

156 FERC ¶ 61,157
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, Tony Clark,
and Colette D. Honorable.

Tennessee Gas Pipeline Company, L.L.C.

Docket No. CP15-77-000

ORDER ISSUING CERTIFICATE AND APPROVING ABANDONMENT

(Issued September 6, 2016)

1. On January 30, 2015, Tennessee Gas Pipeline Company, L.L.C. (Tennessee) filed an application pursuant to sections 7(b) and (c) of the Natural Gas Act (NGA)¹ and Part 157 of the Commission's regulations² for authorization to construct and operate certain compression facilities to be located in Kentucky, Tennessee, and West Virginia, and to abandon certain compression facilities in West Virginia, referred to as the Broad Run Expansion Project. The purpose of the project is to (1) increase firm incremental transportation service on the Tennessee system by 200,000 dekatherms per day (Dth/d) (Market Component); and (2) replace older, less efficient compression facilities with more efficient and cleaner burning compressor units (Replacement Component).

2. For the reasons discussed below, the Commission grants Tennessee's requested certificate and abandonment authorizations subject to the conditions described herein.

I. Background and Proposals

3. Tennessee is a limited liability company organized and existing under the laws of the State of Delaware. Tennessee is engaged in the transportation and storage of natural gas in interstate commerce subject to the jurisdiction of the Commission and is a natural gas company within the meaning of NGA section 2(6).³ Tennessee's mainline

¹ 15 U.S.C. §§ 717(f)(b), (c) (2012).

² 18 C.F.R. pt. 157 (2016).

³ 15 U.S.C. § 717a(6) (2012).

transmission system extends in a northeasterly direction from the States of Texas and Louisiana, and the Gulf of Mexico, through the States of Arkansas, Mississippi, Alabama, Tennessee, Kentucky, West Virginia, Ohio, Pennsylvania, New York, New Jersey, Massachusetts, New Hampshire, Rhode Island, and Connecticut.

Market Component

4. The Market Component of the project is designed to provide 200,000 Dth/d of firm incremental transportation service from a new point of interconnection, or a mutually agreeable receipt point, on Tennessee's Broad Run Lateral in Zone 3 to one or more mutually agreeable delivery points in Zone 1 for the project shipper, Antero Resources (Antero). To provide this expansion service, Tennessee proposes to:

- construct new Compressor Station 118A in Kanawha County, West Virginia, which includes installation of a new 10,771 horsepower (hp) gas-fired turbine compressor unit, compressor building, station piping, and ancillary equipment;
- construct new Compressor Station 119A in Kanawha County, West Virginia, which includes installation of a new 20,500 hp gas-fired turbine compressor unit, compressor building, station piping, and ancillary equipment;
- construct new Compressor Station 875 in Madison County, Kentucky,⁴ which includes installation of a new 16,000 hp gas-fired turbine compressor unit, compressor building, station piping, and ancillary equipment;
- construct new Compressor Station 563 in Davidson County, Tennessee, which includes installation of two new 30,000 hp gas-fired turbine compressor units (for a combined total of 60,000 hp), compressor building, station piping, and ancillary equipment;

⁴ Station 875 would also house a compressor unit proposed for construction in Tennessee's Abandonment and Capacity Restoration Project in Docket CP15-88-000, should that project be approved. In the Abandonment and Capacity Restoration Project, Tennessee seeks to abandon by sale approximately 964 miles of interstate natural gas pipeline to its affiliate, Utica Marcellus Texas Pipeline, to be used for the non-jurisdictional transportation of natural gas liquids, and to construct and operate compression and pipeline facilities to replace the lost capacity and maintain transportation service for its existing customers. The cumulative impacts of the Abandonment and Capacity Restoration Project and this project at Station 875 are discussed in the Environmental Assessment for this project and, as appropriate, in this order.

- install two new 16,000 hp gas-fired turbine compression units (for a combined total of 32,000 hp) at existing Compressor Station 106 in Powell County, Kentucky. These units will provide 11,700 hp for the Market Component of the project, with the remaining 20,300 hp replacing the horsepower of the abandoned compressor units proposed for the Replacement Component of the project; and
- install a new 20,500 hp gas-fired turbine compression unit at existing Compressor Station 114 in Boyd County, Kentucky. This unit will provide 11,050 hp for the Market Component of the project, with the remaining 9,450 hp replacing the horsepower of the abandoned compressor units proposed for the Replacement Component of the project.

5. Tennessee estimates the cost of the Market Component of the project to be approximately \$337.9 million.⁵ Tennessee proposes to establish incremental recourse reservation and commodity rates under its Rate Schedules FT-A for service on the Market Component facilities.

6. Tennessee explains that prior to holding its open season in association with the project, it executed a binding precedent agreement with Antero for 200,000 Dth/d of firm transportation service for a fifteen-year term at negotiated rates.⁶ The terms of the open season provided that Antero's precedent agreement would constitute a binding bid in the open season. Tennessee states that it then held a binding open season for the Market Component of the project from March 25 to April 11, 2014.⁷ One party in

⁵ Tennessee states that it allocated the cost of construction at existing Compressor Stations 106 and 114 to the Market and Replacement Components of the project based on the horsepower attributable to each component, as compared to the total horsepower being installed at each compressor station.

⁶ Tennessee filed the executed precedent agreement with Antero in Exhibit I.

⁷ Tennessee indicates that it solicited offers from shippers to permanently relinquish capacity in the open season but no shippers offered to turn back capacity in response. Tennessee states that the open season notice also included solicitation for firm transportation service of up to 590,000 Dth/d for the Broad Run System Flexibility Project. Tennessee constructed this project under its blanket certificate and sections 2.55 (a) and (b) of the Commission's regulations and placed the project in service on November 1, 2015. The cumulative impacts of this project and the Broad Run System Flexibility Project are discussed in section 2.11 of the EA and, as appropriate, in this order.

addition to Antero submitted a bid during the open season for a portion of the transportation capacity. Tennessee explains that the bids were evaluated on a “net present value basis,” as described in the open season notice, and as a result of this evaluation, Antero was awarded the full 200,000 Dth/d of expansion capacity.

Replacement Component

7. For the Replacement Component of the project, Tennessee proposes to:
- replace 20,300 hp (eleven 1,300 hp and three 2,000 hp reciprocating compressor units) at existing Compressor Station 106 in Powell County, Kentucky, with two new 16,000 hp turbine compressor units, of which 11,000 hp will be used for the Market Component of the project; and
 - replace 9,450 hp (seven 1,350 hp reciprocating compressor units) at existing Compressor Station 114 in Boyd County, Kentucky, with one 20,500 hp turbine compressor unit, of which 11,050 hp will be used for the Market Component of the project.

Tennessee seeks NGA section 7(b) abandonment authority for the compression units and ancillary facilities that will be replaced as part of the project. Tennessee states that it does not propose to abandon any transportation service.

8. Tennessee estimates that the cost of the Replacement Component of the project is \$68.5 million. Tennessee proposes to roll in the costs of the Replacement Component facilities in its next NGA general section 4 rate case, asserting that these facilities are designed to improve system reliability and efficiency.

II. Notice, Interventions and Protest

9. Notice of Tennessee’s application was published in the *Federal Register* on February 19, 2015 (80 Fed. Reg. 8860). The notice established March 1, 2015, as the deadline for comments and interventions. The parties listed in Appendix A filed timely, unopposed motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission’s Rules of Practice and Procedure.⁸

10. The parties listed in Appendix B filed untimely, unopposed motions to intervene. We find that those filing untimely motions to intervene have demonstrated an interest in this proceeding, and that granting these motions at this stage of the proceeding will not

⁸ 18 C.F.R. § 385.214(c) (2016).

cause undue delay, disruption, or prejudice to other parties. We will therefore grant the untimely motions to intervene.⁹

11. Numerous parties, including environmental groups and landowners, filed comments in opposition to the project. The commenters' concerns ranged from the cumulative impacts of the project to the location of the compressor stations and their local environmental impacts. These concerns are discussed in the Environmental Assessment (EA) and, as appropriate, in this Order.

III. Discussion

12. Since Tennessee seeks to abandon, construct, and operate facilities used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of subsections (b), (c), and (e) of section 7 of the NGA.¹⁰

A. Certificate Policy Statement

13. The Commission's Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.¹¹ 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 explained 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 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.

14. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether

⁹ 18 C.F.R. § 385.214(d) (2016).

¹⁰ 15 U.S.C. §§ 717f(b), 717f(c), and 717f(e) (2012).

¹¹ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

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 facilities. 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.

15. As noted above, the threshold requirement for pipelines proposing new interstate gas pipeline facilities is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The Commission has determined that, in general, when a pipeline charges an appropriately designed incremental rate for proposed expansion capacity that is higher than the generally applicable system rate, the pipeline satisfies the threshold requirement that the project will not be subsidized by existing shippers.¹² As discussed below, we are approving incremental recourse reservation and commodity charges for firm service using the proposed Market Component facilities that are calculated to recover the incremental cost of service attributable to these facilities. Thus, we find that the project will not be subsidized by Tennessee's existing customers, and the threshold requirement of no subsidization is met.

16. The Market Component of the Broad Run Expansion Project would increase transportation capacity on Tennessee's system by 200,000 Dth/d. All the proposed capacity has been subscribed under a long-term precedent agreement. In comments filed on June 26, 2016, Concerned Citizens for a Safe Environment (CCSE) questions the need for the project asserting that the need for added infrastructure to transport Marcellus production is contracting.¹³ CCSE also claims that the size of compressor station to be built at Station 563 (consisting of two 30,000 hp compressor units) suggests overbuild because "only a small percentage of the compressor stations built through 2006 had capacity in excess of 40,000 horsepower."¹⁴

¹² See, e.g., *Transcontinental Gas Pipe Line Corp.*, 98 FERC ¶ 61,155, at 61,552 (2002).

¹³ CCSE Comments at 8-9 (citing Commission State of the Market Report).

¹⁴ *Id.* at 9.

