300 Line System by 636,000 dekatherms (Dth) per day. Tennessee also requests approval of new incremental recourse rates for service on the proposed Northeast Upgrade Project facilities and on the certificated 300 Line Project facilities, as well as authority under section 7(b) of the NGA⁴ to abandon certain metering facilities that are to be replaced.

¹ Although originally filed under Tennessee Gas Pipeline Company, Tennessee converted its corporate structure to a limited liability company and changed its name to Tennessee Gas Pipeline Company, L.L.C., effective October 1, 2011.

² 15 U.S.C. § 717f(c) (2006).

³ 18 C.F.R. Part 157 (2011).

⁴ 15 U.S.C. § 717f(b) (2006).

2. We will authorize Tennessee's proposals, with appropriate conditions, as discussed below.

I. Background and Proposal

3. Tennessee is a limited liability company organized and existing under the laws of the State of Delaware. Tennessee's mainline transmission system extends from its principal sources of supply in Texas, Louisiana, and the Gulf of Mexico area, through the States of Texas, Louisiana, Arkansas, Mississippi, Alabama, Tennessee, Kentucky, West Virginia, Ohio, Pennsylvania, New York, New Jersey, Massachusetts, New Hampshire, Rhode Island, and Connecticut. Tennessee is a natural gas company, as defined by section 2(6) of the NGA,⁵ engaged in the transportation of natural gas in interstate commerce and is subject to the jurisdiction of the Commission.

4. On May 14, 2010, the Commission issued an order authorizing Tennessee to construct and operate pipeline facilities and replace certain compression facilities in Pennsylvania and New Jersey on its 300 Line System to both increase overall system reliability (the Reliability Component) and increase pipeline capacity by an incremental 350,000 Dth per day (the Market Component) (jointly, the 300 Line Project).⁶ The Market Component included the construction of eight pipeline loop segments totaling 127.4 miles of 30-inch diameter pipe, two new compressor stations, and the upgrade/restaging of compressor units at three other compressor stations. Since the filing of Tennessee's application in the instant proceeding, Tennessee completed construction of its 300 Line Project and placed the facilities in service on November 1, 2011.⁷

A. Facilities

5. In its present proposal, Tennessee seeks authorization for its Northeast Upgrade Project, which will add an incremental 636,000 Dth per day of capacity to its existing 300 Line System. Tennessee's proposal consists of the construction of five pipeline loop segments totaling approximately 40.3 miles of 30-inch-diameter pipe (21.9 miles in

⁵ 15 U.S.C. § 717a(6) (2006).

⁶ *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 (2010).

⁷ Tennessee's Notification of Placing Facilities In-Service dated November 4, 2011.

Pennsylvania and 18.5 miles in New Jersey) and the addition of approximately 22,310 horsepower (hp) of compression at two existing compressor stations. More specifically, Tennessee's proposed project includes the following facility construction and modifications:

Pipeline Loops

- Loop 317 – construction of 5.4 miles of 30-inch-diameter pipeline in Bradford County, Pennsylvania;
- Loop 319 – construction of 2.0 miles of 30-inch-diameter pipeline in Bradford County, Pennsylvania;
- Loop 321 – construction of 8.1 miles of 30-inch-diameter pipeline in Wayne and Pike Counties, Pennsylvania;
- Loop 323 – construction of 17.2 miles of 30-inch-diameter pipeline in Pike County, Pennsylvania and Sussex County, New Jersey;
- Loop 325 – construction of 7.6 miles of 30-inch-diameter pipeline in Passaic and Bergen Counties, New Jersey;

Compressor Stations

- Station 319 – modification of the compressor station yard and piping to accommodate new appurtenant equipment in Bradford County, Pennsylvania;
- Station 321 – addition of 10,310 hp of compression (compressor and drive), modification of the yard and station piping to accommodate the installation of the new compressor unit and compressor building, and installation of appurtenant facilities in Susquehanna County, Pennsylvania;
- Station 323 – addition of 12,000 hp of compression (compressor and drive), restaging of one existing compressor unit, modification of the yard and station piping to accommodate the installation of the new compressor unit and compressor building, and installation of appurtenant facilities in Pike County, Pennsylvania;
- Station 325 – modification of the yard and station piping to accommodate the installation of appurtenant equipment in Sussex County, New Jersey;

Meter Station and Appurtenant Facilities

- Mahwah meter station – upgrade and modification of the existing meter station, installation of two new taps, three ultrasonic meters, two gas filter-separators, and abandonment of two 12-inch orifice meters; and
- Installation of other appurtenant and auxiliary equipment, as further described in the application.⁸

B. Rates

6. Tennessee proposes to recover the costs associated with the Northeast Upgrade Project facilities through incremental recourse rates charged to shippers using the resulting capacity. The incremental firm recourse rate consists of: (1) a monthly reservation rate of \$14.909 per Dth (equivalent to a daily reservation rate of \$0.4902 per Dth), (2) a daily commodity rate of \$0.00 per Dth, (3) applicable demand and commodity surcharges, and (4) applicable fuel and lost and unaccounted for charges. Tennessee calculated this rate using the costs and design capacities of both the proposed Northeast Upgrade Project and the Market Component facilities of Tennessee's 300 Line Project.⁹ Tennessee argues that this is appropriate given that the Market Component of the 300 Line Project makes it possible for Tennessee to achieve the capacity increase of the Northeast Upgrade Project at a much lower cost than would have been possible absent construction of the 300 Line Project Market Component facilities. Tennessee states it has precedent agreements for long-term firm transportation services utilizing the full capacity of the proposed Northeast Upgrade Project with two shippers, Chesapeake Energy Marketing, Inc. (Chesapeake) and Statoil Natural Gas LLC (Statoil), under negotiated rate agreements under Rate Schedule FT-A of Tennessee's FERC Gas Tariff. Tennessee proposes to commence project service on November 1, 2013.

⁸ See Exhibit Z-1 of Tennessee's application for description of the appurtenant and auxiliary equipment.

⁹ The 300 Line Project had two components: (1) a Replacement Component, the costs of which are to be recovered from system services, and (2) a Market Component, the costs of which are to be recovered through an incremental rate. The Commission-approved Rate Schedule FT-A initial firm recourse rate for the Market Component of the 300 Line Project consists of: (1) a monthly reservation rate of \$26.94 per Dth; (2) a daily commodity rate of \$0.00 per Dth; (3) applicable demand and commodity surcharges; and (4) applicable fuel and lost-and-unaccounted-for charges. See *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140, at P 24 (2010).

7. Tennessee proposes to use the applicable general system rates for interruptible transportation services through the Northeast Upgrade Project capacity.

C. Open Season

8. Prior to holding its open season for the project, Tennessee executed binding precedent agreements with Chesapeake and Statoil for long-term firm natural gas transportation for the full capacity of the project, subject to the outcome of the open season. Tennessee held the binding open season from February 22 to March 22, 2010. Tennessee states that in the open season it offered rates, terms, and conditions of service to potential shippers that were equivalent to those included in the precedent agreements with Chesapeake and Statoil and that no other parties submitted a bid. Tennessee also solicited turn-back of capacity that could be used to provide transportation service to shippers as part of the Northeast Upgrade Project. Tennessee states that no shippers offered to turn back capacity in response to the solicitation. Tennessee states that it awarded Chesapeake 429,300 Dth per day of capacity and Statoil 206,700 Dth per day of capacity, for a total of 636,000 Dth per day. Thus, all the capacity of the proposed project is currently subscribed under precedent agreements.

9. By committing in the open season to quantities equal to or greater than 125,000 Dth per day for a contract term of at least 20 years, Tennessee states that both Chesapeake and Statoil qualified as Anchor Shippers. Tennessee proposes that Anchor Shippers receive certain benefits, including extension rights and a negotiated rate cap for construction overrun sharing, for helping the project reach critical mass. Tennessee notes that these Anchor Shipper benefits would have been provided on a non-discriminatory basis to any other potential shipper that submitted a qualifying bid as an Anchor Shipper in the open season. Tennessee requests that the Commission approve these contract provisions as permissible material deviations to the form of service agreement contained in Tennessee's tariff.

II. Notice and Interventions

10. Notice of Tennessee's application was published in the *Federal Register* on April 20, 2011 (76 Fed. Reg. 22,093). A number of timely, unopposed motions to intervene were filed.¹⁰ Timely, unopposed motions to intervene are granted by operation

¹⁰ The parties filing timely, unopposed motions to intervene are listed in Appendix A to this order.

of Rule 214(c) of the Commission's Rules of Practice and Procedure.¹¹ Timely notices of intervention were filed by the New York State Public Service Commission, the New Jersey Department of Environmental Protection (New Jersey DEP), the U.S. Department of the Interior on behalf of the National Park Service (NPS), and the New Jersey Board of Public Utilities. Timely notices of interventions are granted by operation of Rule 214(a) of the Commission's Rules of Practice and Procedure.¹² Chesapeake Energy Marketing, Inc. filed a motion to intervene one day late. Chesapeake demonstrated an interest in this proceeding and its late intervention will not delay or otherwise prejudice the proceeding.¹³ Therefore, we will grant this motion.

III. Discussion

11. Because Tennessee seeks to construct, operate, and abandon facilities used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of sections 7(b) and (c) of the NGA.¹⁴

A. Application of the Certificate Policy Statement

12. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.¹⁵ The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of

¹¹ 18 C.F.R. § 385.214(c) (2011).

¹² 18 C.F.R. § 385.214(a) (2011).

¹³ 18 C.F.R. § 385.214(d) (2011).

¹⁴ 15 U.S.C. § 717f (2006).

¹⁵ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

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

14. As noted above, the threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. Tennessee proposes to recover the costs of the proposed facilities through a new incremental rate for service which is higher than Tennessee's existing system-wide rate. Use of an incremental rate, as discussed and approved below, ensures that existing customers that do not use the facilities will not subsidize the expansion. Thus, we find Tennessee's existing shippers will not subsidize the project.

15. The construction and operation of the proposed facilities will not degrade existing customers' service. There will be no adverse impact on existing pipelines in the region or their captive customers because the proposal is not intended to replace existing customers' service on other existing pipelines. In addition, no existing pipelines or their customers have protested the proposal. Moreover, the project will help alleviate pipeline constraints in the region by increasing pipeline capacity to the high-demand markets in the northeast.

16. Regarding impacts on landowners and communities along the route of the project, Tennessee has proposed to locate the pipeline looping segments within or parallel to existing rights-of-way for approximately 84 percent of the length of the proposed segments. In addition, all the construction, installation, and modifications activities at the existing compressor stations will take place within existing Tennessee property boundaries. Tennessee participated in the Commission's pre-filing process and states that it is working diligently to address landowner concerns and questions and has made design changes, to the extent feasible, to address concerns from landowners and negotiate mutually agreeable easement agreements. Although, a number of landowners filed

comments objecting to or concerning the proposed facilities, we find that Tennessee has taken steps to minimize any adverse impacts on landowners and surrounding communities. The specific landowner comments are addressed in the Environmental Assessment (EA) for the project and in the Environmental Analysis section of this order, below.

17. Based on the benefits Tennessee's proposal will provide to the project shippers, the lack of adverse effects on existing customers and other pipelines and their captive customers, and the minimal adverse effects on landowners or communities along the route, we find, consistent with the Certificate Policy Statement and subject to the environmental discussion below, that Tennessee's proposed Northeast Upgrade Project is required by the public convenience and necessity, as conditioned in this order.

18. We also find that Tennessee's proposal to abandon certain facilities that are being replaced or will no longer be required after the proposed project is placed in service is permitted by the present and future public convenience or necessity.

B. Rates

1. Incremental Rates

19. Tennessee proposes to provide the new firm transportation service under Rate Schedule FT-A of Tennessee's tariff. As discussed below, the Commission will approve the recalculated incremental rates for service on the Northeast Upgrade Project.

20. Although Chesapeake and Statoil have elected to pay negotiated rates for service on the Northeast Upgrade Project, Tennessee is required under the Commission's Alternative Rate Policy Statement to provide recourse rates as an alternative.¹⁶

21. Tennessee has proposed an incremental recourse rate consisting of: (1) a monthly reservation rate of \$14.909 per Dth (equivalent to a daily reservation rate of \$0.4902 per Dth); (2) a daily commodity rate of \$0.00 per Dth; (3) applicable demand and commodity

¹⁶ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *order on clarification*, 74 FERC ¶ 61,194 (1996); *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996); *aff'd sub nom. Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement).

surcharges; and (4) applicable fuel and lost and unaccounted for charges. In calculating this rate, Tennessee uses an estimated total cost for the Northeast Upgrade Project of \$376,283,376,¹⁷ and a design capacity of 636,000 Dth per day. Tennessee's proposed \$71,053,000 incremental cost of service reflects the income tax rates, capital structure and rate of return approved in Tennessee's settlement in Docket No. RP95-112-000, et al.¹⁸ and reaffirmed in Tennessee's recent settlement in Docket No. RP11-1566-000.¹⁹ The cost of service also reflects a straight-line depreciation rate of 2.5 percent, based on an estimated useful life of 40 years for the proposed Northeast Upgrade Project facilities. Tennessee then added the \$105,345,000 cost of service approved by the Commission for the Market Component of the 300 Line Project, with its accompanying 350,000 Dth per day of design capacity.

22. Tennessee maintains that the Northeast Upgrade Project will build upon the additional capacity created by the Market Component of its 300 Line Project, which was placed into service on November 1, 2011. Tennessee also maintains that the 300 Line Project Market Component facilities have made it possible to achieve the capacity increase of the Northeast Upgrade Project at a lower cost than would have been possible absent the construction of the 300 Line Project Market Component facilities. Therefore, Tennessee contends, it is appropriate to calculate the incremental recourse rate for the Northeast Upgrade Project using a cost of service that combines the costs and design capacities of both the 300 Line Project Market Component facilities and the Northeast Upgrade Project. Tennessee suggests that failure to do so would enable the Northeast Upgrade Project shippers to inappropriately benefit from their project's relatively-cheaper expansibility (made possible by the prior construction of the Line 300 Project Market Component facilities), while the shippers of the Line 300 Project Market Component alone bear all costs of that construction.

23. Tennessee also contends that the combined rate treatment for the Northeast Upgrade Project is fully consistent with the Commission's Certificate Policy Statement, where the Commission recognized the need for certain exceptions to the application of incremental pricing for all projects. Tennessee maintains the inexpensive expansibility of

¹⁷ Tennessee Application - Exhibit K.

¹⁸ *Tennessee Gas Pipeline Co.*, 94 FERC ¶ 61,117 (2001); 77 FERC ¶ 61,083 (1996), *reh'g denied*, 78 FERC ¶ 61,069 (1997).

¹⁹ *Tennessee Gas Pipeline Co., L.L.C.*, 137 FERC ¶ 61,182 (2011).

the Northeast Upgrade Project facilities is a result of the earlier, more expensive capacity created by the 300 Line Project Market Component facilities.²⁰ Although Tennessee is not proposing to roll the Northeast Upgrade Project costs into its general system rates, Tennessee contends its proposal to roll the project's costs into the rates of the 300 Line Project Market Component is consistent with the premise that such rolled-in rate treatment is appropriate in cases of inexpensive expansibility made possible because of earlier costly construction.

24. Tennessee further notes that in the precedent agreement that provided the market support for the 300 Line Project, Tennessee and EQT Energy, LLC agreed to a rate adjustment to the negotiated rate "to the extent a subsequent project meeting certain criteria would be constructed and eventually placed in-service within a specified time period."²¹ Tennessee also explains that the parties agreed to this negotiated rate adjustment in recognition that Tennessee would likely be able to construct a subsequent project (such as the Northeast Upgrade Project) at a lower cost than would have been possible without the 300 Line Project.²²

25. The Commission rejects Tennessee's proposal to base the initial recourse rate for the Northeast Upgrade Project on the combined costs and capacities of both the Northeast Upgrade Project and the Market Component of the 300 Line Project because to do so would result in the total costs of the 300 Line Project Market Component being reflected, and recovered, in two separate rates at the same time. Although it would have been possible to amend the previously-authorized initial rate for the 300 Line Project Market Component to reflect the costs of the instant project in an NGA section 7 proceeding before that project went into service, once the 300 Line Project Market Component went into service in November 2011, the rate for service on that project can only be changed pursuant to section 4 of the NGA. Therefore, the Commission will approve an initial incremental Rate Schedule FT-A reservation rate for service on the Northeast Upgrade Project of \$9.31 per Dth per month.²³ This is without prejudice to Tennessee proposing

²⁰ Tennessee's Application at 14.

²¹ *Id.*

²² *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 at P 34.

²³ The \$71,053,000 incremental cost of service for the Northeast Upgrade Project divided by the annualized monthly billing determinants of 636,000 Dth per day equals \$9.31 Dth per month.

in an NGA section 4 proceeding to consolidate the rates of the Northeast Upgrade Project and the 300 Line Project Market Component rates into a single incremental rate.²⁴ In addition, this finding will not preclude Tennessee from adjusting EQT Energy, LLC's negotiated rate as it previously agreed.

26. Tennessee is directed to file a tariff record reflecting the approved initial rate not less than 30 but no more than 60 days prior to the in service date of the Northeast Upgrade Project.

2. Negotiated Rates

27. Tennessee states that the negotiated rates with Chesapeake and Statoil consist of a monthly reservation rate of \$13.5354 per Dth (equivalent to a daily reservation rate of \$0.4450 per Dth) and a daily commodity rate of \$0.00 per Dth. Tennessee states that these reservation and commodity rates are fixed²⁵ for the 20-year primary term of the service agreements with the shippers and are exclusive of any applicable surcharges. In addition, Tennessee points out that Chesapeake and Statoil have agreed to pay the designated surcharges and fuel and lost and unaccounted for charges as provided in the binding precedent agreements between Tennessee and the two shippers.

28. As indicated above, Tennessee has entered into agreements with Chesapeake and Statoil to provide firm transportation service at negotiated rates. In certificate proceedings, the Commission establishes initial recourse rates, but does not make determinations regarding specific negotiated rates for proposed services.²⁶ In accordance with the Alternative Rate Policy Statement²⁷ and the Commission's negotiated rate

²⁴ If Tennessee seeks to accomplish this rate change before the in-service date of the Northeast Upgrade Project, it should combine its NGA section 4 filing with a filing under section 7 to amend the initial rate approved herein.

²⁵ The negotiated rate agreement for Chesapeake and Statoil includes a rate adjustment mechanism for construction cost overruns.

²⁶ *Gulf Crossing Pipeline Co. LLC*, 123 FERC ¶ 61,100, at P 97 (2008); *ANR Pipeline Co.*, 108 FERC ¶ 61,028, at P 21 (2004); *Gulfstream Natural Gas System, LLC*, 105 FERC ¶ 61,052, at P 37 (2003); *Tennessee Gas Pipeline Co.*, 101 FERC ¶ 61,360 at n.19 (2002).

²⁷ *Alternative Rate Policy Statement*, 74 FERC ¶ 61,076 at 61,241.

policy,²⁸ Tennessee must file any negotiated rate agreements or a tariff record describing the essential elements of the negotiated rate agreements associated with this project. Tennessee shall file its negotiated rate agreements or a tariff record no less than 30 days, and not more than 60 days, prior to the commencement of service.

3. Fuel and Electric Power Cost Recovery Adjustment

29. Tennessee proposes to use its applicable Rate Schedule FT-A fuel charges for the increased transportation services associated with the proposed expansion on its existing 300 Line. Tennessee supported the use of its currently-effective Rate Schedule FT-A gas fuel charge. However, Tennessee did not provide information on how the addition of the proposed 12,000 hp electric-driven compressor will impact the Electric Power Cost Recovery Adjustment (EPCRA)²⁹ for its existing customers. To the extent that the incremental electric power unit costs for the project compressor are greater than the existing electric power unit costs, the existing customers could subsidize the project compression. Therefore, Tennessee is directed to file an analysis within 30 days of this order to demonstrate what impact the new compression will have on its EPCRA.

C. Non-Conforming Provisions

30. Tennessee states that there are several provisions in its precedent agreements with Chesapeake and Statoil that do not conform with its *pro forma* Rate Schedule FT-A transportation service agreement (*Pro Forma Agreement*) and requests Commission approval of these provisions.

31. Tennessee states that because Chesapeake and Statoil elected to pay negotiated rates in the Northeast Upgrade Project's open season, each was provided the right to

²⁸ See, e.g., *Texas Eastern Transmission, LP*, 133 FERC ¶ 61,220 (2010).

²⁹ Tennessee filed its certificate application during the settlement period of Tennessee's general rate case filed on November 30, 2010, in Docket No. RP11-1566-000. The rate case, among other things, implemented surcharges for two additional tracking mechanisms: a Fuel and Loss Retention Adjustment, which tracks and adjusts for over or under collections of Tennessee's fuel and losses, and the EPCRA, which tracks and adjusts for over or under collections of Tennessee's electric power costs. See Sheet Nos. 400, 401 and 402 to Tennessee's FERC Gas Tariff, Sixth Revised Volume No. 1.

extend the 20-year primary term of their respective Firm Transportation Agreements for successive 5-year terms, at the negotiated rate, so long as Chesapeake and Statoil provide written notice to Tennessee at least 24 months prior to the end of the primary term of the Firm Transportation Agreement, or the extended term, as applicable. Tennessee believes that it is reasonable to provide these two Anchor Shippers with this relatively-limited extension provision to address their future capacity needs. Tennessee asserts that this provision was an integral part of the arrangements under which Chesapeake and Statoil agreed to provide firm contractual support for the Northeast Upgrade Project. Tennessee also contends that it was prepared to offer the same extension rights that it offered to Chesapeake and Statoil to any other potential shipper that submitted a qualifying bid as an Anchor Shipper during the open season.

32. Tennessee also states that Chesapeake and Statoil have agreed to be subject to an adjustment to each shipper's negotiated rate due to cost escalations and/or construction cost overruns, which would increase both Chesapeake and Statoil's negotiated rate up to a rate cap of \$0.47 per Dth. Tennessee contends that because the precedent agreements pre-date the actual construction of the Northeast Upgrade Project, it is reasonable that Chesapeake and Statoil share the construction risk with Tennessee through this negotiated rate adjustment provision to reflect cost overruns. Tennessee maintains that this provision was an integral part of the transaction that led to Chesapeake and Statoil's support of the Northeast Upgrade Project and will not affect the terms of service once the facilities are placed in-service.

33. In addition, Tennessee states that there will necessarily be a few additional, minor differences between its firm transportation agreements with Chesapeake and Statoil and its pro forma firm transportation agreement. The project transportation agreements will: (1) contain a "Whereas" clauses describing the specific transaction; (2) address the commencement date of the agreements; (3) indicate that Tennessee will construct the project facilities; (4) state that the execution of the firm transportation agreements will supersede the precedent agreements; (5) not contain language through which individual rate components may be adjusted downward or upward (because Chesapeake and Statoil have agreed to pay negotiated rates); and (6) indicate the sections that will survive the execution and effectiveness of the Firm Transportation Agreements.

34. Tennessee states that the executed service agreements with Chesapeake and Statoil will provide the firm contractual support for the project and reflect the contractual incentives that were necessary for the Shippers to make binding commitments. Tennessee argues that, absent these contractual commitments, the project would not proceed. Therefore, Tennessee asserts, other shippers or potential shippers cannot be viewed as being similarly situated to Chesapeake and Statoil. Tennessee argues that, under the Commission's existing negotiated rate and discount policies, project sponsors may provide rate incentives to shippers on a number of grounds, including volumes to be transported, without constituting undue discrimination. For these reasons, Tennessee

does not believe that any aspect of the service agreements executed with Chesapeake and Statoil constitutes a material deviation from the *pro forma* Agreement contained in its tariff.

35. Tennessee argues that, even if the Commission construes these non-conforming provisions in the Shipper's firm transportation agreements to constitute material deviations from Tennessee's *pro forma* Agreement, none of these provisions are unduly discriminatory. Tennessee explains that it agreed to the non-conforming provisions in exchange for the shippers' long-term commitment to the project, and Tennessee claims that absent these contractual commitments, the shippers would not have subscribed to the project. Tennessee further asserts that these deviations simply reflect certain facts about the project, certain justified shipper benefits, and the fact that it cannot provide the services under the firm transportation agreements until it receives the necessary authorizations and constructs the project facilities. Due to the shippers' unique status as project sponsors, Tennessee states that none of the identified provisions create the risk of undue discrimination. Therefore, Tennessee requests that the Commission review and approve these provisions in the firm transportation agreement for each shipper in this certificate proceeding, subject to Tennessee filing such agreements as specified in Commission regulations or this order. Similarly, Tennessee requests a determination from the Commission that even if some contractual provisions could be construed to constitute a material deviation from the *pro forma* service agreement, no provision of the precedent agreements is unduly discriminatory.

36. As required by the Commission's regulations, Tennessee states it intends to file the firm transportation agreements and negotiated/discounted rate agreements and identify any material deviations or non-conforming provisions in each agreement. However, Tennessee requests the Commission address the potentially non-conforming provisions in this proceeding to forgo revisiting any issues raised by these agreements after Tennessee incorporates the subject provisions into executed service agreements filed with the Commission.

37. The Commission finds that the incorporation of non-conforming provisions in Chesapeake's and Statoil's service agreements constitutes material deviations from Tennessee's *pro forma* service agreement.³⁰ However, in other proceedings, the Commission has found that non-conforming provisions may be necessary to reflect the unique circumstances involved with the construction of new infrastructure and to provide

³⁰ Tennessee Application at section VII.

the needed security to ensure the viability of a project.³¹ We find that the non-conforming provisions identified by Tennessee are permissible because they do not present a risk of undue discrimination, do not affect the operational conditions of providing service, and do not result in any customer receiving a different quality of service.³²

38. Tennessee must file at least 60 days before the in-service date of the proposed facilities, an executed copy of each non-conforming agreement disclosing and reflecting all non-conforming language as part of Tennessee's tariff and a tariff record identifying these agreements as non-conforming agreements consistent with section 154.112 of the Commission's regulations.³³ This required disclosure includes any transportation provision or agreement detailed in a precedent agreement that survives the execution of the service agreement. In addition, the Commission emphasizes that the above determinations relate only to those items as described by Tennessee in section VII of its application and not to the entirety of the precedent agreements or the language contained in the precedent agreements.³⁴

D. Environmental Analysis

39. Commission staff began its environmental review of the Northeast Upgrade Project following approval for Tennessee to use the pre-filing process on July 20, 2010, in Docket No. PF10-23-000. As part of the pre-filing review, the staff issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Northeast Upgrade Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI) on October 8, 2010. The NOI was published in the *Federal Register*³⁵

³¹ See, e.g., *Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089, at P 82 (2008) and *Rockies Express Pipeline LLC*, 116 FERC ¶ 61,272, at P 78 (2006).

³² See, e.g., *Gulf South Pipeline Co., L.P.*, 115 FERC ¶ 61,123 (2006) and *Gulf South Pipeline Co.*, 98 FERC ¶ 61,318, at 62,345 (2002).

³³ 18 C.F.R. § 154.112 (2011).

³⁴ We note we are only ruling herein on the specific provisions of the agreements highlighted by Tennessee in its application. The full agreements will be reviewed upon their filing.

³⁵ 75 Fed. Reg. 64,303 (October 19, 2010).

and mailed to over 1,500 parties including federal, state, and local government officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners. Staff held three public scoping meetings in communities near the proposed facilities to provide the public with an opportunity to learn more about the project and to comment on environmental issues that should be addressed in the Environmental Assessment (EA). The three scoping meetings were attended by a total of 121 individuals.³⁶

40. On July 27, 2011, Commission staff issued an additional notice, after Tennessee filed its project application on March 31, 2011, requesting comments from landowners and other stakeholders potentially affected by route alternatives for Loop 323 in Montague Township, Sussex County, New Jersey. The notice was mailed to over 320 landowners and stakeholders. Tennessee revised its proposed alignment of Loop 323 on August 31, 2011 to incorporate into its proposed route one of these route alternatives in order to reduce impacts on a continuous forest block and the federally-endangered bog turtle.

41. We received written and verbal comments during the public scoping process from affected landowners, concerned citizens, government agencies, and other organizations. The primary issues raised during scoping were the request that the Commission complete an Environmental Impact Statement (EIS) rather than an EA; the development of natural gas from the Marcellus Shale³⁷ in Pennsylvania and the need to consider the cumulative impacts of shale gas development as part of our review of the project; route alternatives in proximity to the Delaware Water Gap National Recreation Area (Delaware Water Gap NRA); impacts on recreation and special interest areas; impacts on water resources, forest, and wildlife; operational noise at modified compressor stations; impacts on landowners and their homes, including property values; and the need for complete information for state permitting purposes.

³⁶ The public scoping meetings were held in Ringwood, New Jersey, and Milford and Wyalusing, Pennsylvania, on November 1, 3, and 4, 2010, respectively.

³⁷ The unconventional development and production of natural gas resources in shale formations has increased in the United States in recent years. In Pennsylvania, this development is occurring in the Marcellus Shale, which extends primarily from New York through Pennsylvania and into West Virginia and Ohio. EA at 2-121.

1. Pre-EA Scoping Comments

42. Commentors on the NOI, including Skylands Clean, New Jersey Highlands Coalition, and New Jersey Conservation Foundation, contended that the project would result in significant impacts on the human environment and, therefore, an EIS would be required. The EA addresses whether an EIS should have been prepared. It explains that the Commission's regulations implementing the National Environmental Policy Act of 1969 (NEPA) require preparation of an EIS for "[m]ajor pipeline construction projects...."³⁸ Our regulations do not define or explain what constitutes a "major" pipeline; however, the Commission's years of experience with NEPA implementation for pipeline projects indicate that a new 40.3-mile-long, 30-inch-diameter pipeline that will be co-located within or adjacent to existing rights-of-way for 84 percent of its length normally would not fall under the "major" category for which an EIS is automatically prepared.³⁹

43. The Council on Environmental Quality (CEQ) regulations implementing NEPA state that one of the purposes of an EA is to assist agencies in determining whether to prepare an EIS or a finding of no significant impact. Here, Commission staff prepared an EA to determine whether the Northeast Upgrade Project would have significant impact, thus necessitating the preparation of an EIS. As explained below, the EA concludes, and we agree, that the Northeast Upgrade Project would not constitute a major federal action

³⁸ EA at 1-2 (citing 18 C.F.R. § 380.6(a)(3) (2011)).

³⁹ See, e.g., *Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 (2010) (EA issued for Tennessee's 300 Line Project consisting of 127.4 miles of 30-inch-diameter pipeline loops through six counties in Pennsylvania and two counties in New Jersey); *Magnum Gas Storage, LLC*, 134 FERC ¶ 61,197 (2011) (EA issued for new Magnum Gas Storage Project which included gas storage field on 2,050-acre site in Millard County, Utah, and associated 61.6-mile, 36-inch-diameter pipeline traversing three counties in Utah); *Colorado Interstate Gas Co.*, 131 FERC ¶ 61,086 (2010) (EA issued for Colorado Interstate Gas Co.'s Raton 2010 Expansion Project which included two new 16-inch-diameter pipeline laterals totaling 118 miles in length traversing four counties in southeastern Colorado); *Equitrans L.P.*, 117 FERC ¶ 61,184 (2006) (EA issued for Big Sandy Pipeline Project which included 68 miles of new 20-inch-diameter pipeline traversing four counties in eastern Kentucky).

significantly affecting the quality of the human environment.⁴⁰ Therefore, an EIS is not required.⁴¹

44. Some commentors also argued an EIS would be necessary to fully consider the impact of the development of natural gas from the Marcellus Shale in the environmental review of the project. As explained in more detail below, the EA addresses the cumulative impact of other jurisdictional natural gas pipelines, natural gas facilities associated with the project but that are not under the Commission's jurisdiction, unrelated projects, and development of Marcellus Shale. The EA considers the general development of the Marcellus Shale in proximately to the project within the context of cumulative impacts in the project area. The EA notes that the more detailed analysis of Marcellus Shale impacts sought by commentors is outside the scope of the project analysis because the exact location, scale, and timing of future facilities are unknown. Moreover, the EA concludes that the potential cumulative impacts of Marcellus Shale development are not sufficiently causally related to the project to warrant the comprehensive consideration of those impacts in our staff's analysis.⁴²

45. Commentors also raised concerns regarding project impacts on recreation and special interest areas including the Delaware River, Appalachian National Scenic Trail, New Jersey Highlands Region, state parks, and properties enlisted in the New Jersey Green Acres program, among others. The EA describes each recreation and special interest area that would be crossed by or within 0.25 mile of the project, and discusses the impacts of the project on each area and Tennessee's consultations with applicable permitting agencies. Tennessee provided state-specific Environmental Construction Plans (ECPs) describing the measures that it will implement to minimize construction and

⁴⁰ EA at 4-1. Under 40 C.F.R. § 1508.18 of the CEQ's regulations, "a 'major federal action' includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly. (Sec. 1508.27)." "Significantly" requires consideration of both the context and intensity of the project. *See* 40 C.F.R. § 1508.27 (2011).

⁴¹ CEQ regulations state that, where an EA concludes in a finding of no significant impact, an agency may proceed without preparing an EIS. *See* 40 C.F.R. §§ 1501.4(e), 1508.13 (2011).

⁴² EA at 2-125.

operational impacts of the project. Tennessee also provided site-specific crossing plans for the above mentioned recreation and special interest areas and committed to continued consultation with the agencies responsible for these areas regarding the need for any additional mitigation measures. As stated in the EA, our staff reviewed the site-specific plans and found them acceptable.

46. Individuals, non-government organizations, and state agencies raised concern regarding adverse impacts on natural resources, primarily surface water, forest, and wildlife resources. The EA examines project impacts on these and other resources, and describes the mitigation measures that Tennessee will implement to avoid or reduce impacts, as well as the local, state, and federal agency consultations and required permits for the project.

47. Many of the commentors stated concerns that the project could threaten important drinking water resources in the region, including the Delaware River between Pennsylvania and New Jersey, and the Monksville Reservoir in Passaic County, New Jersey. The EA explains that Tennessee would cross both of these waterbodies by the horizontal directional drill (HDD) method. Tennessee's HDD contingency plans include provisions to minimize the impact of an inadvertent release of drilling mud (typically bentonite, a naturally occurring clay) into waterbodies. Tennessee would also implement other measures described in the EA and detailed in its state-specific ECPs to minimize construction-related impacts on other surface waters such as a Spill Prevention, Control and Countermeasure Plan that prohibits fueling and fuel storage within 100 feet of a waterbody. Based on the implementation of the construction and restoration methods described in Tennessee's application, the EA concludes that impacts on waterbodies would be minor and temporary and that operation of the project would not pose a threat to drinking water resources in the area.⁴³

48. The EA discusses how Tennessee will further minimize impacts on forest and other vegetation by implementing erosion control measures detailed in its ECPs and by controlling the spread of invasive plant species through implementation of its Invasive Species Management Plan, which includes monitoring for and control of invasive species for at least 5 years after construction. Tennessee has also committed to comply with New Jersey's No Net Loss Reforestation Act to restore or mitigate for all forested habitat impacted on state-owned lands, and with restoration and mitigation measures that may be

⁴³ EA at 2-12.

required by the U.S. Army Corps of Engineers (Corps) in conjunction with permits under section 404 of the Clean Water Act (CWA).⁴⁴

49. Four federally-listed threatened or endangered species were identified in the project area: the bog turtle, dwarf wedgemussel, Indiana bat, and small whorled pogonia. Tennessee consulted with the U.S. Fish and Wildlife Service (FWS) regarding these species and the FWS assisted us in preparing the EA, which contains our Biological Assessment (BA). As discussed below, Tennessee filed additional survey reports and we have continued consultation with the FWS. Environmental recommendations 13 and 14 are included in this order to ensure compliance with the Endangered Species Act (ESA) as Environmental Condition Nos. 13 and 14.

50. The EA identifies state-listed species of concern in the project area and discusses the field surveys conducted to date, potential impacts on the species, and measures that Tennessee will implement to avoid or minimize impacts on these species. The EA recognizes Tennessee's on-going consultation with appropriate state agencies to complete surveys and develop measures as necessary to avoid adverse impacts on rare, state-listed species. The EA recommends that Tennessee file the results of outstanding surveys for state-listed species and to identify additional mitigation measures developed in consultation with the state agencies (environmental recommendation 16). Since issuance of the EA, Tennessee and the New Jersey Department of Environmental Protection (New Jersey DEP) have filed updates and comments pertaining to state-listed species of concern. Therefore, environmental recommendation 16 is included as Environmental Condition No. 15 to this order. These updates and comments are discussed in more detail below.

51. Several landowners from the Fawn Lake community in Pike County, Pennsylvania expressed concern regarding the potential for increased operational noise at modified Compressor Station 323. The EA evaluates the predicted noise levels from the modified Compressor Station 323 at the nearest noise-sensitive areas and finds that the potential noise increase would be barely noticeable. Environmental Condition No. 18 to this order, requires Tennessee to file the results of noise surveys after placing the authorized units at Compressor Stations 321 and 323 in service and requires Tennessee to install noise controls if noise levels exceed the threshold.

⁴⁴ 33 U.S.C. § 1344 (2006).

52. In response to landowner concerns, the EA discusses Tennessee's special construction techniques to minimize project impacts on residential properties and states that Tennessee would repair, replace, or compensate landowners for project-related damages. The EA includes site-specific residential construction plans for those residences within 50 feet of the construction work area and requests that landowners provide comment on these plans. The EA recommends that Tennessee file evidence of landowner concurrence with the residential construction plan for the residence at milepost (MP) 8.3 of Loop 323. After the issuance of the EA, Tennessee provided that landowner concurrence; therefore, the recommended condition in the EA is not included as a condition to this order. The EA concludes that implementation of the special construction methods and site-specific residential construction plans will minimize disruption to residential areas to the extent practicable and facilitate restoration of these areas as soon as possible upon completion of construction.

53. In its scoping comments, New Jersey DEP cited deficiencies and discrepancies in information it had received from Tennessee in support of its application for the state permits and federally-delegated permitting under section 401 of the CWA.⁴⁵ New Jersey DEP requested that we delay issuance of the EA until the outstanding information was submitted and reviewed by the New Jersey DEP and other applicable state agencies. The EA discusses the state's need for complete information for its permitting purposes, but concludes that the information in the EA was sufficient for the purpose of the Commission's NEPA analysis. The EA states that no more than nine percent of the proposed facilities in New Jersey remain to be surveyed due to lack of landowner permission, and that a substantial amount of environmental information was obtained from federal, state, and local resources, including for those areas not accessible for survey. The EA also explains that Tennessee has committed to obtaining all necessary environmental permits and would be required to complete and file with the Commission the results of all resource surveys upon gaining access to unsurveyed properties prior to construction. Further, Environmental Condition No. 8 requires Tennessee to provide documentation that it has received all necessary federal authorizations before construction will be allowed to proceed. This includes the section 401 permit under consideration by the New Jersey DEP.