17. We disagree. Here, consistent with the Certificate Policy Statement, we find a strong showing of need based on the fact that Tennessee has executed a binding precedent agreement for firm service using 100 percent of the design capacity of the pipeline project. In addition, Commission engineering staff has performed a review of the flow diagrams and hydraulic models submitted by Tennessee. Simulations of Tennessee's system show that the Broad Run Expansion Project, including Compressor Station 563, has been properly designed to provide the additional 200,000 Dth/d of incremental capacity proposed for the project.

18. Regarding the Replacement Component of the project, we find that replacing older compressor facilities with new compressor facilities will increase the reliability and efficiency of the pipeline system. Under the Certificate Policy Statement, increasing the rates of existing customers to pay for these types of improvements does not constitute a subsidy, and the costs of such projects, if approved by the Commission, are permitted to be rolled into system rates.¹⁵

19. The proposed expansion facilities are designed to provide incremental service to meet the needs of the project shipper, Antero, without degradation of service to Tennessee's existing customers. The Replacement Component of the project is designed to allow Tennessee to operate its system more efficiently, thereby benefitting existing customers. None of Tennessee's existing shippers have raised any concerns that the proposed project will have adverse effects on their services. Nor have any other pipelines or their customers filed adverse comments regarding Tennessee's proposal. Thus, we find that Tennessee's proposed project will not adversely affect its existing customers or other pipelines and their captive customers.

20. We also find that Tennessee's proposed project will have minimal adverse impacts on landowners and communities. Construction at existing Compressor Stations 106 and 114 will be confined to existing compressor station sites. Tennessee states that it already owns or is in the process of securing necessary property rights for the four new compressor sites associated with the Market Component of the project. Tennessee states that it expects to negotiate settlements with all affected landowners for all necessary easements and property rights. To the extent parties are unable to reach mutual agreement, a court will decide the appropriate levels of compensation for necessary property rights.

21. In view of the considerations above, we find that Tennessee has demonstrated a need for the Broad Run Expansion Project and that the project's benefits will outweigh any adverse effects on Tennessee's existing shippers, other pipelines and their captive

¹⁵ Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,747, n.12.

customers, and the economic interests of landowners and surrounding communities. Consistent with the criteria discussed in the Certificate Policy Statement and subject to the environmental discussion below, we find that the public convenience and necessity requires approval of Tennessee's proposal, as conditioned in this Order.

22. 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. Market Component Incremental Rate

23. Tennessee proposes to establish incremental recourse reservation and commodity rates under Rate Schedule FT-A for service using the incremental capacity. Specifically, Tennessee proposes an incremental monthly firm reservation charge of \$30.7846 per Dth (equivalent to a daily reservation rate of \$1.0121 per Dth) and a daily commodity rate of \$0.00 per Dth. The proposed incremental reservation rate is based on a first year incremental cost of service for the Market Component facilities of approximately \$73,883,000 and a design capacity of 200,000 Dth/d. The proposed cost of service is based on Tennessee's income tax rates, capital structure, and rate of return approved in its rate settlement in Docket No. RP95-112-000, *et al.*,¹⁶ and reaffirmed in its subsequent rate settlement in Docket No. RP11-1566-000.¹⁷ Tennessee uses a straight-line depreciation rate of 3.33 percent, based on an estimated useful life of the Market Component facilities of 30 years. Tennessee states that the proposed incremental recourse rate is reasonable since the incremental recourse rate is above the otherwise

¹⁶ *Tennessee Gas Pipeline Co.*, 94 FERC ¶ 61,117 (2001); *Tennessee Gas Pipeline Co.*, 77 FERC ¶ 61,083 (1996); *reh'g denied*, *Tennessee Gas Pipeline Co.*, 78 FERC ¶ 61,069 (1997).

¹⁷ *Tennessee Gas Pipeline Co., L.L.C.*, 137 FERC ¶ 61,182 (2011). Subsequent to Tennessee filing the instant certification application, Tennessee, in Docket No. RP15-990-000, filed a settlement in lieu of an NGA general section 4 rate case. Under the terms of that settlement, parties agreed to continue the use of the Docket Nos. RP95-112-000, *et al.* variables for the purpose of calculating the costs of service in certificate applications. The Commission approved the uncontested settlement on July 1, 2015. *Tennessee Gas Pipeline Co., L.L.C.*, 152 FERC ¶ 61,009 (2015).

applicable general system rate for comparable service.¹⁸ Tennessee proposes to charge the applicable general system rate under Rate Schedule IT for any interruptible service made available as a result of the Market Component facilities. The Commission has reviewed the proposed cost of service and rates and finds them to be reasonable with the following exceptions.

24. The Commission's long standing cost classification method assigns Operating and Maintenance (O&M) costs to particular accounts, depending on the type of cost incurred, as defined in the Uniform System of Accounts.¹⁹ Costs assigned to each account are required to be itemized between two sub-accounts: labor and non-labor. Once the costs in each account have been itemized, these costs are then classified as fixed or variable.

25. On May 12, 2015, the Commission issued a data request directing Tennessee to provide a breakdown of its O&M expenses by FERC account number and labor and non-labor costs for the project. In response, Tennessee identified a total of \$2,053,000 in non-labor O&M costs in Account Nos. 853 (compressor station labor and expenses) and 864 (maintenance of compressor station equipment) and classified \$706,000 of these costs as variable, and the remainder as fixed.²⁰ However, under the Commission's traditional cost classification method, all non-labor costs in both of these accounts are properly classified as variable.²¹ In addition, Tennessee identified \$34,000 in non-labor O&M costs in Account No. 855 (other fuel and power for compressor stations), but did

¹⁸ For its comparison, Tennessee uses its Zone 3 to Zone 1 base monthly reservation rate of \$8.6375 per Dth (equivalent to a daily reservation rate of \$0.2840 per Dth) and a daily commodity rate of \$0.0169 per Dth.

¹⁹ 18 C.F.R. pt. 201 (2016).

²⁰ Tennessee June 1, 2015 Data Response, Attachment 1. Tennessee classified all of the non-labor costs in Account No. 864 as variable, but classified only a portion of the non-labor costs in Account No. 853 as variable.

²¹ *Dominion Transmission Inc.*, 153 FERC ¶ 61,382, at P 33 (2015) and *Columbia Gulf Transmission, LLC*, 152 FERC ¶ 61,214, at P 21 (2015).

not classify these costs as variable.²² Because fuel use varies with throughput, these costs are properly classified as variable.²³

26. Therefore, we find that Tennessee's variable costs are \$2,087,000, rather than the \$706,000 proposed. Consistent with the Commission's regulation requiring the use of straight fixed variable rate design,²⁴ costs classified as variable should not be recovered through the reservation charge. Accordingly, Tennessee is directed to recalculate its base reservation charge to recover only fixed costs when it files actual tariff records.

27. In its June 1, 2015, data response, Tennessee computed a revised usage charge of \$0.0114, based upon variable costs of \$706,000 and billing determinants of 170,000 Dth/d utilizing an 85 percent load factor of the project's design capacity. Consistent with the discussion above, Tennessee must recalculate its usage charge based on variable costs of \$2,087,000.

28. Under the Certificate Policy Statement, there is a presumption that incremental rates should be charged for proposed expansion capacity if the incremental rate will exceed the maximum system-wide rate.²⁵ Tennessee's proposed incremental reservation charge for the project is higher than the system recourse charge for firm transportation service contained in Tennessee's tariff. While the Commission has not recalculated the project reservation charge, it does not appear that removal of the improperly classified variable costs from the costs recoverable through the reservation charge²⁶ will result in the recalculated reservation charge being less than Tennessee's Zone 3 to Zone 1 system

²² When Tennessee files its tariff records it should confirm that these Account No. 855 costs are not recoverable through its gas and electric compressor fuel tracker.

²³ In its June 1, 2015 data response, Tennessee states that its cost classification method is consistent with the cost classification as reflected in its last two rate settlements in Docket Nos. RP95-112-000 and RP11-1566-000. These settlements, however, do not discuss what method was used to classify costs.

²⁴ 18 C.F.R. § 284.7(e) (2016).

²⁵ Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,745.

²⁶ Section 284.7(e) does not allow the recovery of variable costs in the reservation charge and section 284.10(c)(2) states that variable costs should be used to determine the volumetric rate.

rate.²⁷ Further, the Commission estimates that the project's usage charge will also be higher than Tennessee's currently effective Zone 3 to Zone 1 usage charge. Therefore, as the resulting incremental base reservation charge and usage charge will be higher than Tennessee's existing Rate Schedule FT-A Zone 3 to Zone 1 system rates, we will approve, subject to the conditions discussed above, incremental reservation rates and usage charges as the initial recourse rates for firm service using the incremental capacity created by the project.

29. In addition, Tennessee's proposal to assess its generally applicable interruptible charges under Rate Schedule IT for any interruptible service rendered on additional capacity made available as a result of the project is consistent with Commission policy,²⁸ and is approved.

30. When Tennessee submits its tariff records 30 to 60 days before placing the project facilities into service, we direct Tennessee to submit revised incremental recourse rates consistent with the discussion herein, along with work papers in spreadsheet format, including formulas.

2. Fuel Rates

31. Tennessee proposes to use its currently effective rates listed in its FERC NGA Gas Tariff as the applicable fuel and lost and unaccounted for rates for Market Component service.²⁹ In its May 12, 2015 data request, the Commission requested that Tennessee provide a fuel study, with work papers, demonstrating the impact the project will have on Tennessee's current fuel rates. In Tennessee's July 10, 2015 data response, Tennessee explains that while the project may result in a slight increase (from 0.238 percent to

²⁷ As noted previously, Tennessee's current tariff includes a base reservation charge for Rate Schedule FT-A for Zone 3 to Zone 1 of \$8.3784 per Dth per month and a daily usage charge of \$0.0169 per Dth. Tennessee Gas Pipeline Company, L.L.C, FERC NGA Gas Tariff, TGP Tariffs, [Sheet No. 14, FT-A Rates - Firm Transportation, 9.0.0](#) and [Sheet No. 15, 12.0.0](#).