⁴⁵ 33 U.S.C. § 1341 (2006).

2. Late Scoping Comments

54. We also received late scoping comment letters from three affected landowners (George Feighner (two letters), Joseph and Chris Butto, and Stanley Buczek⁴⁶) and one state agency (New Jersey DEP).⁴⁷ In addition, a form letter was filed by several non-governmental organizations (NGO)⁴⁸ and approximately 150 individuals who are not landowners affected by the project. Some individuals added additional specific concerns to these form letters. These comments were filed just before the issuance of the EA and were too late to be included. However, the majority of the late letters and comments on the EA reiterate comments previously received and are thoroughly addressed in the EA. The remaining, substantive environmental comments are addressed below.

55. In both of his late scoping comments, George Feighner states that he does not oppose the project, but opposes the proposed alignment of Loop 323, which crosses his property in Montague Township, Sussex County, New Jersey. Mr. Feighner notes that the proposed alignment, which deviates from Tennessee's existing right-of-way to avoid crossing the Delaware Water Gap NRA and requires about 3.5 miles of additional pipeline, could adversely affect air quality, animal migration routes, drainage patterns, and visual resources in the area. We note that other late commentors provided additional scoping comments on the proposed route and alternatives around the Delaware Water Gap NRA. Mr. Feighner also states concerns that the project would require removal of old growth trees and impact the water supply well and septic system on his property. In addition, Mr. Feighner and additional commentors noted their concerns about the impact on cultural resources, steep slopes, vernal pools, wetlands, and waterbodies.

⁴⁶ In its comments on the EA filed on December 21, 2011, Tennessee responded to the comments received from both George Feighner and Stanley Buczek.

⁴⁷ Tennessee filed a response to the New Jersey DEP late scoping comment on December 13, 2011.

⁴⁸ The letter was filed jointly by New Jersey Chapter of Sierra Club, Delaware Riverkeeper Network, New Jersey Highlands Coalition, Earthjustice, New Jersey Audubon Society, Pequannock River Coalition, New Jersey Conservation Foundation, North Jersey Public Policy Network, ClimateMama, Morris County Trust for Historic Preservation, and Burham Park Association.

56. As explained in the EA, Tennessee's existing pipeline crosses the Delaware Water Gap NRA for 1 mile in Pike County, Pennsylvania and Sussex County, New Jersey, and was installed prior to 1965 when the Delaware Water Gap NRA was established. The EA analyzes two route alternatives that would cross the Delaware Water Gap NRA and finds that each of the alternatives would result in fewer environmental impact than the proposed alignment in this area. However, the EA does not recommend either alternative because of a substantial land use conflict. The EA explains that the legislation that created Delaware Water Gap NRA precludes the NPS, which manages the Delaware Water Gap NRA, from approving any route across the Delaware Water Gap NRA without federal legislation allowing it to do so, and the NPS has stated its opposition to any routing across the Delaware Water Gap NRA. Therefore, if the Commission were to approve one of the alternatives crossing the Delaware Water Gap NRA, Tennessee would still not be able to construct the project as approved. As a result, the EA concludes that while the alternative routes may be environmentally preferable, the proposed route for Loop 323, with the mitigation proposed by Tennessee and recommended by staff, is considered environmentally acceptable and would not result in significant impacts.

57. Mr. Feighner contends that the 3.5 miles of additional pipeline on Loop 323 to route around the Delaware Water Gap NRA would create the need for increased compression which would result in an increase of greenhouse gas emissions. While we agree that there would be some decrease in downstream pressure because of the additional pipe, the increased compression to compensate for this pressure drop would not result in an appreciable amount of associated greenhouse gas emissions. Any increase in greenhouse gas emissions would be minimal when comparing these 3.5 extra miles to the scope of the project facilities.

58. The EA discusses the environmental concerns raised by Mr. Feighner and other commentors and describes how Tennessee's construction plans would minimize impacts on these resources including those specific to their properties. The EA states that Tennessee would be required complete all remaining surveys, conduct any necessary agency consultations, and implement measures to address issues identified by the surveys. We believe that this process, coupled with the construction and restoration measures described in the EA and input from Mr. Feighner and other landowners, will minimize effects on property impacted by the project to the greatest extent practicable. The loss of some mature trees may be unavoidable; however, any construction-related damages are a point of negotiation between landowners and Tennessee, and Tennessee will compensate landowners for damages and the temporary and permanent easement on their land.

59. Joseph and Chris Butto are homeowners near MP 8.1 of Loop 323 in Montague Township, Sussex County, New Jersey. The Buttos' late scoping comments stated their concern that the project could impact the federally-endangered bog turtle as well as wetlands, springs, and steep slopes in the area. The EA states that Tennessee would be

required to complete its bog turtle surveys prior to construction. On January 11, 2012, Tennessee filed with the Commission, and provided to FWS, the results of its bog turtle survey for the segment of Loop 323 near the Buttos' property. The FWS concurred that the survey did not document any suitable bog turtle habitat on the referenced segment of Loop 323.

60. The Buttos also asked whether Tennessee is required to identify the potential impact radius of the pipelines and requested that information. The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) requires that pipeline operators identify the potential impact radius at all points along their pipelines as part of determining high consequence areas. The EA addresses the methodology for identifying high consequence areas by using pipeline class locations, the associated potential impact radius, and potential impact circle.⁴⁹

61. Stanley Buczek's late comments relay his concern that he would be unable to cross the pipeline, thereby rendering approximately 25 acres to the rear of his property unusable. In a filed response to these comments, Tennessee noted that it met with Mr. Buczek on a number of occasions, but was not granted access to his property to complete an evaluation of his concerns. Tennessee informed Mr. Buczek that it is possible to construct the pipeline in a manner that would allow heavy equipment to cross over the pipeline, allowing him access to the rear of his property. We believe that Tennessee and Mr. Buczek can resolve this issue during the easement negotiation process.

62. The general form letter requested that the Commission hold public meetings in New Jersey for the purpose of taking comments on a draft of the EA and to consider potential project impacts on drinking water resources, including the Monksville Reservoir in Passaic County, New Jersey. Three commentors filed an expanded version of the general form letter that contained a section of specific issues of importance to the commentor. In a version of the form letter, the New Jersey Chapter of Sierra Club, along with several other NGOs, added that the project would result in significant harm to critical habitat for rare, threatened, and endangered species, core forest, and native plants. The Food and Water Watch and Cornucopia Network of New Jersey added concerns of excess erosion and residential impacts from the project, respectively. Judith Sullivan added her concern regarding cumulative impacts on historic roads and Native American

⁴⁹ The potential impact circle is a circle with a radius equal to the potential impact radius.

cultural resources in New Jersey. Ms. Sullivan's comments are addressed in greater detail below.

63. Regarding the request for additional public meetings, we believe that our process has allowed the public sufficient opportunity to comment on the project. As previously described, our environmental review process included a 30-day public scoping period and three public scoping meetings. In addition, we continued to accept and address comments until the EA was ready to be printed. After the EA was issued, landowners and other stakeholders had an additional 30-day opportunity to comment on the project. Although the EA comment period closed on December 21, 2011, we continued to accept comments on the EA. Based on this, we find that interested individuals and groups had sufficient opportunity to provide comments and input on our environmental review of the project. We also find that the environmental issues raised in the form letters are adequately addressed in the EA or in the response to comments on the EA contained in this order without the need for additional public meetings.

3. EA and Post-EA Comments

64. To satisfy the requirements of the NEPA,⁵⁰ Commission staff prepared an EA for the Northeast Upgrade Project. FWS and the Corps participated in the preparation of the EA as cooperating agencies. On November 21, 2011, the EA was placed into the public record of this proceeding⁵¹ and issued for a 30-day comment period. The EA addresses geology and soils, water resources, fisheries and wetlands, vegetation and wildlife, land use, recreation and visual resources, socioeconomics, cultural resources, air quality and noise, reliability and safety, cumulative impacts, and alternatives. As summarized below, the EA also addresses all substantive issues raised during the scoping process or otherwise identified prior to the issuance of the EA.

65. We received comments on the EA from a number of individuals, agencies, and NGOs including: the Environmental Protection Agency (EPA); the New Jersey DEP; three county agencies in Pennsylvania: Pike County Planning Commission, Pike County Conservation District, and Bradford County Office of Community Planning and Grants (Bradford County); one county agency in New Jersey: Bergen County Department of

⁵⁰ 42 U.S.C. §§ 4321-4370f (2006).

⁵¹ A notice announcing the availability of the EA was published in the *Federal Register* on November 29, 2011. 76 Fed. Reg. 73,618 (2011).

Planning and Economic Development; three NGOs filing jointly: New Jersey Chapter of the Sierra Club, Delaware Riverkeeper Network, and New Jersey Highlands Coalition (referred to henceforth collectively as Sierra Club); William Anastasio, an affected landowner in Pennsylvania; George Feighner, an affected landowner in New Jersey; Jean Public and Steven Vitale, two concerned citizens; and Tennessee.⁵² The NPS filed a statement that it had no comments on the EA. The New Jersey State Historic Preservation Office (SHPO), Ramapough Lenape Indian Nation (Ramapough Lenape), and Ms. Judith Sullivan each filed comment letters concerning cultural resource issues and our responsibilities under section 106 of the National Historic Preservation Act (NHPA),⁵³ that were not in response to the EA.

66. In comments on the EA, New Jersey DEP states that NPS approval will be required if the project activity of Loop 325 constitutes a conversion of federally-protected parkland funded by the Land and Water Conservation Fund. Environmental Condition No. 8 of this order requires Tennessee to file with the Commission documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof) prior to receiving authorization to commence construction of any project facilities. Therefore, Tennessee is required to resolve the Land and Water Conservation Fund issues prior to construction.

67. The New Jersey DEP also recommends that Tennessee conduct field investigations to determine whether Loop 325 will cross historical quarries or underground mines, including the former Monks and Board mines. As discussed in the EA, previous field surveys, mapping, and title searches did not identify any mines crossed by the project. The opening to the former Monks mine was found to be 125 feet south of Tennessee's existing pipeline and historical descriptions indicate that the mine shafts extend southeasterly, away from the existing pipeline. Loop 325 will be installed on the north side of the existing pipeline at this location, opposite of the mine, and Tennessee states that the existing pipeline has not been affected by the mine. No indication of the former Board mine was found during initial field surveys, but Tennessee has agreed to revisit the area to determine if the former mine workings can be located, and will file its findings prior to any construction.

⁵² Tennessee filed its comments on the EA on December 21, 2011. Tennessee filed a response to comments that were received on the EA on January 27, 2012.

⁵³ 16 U.S.C. § 470f (2006).

68. New Jersey DEP recommends that blasting be conducted in accordance with New Jersey Department of Labor codes. As described in the EA, blasting will comply with federal, state, and local regulations. Tennessee notes in its response to comments that the New Jersey Department of Labor regulations do not specify a distance for conducting monitoring from blast sites.

69. We also received additional comments regarding blasting concerning the impacts of blasting on underground mines. The EA discloses that approximately 32.7 miles (82 percent) of the proposed pipeline loops would cross areas of shallow bedrock that may require blasting but would not cross any known underground mines. It also identifies Tennessee's Blasting Plan to minimize the effects of blasting and ensure the safety of its existing pipeline and nearby structures during blasting operations. In its blasting Plan, Tennessee states that all blasting techniques would comply with federal, state, and local regulations governing the safe storage, handling, firing, and disposal of explosive materials. Considering the limited, controlled nature of blasting that would be used to excavate the narrow, shallow trench, blasting is not anticipated to impact underground mines and will have minimal impact to other resources. Tennessee will be responsible for any construction-related damages, including from any blasting activities.

70. Regarding project construction and operation on state-owned lands and Natural Heritage Priority Sites, New Jersey DEP comments that some botanical surveys remain to be completed and recommends that surveys for invasive plant species be extended 150 feet from the edge of the construction work space. New Jersey DEP requests that Tennessee conduct invasive species monitoring over the life of the project, fund an independent botanist to monitor construction and restoration activities, post a bond to ensure that sufficient funds will exist to monitor for and manage invasive species and repair other biological impacts, and evaluate alternatives to minimize project impacts. As discussed in the EA, Tennessee will complete any remaining botanical surveys in the spring or early summer of 2012 and provide the survey results to the Commission and New Jersey DEP. The EA references Tennessee's Invasive Species Management Plan which discusses the extent and duration of invasive species surveys, monitoring, and management practices that Tennessee will implement. Tennessee has agreed to continue to discuss invasive species management with New Jersey DEP, as well as the posting of a bond for work on state lands.

71. The EA discusses Tennessee's environmental inspection program, which will consist of trained individuals to ensure implementation of appropriate measures to minimize impacts and ensure compliance with federal, state, and local permit stipulations. In addition, Tennessee has agreed to fund a third-party environmental monitoring program that will include full-time personnel working under the direction of the Commission. Regarding alternatives to minimize impacts, the EA includes a detailed analysis of alternatives to avoid or reduce project impacts. In addition, Tennessee's Freshwater Wetlands and Flood Hazard Area Individual Permit applications to

New Jersey DEP include an alternatives analysis and an avoidance and minimization measures summary that specifically address the minimization measures that Tennessee will employ on state-owned lands.

72. Regarding impacts on wildlife, New Jersey DEP recommends measures to minimize impacts on the state-listed eastern floater (mussel) in Holiday Lake (Loop 323), repeats its earlier concern regarding potential impacts on state-listed snake species, comments that the pipeline trench needs to include animal escape slopes, recommends that the permanent right-of-way be maintained in a low shrub state, and recommends that tree clearing timing restrictions be imposed along the entire length of Loops 323 and 325 to protect Indiana bats and state-listed bat species. New Jersey DEP also recommends that Tennessee develop a detailed construction plan for the project.

73. In response, Tennessee states that landowners surrounding Holiday Lake have opposed draining the lake in order to conduct a dry crossing. Therefore, Tennessee proposes a wet crossing of Holiday Lake using barges and turbidity curtains, similar to the method used to replace the existing 24-inch-diameter pipeline in 2003, to avoid significant impact on the eastern floater. Tennessee also commits to continue to work with New Jersey DEP on the Holiday Lake crossing. With regard to potential project impacts on state-listed snake species, Tennessee will implement measures to avoid, minimize and mitigate for impacts and will employ biological monitors if required by New Jersey DEP permit conditions. Similarly, Tennessee will comply with state permit conditions requiring animal escape ramps from open trenches. As described in the EA, Tennessee will maintain the permanent right-of-way in an herbaceous and low shrub cover type to comply with safety requirements and protocol. Regarding tree clearing timing restrictions related to the federally-listed Indiana bat, we are including Environmental Condition No. 13 to this order to protect the Indiana bat in New Jersey by prohibiting the clearing of trees greater than 5-inch-diameter breast height from April 1 to September 30 between mileposts 13.9 and 16.4 on loop 323. We believe that implementation of this condition will also be protective of other bat species in the area. Finally, Environmental Condition No. 6 of this order requires Tennessee to submit an Implementation Plan for our review and approval detailing how Tennessee will implement the construction procedures and mitigation measures described in its application materials, supplements, and this order.

74. New Jersey DEP provides several comments concerning the applicability analysis completed for this project with regards to the federal General Conformity regulations. New Jersey DEP inquired whether the air emissions associated with the Corps' Philadelphia District permit was included in the General Conformity Applicability Analysis. As the lead federal agency for analyzing the applicability of the General Conformity program requirements, Commission staff's EA analyzes all emission sources that are associated with the project, including actions such as wetland and waterbody crossings that are under the jurisdiction of the Corps. New Jersey DEP also states that

the EPA's NONROAD Model should be used when calculating the non-road air emissions for the project using the latest and most accurate emission estimation techniques available for the applicability analysis. In addition, New Jersey DEP questioned whether the scope of the General Conformity Applicability Analysis includes all direct and indirect emissions from the project construction in 2012 and 2013 and from all air emission sources (e.g., pipe/contractor yards). We reviewed Tennessee's calculation methodologies and verified the scope of the General Conformity Applicability Analysis to confirm the EA's conclusion that the reasonably foreseeable direct and indirect emissions from the project will not exceed the General Conformity thresholds by county or by the project as a whole. Therefore, the project does not require a General Conformity Determination.

75. New Jersey DEP notes that it continues finalizing the review of all properties within the New Jersey Green Acres program that will be disturbed by the project. In response, Tennessee states that it will continue to coordinate with the New Jersey Green Acres program to obtain all necessary approvals.

76. New Jersey DEP notes that trench dewatering permits will be required for the portion of Loop 323 in Montague Township. As stated in the EA, Tennessee would obtain the necessary permits and approvals prior to any construction in New Jersey and Pennsylvania.

77. New Jersey DEP Land Use Regulation Program (LURP) does not believe that the project schedule can be met largely because Tennessee has not filed administratively complete LURP permit applications and approval of Loop 325 has not been received from the New Jersey Highlands Council or New Jersey DEP's Division of Watershed Management. The LURP also notes discrepancies pertaining to access roads, wetland impacts, vegetation impacts, construction methods, and construction timing restrictions between the information presented in the EA and information submitted to the New Jersey DEP for state permitting purposes. The LURP reasserts its contention that, because of these discrepancies, the Commission cannot clearly understand the full impact of the project and urges the Commission to deny approval until Tennessee rectifies the discrepancies.

78. We recognize New Jersey DEP's need for complete information for its permitting purposes, but conclude that the information in the EA is adequate for the purpose of our analysis. Tennessee has also stated that it recognizes the multiple state permits and approvals to be obtained for the project and has committed to continue to work with the Highlands Council, New Jersey DEP, and LURP to obtain the necessary approvals. In addition, as a component of its state permit applications, Tennessee has agreed to compensatory mitigation in the form of land acquisition or monetary compensation acceptable to the New Jersey DEP for unavoidable project impacts on wetlands, forest, and other natural resources.

79. In conclusion, we believe that construction, monitoring, and operation of the project in accordance with Tennessee's plans and our required measures, and Tennessee's continued commitment to work with the New Jersey DEP in finalizing and implementing state permitting requirements, will minimize and compensate for impacts on state lands to the greatest extent practicable.

80. In its comments on the EA, the EPA notes that the degree of co-location of the project with Tennessee's existing facilities will help to minimize impacts on the environment, provided Tennessee implements best management practices during project construction and operation. EPA also agreed that secondary and cumulative impacts are likely to occur as described in the EA, but expressed non-specific concern regarding cumulative impacts on water quality, air quality, and loss of forested land and other sensitive wildlife habitat.

81. In the EPA's view, the EA did not adequately analyze potential project impacts on sensitive surface water resources. We disagree. The EA describes potential impacts on waterbodies and explains that the greatest potential impact will be increased sediment loading and turbidity during construction, which will be minimized by implementing dry crossing methods at nearly all waterbodies and completing most in-stream construction within 24 to 48 hours. Tennessee will also install and maintain erosion control adjacent to waterbodies for the project in accordance with its ECPs, implement its Spill Prevention, Control and Countermeasure Plan to avoid fuel and other product spills into waterbodies, have absorbent materials available if spills occur, and restore the stream bed and bank after construction. The EPA also clarifies that it delegated CWA section 404 program authority to the New Jersey DEP, but retains oversight authority of the program in cooperation with the state.⁵⁴

82. The EPA notes that some forest impacts in New Jersey will be mitigated under New Jersey's No Net Loss Reforestation Act and recommends that Tennessee commit to the same level of mitigation for forest impacts in Pennsylvania. We believe that the mitigation proposed by Tennessee and required by this order are sufficient to minimize impacts on forested areas in Pennsylvania and New Jersey. However, as discussed in the EA, Tennessee has committed to obtaining all necessary environmental permits and will construct, operate, and maintain the proposed facilities in compliance with the required permits and applicable federal and state regulations and guidelines.