²⁸ See, e.g., *ANR Pipeline Company*, 149 FERC ¶ 61,197, at P 19 (2014); *Texas Eastern Transmission, LP*, 139 FERC ¶ 61,138, at P 31 (2012); *Gulf South Pipeline Co., LP*, 130 FERC ¶ 61,015, at P 23 (2010); and *Kern River Gas Transmission Co.*, 117 FERC ¶ 61,077, at PP 313-314 and 326 (2006).

²⁹ The current fuel and lost and unaccounted for rate from Zone 3 to Zone 1 is 1.48 percent. Tennessee Gas Pipeline Company, L.L.C, FERC NGA Gas Tariff, TGP Tariffs, [Sheet No. 32, Fuel and EPCR, 10.0.0](#).

0.255 percent per 100 Dth-Mile³⁰) in general system fuel rates under current operating conditions, it emphasizes that the fuel rates, even if project fuel costs are rolled into the general system fuel rates, are expected to remain well below design levels on a pre-expansion basis. Tennessee explains that this is the result of numerous expansions on its system in recent years that have allowed shippers to source gas supplies from Tennessee's traditional market area, thus reducing the amount of fuel used to transport scheduled volumes when compared to fuel use before the expansions. In light of this situation, Tennessee claims that for purposes of determining the project's impact on general fuel rates it is more appropriate to compare (a) the pre-expansion general system fuel rate based on peak day design conditions, to (b) the post-expansion general system fuel rate, based on current operating condition. According to Tennessee, pre-expansion fuel utilization based on peak day design conditions is a more appropriate benchmark for determining the project's impact on general system fuel rates "as it reflects the existing shippers' maximum exposure to fuel rates based on how Tennessee designs its facilities and sells firm transportation capacity."³¹

32. Tennessee's fuel study estimates a post-expansion fuel rate, based on current operating conditions, of 0.255 percent per 100 Dth-Mile and estimates a pre-expansion fuel rate, based on peak day summer design conditions, of 0.352 percent per 100 Dth-mile. Thus, Tennessee concludes that existing shippers will not be harmed by charging the project shipper the applicable general system fuel rates.

33. When deciding whether to grant a pre-determination of rolled-in fuel rates, the Commission compares the pipeline's estimated incremental fuel rates to the pipeline's existing system-wide fuel rates. If the Commission were to allow rolled-in rate treatment when estimated incremental fuel rates for the project are higher than the existing system-wide fuel rates, there is a possibility that existing customers would subsidize costs related to the expansion. Here, Tennessee acknowledges that the project may result in an increase in the general system fuel rates under current operating conditions. We are not persuaded by Tennessee's argument that it is appropriate to assess the project impact on fuel rates based on a comparison of a pre-expansion fuel rate based on one criterion, e.g., peak day conditions, with a post expansion fuel rate based on a different criterion, e.g., current operating conditions. Accordingly, since we find that rolling in the project fuel costs into Tennessee's system-wide fuel rates may result in the project being subsidized by existing customers, the Commission will require Tennessee to separately identify the

³⁰ Tennessee states that the pre- and post-expansion system fuel rates in the study are expressed in percent per 100 Dth-Mile as Tennessee's existing fuel rates are mileage based.

³¹ Tennessee's July 10, 2015 Data Response, at 2.

incremental fuel associated with its project and to develop and propose incremental fuel rates for the project when it files its actual tariff records in this proceeding.³² This finding is without prejudice to Tennessee proposing to roll the project's fuel costs into its system gas retention rate in a general or limited NGA section 4 filing.

3. Predetermination on Roll in of Replacement Component Costs

34. Tennessee proposes to roll the costs of the Replacement Component of the project into its general system rates in its next NGA section 4 general rate proceeding. Tennessee estimates the Replacement Component costs for the first year to be \$68,481,546.

35. The Commission's Certificate Policy Statement recognizes that rolled-in rate treatment is appropriate for projects designed primarily to improve system reliability and flexibility for existing customers.³³ Therefore, we will grant Tennessee's request for pre-determination of rolled-in rate treatment for the Replacement Component costs of the project in its next NGA section 4 general rate proceeding absent a significant change in circumstances.

4. Non-Conforming Provisions

36. Tennessee states that the executed precedent agreement with Antero deviates from its *pro forma* Rate Schedule FT-A transportation service agreement in several aspects. Tennessee states that these differences do not constitute material deviations from Tennessee's *pro forma* service agreement and are not unduly discriminatory. Tennessee requests that the Commission make an upfront determination in this proceeding and approve these provisions.³⁴

³² *Southeast Supply Header, LLC*, 148 FERC ¶ 61,121, at P 20 (2014), *reh'g denied*, 151 FERC ¶ 61,032 (2015); and *ANR Pipeline Co.*, 149 FERC ¶ 61,197, at P 23 (2014), *reh'g denied*, 152 FERC ¶ 61,021 (2015).

³³ See *Columbia Gas Transmission Co.*, 122 FERC ¶ 61,021, at P 42 (2008), citing *Certificate Policy Statement*, 88 FERC ¶ 61,227 at fn. 12.

³⁴ In its May 12, 2015 data request, the Commission instructed Tennessee to file redline/strikeout versions of its *pro forma*, not under the claim of privilege, in order to receive a preliminary upfront determination in this certificate proceeding regarding potentially non-conforming provisions. On June 1, 2015, Tennessee filed public redline/strikeout versions of the unexecuted FTA.

37. First, Tennessee states that the proposed firm transportation service agreement (FTSA) provides Antero a one-time contractual right to extend the 15-year primary term of the agreement for a 3-year term at the same negotiated rate that was in effect during the primary term of the agreement. Tennessee asserts that this extension right was an integral part of the arrangements under which the project shipper agreed to provide the contractual support for the project. Tennessee explains that it offered the same benefits to any other potential shipper who submitted qualifying bids as a Foundation Shipper in the project's open season. Since no other shipper submitted acceptable or comparable bids, Tennessee maintains that no other shippers or potential shippers can be viewed as being similarly situated to the project shipper.

38. In addition, Tennessee states that there are other differences between the shipper's proposed FTSA and Tennessee's *pro forma* service agreement that constitute material deviations. These differences between the *pro forma* and the proposed FTSA are as follows:

1. The FTSA contains "Whereas" clauses that describe the precedent agreement and the specific transaction between Tennessee and the project shipper, while the *pro forma* does not.
2. Article II (Sections 2.1 and 2.2) of the FTSA addresses regulatory authorization of the project facilities and the commencement date of the FTSA, which is tied to the commencement date of the project facilities. Article II of the *pro forma* does not contain this regulatory authorization or commencement date language.
3. Article IV of the *pro forma* contemplates that the facilities necessary to provide the transportation service for the shipper are already in place. However, Article IV of the FTSA indicates that Tennessee will construct the project facilities to provide transportation service for the shipper.
4. Sections 6.1, 11.1, and 12.1 of FTSA have been modified (as compared to the *pro forma*) to reflect the commencement date for the project. These provisions in the FTSA reflect the fact that Tennessee must construct the project facilities in order to provide service to the shipper.
5. The FTSA contains Article XVI, Creditworthiness, to reflect the creditworthiness provisions included in the precedent agreement which differ from those provisions stated in the FERC Gas Tariff, as discussed below, while the *pro forma* does not.

39. The Commission finds that the incorporation of non-conforming provisions in the shipper's service agreement constitute material deviations from Tennessee's *pro forma*. 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 the needed security to ensure the viability of a project.³⁵ We find the non-conforming provisions identified by Tennessee to be 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.³⁶ As discussed further below, when Tennessee files its non-conforming service agreement, we require Tennessee to identify and disclose all non-conforming provisions or agreements affecting the substantive rights of the parties under the tariff or service agreement.³⁷ This required disclosure includes any such transportation provision or agreement detailed in a precedent agreement that survives the execution of the service agreement.

40. At least 30 days, but not more than 60 days, before providing service to Antero under a non-conforming agreement, Tennessee must file an executed copy of the 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.³⁸ In addition, the Commission emphasizes that the above determination relates only to those items described by Tennessee in its application and not to the entirety of the precedent agreement or the language contained in the precedent agreement.

³⁵ See, e.g., *Tennessee Gas Pipeline Co., L.L.C.*, 144 FERC ¶ 61,219, at P 32 (2013) and *Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089, at P 82 (2008).

³⁶ See, e.g., *Gulf South Pipeline Co., L.P.*, 115 FERC ¶ 61,123, at P 6 (2006) and *Gulf South Pipeline Co., LP*, 98 FERC ¶ 61,318, at P 4 (2002).

³⁷ A Commission ruling on non-conforming provisions in a certificate proceeding does not waive any future review of such provisions when the executed copy of the non-conforming agreement(s) and a tariff record identifying the agreement(s) as non-conforming are filed with the Commission consistent with section 154.112 of the Commission's regulations. See *Tennessee Gas Pipeline Co., L.L.C.*, 150 FERC ¶ 61,160, at P 44 (2015).

³⁸ 18 C.F.R. § 154.112 (2016).

5. Reporting of Incremental Costs

41. To assure that costs are properly allocated between Tennessee's existing shippers and the incremental services proposed in this proceeding, the Commission directs Tennessee to keep separate books and accounting of costs attributable to the Broad Run Expansion Project. The books should be maintained with applicable cross-references, as required by section 154.309 of the Commission's regulations. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 rate case, and the information must be provided consistent with Order No. 710.³⁹

C. Environmental Analysis

42. On May 1, 2015, the Commission issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Broad Run Expansion Project and Request for Comments on Environmental Issues (NOI). The NOI was published in the Federal Register and mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners within one-half mile of the proposed compressor stations and/or compressor station modifications.