⁵⁴ The EA mistakenly refers to delegation by the Corps. EA at 2-22.

83. Pike County Planning Commission reiterated its objection to the proposed alignment of Loop 323 around the Delaware Water Gap NRA and indicated that it prefers the co-location of Loop 323 with the existing pipeline, which staff analyzed in the EA as Delaware Water Gap Alternative 1. Pike County Planning Commission also restated its opinion that an EIS should be conducted to fully evaluate the environmental impacts of the project. The issue of EA versus EIS is addressed in more detail later in this order.

84. Pike County Planning Commission contends that the proposed alignment would require 6.3 miles more of large diameter pipe and additional compression when compared to Delaware Water Gap Alternative 1. For clarification and as described in more detail in the EA, the proposed route will actually be a total of 3.5 miles longer than Delaware Water Gap Alternative 1 and will not require additional compression.⁵⁵

85. In addition to Pike County Planning Commission's comments regarding the routing of Loop 323, we received either written or verbal comments from Pike County Conservation District and four landowners affected by the proposed route around the Delaware Water Gap NRA who also favored Delaware Water Gap Alternative 1. In contrast, the NPS, Save the Park, and Burnham Park Association opposed an alignment across the Delaware Water Gap NRA. Of the four affected landowners who filed comments, three are located in Montague Township, New Jersey and one is located in Pike County, Pennsylvania. Based on Tennessee's alignment sheets, ten landowners in Pike County will be affected by the segment of Loop 323 around the Delaware Water Gap NRA. The EA fully analyzes three possible routes near the Delaware Water Gap NRA and concludes that Tennessee's proposed route, outside of the Delaware Water Gap NRA, will not result in a significant environmental impact. While we recognize that the other route alternatives could have less environmental impact, they would require federal legislation and NPS support, which are absent. The rationale for not recommending the use of either of the alternative routes through the Delaware Water Gap NRA was discussed previously.

86. Pike County Planning Commission states that the proposed alignment of Loop 323 would create a bottleneck in Tennessee's system, resulting in gas velocities within the existing 24-inch-diameter pipeline that would increase safety risks to Pike County residents. This is not the case. Although the pipelines will not be adjacent, the new pipeline and the existing pipeline will operate together to transport the additional capacity. Based on our engineering review, this will not result in an increase of natural

⁵⁵ EA at 3-5.

gas velocity above safety design standards in the existing or proposed pipelines. The EA did consider a system alternative that would involve construction of Loop 323 as proposed, with the exception of the one mile crossing of the Delaware Water Gap NRA. For this system alternative, Loop 323 would follow Tennessee's existing pipeline up to the boundaries of the Delaware Water Gap NRA where it would tie into the existing pipeline and only the existing 24-inch-diameter pipeline would traverse the Delaware Water Gap NRA. This would essentially create a mile gap in Loop 323 across the Delaware Water Gap NRA. This system alternative was determined to be infeasible because it would have potentially resulted in a situation where the velocity of the natural gas in the single 24-inch-diameter pipeline across the Delaware Water Gap NRA would have to exceed design standards to transport the same volume of natural gas that would be carried by the existing pipeline and proposed larger diameter loop.⁵⁶

87. Pike County Planning Commission reiterates its position that the proposed alignment would result in increased environmental impacts on forest, sensitive surface waters, cultural resources, and other resources, and would impact private landowners that are currently unaffected by a pipeline right-of-way. Pike County Planning Commission is concerned that the added length of pipeline would pose a greater operational safety concern to the citizens of Pike County and notes that the proposed alignment is within approximately 750 feet of a public school and 300 feet of a senior care facility.

88. Regarding Pike County Planning Commission's concern that the proposed alignment would result in an increased safety risk due to its added length, we note that the proposed alignment in Pike County will traverse wooded, undeveloped land for 82 percent of its length and will be installed by HDD for the remainder of its length near the developed area along the Delaware River. The public school and senior care center referenced by the Pike County Planning Commission are located in this area of the HDD so Loop 323 will be approximately 30 to 50 feet below ground level at its nearest approach to these facilities. The EA discusses the design and operational safety features of interstate natural gas pipeline systems and the requirement that Tennessee must construct and operate the project in accordance with applicable DOT regulations. The EA concludes, and we agree, that the project will pose only a slight increase in risk to the nearby public.

89. In its comments on the EA, Pike County Conservation District states that the environmental consequences of the project are understated because the EA relies on

⁵⁶ EA at 3-3.

pipeline construction and restoration techniques that do not adequately protect water and land resources. Pike County Conservation District's primary concern is that the construction and restoration measures do not adequately control stormwater runoff or promote successful revegetation of the right-of-way. Pike County Conservation District also argues that additional temporary workspace could be utilized more judiciously and urged the Commission to deny Tennessee's request for additional temporary workspace within 50 feet of a wetland or waterbody. Pike County Conservation District also noted additional concerns about cumulative impacts, soils, wetland and waterbody crossings, fisheries, impact on vegetation and wildlife, residential impacts, and access road impacts, all of which we believe were adequately addressed in the EA or in this Order.

90. As the EA explained, Tennessee's ECPs are based on our Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and Wetland and Waterbody Construction and Mitigation Procedures (Procedures), which contain measures that are specifically designed to avoid or minimize the environmental impacts associated with the construction of interstate natural gas transmission projects and promote restoration of the right-of-way. Based on Tennessee's detailed alignment sheets, site-specific construction plans, and site visits, and considering standard industry practices and our experience in pipeline construction, we determined that Tennessee's proposed construction workspace, including additional temporary workspace, is appropriate and justified. The EA clarifies that, with implementation of Tennessee's proposed measures and the staff's recommended mitigation measures, the project would not significantly impact the human environment. Furthermore, Tennessee has committed to work with Pike County Conservation District to address its concerns and has agreed to fund a full-time, third-party environmental compliance monitoring program during project construction, which will help ensure Tennessee's compliance with the approved construction and restoration methods and other environmental permit stipulations that do not conflict with any authorization issued by this Commission. We also note that Pike County Conservation District administers both the Pennsylvania Chapter 102 Erosion and Sediment Control and Stormwater Management and the CWA National Pollutant Discharge Elimination System programs in Pike County, including permit application and plan reviews and approvals, site inspections, complaint investigations and technical assistance.

91. Pike County Conservation District states that the proposed Wayne County, Pennsylvania wetland mitigation site was not appropriate for impacts in Pike County. We note that the Corps has regulatory oversight for wetland impact mitigation in Pennsylvania; therefore this issue should be brought before the Corps rather than the Commission.

92. Pike County Conservation District asserts that the Northeast Upgrade Project is related to Tennessee's previously authorized 300 Line Project and questions why the Commission allowed these projects to be submitted and approved in a "piecemeal" fashion. We authorized the 300 Line Project almost two years ago in May 2010, which

was a stand-alone project and designed to provide a contracted-for volume of gas to a certain customer within a certain timeframe. The proposed project is designed to provide another contracted-for volume of gas within a different timeframe to different customers. Commission policy does not allow the overbuilding of capacity so that customers are not paying for facilities that are not being used and to minimize impacts on landowners and communities for facilities that are not needed.⁵⁷ The 300 Line Project is currently in operation and is not dependent on the Northeast Upgrade Project facilities. The impacts associated with the 300 Line Project are included in the cumulative impacts discussion in the EA.

93. Pike County Conservation District also notes concerns with tree clearing occurring well before the start of construction and the project remaining unstabilized for long periods. Tennessee must complete tree clearing in the fall, winter, or early spring to comply with the Migratory Bird Treaty Act and other federal and state regulations to minimize impacts on threatened, endangered, and sensitive species. However, once the ground is disturbed, Tennessee will be required to install the appropriate erosion and sedimentation controls as described in its state-specific ECPs.

94. Bradford County comments that pipelines being constructed in the county are essential to transport natural gas from the Marcellus Shale to market, but requests that Tennessee be required to comply with county land use ordinances and submit for county approval land development applications, plans, and associated data for proposed pipe/contractor yards in the county. The county states its belief that this land development process will not hinder, prohibit, or unreasonably delay the construction or operation of Commission-approved facilities.

95. In its response to comments on the EA, Tennessee asserts its belief that Bradford County approval is not required because the proposed pipe/contractor yards in Bradford County do not meet the definition of a “land development” under the county’s land use ordinances. We encourage the cooperation of Tennessee with local jurisdictions such as Bradford County and expect Tennessee to abide by all state, local, or municipal permit stipulations to the extent they do not conflict with any authorization issued by this Commission. This does not mean that state, local, or municipal agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.

⁵⁷ See Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,750.

96. In its comments on the EA, Bergen County, New Jersey recommends that, for project activities on Bergen County parkland, Tennessee conduct an ecological community assessment and invasive species inventory within 150 feet adjacent to the project right-of-way, post a bond to fund environmental monitoring during construction and restoration and retain an independent botanist/ecologist to monitor construction and restoration activities, conduct alternatives analysis to minimize impacts on high priority and critical habitat areas, provide a plan regarding work crews needed on Bergen County parkland, and comply with all New Jersey DEP requirements to protect the natural environment.

97. As indicated in the EA, Tennessee has conducted the majority of the biological surveys required for state permitting purposes, but some surveys remain to be completed due to its lack of property access. The EA also references Tennessee's state-specific Invasive Species Management Plan developed for Pennsylvania and New Jersey, which we typically require for all interstate projects under our jurisdiction. The EA describes the environmental inspection and compliance monitoring programs that will ensure the project is constructed and restored in accordance with applicable authorizations and permit stipulations. The EA also includes a detailed analysis of alternatives that would minimize environmental impacts. Through comments filed by the New Jersey DEP, we are aware that Tennessee has worked with the New Jersey DEP to reduce project impacts, including in Bergen County, which is located in the New Jersey Highlands Preservation Area.

98. Tennessee responded to Bergen County's comments and commits to consult with the New Jersey DEP to ensure that all areas requiring survey are covered during biologic and invasive species surveys. Tennessee also states that it will post a performance bond for work in the Highlands area and is discussing the terms of the bond with the New Jersey DEP. Further, Tennessee agrees to provide Bergen County with project plans and give advanced notice to the county prior to construction, and commits to comply with all New Jersey DEP permit requirements to protect the natural environment and enjoyment of public parkland. Other Bergen County comments concerning the Mahwah Meter Station, cultural resources, recreational land impacts, and the use of Bear Swamp Road and Bear Swamp Bridge are discussed in the EA or addressed below in this order.

99. William and Amy Anastasio comment that the proposed alignment of Loop 321 on their 28-acre property in Pike County, Pennsylvania, would place the pipeline within 120 feet of their residence and 100 feet of their water supply well, and would require the removal of hundreds of mature trees that are home to a variety of wildlife. The Anastasios recommend that Loop 321 be routed along the north side of the existing Tennessee easement to avoid forest impacts and provide further separation from their residence and well.

100. On the Anastasio property, the existing 300 Line pipeline is located along the southern border of an approximate 100-foot-wide electric transmission corridor containing overhead power lines. Loop 321 will be off-set from the existing pipeline by 25 feet to the south, further from the electric transmission lines but nearer to the Anastasio residence. As proposed, the construction workspace will be 100 feet wide across the majority of the property, consisting of 25 feet of Tennessee's currently maintained right-of-way, 25 feet of new operational right-of-way, and 50 feet of additional temporary workspace. The construction workspace will approach within approximately 80 feet of the Anastasio residence, and an approximate 50-foot-wide buffer of trees will remain between the residence and construction workspace.

101. The Anastasios' recommended route change would place the pipeline only 60 feet from the transmission towers, making it extremely difficult to install the pipeline between the existing pipeline and the towers. Based on our review, an alignment along the north side of the electric transmission corridor would result in increased permanent impacts on forest resources. This alternative alignment would establish a new, 50-foot-wide operational right-of-way through a largely forested area rather than expand Tennessee's existing permanent right-of-way by 25 feet. Such an alignment would also place the construction workspace and pipeline similarly close to another residence. Therefore, an alignment along the north side of the electric transmission corridor is not environmentally preferable to the proposed alignment.

102. Since issuance of the EA, Tennessee states that it has modified the original construction plan for the Anastasio property to reduce the new permanent right-of-way and temporary workspace near the residence. This modification will reduce the number of trees that will be permanently removed and provide a greater forested buffer between the Anastasio residence and construction workspace. Tennessee also states that it intends to review the modified construction plan with the Anastasios and will report the results to the Commission. Therefore, we have added Environmental Condition No. 19 of this order to require that Tennessee provide the modified construction plan and results of communications with the Anastasios to the Director of Office of Energy Projects (OEP) for review and written approval, prior to construction on the Anastasio property.

103. Steven Vitale provided information regarding a proposed elementary school within the Delaware Water Gap NRA near where Tennessee's existing 24-inch-diameter pipeline crosses the Delaware River. Mr. Vitale appears to advocate for replacement of the existing 24-inch-diameter pipeline in its current location to meet Class 3 standards if the school is constructed. In addition, Mr. Vitale recommends installation of Loop 323 in

a new right-of-way at least 2,000 feet to the south of the existing pipeline and proposed school site.⁵⁸

104. As described in the EA, Loop 323 will avoid this area by routing to the north, around the Delaware Water Gap NRA. As proposed, Loop 323 will be at least 1 mile from the elementary school site identified by Mr. Vitale. Similar to the Pike County Planning Commission, Mr. Vitale is concerned that the proposed alignment of Loop 323 would result in increased natural gas velocities above design standards. As discussed above, the proposed alignment will result in a continuous loop of the existing pipeline and will not result in gas velocities above design standards in the existing 24-inch-diameter pipeline.

105. Mr. Vitale also provided additional recommendations for an alternative that would use Tennessee's existing right-of-way across the Delaware Water Gap NRA. While this alternative was not raised by any party during the scoping process, Mr. Vitale states that Tennessee should replace the existing 24-inch-diameter pipeline with a new 36-inch-diameter pipeline to obviate the need for Tennessee's proposed route outside of the Delaware Water Gap NRA. We note that because of concerns with the Delaware River being designated as National Scenic and Recreational River within the Delaware Water Gap NRA and the possible presence of the federally-listed endangered dwarf wedgemussel, this alternative would require an HDD to avoid impacts. An HDD at this river location would require workspace outside of Tennessee's existing easement on NPS property, which would still require congressional approval. Tennessee would also be required to take its existing line out of service to install the new line within the same trench. As a result, this alternative would require Tennessee to stop service for an extended amount of time during construction and would prevent it from supplying gas to fulfill its existing contractual obligations. Therefore, as mentioned above for the other alternatives within the Delaware Water Gap NRA, we consider this alternative infeasible due to the NPS opposition, the permitting conflicts within the Delaware Water Gap NRA, and contractual obligation conflicts for operation of Tennessee's existing line.

⁵⁸ Our review of Delaware Valley School Board meeting minutes indicate that the school board is considering three sites for the future elementary school and is aware of Tennessee's existing pipeline near the site of concern to Mr. Vitale.

106. In October and November 2011, Tennessee filed final survey results for the federally-listed Indiana bat in New Jersey and Pennsylvania, respectively, in support of our continued consultation with the New Jersey and Pennsylvania Field Offices of the FWS under section 7 of the ESA.⁵⁹

107. After review of the final Indiana bat survey report for New Jersey, the New Jersey FWS indicates in a January 24, 2012 consultation letter that no seasonal restriction on tree clearing is necessary in New Jersey except for the eastern 2.5 miles of Loop 323 (MPs 13.9-16.4). The 2.5-mile segment is within the foraging range of a known maternity colony of Indiana bat (the EA includes a typographical error identifying the maternity colony near the eastern 2.5 miles of Loop 325).⁶⁰ The New Jersey FWS recommends that, among other things, Tennessee: (1) submit a draft plan to limit habitat impacts around the known colony, (2) provide updated estimates of temporary and permanent forest loss in New Jersey, and (3) provide a draft mitigation plan to help offset permanent and temporary loss of Indiana bat habitat. New Jersey FWS states that this mitigation plan should include preferential planting of tree species that provide suitable bat roosts as part of both on-site reforestation and off-site compensatory mitigation as required by other authorities (e.g., impacts on state lands, the Highlands Preservation Area, and wetlands/riparian areas in New Jersey).

108. After review of the final Indiana bat survey report for Pennsylvania, the Pennsylvania FWS recommends in a January 18, 2012 consultation letter that Tennessee implement a seasonal tree clearing restriction from April 1 to October 14 within 2.5 miles of a site along Loop 321 where an Indiana bat had been captured in August, 2010 (the 2.5-mile radius corresponds to approximate MPs 3.2-8.1 of Loop 321). Pennsylvania FWS also recommends that Tennessee either submit a plan for Pennsylvania FWS review that addresses Indiana bat habitat loss within 2.5 miles of the capture site or make an appropriate contribution to the Indiana Bat Conservation Fund. Pennsylvania FWS states that, with implementation of their recommendations, the effects of the project on the Indiana bat will be insignificant or discountable.

109. In its response to comments on the EA, Tennessee agreed to provide the information and plans requested by the New Jersey FWS, and states that it is evaluating the mitigation measures recommended by the Pennsylvania FWS and will provide a

⁵⁹ 16 U.S.C. § 1536 (2006).

⁶⁰ EA at 2-19.

response to the Pennsylvania FWS and the Commission. We have incorporated the EA's environmental recommendation 14 into Environmental Condition No. 13 of this order. In addition we have amended environmental recommendations 13 and 15 from the EA to reflect the final survey results, our on-going consultation with both FWS offices, and Tennessee's commitments and incorporated them as Environmental Condition Nos. 13 and 14 of this order.

110. The EA includes environmental recommendation 13 that Tennessee file the results of a habitat assessment and surveys for the federally-listed dwarf wedgemussel in New Jersey. On December 5, 2011, Tennessee filed these outstanding reports and, based on its review of the final reports and Tennessee's contingency plan for minimizing the impact of an inadvertent release of drilling mud during the HDD installation of Loop 323 beneath the Delaware River, the Pennsylvania and New Jersey offices of FWS concurred that the project is not likely to adversely affect the dwarf wedgemussel. Thus, our consultation with the FWS concerning the dwarf wedgemussel is concluded and Environmental Condition No. 13 of this order has been amended accordingly.

111. The EA also recommends that Tennessee file the results of a Phase I survey for the federally-listed bog turtle between approximate MPs 7.6 and 9.3 of Loop 323 in New Jersey. On January 11, 2012, Tennessee filed the outstanding survey and New Jersey FWS concurred that the survey did not document any suitable bog turtle habitat along the referenced segment of Loop 323. New Jersey FWS reiterated an earlier request that Tennessee provide project construction plans and a draft Fencing and Monitoring Plan for wetland W003 on Loop 323, consistent with New Jersey FWS conservation measures outlined in a June 16, 2010 letter to Tennessee. The New Jersey FWS also requested that Tennessee provide an electronic copy of the New Jersey ECP.

112. In its response to comments on the EA, Tennessee commits to provide the requested construction plans and draft Fencing and Monitoring Plan for wetland W003 to the New Jersey FWS. Environmental Condition No. 13 of this order specifies that Tennessee shall not begin construction of Loop 323 until we complete any necessary consultation with the New Jersey FWS concerning the bog turtle.

113. Tennessee provided an update regarding two bald eagle nests identified in the project area. As discussed in the EA, the nests were located approximately 350 feet and 2,450 feet from proposed Loop 323 in Pike County, Pennsylvania. Tennessee conducted additional aerial and ground surveys and monitoring in 2011 and determined that the farther nest was active whereas the nearer nest was inactive. In a letter dated September 2, 2011, the Pennsylvania FWS stated that, based on the survey results, it does not anticipate that the project will disturb bald eagles. As a result, Tennessee does not intend to limit construction activities and other disturbances within buffers specified under the National Bald Eagle Management Guidelines for the nearer, inactive nest. The

farther nest is outside the buffers recommended in the National Bald Eagle Management Guidelines.

114. Tennessee provided several updates⁶¹ regarding the status of surveys for state-listed species of concern including rare plants and snakes, and reiterated its commitment to complete and submit the survey results to appropriate state agencies and the Commission. As previously noted, the EA recommends that, prior to construction, Tennessee file the results of any outstanding surveys for state-listed species and to identify additional mitigation measures developed in consultation with applicable state agencies. This recommendation is included as Environmental Condition No. 15 to this order.

115. Tennessee provides clarification in its comments on the EA that it will temporarily divert hikers to the Iris Trail during specific construction activities at the Appalachian National Scenic Trail crossing. Loop 323 will cross the Appalachian National Scenic Trail at MP 14.4 in Sussex County, New Jersey. As discussed in the EA, Tennessee consulted with the NPS and Appalachian Trail Conservancy in developing a plan to minimize potential interruptions to trail users during construction and to restore the crossing location after construction.

116. The EA includes a recommendation that prior to construction, Tennessee file a plan with the Director of OEP detailing the additional noise mitigation measures that Tennessee would use to ensure that the noise levels attributable to the 24-hour HDD activities do not exceed an L_{dn} of 55 dBA at the noise sensitive areas near the Susquehanna River HDD entry site. In its comments on the EA, Tennessee requests that the recommendation be amended to require submittal and approval of the noise mitigation plan “prior to initiation of HDD activities at the Susquehanna River,” rather than “prior to construction” as indicated in the recommendation. We concur with this clarification and have phrased Environmental Condition No. 17 of this order accordingly.

117. The alignment of Loop 325 crosses land historically occupied by the Ramapough Lenape, which is a Native American tribe recognized by the State of New Jersey. The Ramapough Lenape, through Judith Joan Sullivan, have continued to express concern that some of its known cultural resources sites were missed by Tennessee’s inventory surveys, its local experts were not consulted, potential impacts from blasting on cultural

⁶¹ Updates to biological surveys were filed on November 4 and 7, 2011, December 5, 2011, January 11, 2012, and February 6, 2012.

resources sites were not fully considered, and cumulative impacts were not considered for an historic road, bridge, and Mahwah Meter Station site that would be used for both the Northeast Upgrade Project and the New Jersey-New York Expansion Project (Docket No. CP11-56-000). The Ramapough Lenape also assert that their participation in the project under the NHPA was compromised by a lack of funding and an abbreviated review period. New Jersey DEP and Bergen County acknowledged the Ramapough Lenape concerns and indicated that any deficiencies in the identification of cultural resources should be addressed.

118. The EA thoroughly explains the process that was undertaken to identify cultural resources and describes potential project impacts on historic properties. The EA also discusses Tennessee's consultation with the relevant SHPOs, federal agencies, Native American tribes, and interested parties regarding potential project impacts on cultural resources. As described in the EA, Tennessee conducted Phase I field surveys for the majority of the project's area of potential effect (APE), and has committed to completing all remaining surveys. Phase II evaluative studies are underway for some sites and Tennessee will either avoid or conduct further study of potentially eligible or unevaluated sites. Tennessee also identified five historic architecture sites within the project APE, all of which are considered potentially eligible for listing on the National Register of Historic Places, and is consulting with us and the SHPOs to design measures to avoid impacts on the sites.

119. In its response to comments, Tennessee notes that the APE for direct impacts is a 300-foot-wide survey corridor centered on the pipeline alignment, and sites known to the Ramapough Lenape outside of this corridor may not have been identified. Tennessee and Commission staff visited areas of concern with the Ramapough Lenape on March 2, 2012, and Tennessee has committed to re-examine portions of the right-of-way that may contain burial sites, identify areas of potential blasting and address potential blasting impacts on historic properties, and continue consultation with the Ramapough Lenape. Tennessee will report the additional field inventory results in a revised Phase IB report, as required by Environmental Condition No. 16. Additionally, because the information provided by the Ramapough Lenape suggests that portions of the project area have a high probability for burials, we are requiring Tennessee to update their unanticipated discoveries plan in consultation with the Ramapough Lenape and the New Jersey SHPO.

120. The EA discloses that Tennessee and Algonquin Gas Transmission, LLC (Algonquin) will each construct new aboveground facilities at the existing Mahwah Meter Station for the Northeast Upgrade Project and the New Jersey-New York

Expansion Project, respectively. Tennessee and Algonquin filed drawings depicting the location of the proposed facilities for each project⁶² and clarified that Tennessee will develop the entire footprint at the site, with each company constructing and operating their own facilities. The construction-related impacts for the site are included in the EA and will take place within the 10-acre parcel owned by Algonquin. Tennessee commits to avoid and/or mitigate impacts on archaeological sites within the APE for the Mahwah Meter Station, and to continue consulting with the New Jersey SHPO.

121. Tennessee will also make minor modifications to Bear Swamp Road, which will serve as a temporary access road during construction and as a permanent access road to the Mahwah Meter Station by both companies. The road modifications will be accomplished entirely within the existing road bed. Use of Bear Swamp Road will include the Bear Swamp Bridge (also known as the Cleveland Bridge). In response to comments concerning the historic significance and potential cumulative impacts on the bridge, Tennessee stated its belief that the bridge does not retain sufficient historic integrity to be considered eligible for National Register or Historic Places listing. The issue will be addressed in Tennessee's revised Phase IB report.

122. Cumulative impacts associated with construction and operation of the Tennessee and Algonquin facilities at the Mahwah Meter Station are discussed in the EA including a temporary increase of traffic on Bear Swamp Road during construction. The EA concludes that, due to the implementation of specialized construction techniques, the relatively short construction timeframe, and carefully developed resource protection and mitigation plans, only minimal cumulative effects are anticipated when the impacts of Tennessee's project are added to on-going projects in the area, including Algonquin's proposed New Jersey - New York Expansion Project.

123. We have modified the originally recommended condition 18 in the EA and included it as Environmental Condition No. 16 to this order to reflect information provided by Tennessee, the New Jersey SHPO, and the Ramapough Lenape regarding the cultural resources reports. This condition ensures that the Commission's responsibilities under section 106 of the NHPA and its implementing regulations are met prior to Tennessee's construction and use of the facilities associated with the project, including at the Mahwah Meter Station.

⁶² Algonquin and Tennessee filed their drawings on December 9, 2011 and December 15, 2011, respectively.

EA vs. EIS

124. Echoing concerns raised earlier during scoping, the Sierra Club argues that the Commission staff's EA is inadequate and cannot support a finding of no significant impact and that, therefore, we should prepare a full EIS to satisfy the Commission's obligations under NEPA.

125. The Sierra Club starts by arguing the EA is too long and an EIS should have been prepared instead. Sierra Club cites CEQ guidance that states that agencies should avoid preparing lengthy EAs except in unusual cases, where a proposal is so complex that a concise document cannot meet the goals of 40 C.F.R. § 1508.9 and where it is extremely difficult to determine whether the proposal could have a significant impact. Sierra Club specifically asserts the CEQ has generally advised agencies to limit EAs to not more than 10-15 pages and that since the Commission's EA is over 250 pages of text, tables, maps, and appendices the Commission should have undertaken an EIS.

126. The CEQ's advisory memorandum is general guidance to agencies that urges brevity in the preparation of an EA and does not require an agency to prepare an EIS after issuance of an EA with more than 15 pages. The CEQ's guidance recognizes that a lengthy EA may be appropriate in cases of complexity, and while a lengthy EA may suggest that an EIS may be needed in some cases, the CEQ's guidance does not establish a blanket requirement. In this case, the broad range of environmental issues in the resource reports and the workability of the required mitigation to reduce the project's effects below the level of significance warranted a relatively lengthy EA, but not further analysis in an EIS. The EA adequately addresses the myriad of issues as concisely and briefly as possible as Commission and CEQ regulations require. The fact that all the analysis of environmental issues consumed approximately 250 pages does not imply that an EIS is warranted. Moreover, the CEQ guidance cited by Sierra Club is over thirty years old.⁶³ Courts have held that the length of an EA "has no bearing on the necessity of an EIS."⁶⁴ "What ultimately determines whether an EIS rather than an EA is required is the scope of the project itself, not the length of the agency's report."⁶⁵ A rule requiring an

⁶³ <http://ceq.hss.doe.gov/nepa/regs/40/40P1.HTM> (originally published in the *Federal Register* on March 23, 1981 (46 Fed. Reg. 18,026)).

⁶⁴ *Tomac v. Norton*, 433 F.3d 852, 862 (D.C. Cir. 2005) (citing *Sierra Club v. Marsh*, 769 F.2d 868, 875 (1st Cir. 1985)).

EIS for any EA over a certain number of pages would create a perverse incentive for agencies to produce bare-bones EAs.⁶⁶

127. The Sierra Club also argues that the Commission should have prepared an EIS as opposed to an EA because it believes the project will significantly affect the quality of the human environment. Sierra Club argues that both the context and intensity of the project mandates a finding of significant impacts. Under the CEQ regulations, context refers to “society as a whole (human, national), the affected region, the affected interests, and the locality.”⁶⁷ The Sierra Club argues that the context of the project includes the rapid development of the Marcellus Shale and that the looping segments will be constructed in high-value resource areas and special protection waters, including habitat for federal and state endangered and threatened species. “Intensity” “refers to the severity of the impact” and Sierra Club argues that intensity factors 2 through 10 listed in 40 C.F.R. § 1508.27(b) weigh in favor of a finding of severe and significant impacts necessitating an EIS rather than an EA.⁶⁸ We disagree. We will address the Sierra Club’s arguments regarding cumulative impacts, intensity factor 7, in a separate section of this order. We address Sierra Club’s arguments with respect to the other intensity factors below.

⁶⁵ *Id.* quoting *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d 428, 434 (8th Cir. 2004).

⁶⁶ *Heartwood, Inc. v. U.S. Forest Serv.*, 380 F.3d at 434.

⁶⁷ 40 C.F.R. § 1508.27(a) (2011).

⁶⁸ Sierra Club cites intensity factors 2 through 10 (40 C.F.R. §§ 1508.27(b)(2) through (b)(10) (2011)) arguing that the project: poses a significant threat to public health and safety (27(b)(2)); will affect numerous unique geographic areas and may cause destruction of significant scientific, cultural, and historical resources (27(b)(3) and (b)(8)); will have environmental impacts likely to be highly controversial (27(b)(4)); could have possible effects on the quality of the human environment that are highly uncertain (27(b)(5)); is likely to establish a precedent for future actions with significant effects (27(b)(6)); will have cumulatively significant impacts on the environment (27(b)(7)); may adversely affect several endangered and threatened species and their habitat (27(b)(9)); and might violate federal, state, and local law requirements imposed for the protection of the environment (27(b)(10)).

128. Sierra Club argues that the project poses a significant threat to public health and safety, the second intensity factor.⁶⁹ Sierra Club argues that Tennessee's safety record, the age of the original pipeline, and the proximity of the project to hazardous waste sites pose numerous and significant public health and safety concerns. Sierra Club states that in the past year, three pipeline segments owned and operated by Tennessee have exploded and two segments experienced significant failures in the same time period. Sierra Club argues that the original pipeline was installed in the 1950s and older pipelines have a higher frequency of corrosion incidents. In addition, Sierra Club points out that the EA identifies 35 hazardous sites within 1700 feet of the project, including the Ringwood Mines/Landfill Site in Ringwood, NJ, located 500 feet from the pipeline where hazardous materials continue to be found.⁷⁰ As a result, Sierra Club argues the Commission must conduct an EIS to fully assess the risks.

129. Commission staff addresses the potential threat of the project to public health and safety in the EA and determined that the operation of the project would only represent a slight increase in risk to the nearby public.⁷¹ Tennessee will be required to design, install, inspect, test, construct, operate, replace, and maintain the certificated facilities in accordance with PHMSA's *Minimum Federal Safety Standards* in 46 C.F.R. Part 192.⁷² As discussed in more detail in the EA, these rules prescribe that each pipeline operator is required to establish an emergency plan that includes procedures for: receiving, identifying, and classifying events, gas leakage, fires, explosions, and natural disasters; establishing communications with local authorities; emergency system shutdown and safe restoration of service; and other requirements.⁷³ Tennessee's past safety record and the age of the existing 300 Line pipeline are outside the scope of our environmental review.

130. As for hazardous waste sites in the project's vicinity, there is no evidence that any sites will impact, or be impacted by, the project, including the Ringwood Mines/Landfill site. As discussed in the EA, the EPA reports that human exposure and groundwater

⁶⁹ 40 C.F.R. § 1508.27(b)(2) (2011).

⁷⁰ EA at 2-80.

⁷¹ EA at 2-121.

⁷² EA at 2-115.

⁷³ EA at 2-116.

mitigation is under control at the site and Tennessee is committed to continuing site research with EPA and New Jersey DEP. In addition, Tennessee will implement the protocols prescribed in its ECPs and Spill Prevention, Control, and Countermeasure Plan, which have been reviewed by the relevant resource agencies, in the event contaminated material is encountered.

131. We are confident, therefore, that if Tennessee constructs and operates the project as required by this authorization and PHMSA's standards, the project would only result in a slight increase in risk to the nearby general public, as described in the EA.

132. Sierra Club also argues that the project will affect numerous unique geographic areas and may cause destruction of significant scientific, cultural, and historical resources, the third and eighth intensity factors, respectively.⁷⁴ Sierra Club argues that a number of unique resource areas will be adversely affected by the project, including the Susquehanna River, U.S. Route 6 Grand Army of the Republic Highway Trail, Delaware State Forest, High Point State Park, Appalachian Trail National Scenic Trail, Clove Brook Road Corridor Important Bird Area, Delaware River, Highlands Region, Long Pond Ironworks State Park, Monksville Reservoir, and Ringwood State Park. Sierra Club also points out that the project will also cross seven miles of farmland, dozens of high quality coldwater and warmwater fisheries and almost 50 acres of wetlands. In addition, Sierra Club states that the project area will serve as habitat for four federally-listed threatened or endangered species, the bald eagle, and 65 state endangered, threatened, or special concern species and permanently convert 85 acres of forested land and degrade an additional 265.4 acres of forested land.

133. The EA addresses the effects of the project on unique geographic areas and significant scientific, cultural, and historical resources and describes Tennessee's intention to implement general mitigation measures and provide site-specific measures for each special interest area as determined by the managing agency or permitting authority. In addition, the EA specifically addresses impacts to each special interest area.⁷⁵ For example, the EA analyzes impacts to the Susquehanna River, concluding that construction and operation would not result in direct impact on the river because Tennessee will use Horizontal Directional Drilling (HDD) to cross the river.

⁷⁴ 40 C.F.R. §§ 1507.27(b)(3), (8) (2011).

⁷⁵ EA at 2-68-79.

134. Sierra Club also argues that staff failed to adequately address how affected wetlands would continue to provide important ecological functions, how wildlife temporarily relocated during construction would be expected to return, and why permanent conversion of wildlife habitat would be minor because wildlife would be expected to return.

135. As explained in the EA, Tennessee will implement a series of mitigation measures to reduce wetland impacts and, where impacts cannot be sufficiently reduced, Tennessee will provide compensatory mitigation pursuant to agreements with the Corps and state agencies. Regarding wildlife habitat, the EA concludes that project impacts on non-forested lands will be temporary and limited, based on Tennessee's ECPs, lasting only several weeks or several months in a given area. Forested lands will experience long-term and permanent impacts because the permanent right-of-way will be maintained in an herbaceous state, however, forested land makes up only a small portion of the project area.⁷⁶ Where forested lands are impacted, Tennessee's proposed right-of-way is primarily widening an existing right-of-way rather than a new greenfield pipeline through forested land. Although some project impacts are permanent we do not believe them to be significant.⁷⁷

136. The EA considers all of these issues in depth, satisfying our responsibility to take a hard look at the project's impacts, and concludes with a finding of no significant impact.

137. Sierra Club also argues that the degree to which possible effects of the project on the quality of the human environment are likely to be highly controversial, the fourth intensity factor.⁷⁸ Sierra Club argues that a major federal action is controversial when "a substantial dispute exists as to the size, nature, or effect of the . . . action."⁷⁹ Sierra Club then argues that many facts in the EA are disputed, including the effects of the project on soil in the project area, movement of sensitive species, increase in undesirable species,

⁷⁶ EA at 2-70.

⁷⁷ Impacts on federally-listed and state species are addressed below.

⁷⁸ 40 C.F.R. § 1508.27(b)(4) (2011).

⁷⁹ Citing *LaFlamme v. FERC*, 852 F.2d 389, 400-01 (9th Cir. 1988) (citations and quotations omitted).

increased forest fragmentation, and degradation in habitat conditions. Sierra Club also argues that agencies cannot assume restorative measures will succeed. Therefore, Sierra Club argues the controversial nature of the project supports the preparation of an EIS.

138. Sierra Club, however, misapprehends the meaning of “controversial” in the context of the Commission review of the project. While the existence of a controversy over the effect of an agency action is one factor to consider in determining whether the agency should prepare an EIS,⁸⁰ a federal action is “controversial” “where a substantial dispute exists as to the size, nature, or effect” of the action “rather than to the existence of opposition to a use.”⁸¹ Furthermore, the use of the word “highly” to modify “controversial” “means that information merely favorable” to Sierra Club’s position in the EA “does not necessarily raise a substantial question about the significance of the project’s environmental effects.”⁸² Sierra Club cannot cherry pick information and data out of the administrative record to support its argument that the project is highly controversial.⁸³ In this case, no substantial dispute as to the effects of the project exists. Although Sierra Club presents some evidence of the potential for the degradation of habitat, those effects were properly addressed in the EA and staff’s discussion of those effects does not make the effects of the project highly controversial.

139. The EA concludes that the impact of fragmentation will be minimal because the project will mostly expand the width of the existing right-of-way which already has edge habitat. Edge habitat will not be created in these cases, but will be offset from its existing location to the new right-of-way edge. As discussed in the EA, in the limited areas where a new right-of-way is created, wildlife may be adversely affected by forest fragmentation and there would be a shift from forest species to species that are more adapted to edge habitat at the border of the new right-of-way and inward for a distance.⁸⁴ The EA also

⁸⁰ 40 C.F.R. § 1508.27(b)(4) (2011).

⁸¹ *Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture*, 681 F.2d 1172, 1182 (9th Cir. 1982) (quoting *Rucker v. Willis*, 484 F.2d 158, 162 (4th Cir. 1973)) (internal quotations omitted).

⁸² *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005).