43. We received comments in response to the NOI from three field offices (Kentucky, Tennessee, and West Virginia) of the U.S. Fish and Wildlife Service (FWS), the Kentucky Department for Environmental Protection (KYDEP), the West Virginia Department of Environmental Protection (WVDEP), five nongovernmental organizations (the Allegheny Defense Project, the Ohio Valley Environmental Coalition, the Freshwater Accountability Project, Heartwood (collectively, Allegheny), CCSE, and numerous individuals. Most individual commenters expressed opposition to the siting and construction of the Pinnacle Compression Station 563 in Davidson County, Tennessee. The primary issues raised during the scoping process were impacts from air and noise pollution, impacts on nearby farms and residential property values, wildlife, and safety concerns.

44. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),⁴⁰ Commission staff prepared an EA for Tennessee's proposal. The EA was prepared with the cooperation of the WVDEP. The analysis in the EA addresses

³⁹ *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, FERC Stats. & Regs. ¶ 31,267, at P 23 (2008).

⁴⁰ 42 U.S.C. § 4321 *et seq.* (2012).

geology; soils; water resources and wetlands; vegetation, fisheries, wildlife, and threatened and endangered species; land use, recreation, and visual resources; cultural resources; air quality and noise; safety; socioeconomics; cumulative impacts; and alternatives. All substantive comments received in response to the NOI were addressed in the EA.

45. The EA was issued for a 30-day comment period and placed into the public record on March 11, 2016. The Commission received comments on the EA from U.S. Congressman Jim Cooper of Tennessee, six elected officials in West Virginia, one federal agency (the FWS), the West Virginia State Historic Preservation Office (SHPO), the Tennessee Department of Environmental Conservation (TDEC), Tennessee,⁴¹ CCSE, Allegheny, the Tennessee Chapter of the Sierra Club (Sierra Club), and numerous individuals. The substantive comments on the EA are organized by topic and described below.

1. EA vs. EIS

46. Under NEPA, agencies must prepare an EIS for major federal actions that may significantly impact the environment.⁴² If, however, an agency determines that a federal action is not likely to have significant adverse effects, it may prepare an EA for compliance with NEPA.⁴³ In addition, the Council on Environmental Quality (CEQ) regulations state that one of the purposes of an EA is to determine whether an EIS is required.⁴⁴ Thus, based on the Commission's experience with NEPA implementation for pipeline projects, the Commission's environmental staff determines upfront whether to

⁴¹ Commission staff received a number of minor corrections on the EA from Tennessee, and acknowledge them. However, the corrections are small and do not affect any of the conclusions in the EA.

⁴² See 42 U.S.C. § 4332(2)(C) (2012); 40 C.F.R. § 1502.4 (2016).

⁴³ See 40 C.F.R. §§ 1501.3-1501.4 (2016). An EA is meant to be a "concise public document . . . that serves to . . . [b]riefly provide sufficient evidence and analysis for determining whether to prepare an [EIS] or finding of no significant impact." *Id.* § 1508.9(a). Pursuant to the Commission's regulations, if an EA is prepared first, "[d]epending on the outcome of the environmental assessment, an [EIS] may or may not be prepared." 18 C.F.R. § 380.6(b) (2016).

⁴⁴ 40 C.F.R. § 1501.4(c) (2016).

prepare an EIS or an EA for each new proposed project, pursuant to the Commission's regulations.⁴⁵

47. While CEQ regulations do not define "significant," they do explain that whether an impact is "significant" depends on both "context" and "intensity."⁴⁶ Context means that the "significance of an action must be analyzed in several contexts," including "the affected region, the affected interest, and the locality."⁴⁷ With respect to intensity, the CEQ regulations set forth 10 factors agencies should consider, including: the unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild or scenic rivers, or ecologically critical areas (factor 3), and whether the action threatens a violation of Federal, State, or local law (factor 10).⁴⁸

48. CCSE and Sierra Club assert that the Commission violated NEPA by failing to prepare an Environmental Impact Statement (EIS) rather than an EA for the Broad Run Expansion Project. CCSE claims that an EIS is required because the EA does not sufficiently consider the impacts of proposed Compressor Station 563 on forestland and parkland, and because the proposed siting of Compressor Station 563 is inconsistent with local zoning regulations.

49. The Commission's regulations include a list of instances when an EA is typically prepared, including when, as is the case here, the applicant proposes to construct compressor units under section 7 of the NGA.⁴⁹ In accordance with this regulation, Commission staff prepared an EA for the Broad Run Expansion Project and the EA concludes that if Tennessee constructs the facilities in accordance with its application, supplements, and environmental conditions, the project would not constitute a major federal action significantly affecting the quality of the human environment.⁵⁰ We agree with staff's recommendations as presented in the EA and are including them as

⁴⁵ See 18 C.F.R. §§ 380.5(a) and 380.6(b) (2016).

⁴⁶ 40 C.F.R. § 1508.27 (2016).

⁴⁷ *Id.* § 1508.24(a).

⁴⁸ *Id.* § 1508.24(b).

⁴⁹ 18 C.F.R. § 380.5(b)(1) (2016).

⁵⁰ See EA at 4.

conditions in Appendix C to this order. We also find that the project will not result in significant impacts and that an EIS is not required.

50. We disagree that the EA's discussion of impacts on parkland and forestland was insufficient. The EA explains that the Paradise Ridge Community Park is adjacent to and east of the Compressor Station 563 site in Nashville, Tennessee. The EA finds that the project would not directly impact the park. However, indirect impacts associated with increases in traffic and associated noise in the vicinity of the park during construction at the compressor site could occur, but these construction-related impacts would be temporary in nature. The EA explains that the compressor station site has been configured so that a forested buffer would be maintained between the compressor station and the park. Because this forested area would provide visual screening and a noise buffer, the EA concludes that the project would not have significant impacts on recreational users at Paradise Ridge Park.⁵¹ We agree.

51. Regarding forestland, section 2.3.1 of the EA discloses impacts of the project on vegetation, including upland forest and mature forest. It states that Tennessee would avoid and minimize impacts or revegetate disturbed areas according to measures outlined in its *Revegetation and Invasive Species Plan*. The EA concludes that because the areas of vegetation that would be permanently cleared are relatively small and within larger areas of similar vegetation, the impacts would be insignificant. We agree.

52. We also reject CCSE's argument that an EIS is required because the construction and operation of Compressor Station 563 will violate local zoning laws. As discussed in the EA, the NGA preempts the local zoning laws, and in our view, "preemption of a particular state or local law is not tantamount to a violation of that state or local law."⁵²

53. In sum, we appropriately considered the potential environmental impacts of the Broad Run Expansion Project and conclude that there would be no resulting significant impacts. Thus, preparation of an EIS is not required.

Programmatic EIS

54. CEQ regulations do not require broad or "programmatic" NEPA reviews. The CEQ has stated, however, that such a review may be appropriate where an agency: (1) is adopting official policy; (2) is adopting a formal plan; (3) is adopting an agency program;

⁵¹ *Id.* at 79.

⁵² *Dominion Transmission, Inc.*, 141 FERC ¶ 61,240, at P 78 (2012).

or (4) is proceeding with multiple projects that are temporally and spatially connected.⁵³ The Supreme Court has held that a NEPA review covering an entire region (that is, a programmatic review) is required only “if there has been a report or recommendation on a proposal for major federal action” with respect to a region,⁵⁴ and the courts have concluded that there is no requirement for a programmatic EIS where the agency cannot identify the projects that may be sited within a region because individual permit applications will be filed at a later time.⁵⁵

55. We have explained in the past that there is no Commission plan, policy, or program for the development of natural gas infrastructure.⁵⁶ Rather, the Commission acts on individual applications filed by entities proposing to construct interstate natural gas pipelines. Under NGA section 7, the Commission is obligated to authorize a project if it finds that the construction and operation of the proposed facilities “is or will be required by the present or future public convenience and necessity.”⁵⁷ What is required by NEPA, and what the Commission provides, is a thorough examination of the potential impacts of specific projects. In the circumstances of the Commission’s actions, a broad, regional analysis would “be little more than a study...concerning estimates of potential development and attendant environmental consequences,”⁵⁸ which would not present “a credible forward look and would therefore not be a useful tool for basic program planning.”⁵⁹ As to projects that have a clear physical, functional, and temporal nexus

⁵³ See Memorandum from CEQ to Heads of Federal Departments and Agencies, *Effective Use of Programmatic NEPA Reviews* at 13-15 (Dec. 18, 2014) (citing 40 C.F.R. § 1508.18(b) (2014)) (2014 Programmatic Guidance).

⁵⁴ *Kleppe v. Sierra Club*, 427 U.S. 390, 399 (1976); see also *id.* at 413-14 (holding that where there is no proposal for region-wide action, NEPA does not require a regional impact statement).

⁵⁵ See *Piedmont Env'tl. Council v. FERC*, 558 F.3d 304, 316-17 (4th Cir. 2009) (programmatic EIS not required with respect to FERC’s permitting of individual electric transmission facilities).

⁵⁶ See, e.g., *National Fuel Gas Supply Corp.*, 154 FERC ¶ 61,180, at P 13 (2016); *Texas Eastern Transmission, LP*, 149 FERC ¶ 61,259, at PP 38-47 (2014).

⁵⁷ 15 U.S.C. § 717f(e) (2012).

⁵⁸ *Kleppe*, 427 U.S. at 402.

⁵⁹ *Piedmont Env'tl. Council*, 558 F.3d at 316.

such that they are connected or cumulative actions,⁶⁰ the Commission will prepare a multi-project environmental document.⁶¹

56. Allegheny contends that the Commission violated NEPA by failing to prepare a programmatic EIS for natural gas infrastructure projects related to natural gas development in the Appalachian Basin region.⁶² Allegheny points to a number of gas infrastructure projects in various stages of planning in the Appalachian Basin, claiming that they will collectively “have cumulative or synergistic environmental impacts upon a region.”⁶³

57. Further, Allegheny claims that even if future pipeline projects may be theoretical, this does not mean that the Commission would not be able to “establish parameters for subsequent analysis.”⁶⁴ Allegheny claims that a programmatic EIS may aid the Commission’s and the public’s understandings of broadly foreseeable consequences of NGA-jurisdictional projects and non-jurisdictional shale gas production.