⁸³ *Id.*

⁸⁴ EA at 2-43.

states that Tennessee will restore the topographic conditions after construction. The EA evaluates stream and wetland crossings and the efficacy of Tennessee's ECPs. These plans contain best management practices that reduce impacts on streams and wetlands during construction and promote their restoration after construction. Based on the analysis in the EA, which includes and references best management practices, mitigation, and the required restoration measures Tennessee has adopted, we continue to affirm that the project will not have a significant impact on streams or wetlands.

140. The EA includes a reference to and provides some measures that are included in Tennessee's Invasive Species Management Plan. As stated in Tennessee's ECP, it has developed specific procedures in coordination with the appropriate agency to prevent the introduction or spread of noxious weeds and soil pests resulting from construction and restoration activities. This Invasive Species Management Plan is in compliance with the Commission's requirement and provides specific details by state as to what species need to be monitored for and how this monitoring will occur. Tennessee will monitor invasive species within their certificated and approved right-of-way, but will not have access or the right to monitor for invasive species outside of their certificated right-of-way.

141. Although the Sierra Club and others object to the project and Commission staff preparation of an EA, numerous state and federal agencies participated in staff's preparation of the EA. Both the FWS and the Corps acted as cooperating agencies in preparing the EA. Other state and federal agencies participated in the EA process by submitting comments and recommending mitigation. In many cases, the EA recommends, and we adopt here, mitigation measures put forth by other agencies. As for restoration, Tennessee is required to restore the areas affected by project construction to the greatest extent practicable. We retain compliance management oversight of the pipeline until such time as construction and restoration is complete and will require Tennessee to do what is necessary to restore the affected lands. Although some disagreement exists as to the effects of the project, we do not find that a substantial dispute exists as to the size, nature, or effect of the project.

142. Sierra Club also argues that the Commission failed to properly evaluate the "degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," the fifth intensity factor.⁸⁵ Sierra Club alleges that the EA failed to gather and assess information regarding the geology of the projects area (incomplete field studies on landslides, karst formations, and the potential for blasting),

⁸⁵ 40 C.F.R. § 1508.27(b)(5) (2011).

the effect of the project on revegetation, potential for harm to water resources, affects on threatened and endangered species (incomplete surveys for the bog turtle, dwarf wedgemussel, small whorled pogonia, and bald eagle), and the effect of the project on cultural resources (due to incomplete survey results). Sierra Club argues that NEPA does not permit agencies to “act first and study later.”⁸⁶ Therefore, the Sierra Club argues the Commission must collect and assess this missing information in an EIS.

143. We disagree. The EA discloses that the majority of the project is located in an area considered to be moderately to highly susceptible to landslides. If an area susceptible to landslides is identified, Tennessee will implement specific measures to minimize the potential for landslides and erosion, like installing water bars diagonally across the right-of-way on steep slopes, installing trench breakers within the pipeline trench, inspecting erosion control devices on a daily basis, and reestablishing vegetative cover as soon as possible following final grading.⁸⁷ During construction, field surveys will be conducted to assess the necessary mitigation measures to employ.

144. The EA discusses karst and discloses that there could be areas prone to sinkhole development in the proximity to Loop 323. If karst features are identified during construction, Tennessee will implement measures to stabilize the trench and minimize impacts associated with surface water runoff, erosion, and the discharge of hydrostatic test water. Tennessee will restore the project area to pre-construction contours and elevations to maintain the existing drainage at the site and to prevent diversion of stormwater into areas prone to sinkhole development. Tennessee will monitor the area identified by the New Jersey Geologic Society on an annual basis following construction to identify any evidence of sinkhole development and implement mitigation measures as needed.⁸⁸ We also note that for a majority of its length the new pipeline will be located within 25 feet of the existing pipeline, which has been in service for well over 50 years and has not been adversely affected by geologic hazards.

145. The EA discloses that approximately 32.7 miles (82 percent) of the proposed pipeline loops would cross areas of shallow bedrock that may require blasting. It also

⁸⁶ Sierra Club Comments at 11 citing *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 734 (9th Cir. 2001) (*NPCA*).

⁸⁷ EA at 2-2.

⁸⁸ *Id.*

identifies Tennessee's *Blasting Plan* prepared to minimize the effects of blasting and ensure the safety of its existing pipeline during blasting operations. All blasting techniques would comply with federal, state, and local regulations governing the safe storage, handling, firing, and disposal of explosive materials. Based on the above information, we reiterate that project impacts on geological resources and impacts from geological resources on the project would be minimal.

146. As noted above, Tennessee's ECPs are designed to minimize impacts associated with the construction of the project and promote the restoration of the right-of-way. In forested areas, Tennessee will clear the right-of-way and will install erosion control measures to minimize erosion and sedimentation impacts. Following construction, Tennessee will reseed all previously vegetated workspace areas and monitor disturbed areas for a minimum of two growing seasons. After construction on open land, Tennessee will reseed and restore the right-of-way and the EA states that vegetation impacts on this type of land are typically temporary to short-term. As for agricultural land, Tennessee will test the topsoil and subsoil for compaction at regular intervals and strictly control traffic on agricultural land to minimize compaction and rutting. Tennessee will segregate topsoil, as stipulated in landowner agreements, and store it separately from subsoil. Tennessee will also monitor the crops during the first and second growing seasons after seeding to determine if additional restoration is necessary.⁸⁹ Although much of the right-of-way is underlain by stony, rocky, or droughty soils and restoration may be difficult,⁹⁰ Tennessee's mitigation and restoration measures will help to ensure that the right-of-way is restored as close as practicably possible to its original condition.

147. The EA also evaluated stream and wetland crossings and the efficacy of Tennessee's ECPs. These plans contain best management practices that reduce impacts on streams and wetlands during construction and promote their restoration after construction. Based on the analysis in the EA, which includes and references best management practices, mitigation, and the required restoration measures Tennessee has adopted, we affirm that the project will not have a significant impact on streams or wetlands.⁹¹

⁸⁹ EA at 2-37.

⁹⁰ EA at 2-6.

⁹¹ EA at 2-22.

148. As noted in the EA, Tennessee will develop a Comprehensive Mitigation Plan for the construction and operation of the project through the Highlands Region. The New Jersey Highlands Council issued a Highlands Act Consistency Determination on February 16, 2012 and will have to approve any mitigation, the results of which will not be known until after the New Jersey Highlands Council acts, but Tennessee will be required to carry out the identified mitigation.

149. Sierra Club argues possible effects are uncertain where, as here, an EA reveals significant gaps in data collection and, thus, a finding of no significant impact cannot be supported “where uncertainty may be resolved by further collection of data, or where the collection of such data may prevent speculation of potential effects.”⁹² However, Sierra Club omits the beginning of the cited language in which the Ninth Circuit explains that an agency must generally prepare an EIS if the effects of the proposed action are “highly uncertain.”⁹³ As the Ninth Circuit explained, the use of the word “highly” to modify “uncertain” means that information merely favorable to Sierra Club’s position does not necessarily raise a substantial question about the significance of the project’s effects.⁹⁴ Based on the evidence in the EA and above discussion, we believe that the EA appropriately assessed the impacts of the project on the areas identified by Sierra Club and reasonably concluded that the risks were neither highly uncertain, unique, nor unknown.

150. Sierra Club also argues that the Commission should have prepared an EIS because the project is likely to establish precedent for future actions with significant effects, the sixth intensity factor.⁹⁵ Sierra Club argues that the inquiry here is whether “approval of a single action will establish a precedent for other actions which may cumulatively have a negative impact on the environment.”⁹⁶ Sierra Club argues there is a serious risk that the Commission will feel bound, when reviewing other certificate applications in the

⁹² *NPCA*, 241 F.3d at 732-33.

⁹³ *Id.* at 731-732.

⁹⁴ *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1240 (9th Cir. 2005).

⁹⁵ 40 C.F.R. § 1508.27(b)(6) (2011).

⁹⁶ *Anderson v. Evans*, 371 F.3d 475, 493 (9th Cir. 2004).

Marcellus Shale region, like the New York-New Jersey Expansion Project, Docket No. CP11-56-000, to the conclusions presented in the EA for the Northeast Upgrade Project. Therefore, Sierra Club argues, the Commission should conduct a full EIS because the precedential value of the project is substantial and the issuance of a finding of no significant impacts could open the floodgates to detrimental impacts on highly valued natural resources.

151. As explained above, when deciding whether to prepare an EIS or an EA the Commission's NEPA regulations explain that an EIS is only necessary for "[m]ajor pipeline construction projects...",⁹⁷ a category into which the Northeast Upgrade Project does not fit. Sierra Club's argument that Commission staff's EA for the project would establish a precedent is without merit because the EA is a non-binding document and creates no precedent to which the Commission is bound.⁹⁸ Each proposed project is unique and has different effects on different resources. In determining whether to prepare an EIS or an EA, Commission staff relies upon the Commission's regulations and makes an individual determination for each new proposal. Just because Commission staff has decided one action requires an EA, does not mean that a seemingly similar action will not require an EIS. Specifically, it is important to point out that the Commission prepared an EIS for the New York-New Jersey Expansion Project evincing the independence of our review and lack of precedential value in our decision whether to prepare an EA for each individual project.

152. Sierra Club argues that the Commission must consider the degree to which our action "may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973,"⁹⁹ the ninth intensity factor.¹⁰⁰ Sierra Club argues that the Supreme Court has held that the loss of any endangered species has been determined by Congress to be environmentally

⁹⁷ 18 C.F.R. § 380.6(a)(3) (2011).

⁹⁸ See e.g. *Town of Cave Creek v. FAA*, 325 F.3d 320, 332 (D.C. Cir. 2003) (finding that the Federal Aviation Administration reasonably concluded that an EIS was unnecessary and preparing an EA for the agency review of high-altitude arrival and departure procedures would not be binding precedent).

⁹⁹ 16 U.S.C. §§ 1531-1544 (2006).

¹⁰⁰ 40 C.F.R. § 1508.27(b)(9) (2011).

significant.¹⁰¹ In addition, Sierra Club argues that incomplete survey information cannot be relied upon to support a finding of no significant impact and mandates the further collection of data and an EIS.¹⁰² Sierra Club states that although mitigation plans have been used in the past to avoid preparing an EIS, courts have a high standard for what constitutes a sufficient mitigation plan and have held that plans need to be thoroughly developed to be valid.¹⁰³ Sierra Club argues that the EA cites to incomplete surveys for the Indiana bat (a federally-endangered species), the bog turtle (a federally-threatened species), and the dwarf wedgemussel (a federally-endangered species).

153. Specifically, Sierra Club argues that Indiana bat surveys around portions of Loop 321 and all of Loop 323, where bats are likely to be present, were never conducted and that the EA fails to discuss mitigation plans in depth. Further, that although Tennessee has agreed to a seasonal restriction of vegetation clearing, it has not committed to the additional aspects of FWS recommended measures.

154. As explained above, Tennessee has now completed the necessary Indiana bat surveys in Pennsylvania and New Jersey. According to the New Jersey FWS, to avoid any effects of the project on the Indiana bat in New Jersey, Tennessee must implement a seasonal tree-clearing restriction for the eastern 2.5 miles of Loop 323. Pennsylvania FWS recommends mitigation and states that with the implementation of the mitigation, the effects of the project on Indiana bats will be insignificant or discountable. Environmental Condition Nos. 13 and 14 of this order require a tree-clearing restriction on Loops 321 and 323 to protect the Indiana bat, and other bat species, and requires Tennessee to file a plan that addresses Indiana bat habitat loss with the Pennsylvania FWS and the Secretary before starting construction over those loops.

155. As for the bog turtle, Sierra Club states that bog turtle survey methodology is not included in the EA. Sierra Club states that Commission staff's recommendation that Tennessee not begin construction until (1) certain bog turtle surveys are completed, (2) staff completes ESA section 7 consultation, and (3) Tennessee receives written notification from the Director of OEP that construction may begin, does not ensure these measures will be implemented. Sierra Club argues that framing these conditions as

¹⁰¹ *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 188 (1978).

¹⁰² *NPCA*, 241 F.3d at 734.

¹⁰³ *NPCA*, 241 F.3d at 734.

“recommendations” here and throughout the EA casts doubt on whether measures to mitigate harms to the species in the project area will ever be undertaken.

156. As explained above, Tennessee filed the outstanding bog turtle survey with the Commission in January 2012, and the New Jersey FWS concurred that the survey did not document any suitable bog turtle habitat between approximate MPs 7.6 and 9.3 of Loop 323 in New Jersey. Sierra Club seems to misunderstand the role of the EA within the Commission. Commission staff prepares the EA to provide recommendations to the Commission and aid the Commission in its decision-making. The EA is not a final order approved by the Commission. Instead, we take the recommendations made by staff under consideration when we issue our final order. Generally, we adopt many of the EA’s recommendations as final environmental conditions to our orders. In this case, as mentioned above, we adopt Commission staff’s environmental recommendation concerning the bog turtle and modify it as Environmental Condition No. 13 to this order.

157. Sierra Club points out that the EA concludes that no additional surveys are needed for the dwarf wedgemussel “so long as the crossing of the Delaware River can be completed using the HDD crossing method.”¹⁰⁴ Sierra Club also points out that Tennessee has not yet completed surveys for a 2.9-mile segment of Loop 323 and argues that the EA prematurely concludes that the project is not likely to adversely affect the dwarf wedgemussel.¹⁰⁵ Sierra Club argues that reliance on HDD to justify a lack of additional surveying is premature because Tennessee has not developed a contingency crossing method for the Delaware River HDD; it adds that although the EA mentions a frac-out as a possibility, it does not address any mitigation measures to address and minimize the potential for habitat destruction. Therefore, Sierra Club argues, the EA does not sufficiently consider the potential effect of the project on endangered and threatened species.

158. As explained above, Tennessee filed the necessary reports on the effects of the project on the dwarf wedgemussel and the Pennsylvania and New Jersey FWS offices concurred that the project is not likely to adversely affect the species, thus concluding the Commission’s consultation with FWS regarding the dwarf wedgemussel.

¹⁰⁴ EA at 2-48.

¹⁰⁵ EA at 2-51.

159. The EA does not address the possibility of a frac-out, because such an occurrence is unlikely under the circumstances. The proposed action that the EA considers is the HDD crossing of the Delaware River. Although, a frac-out may occur, it is not reasonably foreseeable. The EA generally describes the potential impacts of an HDD-drilling fluid release on fisheries and other aquatic organisms. The EA also notes that Tennessee filed site-specific plans for each HDD and a frac-out contingency plan that describes how Tennessee would monitor for and respond to an inadvertent release of drilling fluid on land or into water. The EA summarizes the process that Tennessee would implement to minimize the likelihood of a frac-out, monitor for frac-outs, and notify agencies in the event of a frac-out. Tennessee included the contingency plan in its application and details how a land release would be cleaned up. If a release would occur in water, Tennessee would consult with applicable agencies within 24 hours after detection of the frac-out and implement containment and cleanup measures to the satisfaction of governing agencies and any affected party. In the event that a successful crossing using by HDD is not achievable, Tennessee will notify the Commission and consult with the applicable state and federal agencies to obtain the necessary permits prior to initiating another crossing method.¹⁰⁶ The EA concludes, and we concur, that Tennessee's site-specific HDD plans and frac-out contingency plan will adequately reduce the potential for, and impact of, a drilling fluid release.¹⁰⁷

160. Sierra Club argues that incomplete survey data mandates the preparation of an EIS. In this case, although some surveys were incomplete at the time of the EA, a substantial amount of the project area had already been surveyed. As explained above, no more than nine percent of the proposed facilities in New Jersey remain to be surveyed due to lack of landowner permission and a substantial amount of environmental information was obtained from federal, state, and local resources, including for those areas not accessible for survey. The EA discloses the lack of this data and recommends the Commission require Tennessee to perform the studies before construction could begin on the limited areas where additional study was necessary. Since the issuance of the EA, Tennessee has completed several of the studies necessary for ESA section 7 consultations, including surveys for Indiana bat and the bog turtle. All other necessary outstanding surveys are required by the environmental conditions attached to this order prior to construction of the affected pipeline sections. Therefore, Tennessee will not receive our approval to proceed until it completes the studies that confirm the project will

¹⁰⁶ EA at 2-17.

¹⁰⁷ EA at 2-18-19.

be consistent with our and other agencies' authorizations. As the Commission has found, "if the studies do not support such a finding, the project cannot proceed until it is modified or measures are put in place to ensure the project will not cause any unacceptable adverse environmental impacts."¹⁰⁸

161. Finally, Sierra Club argues that the project will threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment, the tenth intensity factor.¹⁰⁹ Specifically, Sierra Club alleges that the project will violate the Endangered Species Act; the Migratory Bird Treaty Act and the Bald and Golden Eagles Protection Act; the New Jersey Endangered and Nongame Species Conservation Act, the New Jersey Natural Heritage Program, and the Division of Land Use Regulation; the New York Endangered Species Act; Pennsylvania Endangered Species laws; the Clean Water Act; the Federal Safe Water Drinking Act; and the Pennsylvania Clean Streams Act.

162. With respect to the ESA, Sierra Club points out that FWS requested the Commission consider the effects on the federally-petitioned Northern long-eared bat, but argues that the analysis in the EA is so cursory that it ignores the threat of future violation of federal law. In addition, Sierra Club argues the EA ignores the possibility of effects on the American eel in the case of frac-out. Although the Northern long-eared bat is currently not a federally-protected species, the EA addresses impacts to that bat as well as the Indiana bat and concludes that the requirement that Tennessee clear trees only between September 1 and March 31 in Pennsylvania and August 1 and March 14 in New Jersey will be protective of both species of bat within the project area. Impacts from a potential frac-out are addressed above.

163. Sierra Club also argues that there is a risk of violation of the Migratory Bird Treaty Act and the Bald and Golden Eagles Protection Act based on the two bald eagles' nests that were identified.¹¹⁰ As discussed above, based on additional surveying, one of the identified bald eagles' nests is outside the buffer zone recommended in the National Bald Eagle Management Guidelines and the other nest is currently inactive. Tennessee

¹⁰⁸ *AES Sparrows Point LNG, LLC*, 129 FERC ¶ 61,245 (2009) (citing *Cal. Public Utilities Comm'n*, 900 F.2d 269, 282 (D.C. Cir. 1990)).

¹⁰⁹ 40 C.F.R. § 1508.27(b)(10) (2011).

¹¹⁰ EA at 2-53.

has explicitly agreed to the tree-clearing limitations, and we believe these limitations will protect migratory bird habitat effectively.

164. Sierra Club also alleges that the project implicates 46 threatened, endangered, and special concern species in New Jersey protected under the New Jersey Endangered and Nongame Species Conservation Act, the New Jersey Natural Heritage Program, and the Division of Land Use Regulation. Accordingly, Sierra Club asserts the EA fails to adequately address the project's affect on protected species. For example, Sierra Club argues the EA fails to evaluate route deviations or mitigation measures that are designed to protect the timber rattlesnake at the Mahwah meter station site. In addition, Sierra Club states that the results of surveys on red-shouldered hawks and barred owls are still pending. Sierra Club states that regarding mussel species of concern, Tennessee will use the HDD crossing method to avoid impacts.

165. We note that at the Mahwah Meter Station there exists habitat for the timber rattlesnake, a New Jersey state protected species. Tennessee has continued to provide updates to its surveys for protected species and will provide additional survey information as it is completed in the spring of 2012. Both Tennessee and Algonquin propose work at the site and have provided updates on their respective work proposals at the meter station because the work could have a cumulative impact on protected species. Tennessee and Algonquin note that while both companies are completing work within the same area, Tennessee would be responsible for developing the footprint of the site. The EA discloses numerous measures Tennessee would take to avoid or minimize impact on any protected species within New Jersey. The EA notes that the only area of direct habitat impact for the timber rattlesnake is Mahwah Meter Station and that no northern copperheads were identified within the project area. We note that Tennessee is required to submit all outstanding surveys and any mitigation that is developed with the state of New Jersey for protected state species. Concerning mussel species, we reiterate that Tennessee will employ its site specific HDD plans which include a frac-out contingency plan.

166. In New York, Sierra Club states that rare species are protected under the New York Endangered Species Act.¹¹¹ Sierra Club points out that a bald eagle was found in the vicinity of the Port Jervis, New York pipe yard.¹¹² Sierra Club argues that the EA

¹¹¹ N.Y. Envtl. Conserv. Law § 11-0535 (Consol. 2012).

¹¹² EA at 2-55.

offers no analysis of which species may be implicated by the law, instead indicating that Tennessee would transplant individual plants to locations outside the construction workspace or right-of-way.¹¹³ Sierra Club argues that according to the Fifth Circuit, this “mere perfunctory or conclusory language will not be deemed to constitute an adequate record and cannot serve to support the agency’s decision not to prepare an EIS.”¹¹⁴

167. The Port Jervis pipe yard is the only project element located in New York State. Based on aerial photographs and descriptions from Tennessee, the Port Jervis Yard consists of a cleared lot with one or two commercial buildings on the property. The yard is situated in a mixed commercial and residential area, with buildings or roads on three sides, and a small wooded area on the fourth side. The EA discusses the bald eagle in the vicinity of the Port Jervis pipe yard. Tennessee contacted the New York FWS and the New York Natural Heritage Program. Based on these discussions Tennessee committed to working with the New York State Department of Environmental Conservation to determine whether adverse impacts on bald eagle could occur and to limit construction activities and other disturbances within buffers established under the National Bald Eagle Management Guidelines.¹¹⁵ Therefore, no impacts on the bald eagle are expected. It should also be noted that the New York State Department of Environmental Conservation stated that “historical records of the dragonfly and plants in the vicinity of the pipe yard do not require habitat surveys.”¹¹⁶ Nevertheless, Tennessee has committed to completing surveys and would attempt to relocate workspaces to avoid impacts on state-protected plants. If impacts are unavoidable, Tennessee would mitigate them by preserving seed banks and rootstocks or transplanting individual plants.¹¹⁷

168. Sierra Club states that Pennsylvania law also protects and monitors the taking of endangered species.¹¹⁸ Sierra Club argues that the EA conducts the same superficial

¹¹³ EA at 2-56.

¹¹⁴ Citing *Citizen Advocates for Responsible Expansion, Inc. (I-Care) v. Dole*, 770 F.2d 423, 434 (5th Cir. 1985).

¹¹⁵ EA at 2-53.

¹¹⁶ EA at 2-56.

¹¹⁷ EA at 2-56.

¹¹⁸ 30 Pa. Cons. Stat. § 2305 (2012).

review that it does for all endangered species. Specifically, Sierra Club argues that although timber rattlesnakes were documented along portions for Loop 321, the EA fails to supply information on snakes that were not gestating or what the habitat implications would be.

169. Pennsylvania currently lists the timber rattlesnake as a candidate species, rather than threatened or endangered. The EA notes that a report of denning surveys was pending, but that Tennessee would: avoid direct impacts on any dens that may be identified by reducing the workspace or implementing a route deviation, employ snake monitors to remove any snakes from the right-of-way on a daily basis, and restore gestation habitat after construction.¹¹⁹ At the request of the Pennsylvania Fish and Boat Commission, Tennessee conducted the final denning survey on October 26, 2011, as staff was preparing the EA. The report documented three dens near the Loop 321 construction right-of-way and none near Loop 323. Although none of the dens near Loop 321 are located within the construction right-of-way, the report documented potential denning, gestating, and basking habitat. Tennessee also committed to train its construction workers to recognize species of snakes and contact the snake monitor and add snake fencing and signage along the right-of-way near the dens. In addition, Environmental Condition No. 15 to this order, originally environmental recommendation 16 in the EA, requires Tennessee to file the results of any outstanding surveys for Pennsylvania and New Jersey state-listed species and identify any additional mitigation measures developed in consultation with the applicable state agencies prior to construction. Based on the mitigation measures Tennessee has committed to, and its consultation with the Pennsylvania Fish and Boat Commission, we do not believe the project will result in a violation of Pennsylvania's endangered species law.

170. As for the CWA, Sierra Club argues that the EA contains little analysis of proposed dredge and fill activities and relies on the assumption that Tennessee will meet permit requirements. In addition, Sierra Club argues that the EA fails to explain the impact of the project on wetlands and sensitive waterbodies, including the Monksville Reservoir and Valentine Brook.¹²⁰

171. It is not unreasonable for the EA to assume that Tennessee will comply with permit requirements because other agencies will require Tennessee to do so. Multiple

¹¹⁹ EA at 2-54.

¹²⁰ EA at 2-13.

agencies, including New Jersey DEP, Pennsylvania DEP, the Corps, and others must issue separate authorizations for many of the planned construction activities and environmental impacts. As pointed out throughout the EA and in this order, many of the resource areas addressed in the EA are protected by different federal and state laws to which Tennessee is obligated to adhere. By assuming that Tennessee will adhere to these different requirements, the Commission is not abdicating its responsibility; rather we are looking at the impacts of the project within that context. Sierra Club offers no evidence why it is inappropriate to assume Tennessee will adhere to its permit requirements.¹²¹

172. Tennessee must cross wetlands and waterbodies in accordance with Tennessee's ECPs and federal and state permit requirements, minimizing impacts. The EA also addresses impacts to the Valentine Brook, stating that Loop 323 would cross one minor, unnamed tributary to the brook that is classified as intermittent and located approximately 1.7 miles upstream of the Milford Township Water Authority water withdrawal. The project will also cross the Monksville Reservoir, for which Tennessee will use the HDD method which would avoid direct impacts from trenching within this waterbody. The EA discusses at length the impacts that are anticipated for waterbody and wetland crossings associated with the project.

173. Sierra Club also argues the project may violate the Federal Safe Drinking Water Act.¹²² Sierra Club points out that when discussing impacts to the New Jersey Highlands Planning and Preservation areas, the EA addresses Tennessee's mitigation plans by stating Tennessee "would" develop comprehensive mitigation plan that "would" be submitted as part of a Highland Applicability Determination.¹²³ Sierra Club argues that the lack of developed mitigation plan and reliance on hypothetical future scenario interferes with the ability to assess the impact of drinking water. In addition, Sierra Club

¹²¹ See, e.g., *Sierra Club v. Hassell*, 636 F.2d 1095, 1098 (5th Cir. 1981) (Finding that the Federal Highway Administration acted reasonably in not preparing an EIS for the reconstruction of a hurricane-damaged bridge linking an island to the mainland. The court found laws which restricted development and use on the island, including construction permit requirements, regulation of fish habitat, and prohibition on development on sand dunes, were sufficient to protect the island, stating "[a]ppellants have failed to establish why this regulatory scheme is insufficient to protect against adverse environmental effects resulting from increased development or otherwise.").

¹²² 42 U.S.C §§ 300f-300j-26 (2006).

¹²³ See EA at 2-11.

argues that the EA fails to address the impacts of potential hazardous waste contamination, hydrostatic testing, and the effect of a possible frac-out.

174. As noted above, Tennessee has received a Highlands Act Consistency Determination in order to construct within the Highlands area. In addition, Tennessee will be required to develop a mitigation plan as part of its approval process, separate from Commission approval.

175. Impacts to drinking water related to construction and operation of the project are expected to be minimal, as it relates to both the Monksville Reservoir and Valentine Brook. The Monksville Reservoir HDD would avoid direct impacts to the waterbody and Valentine Brook would not be directly crossed (an intermittent tributary would be). The EA concludes that crossing waterbodies in accordance with the construction and restoration methods proposed within Tennessee's ECP and outlined in the EA, and any other federal or state requirements, will ensure that any potential impacts on waterbodies are minimal.

176. Sierra Club argues that the project threatens a violation of the Pennsylvania Clean Streams Act¹²⁴ because, it asserts, Tennessee has a history of violations of the Clean Streams Act and these violations imply a near certainty that the project will violate clean water laws, and, therefore, requires the preparation of an EIS. Tennessee's compliance with the Pennsylvania Clean Streams Act is the responsibility of the Pennsylvania DEP to which Tennessee will answer if it does not comply. Tennessee's alleged past history of non-compliance of this law has no bearing in this proceeding and, consequently, does not raise the potential of a violation of state law.

177. As discussed above, the EA thoroughly addresses the potential impact of the project on all the federal, state, and local laws cited by Sierra Club. We find that the project, as authorized, will not likely result in a violation of any of these laws. Accordingly, we reject Sierra Club's assertion that an EIS is required.

Cumulative Impact of Marcellus Shale Region

178. Sierra Club argues that the project will have cumulatively significant impacts on the environment, the seventh intensity factor, and that the Commission, therefore, should

¹²⁴ 35 Pa. Cons. Stat. § 691.401 (2012).

have prepared an EIS rather than an EA.¹²⁵ Sierra Club argues that the EA's treatment of the cumulative impacts falls short of what NEPA requires by failing to consider the full scope of impacts of the project. Sierra Club also argues that the cumulative impacts analysis is devoid of detailed, reasoned conclusions and quantified information. Further, Sierra Club argues that instead of performing an independent assessment of cumulative impacts, the EA impermissibly relies on Tennessee's assumed compliance with other agencies' permitting requirements. Therefore, Sierra Club argues, the cumulative impacts analysis is insufficient and the EA cannot support the finding of no significant impact.

179. Under CEQ's NEPA regulations, agencies must consider the three types of impacts: direct, indirect, and cumulative.¹²⁶ The regulations state that "direct effects" of a proposed action are "caused by the action and occur at the same time and place."¹²⁷ "Indirect effects" are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."¹²⁸ "Cumulative impact" is defined as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions."¹²⁹

180. The EA includes an analysis of the cumulative impacts of related past, present, and reasonably foreseeable activities in the project area.¹³⁰ As noted above, the EA describes the impacts of existing and pending jurisdictional natural gas pipelines, natural gas facilities associated with the project but that are not under the Commission's jurisdiction, unrelated projects, and development of Marcellus Shale.

181. The EA considers the general development of the Marcellus Shale region in the vicinity of the project. For example, the EA identifies that 1,454 Marcellus Shale wells

¹²⁵ 40 C.F.R. § 1508.27(b)(7) (2011).

¹²⁶ 40 C.F.R. § 1508.25 (2011).

¹²⁷ 40 C.F.R. § 1508.8(a) (2011).

¹²⁸ 40 C.F.R. § 1508.8(b) (2011).

¹²⁹ 40 C.F.R. § 1508.7 (2011).

¹³⁰ EA at 2-121-134.

were drilled in Pennsylvania in 2010 and approximately 1,740 wells would be drilled in 2011 based on January through July data, according to the Pennsylvania DEP. The project facilities closest to active Marcellus Shale drilling activities are Loops 317 and 319 in Bradford County and the modifications at existing Compressor Station 321 in Susquehanna County. The EA concludes that it is likely that drilling would continue through the period of construction of the project, but that the exact extent of the drilling is unknown.¹³¹

182. However, notwithstanding the EA's description of Marcellus Shale development in the project area, and contrary to Sierra Club's assertion, we are not required to include a fuller discussion in the cumulative effects analysis. Development of the Marcellus Shale region is neither causally-related to the project, nor reasonably foreseeable and, as the EA concludes, a more specific analysis is outside the scope of the cumulative impact analysis in the EA because the exact location, scale, and timing of future Marcellus Shale facilities are unknown.¹³²

183. When looking at project impacts, the Supreme Court held in *U.S. Dep't of Transp. v. Public Citizen (Public Citizen)*,¹³³ that NEPA requires a "reasonably close causal relationship" between the environmental effect and the alleged cause.¹³⁴ The Court further explained that this is similar to "the familiar doctrine of proximate cause from tort law."¹³⁵ In *Public Citizen*, the Court upheld the Federal Motor Carrier Safety Administration's (FMCSA) decision not to consider the potential environmental impacts of an increased number of Mexican trucks on U.S. roads in its EA assessing new safety regulations governing Mexican motor carriers. The Court based its decision upon the agency's finding that the relationship between the increased number of trucks and the safety regulations was not a reasonably close causal relationship.¹³⁶ Similarly, there is

¹³¹ EA at 2-125.

¹³² EA at 2-125.

¹³³ 541 U.S. 752, 767 (2004).

¹³⁴ *Public Citizen*, 541 U.S. at 767 (citing *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)).

¹³⁵ *Id.*

¹³⁶ *Id.*

not a reasonably close causal relationship between the development of Marcellus Shale in Pennsylvania and our approval of the Northeast Upgrade Project.

184. Sierra Club argues that the Commission cannot rely upon *Public Citizen*, where the Court found that the critical feature of the case was that FMCSA had “no ability” to prevent Mexican motor carriers from operating within the United States.¹³⁷ In contrast, Sierra Club argues that the Commission’s exclusive jurisdiction over the interstate pipeline system grants the Commission substantial authority to affect development of Marcellus Shale upstream activities.

185. We disagree. The EA notes that natural gas development in the Marcellus Shale region in Pennsylvania began in 2005 and has rapidly expanded. The EA adds that Pennsylvania is forecast to produce approximately 7.5 billion cubic feet (Bcf) of natural gas per day by 2015 and 13.4 Bcf per day by 2020.¹³⁸ In contrast, the Northeast Upgrade Project will only transport 636,000 Dth per day – a very small percentage of the projected growth. Natural gas development in the Marcellus Shale region will continue with or without the project and will find other avenues to market. Furthermore, the Commonwealth of Pennsylvania regulates new permits, wells, gathering lines, and other facilities and determines whether gas will be developed in Pennsylvania, whereas, the Commission’s NGA section 7 jurisdiction is limited only to the construction, operation, and maintenance of the project and natural gas in interstate commerce. The Commission, therefore, has no statutory authority to prevent the types of impacts involved in the development of the Marcellus Shale region. Even if we decided not to issue a certificate for the project, there is no evidence to show that would prevent impacts from the construction and operation of well pads, access roads, gathering lines, and compressor stations that Sierra Club is concerned about. Certainly, there is a relationship between the project and Marcellus Shale development (Tennessee states in its application that the project will provide shippers access to natural gas supplies being produced in the Marcellus Shale supply area); however, this link is not the “close causal relationship” the Supreme Court described in *Public Citizen*.

186. Similarly, the Commission cannot be said to be the “gatekeeper” for approval of development of Marcellus Shale upstream activities as Sierra Club argues. Sierra Club

¹³⁷ *Id.* at 766.

¹³⁸ EA at 2-125.

relies on *Humane Society of U.S. v. Johanns (Humane Society)*,¹³⁹ to argue that the Commission is able to promote, prevent, or otherwise affect upstream development in the Marcellus Shale region noting that “when an agency serves effectively as a gatekeeper for private action, that agency can no longer be said to have no ability to prevent a certain effect.”¹⁴⁰ However, *Humane Society* is inapplicable here. In that case, the district court found that the U.S. Department of Agriculture violated NEPA by failing to prepare either an EIS or an EA for the promulgation of a rule governing inspectors of horse-slaughter facilities, and found that the environmental effects of horse slaughter should have been assessed under NEPA prior to the promulgation of the horse-slaughter rule.¹⁴¹ In this case, Commission staff prepared a detailed and in-depth EA in compliance with NEPA, which, as described above, assesses all the impacts of the project and, after review, recommends a finding of no significant impact.

187. Consideration of the project’s cumulative impacts does not change the analysis of impacts under *Public Citizen*, where the Court also held that the FMCSA appropriately examined the cumulative impacts of its safety rule.¹⁴² As we recently explained in *Central New York Oil and Gas Co. (Central New York)*, the Ninth Circuit analogized cumulative impacts to links in a single chain:

Environmental impacts are in some respects like ripples following the casting of a stone in a pool. The simile is beguiling but useless as a standard. So employed it suggests that the entire pool must be considered each time a substance heavier than a hair lands upon its surface. This is not a practical guide. A better image is that of scattered bits of broken chain, some segments of which contain numerous links, while others have only one or two. Each segment stands alone, but each link within a segment does not.¹⁴³

¹³⁹ 520 F.Supp 2d 8, 25 (D.D.C. 2007).

¹⁴⁰ *Id.* (internal quotations omitted).

¹⁴¹ *Humane Society of U.S. v. Johanns*, 520 F.Supp 2d at 27.

¹⁴² *Public Citizen*, 541 U.S. at 769-770.

¹⁴³ *Central New York*, 137 FERC ¶ 61,121, at P 88 (2011), *order on reh’g, clarification and stay*, 138 FERC ¶ 61,104 (2012) (quoting *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989)).

188. The EA considers past, present, and future Marcellus Shale activities and logically concludes that the project and impacts from Marcellus Shale production activities are not links in the same chain. Specifically, the EA states the purpose of the project is to expand the natural gas delivery capacity to the northeast U.S., meet market demand for new transportation services, and help alleviate the already constrained pipeline capacity in the region. All four pipeline systems in the region are currently fully subscribed during the peak heating season and, even when underground storage in northwestern Pennsylvania and New York is used to meet peak day requirements, pipeline capacity must still be used to reach market areas. In addition, according to Tennessee, natural gas deliveries into its system in the region have increased from about 25 million cubic feet per day to 1 Bcf per day within the last 2 years. Development of natural gas resources in the Marcellus Shale region will continue even without the project and unregulated developers will continue to build new wells and gathering systems to serve the shale gas. The Northeast Upgrade Project is designed as a high-pressure, high-capacity pipeline to transport natural gas in interstate commerce supporting Tennessee's entire system, not as a gathering system for low-pressure shale gas produced in the region.

189. In addition, future Marcellus Shale drilling activities and the potential associated environmental impacts are not reasonably foreseeable. As explained in the EA, the exact location, scale, and timing of future actions are unknown.¹⁴⁴ Sierra Club disagrees, noting that publicly available maps prepared by Bradford County and the Pennsylvania DEP provide quantitative and geographic data on the location of permitted gas wells in Pennsylvania and show the locations of existing and proposed wells in the counties crossed by the project. Therefore, Sierra Club argues, the Commission can ascertain with relative certainty the locations of wells the project will facilitate by looking at maps that identify Chesapeake-owned permits and active wells along a proposed gathering pipeline that would connect with the Tennessee's system.

190. However, the available maps do not provide the degree of specificity necessary for an in-depth review and meaningful analysis in the EA. Knowing the location of a permitted, yet unconstructed, well does not mean that other specific factors are known such as the specific location of gathering lines, access roads, and other associated infrastructure and related facilities, information that is not provided in the maps cited by Sierra Club. In addition, although Pennsylvania has issued thousands of well permits, and continues to do so, it is unknown when, or even if, these wells will be drilled. The EA concludes, and we agree, that the factors necessary for meaningful analysis of when,

¹⁴⁴ EA at 2-125.

where, and how Marcellus Shale development will occur are ultimately unknowable and not reasonably foreseeable at this time. The EA provides general information on the number and general location of wells permitted in order to provide public disclosure of environmental issues. However, this information does not inform our finding of no significant impact.