58. Allegheny also argues that CEQ’s 2014 Programmatic Guidance recommends a programmatic EIS when “several energy development programs proposed in the same region of the country... [have] similar proposed methods of implementation and similar best practice and mitigation measures that can be analyzed in the same document.”⁶⁵ In support, Allegheny points to a Programmatic EIS developed by the Department of Energy (DOE) and U.S. Bureau of Land Management to consider the environmental impacts of solar energy development in six southwestern states and urged the

⁶⁰ 40 C.F.R. § 1508.25(a)(1)-(2) (2016) (defining connected and cumulative actions).

⁶¹ *See, e.g.*, Environmental Assessment for the Monroe to Cornwell Project and the Utica Access Project, Docket No. CP15-7-000 & CP15-87-000 (filed Aug. 19, 2015); Final Multi-Project Environmental Impact Statement for Hydropower Licenses: Susquehanna River Hydroelectric Projects, Project Nos. 1888-030, 2355-018, and 405-106 (filed Mar. 11, 2015).

⁶² Allegheny Comments at 45-49.

⁶³ *Id.* at 45.

⁶⁴ *Id.* at 47.

⁶⁵ *Id.* (citing 2014 Programmatic Guidance at 11).

Commission to adopt a similar approach for natural gas development in the Appalachian Basin.⁶⁶

59. CEQ states that a programmatic EIS can “add value and efficiency to the decision-making process when they inform the scope of decisions,” “facilitate decisions on agency actions that precede site- or project-specific decisions and actions,” or “provide information and analyses that can be incorporated by reference in future NEPA reviews.”⁶⁷ The Commission does not believe these benefits can be realized by a programmatic review of natural gas infrastructure projects because the projects subject to our jurisdiction do not share sufficient elements in common to narrow future alternatives or expedite the current detailed assessment of each particular project. Thus, we find a programmatic EIS is neither required nor useful under the circumstances here.

60. Allegheny has not shown that the Commission is engaged in regional planning. Rather, it simply points to the fact that there are a number of natural gas infrastructure projects in various stages of planning throughout the Appalachian Basin, and alleges that the Commission should provide the public with the “big picture” so it “can provide fresh perspectives and new ideas before determinations are made.”⁶⁸

61. The mere fact that there currently are a number of planned, proposed, or approved infrastructure projects to increase capacity to transport natural gas throughout the Appalachian basin and elsewhere in the country does not establish that the Commission is engaged in regional development or planning.⁶⁹ Rather, this information confirms that pipeline projects to transport natural gas are initiated solely by a number of different companies in private industry. As we have noted previously, a programmatic EIS is not

⁶⁶ *Id.* at 48-49.

⁶⁷ 2014 Programmatic Guidance at 13.

⁶⁸ Allegheny Comments at 49.

⁶⁹ *See, e.g., Sierra Club v. FERC*, No. 14-1275, slip op. at 22 (D.C. Cir. June 28, 2016) (rejecting claim that NEPA requires FERC to undertake a nationwide analysis of all applications for liquefied natural gas export facilities); *cf. Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, at 1326-27 (D.C. Cir. 2015) (upholding FERC determination that, although a Dominion-owned pipeline project’s excess capacity may be used to move gas to the Cove Point terminal for export, the projects are “unrelated” for purposes of NEPA).

required to evaluate the regional development of a resource by private industry if the development is not part of, or responsive to, a federal plan or program in that region.⁷⁰

62. The Commission's siting decisions regarding pending and future natural gas pipeline facilities will be in response to proposals by private industry, and the Commission has no way to accurately predict the scale, timing, and location of projects, much less the type of facilities that will be proposed.⁷¹ In these circumstances, the Commission's longstanding practice to conduct an environmental review for each proposed project, or a number of proposed projects that are interdependent or otherwise interrelated or connected, "should facilitate, not impede, adequate environmental assessment."⁷² Thus, here the Commission's environmental review of Tennessee's actual proposed project in a discrete EA is appropriate under NEPA.

63. In sum, CEQ states that a programmatic EIS can "add value and efficiency to the decision-making process when they inform the scope of decisions," "facilitate decisions on agency actions that precede site- or project-specific decisions and actions," or "provide information and analyses that can be incorporated by reference in future NEPA reviews."⁷³ The Commission does not believe these benefits can be realized by a programmatic review of natural gas infrastructure projects because the projects subject to our jurisdiction do not share sufficient elements in common to narrow future alternatives or expedite the current detailed assessment of each particular project.

2. Indirect Impacts of Production

64. CEQ's regulations direct federal agencies to examine the indirect impacts of proposed actions.⁷⁴ Indirect impacts are defined as those "which are caused by the action

⁷⁰ See, e.g., *Kleppe*, 427 U.S. at 401-02.

⁷¹ We agree with Allegheny that lack of jurisdiction over an action does not necessarily preclude an agency from considering the potential impacts. However, as explained in the cumulative impacts section of this order, it reinforces our finding that because states, and not the Commission, have jurisdiction over natural gas production and associated development (including siting and permitting), the location, scale, timing, and potential impacts from such development are even more speculative.

⁷² *Piedmont Env'tl. Council*, 558 F.3d 304, 316 (4th Cir. 2009).

⁷³ 2014 Programmatic Guidance at 13.

⁷⁴ See 40 C.F.R. § 1508.25(c) (2016).

and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”⁷⁵ Accordingly, to determine whether an impact should be studied as an indirect impact, the Commission must determine whether it: (1) is caused by the proposed action; and (2) is reasonably foreseeable.

65. With respect to causation, “NEPA requires ‘a reasonably close causal relationship’ between the environmental effect and the alleged cause”⁷⁶ in order “to make an agency responsible for a particular effect under NEPA.”⁷⁷ As the Supreme Court explained, “a ‘but for’ causal relationship is insufficient [to establish cause for purposes of NEPA].”⁷⁸ Thus, “[s]ome effects that are ‘caused by’ a change in the physical environment in the sense of ‘but for’ causation,” will not fall within NEPA if the causal chain is too attenuated.⁷⁹ Further, the Court has stated that “where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect.”⁸⁰

66. An effect is “reasonably foreseeable” if it is “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.”⁸¹ NEPA requires “reasonable forecasting,” but an agency is not required “to engage in speculative

⁷⁵ See 40 C.F.R. § 1508.8(b) (2016).

⁷⁶ *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752 at 767 (2004) (quoting *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)).

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Metro. Edison*, 460 U.S. at 774.

⁸⁰ *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752 at 770.

⁸¹ *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992). See also *City of Shoreacres v. Waterworth*, 420 F.3d 440, 453 (5th Cir. 2005).

analysis” or “to do the impractical, if not enough information is available to permit meaningful consideration.”⁸²

67. The Commission does not have jurisdiction over natural gas production. The potential impacts of natural gas production, with the exception of greenhouse gases and climate change, would be on a local and regional level. Each locale includes unique conditions and environmental resources. Production activities are thus regulated at a state and local level. In addition, deep underground injection and disposal of wastewaters and liquids are subject to regulation by the U.S. Environmental Protection Agency (EPA) under the Safe Drinking Water Act. The EPA also regulates air emissions under the Clean Air Act. On public lands, federal agencies are responsible for the enforcement of regulations that apply to natural gas wells.

68. As we have previously concluded in natural gas infrastructure proceedings, the environmental effects resulting from natural gas production are generally neither sufficiently causally related to specific natural gas infrastructure projects nor are the potential impacts from gas production reasonably foreseeable such that the Commission could undertake a meaningful analysis.⁸³ A causal relationship sufficient to warrant Commission analysis of the non-pipeline activity as an indirect impact would only exist if the proposed pipeline would transport new production from a specified production area and that production would not occur in the absence of the proposed pipeline (i.e., there will be no other way to move the gas).⁸⁴ To date, the Commission has not been presented with a proposed pipeline project that the record shows will cause the predictable development of gas reserves. Though Allegheny disagrees with our position, we

⁸² *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1078 (9th Cir. 2011).

⁸³ See, e.g., *Central New York Oil and Gas Co., LLC*, 137 FERC ¶ 61,121, at PP 81-101 (2011), *order on reh'g*, 138 FERC ¶ 61,104, at PP 33-49 (2012), *petition for review dismissed sub nom. Coalition for Responsible Growth v. FERC*, 485 Fed. Appx. 472, 474-75 (2012) (unpublished opinion).

⁸⁴ Cf. *Sylvester v. U.S. Army Corps of Engin'rs*, 884 F.2d 394, 400 (9th Cir. 1989) (upholding the environmental review of a golf course that excluded the impacts of an adjoining resort complex project). See also *Morongo Band of Mission Indians v. F.A.A.*, 161 F.3d 569, 580 (9th Cir. 1998) (concluding that increased air traffic resulting from airport plan was not an indirect, “growth-inducing” impact); *City of Carmel-by-the-Sea v. United States Dept. of Transp.*, 123 F.3d 1142, 1162 (9th Cir. 1997) (acknowledging that existing development led to planned freeway, rather than the reverse, notwithstanding the project’s potential to induce additional development).

continue to believe that the opposite causal relationship is in fact more likely, i.e., once production begins in an area, shippers or end users will support the development of a pipeline to move the produced gas. It would make little economic sense to undertake construction of a pipeline in the hope that production might later be determined to be economically feasible and that the producers will choose the previously-constructed pipeline as best suited for moving their gas to market.

69. Even accepting, *arguendo*, that a specific pipeline project will induce incremental natural gas production, we have found that the potential environmental impacts resulting from such production are not reasonably foreseeable. As we have explained, the Commission generally does not have sufficient information to determine the origin of the gas that will be transported on a pipeline. It is the states, rather than the Commission, that have jurisdiction over the production of natural gas and thus would be most likely to have specific information regarding future production. We are aware of no forecasts by states, in particular Kentucky, Tennessee, or West Virginia, where the project is located, making it impossible for the Commission to meaningfully predict production-related impacts, many of which are highly localized. Thus, even if the Commission knows the general source area of gas likely to be transported on a given pipeline, a meaningful analysis of production impacts would require more detailed information regarding the number, location, and timing of wells, roads, gathering lines, and other appurtenant facilities, as well as details about production methods, which can vary per producer and depending on the applicable regulations in the various states. Accordingly, the impacts of natural gas production are not reasonably foreseeable because we “cannot forecast [their] likely effects” in the context of an environmental analysis for a specific proposed interstate natural gas pipeline project.⁸⁵

70. Nonetheless we note that although not required by NEPA, a number of federal agencies have examined the potential environmental issues associated with unconventional natural gas production in order to provide the public with a more complete understanding of the potential impacts. The DOE has concluded that such production, when conforming to regulatory requirements, implementing best management practices, and administering pollution prevention concepts, may have temporary, minor impacts to water resources.⁸⁶ The EPA has reached a similar

⁸⁵ *Habitat Educ. Ctr.*, 609 F.3d 897, 902 (7th Cir. 2010) (finding that impacts that cannot be described with enough specificity to make their consideration meaningful need not be included in the environmental analysis).

⁸⁶ U.S. Department of Energy, *Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* at 19 (Aug. 2014) (DOE Addendum), <http://energy.gov/sites/prod/files/2014/08/f18/Addendum.pdf>.

conclusion.⁸⁷ With respect to air quality, the DOE found that natural gas development leads to both short- and long-term increases in local and regional air emissions.⁸⁸ It also found that such emissions may contribute to climate change. But to the extent that natural gas production replaces the use of other carbon-based energy sources, the Department of Energy found that there may be a net positive impact in terms of climate change.⁸⁹

a. Causation

71. Allegheny and CCSE assert that the EA for the Broad Run Expansion Project was insufficient, as it failed to consider the indirect effects of induced natural gas production in the Marcellus and/or Utica shale regions. In addition, CCSE asserts that this project will induce further development of liquefied natural gas terminals, related export facilities, and greater exports of natural gas.

72. Allegheny argues that the proposed projects and regional shale gas extraction are “two links of a single chain” as allegedly shown by multiple industry and government sources, as well as common sense.⁹⁰

73. Allegheny alleges that, by ignoring induced upstream natural gas production, Commission staff use “tunnel vision” to look only at direct impacts, rather than indirect impacts, like the unlawful NEPA analysis by the U.S. Army Corps of Engineers (Corps)

⁸⁷ See U.S. Environmental Protection Agency, *Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources* at ES-6 (June 2015) (external review draft), http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=523539 (finding the number of identified instances of impacts on drinking water resources to be small compared to the number of hydraulically fractured wells). See also *Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands*, 80 Fed. Reg. 16,128, 16,130 (Mar. 26, 2015) (Bureau of Land Management promulgated regulations for hydraulic fracturing on federal and Indian lands to “provide significant benefits to all Americans by avoiding potential damages to water quality, the environment, and public health”).

⁸⁸ DOE Addendum at 32.

⁸⁹ *Id.* at 44.

⁹⁰ Allegheny Comments at 18 (quoting *Sylvester*, 884 F.2d 394 at 400). Allegheny cites to a number of statements from oil and gas industry officials which it asserts corroborates its position.

in *Colorado River Indian Tribes v. Marsh*, which ignored that a stabilization project on a riverbank was a prerequisite for real estate development adjacent to the river.⁹¹

74. The record in this proceeding does not demonstrate the requisite reasonably close causal relationship between the impacts of future natural gas production and the Broad Run Expansion Project, which would necessitate further analysis. The fact that natural gas production and transportation facilities are all components of the general supply chain required to bring domestic natural gas to market is not in dispute. This does not mean, however, that the Commission's approval of this particular infrastructure project will cause or induce the effect of additional or further shale gas production. The Broad Run Expansion Project is responding to the need for transportation, not creating it.

75. Here, Allegheny, like the environmental groups in *Central New York Oil and Gas Co., LLC* case,⁹² seek review of impacts (induced production of natural gas from the Marcellus Shale gas play) that are not "caused by" the construction and operation of the Broad Run Expansion.⁹³ In *Central New York*, the Commission authorized construction and operation of a 39-mile long pipeline traversing Northeast Pennsylvania, which was intended, in part, to "provide access to interstate markets for natural gas produced from the Marcellus [s]hale in northeast Pennsylvania"⁹⁴ In that case, environmental groups, before the Commission and the Second Circuit, argued that the pipeline would "serve[] as a 'catalyst' for Marcellus shale development in the Bradford, Lycoming and Sullivan Counties crossed by the pipeline, and would 'facilitate the development of Marcellus [s]hale.'"⁹⁵ The Commission determined, and the court agreed, that the Commission need not consider the environmental impacts of production from the

⁹¹ *Id.* at 19 (citing *Colorado River Indian Tribes v. Marsh*, 605 F. Supp 1425 (C.D. Cal. 1985)).

⁹² *Central New York Oil and Gas Co., LLC*, 137 FERC ¶ 61,121 (2011), *order on reh'g*, 138 FERC ¶ 61,104 (2012), *pet. for review dismissed sub nom. Coal. for Responsible Growth v. FERC*, 485 Fed. App'x 472 (2d Cir. 2012).

⁹³ *See* EA at 7 (noting that it is the existing and ongoing development of the Marcellus shale gas play that drives demand for takeaway interstate pipeline facilities).

⁹⁴ *Cent. N.Y. Oil & Gas Co., LLC*, 138 FERC ¶ 61,104 at P 5.

⁹⁵ *Cent. N.Y. Oil & Gas Co., LLC*, 137 FERC ¶ 61,121 at P 81.

Marcellus shale region when authorizing a pipeline project that would connect an interstate gas pipeline to a specific Marcellus shale gas production region.⁹⁶

76. In *Central New York Oil and Gas*, the Commission examined the purpose of the pipeline project, and found that Marcellus shale development activities are not “an essential predicate” for the project because “it is not merely a gathering system for delivery” of Marcellus shale gas.⁹⁷ Rather, that new pipeline created a hub line that enabled gas to flow onto three major interstate pipeline systems.⁹⁸ Thus, the Commission concluded, and the Second Circuit agreed, that under NEPA, Marcellus shale development activities are not sufficiently causally-related to the project to warrant in-depth consideration of the gas production impacts.⁹⁹

77. Similarly here, as noted in the EA, a network of transmission facilities already exists through which gas produced in the Marcellus Shale region may flow to local users or into the interstate pipeline system.¹⁰⁰ Moreover, the Broad Run Expansion Project, unlike the *Central New York* pipeline, is not a new transportation path for moving gas from the production area to market. Rather, the project creates incremental transportation capacity on a portion of Tennessee’s existing system.¹⁰¹ Thus, here, any link between the Broad Run Expansion Project and Marcellus Shale gas production is more attenuated than the *Central New York* case.

⁹⁶ See *id.* at P 37 (finding no causal connection between pipeline and shale gas production in part “because the Commission plays no role in, nor retains any control over,” well development), *order on reh’g*, 138 FERC ¶ 61,104 (2012), *aff’d*, *Coal. for Responsible Growth & Res. Conservation v. FERC*, 485 F. App’x 472, 474 (2d Cir. 2012).

⁹⁷ *Cent. N.Y. Oil & Gas Co., LLC*, 137 FERC ¶ 61,121 at P 91.

⁹⁸ *Id.*

⁹⁹ *Cent. N.Y. Oil & Gas Co.*, 138 FERC ¶ 61,104 at P 84; *Coal. for Responsible Growth*, 485 F. App’x at 474 (“FERC reasonably concluded that the impacts of that [shale gas] development are not sufficiently causally-related to the project to warrant a more in-depth [NEPA] analysis”).

¹⁰⁰ *Id.*

¹⁰¹ See Tennessee Application at 10-11.

78. Moreover, as we have explained in other proceedings, a number of factors, such as domestic natural gas prices and production costs, drive new drilling.¹⁰² If the Broad Run Expansion Project were not constructed, it is reasonable to assume that any new production spurred by such factors would reach intended markets through alternate pipelines or other modes of transportation.¹⁰³ Again, any such production would take place pursuant to the regulatory authority of state and local governments.¹⁰⁴

79. The case *Allegheny* relies upon, *Colorado River*, is inapposite. At issue in *Colorado River* was the scope of the Corps' environmental review for a permit for a developer to place riprap¹⁰⁵ to stabilize a portion of the shoreline along the Colorado River.¹⁰⁶ The riprap was an integral and necessary part of the developer's proposed 156-acre residential and commercial development project, which included 447 single-family homes, mobile homes, and commercial facilities, along the Colorado River.¹⁰⁷ The Court determined that the Corps – the agency responsible for issuing a permit for the rip-rap – violated NEPA by limiting its review to the physical impacts from the developer's construction of the riprap and failing to consider the impacts of the developer's larger residential and commercial development that was dependent on the installation of the riprap.¹⁰⁸ *Colorado River* highlights the close causal relationship necessary to mandate consideration of indirect impacts – a causal link that is absent here.

¹⁰² *Rockies Express Pipeline LLC*, 150 FERC ¶ 61,161, at P 39 (2015) (*Rockies Express*). See also *Florida Wildlife Fed'n v. Goldschmidt*, 506 F.Supp. 350, 375 (S.D. Fla. 1981) (ruling that an agency properly considered indirect impacts when market demand, not a highway, would induce development).

¹⁰³ *Rockies Express*, 150 FERC ¶ 61,161 at P 39.

¹⁰⁴ See EA at 5 (natural gas production is regulated by the states); see also *N.J. Dep't of Env'tl. Prot. v. NRC*, 561 F.3d 132, 139 (3d Cir. 2009) (NEPA does not require consideration of foreseeable effects that are not potentially subject to the control of the federal agency doing the evaluation).