191. Sierra Club argues that this situation is analogous to *Thomas v. Peterson*,¹⁴⁵ where the court considered an EA prepared by the Forest Service for a timber road through a National Forest and held that the cumulative impacts of the road and any future timber sales had to be considered together. The court rejected the argument that “sales are too uncertain and too far in the future for their impacts to be analyzed along with the road” reasoning that “if sales are sufficiently certain to justify construction of the road, then they are sufficiently certain for their environmental impacts to be analyzed along with the road.”¹⁴⁶ Similarly, Sierra Club argues, the Commission cannot claim that the effects of past, present, and reasonably foreseeable upstream Marcellus shale development do not have a “reasonably close causal relation” to the project, or that they are entirely unknown and, thus, outside the scope of analysis.

192. However, *Thomas v. Peterson* is inapplicable here. In that case, the court held that the Forest Service’s plan to prepare separate EAs for the forest road approval and timber sales approvals was an impermissible segmentation of connected actions.¹⁴⁷ The court first found the approval of the new road and timber sales were “connected actions” under NEPA,¹⁴⁸ stating that “[w]here agency actions are sufficiently related so as to be ‘connected’ within the meaning of NEPA, the agency may not escape compliance with the regulations by proceeding with one action while characterizing the others as remote

¹⁴⁵ 753 F.2d 754 (9th Cir. 1985).

¹⁴⁶ *Id.* at 760.

¹⁴⁷ *Id.* at 759.

¹⁴⁸ CEQ regulations state that “Connected actions, which means they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.” 40 C.F.R. § 1508.25 (2011).

or speculative.”¹⁴⁹ Therefore the issue in *Thomas v. Peterson* was the Forest Service’s attempt to segment several federal actions into small enough parts to avoid the preparation of an EIS. Our review and approval of the project, and impacts from the development of the Marcellus Shale region, are not connected actions within the meaning of NEPA. As we stated before, development of the Marcellus Shale region will proceed with or without the project and the Commission has no control over the siting and drilling of natural gas wells and related infrastructure in Pennsylvania.

193. More analogous to the instant case is *Sylvester v. U.S. Army Corps of Engineers (Sylvester)*,¹⁵⁰ where the court addressed the scope of analysis that federal agencies must conduct in determining whether their actions, when combined with private actions, require an EIS under NEPA.¹⁵¹ The court in *Sylvester* upheld the Corps decision to limit its NEPA review to impacts of the construction of a golf course for which the Corps issued a permit, rather than look at the impacts of the larger resort complex.¹⁵² The court explicitly distinguished *Sylvester* from *Thomas v. Peterson* finding that the federal actions in *Thomas v. Peterson* were joined to each other as links in the same chain in a way that the golf course and resort were not.¹⁵³ The court explained that the golf course and the resort complex were separate segments of chain and, although the golf course and resort complex would each benefit from the other’s presence, each project could exist without the other.¹⁵⁴ The Northeast Upgrade Project and development of the Marcellus Shale region are related in a similar way as the golf course and the resort in *Sylvester*: separate segments of chain each of which can exist without the other. Marcellus Shale development will continue with or without the project and there is no “reasonably close causal relationship” between the alleged impacts and the project.

194. Sierra Club and other commentators also argue that the EA fails to adequately address the cumulative impacts of related existing and reasonably foreseeable pipelines

¹⁴⁹ *Thomas v. Peterson*, 753 F.2d at 760.

¹⁵⁰ 884 F.2d 394 (9th Cir. 1989).

¹⁵¹ *Id.* at 398.

¹⁵² *Id.* at 401.

¹⁵³ *Id.* at 400.

¹⁵⁴ *Id.*

within the Commission's jurisdiction. Sierra Club points out that the EA identifies ten existing or proposed pipelines totaling approximately 240 miles of new or improved pipelines and argues that the EA does not say what the cumulative effects might be or provide a basis that mitigation will be sufficient. In particular, the Sierra Club argues that to the extent the Northeast Upgrade Project and the 300 Line Project are connected and similar actions, the impact of both should have been considered in the EA but that the EA fails to analyze the cumulative impact of the 300 Line Project.

195. We disagree. The EA addresses other jurisdictional pipelines, including the 300 Line Project, in its cumulative impacts analysis. The EA concludes that the impacts from most of the other jurisdictional pipelines in the region are too far away from the project (over 25 miles) to significantly contribute to cumulative impacts in the project area. In addition, EA concludes that the majority of the recently-approved MARC 1 Hub Line Project would also be located a substantial distance from the project and most of the impact would be ameliorated by the time Tennessee begins construction of its project. As for the 300 Line Project, most of the construction impacts were temporary in nature and will be separated by time and distance from the impacts of the Northeast Upgrade Project. In addition, both projects either have been or would be required to implement construction practices and restoration measures that minimize overall environmental impacts and, thus, reduce potential cumulative effects of the projects to less than significant levels. For these reasons and considering that the Northeast Upgrade Project is primarily an expansion of an existing right-of-way, the EA properly concludes that only minor cumulative impacts will result when the impact of Tennessee's proposal are added to impacts from other projects in the area, including the 300 Line Project.

196. We also disagree with Sierra Club's assertion that the EA fails to adequately consider the cumulative effects to groundwater resources, vegetation and wildlife, land use and visual resources, and recreation. The EA explains that project construction could have a minor, temporary, and localized effect on groundwater resources, including increased turbidity, reduced water levels, contamination, and damage to nearby water wells. These impacts would be greatest during construction and would quickly diminish after construction, as Tennessee restores and revegetates the right-of-way. In addition, Tennessee will monitor nearby wells and will repair affected wells and compensate owners.¹⁵⁵ The EA also addresses the cumulative impacts on vegetation and wildlife explaining that other projects in the same general location and time frame could have a cumulative impact on local vegetation and wildlife, but concludes that the scale and short

¹⁵⁵ EA at 2-129-130.

time frame for construction of the project, other nearby jurisdictional projects, and a proposed electric generation plant would not contribute significantly to cumulative impacts on vegetation and wildlife.¹⁵⁶

197. With respect to cumulative impacts on land use, visual resources, and recreation, the EA concludes that construction and operation of the project would not significantly impact these resource areas. The EA explains that effects on land use, visual resources, and recreation will be temporary in nature and minimized by the use of the existing right-of-way. In addition, the project will not cross the Delaware Water Gap NRA, avoiding impacts to this federal recreation area, and Tennessee will minimize impacts to the Appalachian National Scenic Trail through consultation with the NPS.¹⁵⁷ Tennessee has also developed site-specific plans for working in special interest areas and will obtain all necessary permits and approvals.

198. The purpose of the requirement that agencies consider the cumulative impacts of its actions “is to prevent agencies from dividing one project into multiple individual actions ‘each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.’”¹⁵⁸ Such is not the case here. The cumulative impacts analysis in the EA identifies recently completed, ongoing, and planned projects in the project area, including, to a limited extent, development of natural gas reserves in the Marcellus Shale. The EA concludes, and we agree, due to the implementation of specialized construction techniques, the relatively short timeframe in any one location, and carefully developed resource protection and mitigation plans, only small cumulative impacts are anticipated when the impacts of the Northeast Upgrade Project are added to identified, ongoing projects in the project area.¹⁵⁹

199. Finally, Sierra Club argues that the EA impermissibly relies on compliance with other agencies’ permitting requirements as a basis for a finding of no significant impact. Sierra Club argues that Commission staff abdicates its NEPA responsibility by deferring

¹⁵⁶ EA at 2-131.

¹⁵⁷ EA at 2-132.

¹⁵⁸ *Natural Resources Defense Council, Inc. v. Hodel*, 865 F.2d 288, 297 (D.C. Cir. 1988) (quoting *Thomas v. Peterson*, 753 F.2d at 758).

¹⁵⁹ EA at 1-134.

to standards administered by other agencies without independently assessing the impacts. Sierra Club argues that the EA subverts the purpose of NEPA by repeatedly pointing to oil and gas well permitting standards as a reason for concluding that the project will have no significant cumulative impact when considered in the context of Marcellus Shale development. For example, Sierra Club points to the fact that the EA notes that non-jurisdictional facilities in Pennsylvania will be required to implement best management practices developed by the Pennsylvania DEP which the EA determines would avoid or minimize cumulative impacts. Sierra Club argues that the EA's reliance on other agencies' regulations does not supplant the requirement of a thorough EA analysis and does not suffice as a hard look under NEPA.¹⁶⁰

200. As explained above, we are not required to look at the impacts of the development of Marcellus Shale in the EA because the project and such development do not have a reasonably close causal connection, nor are the impacts from Marcellus Shale development reasonably foreseeable. Nonetheless, staff looked at the general impacts of Marcellus Shale development to inform the public. The EA thoroughly analyzes each aspect of the project and its impacts, as detailed throughout this order. The EA does not defer our NEPA responsibilities to other agencies; rather it explains that based on Tennessee's compliance with other laws and mitigation required by the Commission and other agencies, the EA can recommend a finding of no significant impact. The Commission is not abdicating its responsibility under NEPA. The EA acknowledges the reality that Tennessee will be required to comply with other federal and state laws not administered by the Commission and implement additional mitigation measures required by other federal and state agencies. The EA also finds that based on the regulation of natural gas producers by Pennsylvania, the Susquehanna River Basin Commission, the Delaware River Basin Commission, and other federal agencies, cumulative impacts of the project will not be significant. The fact that we take these laws and measures into account in assessing the environmental impact of the project is not an abdication of our responsibility.

201. In conclusion, we have reviewed the information and analysis contained in the record, including the EA, regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the EA and find that if constructed and operated in accordance with Tennessee's

¹⁶⁰ Citing *Limerick Ecology Action, Inc. v. U.S. Nuclear Regulatory Comm'n*, 869 F.2d 719, 729 (3d Cir. 1989); *Calvert Cliffs' Coordinating Comm. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109 (D.C. Cir. 1971).

application, as supplemented, and the conditions imposed herein, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

202. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction, replacement, or operation of facilities approved by this Commission.¹⁶¹

IV. Conclusion

203. For all of the reasons discussed above, and with the conditions imposed herein, the Commission finds that Tennessee's proposal is required by the public convenience and necessity and we are issuing the requested certificate and abandonment authorizations.

204. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued authorizing Tennessee to construct and operate the facilities, as more fully described in the application and in this order.

(B) Tennessee is authorized to abandon the facilities, as more fully described in the application and this order.

(C) Tennessee shall complete the construction of the facilities and make them available for service within one year of the date of the order, pursuant to section 157.20(b) of the Commission's regulations.

¹⁶¹ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Comm'n*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(D) The authorization in Ordering Paragraph (A) is conditioned on Tennessee's compliance with the provisions of all applicable Commission regulations and the NGA, including, but not limited to, sections 157.20 (a), (c), (e), and (f) of the Commission's regulations.

(E) The authorization in Ordering Paragraph (A) is conditioned upon Tennessee's compliance with the environmental mitigation measures set forth in the Appendix B to this order.

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

(G) Tennessee is directed to file actual tariff records to implement its proposed Northeast Upgrade Project rates not less than 30 but not more than 60 days prior to the proposed facilities being placed into service.

(H) Tennessee's incremental recourse rates for firm services and applicable general system rate under Rate Schedule IT for any interruptible service on the Northeast Upgrade Project are approved, as described above. This approval is subject to Tennessee filing, within 30 days of the date of this order, an analysis demonstrating what impact operation of the new compressor will have on the Electric Power Cost Recovery Adjustment for existing customers.

(I) Tennessee must file not less than 30 but not more than 60 days before the in service date of the proposed facilities an executed copy of each non-conforming agreement as a tariff record reflecting the non-conforming language and a tariff record identifying these agreements as non-conforming agreements, consistent with section 154.112 of the Commission's regulations.

(J) Tennessee must execute firm natural gas transportation contracts equal to the level of service and in accordance with the terms of service represented in its precedent agreements prior to commencing construction.

(K) The motion to intervene out of time is granted.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A**Parties Filing Timely, Unopposed Interventions**

Atmos Energy Corporation
Atmos Energy Marketing LLC
Calpine Energy Services, L.P.
Consolidated Edison of New York, Inc. and Orange and Rockland Utilities, Inc.
Constellation Energy Commodities Group, Inc.
Delaware Riverkeeper Network
EQT Energy, LLC
George C. Feighner
Ellen Hay and Milton Newman
Inergy Midstream, LLC
Louisville Gas & Electric Company
Millennium Pipeline Company, LLC
National Fuel Gas Distribution Corporation
National Grid Gas Delivery Companies
New England Local Distribution Companies¹⁶²
New Jersey Chapter of the Sierra Club
New Jersey Highlands Coalition
New Jersey Natural Gas Company
NJR Energy Services Company
Piedmont Natural Gas Company, Inc.
ProLiance Energy, LLC
PSEG Energy Resources & Trade LLC
Statoil Natural Gas LLC
UGI Distribution Companies¹⁶³

¹⁶² Bay State Gas Company d/b/a Columbia Gas of Massachusetts, The Berkshire Gas Company, Connecticut Natural Gas Corporation, Fitchburg Gas and Electric Company, City of Holyoke, Massachusetts Gas and Electric Department, Northern Utilities, Inc., NSTAR Gas Company, The Southern Connecticut Gas Company, Westfield Gas & Electric Department, and Yankee Gas Services Company.

¹⁶³ UGI Utilities, Inc., UGI Penn Natural Gas, Inc., and UGI Central Penn Gas, Inc.

Appendix B

Environmental Conditions

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

1. Tennessee Gas Pipeline Company (Tennessee) shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Tennessee must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of Office of Energy Projects (OEP) before using that modification.
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of the Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.
3. **Prior to any construction**, Tennessee shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, Environmental Inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Tennessee shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of

environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

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

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

This requirement does not apply to extra workspace allowed by Tennessee's Environmental Construction Plans (ECPs) and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

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

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **At least 60 days prior to construction**, Tennessee shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Tennessee must file revisions to the plan as schedules change. The plan shall identify:

- a. how Tennessee will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
 - b. how Tennessee will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - c. the number of EIs assigned per loop segment and aboveground facility sites, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Tennessee will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change, with the opportunity for OEP staff to participate in the training sessions);
 - f. the company personnel (if known) and specific portion of Tennessee's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Tennessee will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (1) the completion of all required surveys and reports;
 - (2) the environmental compliance training of onsite personnel;
 - (3) the start of construction; and
 - (4) the start and completion of restoration.
7. Beginning with the filing of its Implementation Plan, Tennessee shall file updated status reports with the Secretary on a **weekly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Tennessee's efforts to obtain the necessary federal authorizations;
 - b. the construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally-sensitive areas;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EIs during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

- d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
 - e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by Tennessee from other federal, state, or local permitting agencies concerning instances of noncompliance, and Tennessee's response.
8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Tennessee shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
 9. Tennessee must receive written authorization from the Director of OEP **before placing each phase of the project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.
 10. **Within 30 days of placing the authorized project facilities in service**, Tennessee shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed and/or abandoned in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions Tennessee has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
 11. **Within 30 days of placing the facilities in service**, Tennessee shall file a report with the Secretary identifying all water supply wells/systems damaged by construction and how they were repaired. The report shall also include a discussion of any other complaints concerning well yield or water quality and how each problem was resolved.
 12. **Prior to construction**, Tennessee shall file with the Secretary for review and written approval from the Director of OEP a revised Pennsylvania ECP that includes in-stream construction timing windows consistent with section V.B.1 of the FERC's Wetland and Waterbody Construction and Mitigation Procedures.

13. Tennessee **shall not begin construction of Loop 323 in New Jersey until:**
 - a. Tennessee files with the New Jersey Field Office of the U.S. Fish and Wildlife Service (FWS) and the Secretary the results of all outstanding small whorled pogonia surveys. If small whorled pogonia are identified in any of the proposed construction work spaces, Tennessee shall consult with the FWS for measures that avoid impacts on this species;
 - b. Tennessee adopts a seasonal restriction for clearing trees greater than 5-inch-diameter breast height from April 1 to September 30 between mileposts (MP) 13.9 and 16.4;
 - c. the FERC staff completes any necessary ESA section 7 consultation with the NJFWS for the small whorled pogonia, Indiana bat, and bog turtle; and
 - d. Tennessee receives written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.

14. Tennessee **shall not begin construction of Loops 321 until:**
 - a. Tennessee files with the Pennsylvania Field Office of the FWS and the Secretary a plan that addresses Indiana bat habitat loss between approximate MPs 3.2 and 8.1;
 - b. Tennessee adopts a seasonal restriction for clearing trees greater than 5-inch-diameter breast height from April 1 to October 14 between MPs 3.2 and 8.1;
 - c. the FERC staff completes any necessary ESA section 7 consultation with the FWS; and
 - d. Tennessee receives written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.

15. **Prior to construction,** Tennessee shall file the results of any outstanding surveys for Pennsylvania and New Jersey state-listed species and identify any additional mitigation measures developed in consultation with the applicable state agencies.

16. Tennessee **shall not begin construction** of facilities, including the pipeline loops and compressor stations, meter stations, and/or use of all staging, storage, or temporary work areas and new or to-be-improved access roads **until:**
 - a. Tennessee files with the Secretary:
 - (1) any Phase IB survey reports for areas of denied access, and/or Phase IB survey reports revised to address comments;

- (2) Phase I cultural resources survey report(s) for any previously unreported areas for Pennsylvania and New Jersey, including proposed wetland mitigation sites;
 - (3) Phase II site evaluation reports, as required, to provide National Register of Historic Places-eligibility recommendations for sites in Pennsylvania and New Jersey, including additional geomorphological testing;
 - (4) a revised unanticipated discovery plan developed in consultation with the Ramapough Lenape and New Jersey SHPO;
 - (5) any other reports, plans, or special studies not yet filed, including archaeological site avoidance and treatment plans, and historic architectural avoidance plans;
 - (6) comments on the cultural resource reports and plans from the Pennsylvania State Historic Preservation Office, New Jersey State Historic Preservation Office, and any comments from other consulting parties not yet filed; and
 - (7) the records of continued consultation with the Ramapough Lenape Indian Nation, Delaware Nation, Delaware Tribe of Indians, Oneida Indian Nation, Eastern Shawnee Tribe of Oklahoma, and Stockbridge Munsee Community of Wisconsin, and any other American Indian tribe that have not yet been filed.
- b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
 - c. the FERC staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Tennessee in writing that treatment plans/mitigation measures may be implemented and/or construction may proceed.

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

17. **Prior to initiation of horizontal directional drilling (HDD) activities at the Susquehanna River**, Tennessee shall file for the review and written approval of the Director of OEP a plan detailing the additional noise mitigation measures Tennessee would use to ensure that the noise levels attributable to the 24-hour HDD activities do not exceed a day-night sound level of 55 decibels on the A-weighted scale (L_{dn}) at the noise-sensitive areas near the Susquehanna River HDD entry site.

18. Tennessee shall file noise surveys with the Secretary **no later than 60 days** after placing the authorized units at the Compressor Stations 321 and 323 in service. If the noise attributable to the operation of all of the equipment at the identified compressor stations at full load exceeds an L_{dn} of 55 dBA at the nearby noise sensitive areas, Tennessee shall install additional noise controls to meet the level **within 1 year** of each stations in-service date. Tennessee shall confirm compliance with the above requirement by filing a second set of noise surveys with the Secretary **no later than 60 days** after it installs the additional noise controls.

19. **Prior to construction of Loop 321 on the Anastasio property near milepost 6.7 in Lackawaxen Township, Pike County, Pennsylvania,** Tennessee shall file with the Secretary for review and written approval from the Director of OEP the results of Tennessee's communication with the Anastasios and the finalized construction plan for crossing the Anastasio property.