¹⁰⁵ Riprap consists of large boulders placed along shorebanks to stabilize the banks and prevent erosion.

¹⁰⁶ *Colorado River*, 605 F. Supp. at 1432-34.

¹⁰⁷ *Id.* at 1428.

¹⁰⁸ *Id.* at 1433. (Corps violated NEPA by failing to consider the indirect and cumulative impacts of the residential and commercial development where it was

(continued...)

80. Finally, the record contains no support for CCSE's allegation that the project will induce further development of liquefied natural gas terminals, related export facilities, and greater exports of natural gas.

b. Reasonable Foreseeability

81. Allegheny contends that natural gas production in the Marcellus and Utica shale formations is reasonably foreseeable, and that because speculation is implicit in NEPA, there is no need to know the precise location, scale, scope, and timing of shale gas drilling.¹⁰⁹ Rather, it maintains that there is adequate information available to "engage in reasonable forecasting,"¹¹⁰ and cites a report by a research investment firm stating that various companies have identified "between 10 and 30 years of drilling locations across the Marcellus [production region]."¹¹¹

82. We disagree. Even if a causal relationship between our action here and additional production were presumed, the scope of the impacts from any such induced production is not reasonably foreseeable. Even knowing the identity of a producer of gas to be shipped on a pipeline, and the general area where that producer's existing wells are located, does not alter the fact that the number or location of any additional wells are matters of speculation. As we have explained previously, factors such as market prices and production costs, among others, drive new drilling.¹¹² These factors, combined with the immense size of the Marcellus and Utica shale formations and the highly localized impacts of production make any forecasting, by a state or federal agency, inherently speculative and impractical. A broad analysis, based on generalized assumptions rather than reasonably specific information of this type, will not meaningfully assist the Commission in its decision making, e.g. evaluating potential alternatives. While *Northern Plains Resource Council v. Surface Transportation Board* states that speculation is implicit in NEPA, it also states that agencies are not required "to do the

"reasonably foreseeable that the placement of the ripraps was just a stepping stone to major development in the area.").

¹⁰⁹ Allegheny Comments at 23.

¹¹⁰ *Id.*

¹¹¹ *Id.* at 24 (citing Morningstar Energy Observer, *Shale Shock: How the Marcellus Shale Transformed the Domestic Natural Gas Landscape and What It Means for Supply in the Years Ahead*, p. 17 (Feb. 2014)).

¹¹² *Dominion Transmission, Inc.*, 153 FERC ¶ 61,284 (2015).

impractical, if not enough information is available to permit meaningful consideration.”¹¹³

83. In support of its position, Allegheny asserts that the Commission is attempting to “‘shirk’ its responsibility under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’”¹¹⁴ Allegheny also cites *Mid States Coalition for Progress v. Surface Transportation Board*,¹¹⁵ (*Mid States*), in which the Eighth Circuit Court of Appeals stated that, “when the nature of the effect is reasonably foreseeable but its extent is not, [an] agency may not simply ignore the effect.”¹¹⁶

84. Allegheny’s reliance on *Mid States* is unavailing. In that case, the agency acknowledged that a particular outcome (increased usage of 100 million tons of coal at coal burning electric generation plants resulting from the availability of cheaper coal after the new rail lines were built) was reasonably foreseeable, but then failed to consider its impact.¹¹⁷ In particular, the court in *Mid States* faulted the agency for failing to consider the environmental effects of the known increase in coal usage where the agency had already identified the nature of the ensuring environmental effects.¹¹⁸ Here, as discussed above, neither the nature *nor* the extent of the effect is reasonably foreseeable. Specifically, there is no record evidence that the Broad Run Expansion Project will induce incremental production of natural gas and, even if additional gas is induced, the

¹¹³ *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1078 (citing *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1014 (9th Cir. 2006)). See also *The Fund for Animals v. Kempthorne*, 538 F.3d 124, 137 (2d Cir. 2008).

¹¹⁴ Allegheny Comments at 23 (citing *Delaware Riverkeeper*, 753 F.3d at 1310 (quoting *Scientists’ Inst. For Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973))).

¹¹⁵ 345 F.3d 520 (8th Cir. 2003).

¹¹⁶ *Id.* at 549.

¹¹⁷ *Mid States*, 345 F.3d at 549-50; see also *Sierra Club v. FERC*, No. 14-1275, slip op. at 18 (finding that *Mid States* “looks nothing like” challenge that FERC failed to consider indirect impacts claimed increased natural gas production stemming FERC’s authorization of liquefied natural gas export facilities).

¹¹⁸ *Mid States*, 345 F.3d at 549.

amount, timing, and location of such development activity is speculative.¹¹⁹ Thus, unlike the agency in *Mid States*, here we are not “simply ignor[ing]” the impacts of future gas development; rather, there are no identified “specific and causally linear indirect consequences that could reasonably be foreseen and factored into the Commission’s environmental analysis.”¹²⁰

85. In addition, the other case cited by Allegheny, *Delaware Riverkeeper*, is inapposite. In that case, the Court faulted the Commission for segmenting its environmental review of four “contemporaneous” Commission-jurisdictional pipeline projects.¹²¹ Reasonable foreseeability was not at issue.

3. Indirect Effects of Tennessee’s Abandonment and Capacity Restoration Project

86. As proposed, Tennessee’s Abandonment and Capacity Restoration Project (ACRP)¹²² would permit Tennessee to abandon by sale over 900 miles of interstate natural gas pipeline to an affiliate to be used for the non-jurisdictional transportation of natural gas liquids (NGL), and to construct and operate compression and pipeline facilities to replace the abandoned capacity and maintain transportation service for its existing customers.

87. Allegheny asserts that the Commission failed to consider the indirect effects of Tennessee’s ACRP, as well as the anticipated conversion of the natural gas pipeline to NGL service, in its EA for the Broad Run Expansion Project. In support, Allegheny claims that the ACRP includes installation of additional horsepower at Compressor Station 875, and that expansion is only possible if the compressor station is first built as

¹¹⁹ See generally *Nat. Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 90 (2d Cir. 1975) (holding that an agency need not “consider other projects so far removed in time or distance from its own that the interrelationship, if any, between them is unknown or speculative”).

¹²⁰ *Sierra Club v. FERC*, No. 14-1275, slip op. at 18.

¹²¹ *Del. Riverkeeper Network*, 753 F.3d at 1318 (emphasizing the importance the Court placed on the overlapping timing of the four projects).

¹²² Currently pending before the Commission in Docket No. CP15-88-000.

part of the Broad Run Expansion Project. On this basis, Allegheny asserts that the Broad Run Expansion Project is “a necessary first link” in the chain connecting the projects.¹²³

88. Allegheny’s argument is without support. The ACRP is a separate “federal action”¹²⁴ under NEPA, and is in no way caused by our approval of the Broad Run Expansion Project. The Commission is currently developing an administrative record for the ACRP that will include an EA and has invited comment on environmental issues.¹²⁵ The cumulative impacts of the ACRP and this project at Station 875 are discussed in the EA for this project and, as appropriate, in this order. No more is required by NEPA.

4. Segmentation

89. CEQ regulations require the Commission to include “connected actions,” cumulative actions,” and “similar actions” in its NEPA analyses.¹²⁶ “An agency impermissibly ‘segments’ NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and impact of the activities that should be under consideration.”¹²⁷ Connected actions include actions that: (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.¹²⁸

90. In evaluating whether multiple actions are, in fact, connected actions, courts have employed a “substantial independent utility” test, which the Commission finds useful for

¹²³ Allegheny Comments on EA at 16, (quoting *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989)).

¹²⁴ 40 C.F.R. § 1508.18(b) (2016) (listing categories of federal actions).

¹²⁵ See *Tennessee Gas Pipeline Co., L.L.C.*, Notice, Docket No. CP15-88-000 (Apr. 17, 2015).

¹²⁶ 40 C.F.R. § 1508.25(a)(1)-(3) (2016).

¹²⁷ *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (*Delaware Riverkeeper Network*). Unlike for connected and cumulative actions, for similar actions an agency has some discretion about combining environmental review. E.g., *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1305-1306 (9th Cir. 2003).

¹²⁸ 40 C.F.R. § 1508.25(a)1 (2016).

determining whether the three criteria for a connected action are met. The test asks “whether one project will serve a significant purpose even if a second related project is not built.”¹²⁹ For proposals that connect to or build upon an existing infrastructure network, this standard distinguishes between those proposals that are separately useful from those that are not. While the analogy between the two is not apt in many regards, similar to a highway network, “it is inherent in the very concept of” the interstate pipeline grid “that each segment will facilitate movement in many others; if such mutual benefits compelled aggregation, no project could be said to enjoy independent utility.”¹³⁰

91. In *Delaware Riverkeeper Network v. FERC*, the court ruled that individual pipeline proposals were interdependent parts of a larger action where four pipeline projects, when taken together, would result in “a single pipeline” that was “linear and physically interdependent” and where those projects were financially interdependent.¹³¹ The court put a particular emphasis on the four projects’ timing, noting that when the Commission reviewed the proposed project, the other projects were either under construction or pending before the Commission.¹³² In a later case, the same court indicated that in considering a pipeline application, the Commission need not jointly consider projects that are unrelated and do not depend on each other for their justification.¹³³

92. Allegheny and the CCSE allege that Tennessee’s ACRP and the Broad Run Expansion Project are connected, cumulative and similar actions, the impacts of which should be considered together in a single EIS. CCSE makes a similar claim regarding Tennessee’s Broad Run System Flexibility Project (Flex Project), which was placed in service on November 1, 2015.

¹²⁹ *Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 69 (D.C. Cir. 1987). See also *O’Reilly v. U.S. Army Corps of Eng’rs*, 477 F.3d 225, 237 (5th Cir. 2007) (defining independent utility as whether one project “can stand alone without requiring construction of the other [projects] either in terms of the facilities required or of profitability.”).

¹³⁰ *Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d at 69.

¹³¹ *Delaware Riverkeeper Network*, 753 F.3d at 1314.

¹³² *Id.*

¹³³ See *Myersville Citizens for a Rural Cmty. Inc. v. FERC*, 783 F.3d 1301, 1326 (D.C. Cir. 2015) (*Myersville*).

a. **Abandonment and Capacity Restoration Project**

i. **Connected Actions**

93. Allegheny asserts that the Broad Run Expansion Project and the ACRP are connected actions that the Commission must consider in a single EIS. Allegheny contends that Tennessee is not able to proceed with the ACRP until the Broad Run Expansion Project is approved and constructed. In support, Allegheny cites to the fact that Tennessee, in its application for the ACRP, proposes to install a compressor unit at Compressor Station 875, a new station proposed as part of the Broad Run Expansion Project. Therefore, Allegheny contends that “Tennessee cannot ‘add’ horsepower at [Compressor Station] 875 as part of the ACRP unless and until it is first constructed and placed in service as part of the [Broad Run Expansion Project].”¹³⁴ It also asserts that because Tennessee proposes to add an additional 10,771 hp of compression as part of the ACRP, in addition to the 16,000 hp of compression it proposes for the Broad Run Expansion Project, “it is clear, then, that Tennessee needs a combined 26,771 hp at [Compressor Station] 875 in order to meet the transportation requirements of the ACRP.”¹³⁵

94. Allegheny also asserts that the two projects are interdependent parts of Tennessee’s restructuring to transport shale gas supplies from the Marcellus and Utica shale regions. In support, Allegheny cites an Energy Information Administration report that states that several pipeline companies, including Tennessee, have been restructuring their systems “to allow for bidirectional flow, adding the ability to send natural gas out of the northeast region.”¹³⁶ On this basis, Allegheny asserts that both the Broad Run Expansion Project and the ACRP, as part of which Tennessee would abandon from use for interstate transportation of natural gas an existing pipeline which an affiliate might subsequently convert to NGL service, fit into Tennessee’s larger effort to increase takeaway capacity for Marcellus and Utica shale supplies from the Appalachian basin.

95. As found in the EA, the Broad Run Expansion Project and the ACRP are separate, distinct projects, each with independent utility.¹³⁷ The Market Component of the Broad Run Expansion Project will provide 200,000 Dth/d of incremental transportation service

¹³⁴ Allegheny Comments at 3.

¹³⁵ *Id.* at 4.

¹³⁶ *Id.* at 5 (citing Energy Information Administration, *Today in Energy* (2014)).

¹³⁷ EA at 17.

from a new point of interconnection, or a mutually agreeable receipt point, on Tennessee's Broad Run Lateral in Zone 3 to one or more mutually agreeable delivery points in Zone 1 for the project shipper, Antero. In contrast, the ACRP would not increase incremental capacity on Tennessee's system at all. Rather, if approved and implemented, the ACRP will maintain the level of capacity necessary to serve existing customers following abandonment of an existing natural gas pipeline from jurisdictional transportation service.¹³⁸

96. The fact that Tennessee proposes to add a compressor unit at Compressor Station 875 as part of the ACRP in no way makes the Broad Run Expansion Project dependent on the ACRP. The Broad Run Expansion Project can proceed with or without the ACRP. Conversely, if the Broad Run Expansion Project is not approved, the ACRP can proceed, albeit with minor modifications to build a compressor station to house the 10,771 hp unit that is necessary for that project. We find no support for Allegheny's additional claim that Tennessee would need the combined compression proposed for both projects of 26,771 hp, to support the ACRP if the Broad Run Expansion Project is not built. To the extent that Tennessee does not proceed with the Broad Run Expansion Project, there is no indication that it will need the 16,000 horsepower of Compression proposed at Compressor Station 875. Thus, Allegheny has not demonstrated these two projects are connected actions for NEPA purposes.

97. Allegheny's argument that the Broad Run Expansion Project and the ACRP are both interdependent parts of a broader effort by Tennessee to transport Marcellus and Utica shale gas to markets in the Gulf Coast is equally unavailing. The fact that both of these projects may be part of Tennessee's corporate strategy, does not make the projects connected actions for NEPA purposes.

ii. Cumulative Actions

98. Allegheny notes that the Broad Run Expansion Project and the ACRP would add 150,321 hp and 124,771 hp of compression, respectively, to Tennessee's system. For this reason, Allegheny claims that the two projects are cumulative actions for the purposes of NEPA analysis.

99. Cumulative actions are those "which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement."¹³⁹ Commission staff considered whether the ACRP could

¹³⁸ See Application filed by Tennessee Gas Pipe Line Company, LLC in Docket No. CP15-88-000 on February 13, 2015.

¹³⁹ 40 C.F.R. § 1508.25(a)(2) (2016).

cumulatively impact the same resources as the Broad Run Expansion Project and concluded that any impacts would be minimal. Therefore, we conclude that the two projects are not cumulative actions because they lack the potential to produce cumulatively significant impacts.

iii. Similar Actions

100. Allegheny asserts that the two projects are similar actions because they share common timing and geography.

101. Similar actions have “similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.”¹⁴⁰ An agency “may wish to analyze these actions in the same impact statement, but is not required to do so.”¹⁴¹ The Commission may consider similar actions in the environmental analysis if it finds that it is “the best way to assess adequately the combined impacts of [the] similar actions.”¹⁴²

102. The ACRP and its associated impacts, while similar in timing, are geographically distinct from the Broad Run Expansion Project with the exception of construction at Compressor Station 875. Because the majority of the projects’ facilities will not occur close in distance to one another, we conclude that analyzing them in the same NEPA document is neither necessary nor the best way to assess their combined impacts or reasonable alternatives.

b. Broad Run System Flexibility Project

103. The Broad Run System Flexibility Project increased incremental transportation service on the Tennessee system by 590,000 Dth/d. CCSE asserts that because Antero has subscribed to the capacity made available by both projects, the Commission impermissibly segmented the Flex Project from its environmental review of the Broad Run Expansion Project.

104. We disagree. Tennessee’s Broad Run System Flexibility Project consisted solely of “auxiliary” and “replacement” facilities as defined by section 2.55 (a) and (b) of the

¹⁴⁰ *Id.* § 1508.25(a)(3) (defining similar actions).

¹⁴¹ *Id.*

¹⁴² *Id.*

Commission regulations,¹⁴³ and eligible facilities under Tennessee’s Part 157 blanket certificate authority.¹⁴⁴ Qualifying facilities and construction activities under section 2.55 may only use existing rights-of-way and previously used work spaces, and are limited to facilities that will replace existing facilities that were subject to environmental review and relatively minor auxiliary facilities to obtain more efficient operation or economical operation of other facilities that have been or will be subject to environmental review.¹⁴⁵ For these reasons, the Commission has provided automatic authority in section 2.55 for the construction of qualifying auxiliary and replacement facilities, and the Commission does not prepare an EA for section 2.55 facilities and construction activities.¹⁴⁶ In addition, the construction of eligible blanket certificate facilities is categorically exempt from NEPA review.¹⁴⁷ Accordingly, Tennessee was not required to obtain a certificate of public convenience and necessity for the Broad Run System Flexibility Project, nor was the Commission required to conduct an EA of the Flex Project’s facilities. The prohibition against segmentation prevents “agencies from dividing one project into multiple individual actions” with individual EAs.¹⁴⁸ Here, because the Commission did not issue a certificate for or conduct an environmental review of the Broad Run System Flexibility Project, there was no segmentation. However, the Broad Run System Flexibility Project is evaluated in the EA as part of the cumulative impacts analysis.

¹⁴³ 18 C.F.R. § 2.55 (a), (b) (2016).

¹⁴⁴ 18 C.F.R. § 157.201 Subpart F (2016). “Eligible facilities” consist of facilities necessary to provide service within existing certificated levels.

¹⁴⁵ *Id.* at § 2.55(a)(1) and (b)(1)(ii).

¹⁴⁶ *See* 18 C.F.R. § 380.5(b)(1) (2016) (excluding facilities covered under section 2.55 from being subject to an environmental assessment). *See also Revisions to Auxiliary Installations, Replacement Facilities, and Siting and Maintenance Regulations*, Order No. 790, 78 FR 72794-801, PP 15, 17 (Dec. 4, 2013), FERC Stats. & Regs. ¶ 31,351 (2013) (cross-referenced at 145 FERC ¶ 61,154 (2013)).

¹⁴⁷ 18 C.F.R. § 380.4(a)(21) (2016).

¹⁴⁸ *Myersville Citizens for a Rural Community, Inc. v. FERC*, 783 F.3d 1301, 1326 (D.C. Cir. 2015) (Court approved FERC’s determination that, although a Dominion-owned pipeline project’s excess capacity may be used to move gas to the Cove Point terminal for export, the projects are “unrelated” for purposes of NEPA); *see also City of W. Chicago, Ill. v. U.S. Nuclear Regulatory Comm’n*, 701 F.2d 632, 650 (7th Cir. 1983) (citing *City of Rochester v. United States Postal Serv.*, 541 F.2d 967, 972 (2d Cir.1976)).

5. Purpose and Need

105. CCSE and David Robertson claim that the EA does not provide an adequate discussion of the purpose of the project, or establish a public need for the project.

106. Contrary to these assertions, section 1.1 of the EA sets forth the “purpose and need” of the projects, as required by NEPA.¹⁴⁹ That section describes Tennessee’s stated purpose as expanding capacity of its pipeline system to provide 200,000 Dth/d of firm natural gas transportation service and replacing older, less efficient compression facilities with new, more efficient compression facilities at two compressor stations. The determination of whether there is a “public need” for the proposed facilities for the purpose of issuing an authorization under section 7 of the NGA is made by the Commission, not by the EA. In the Certificate Policy Statement section of this order, we find that there is a public need for the project based on the fact that the pipeline project is fully subscribed and that the benefits of the project outweigh any adverse impacts.

107. CEQ regulations require that an EA provide a brief discussion of the need for the proposal.¹⁵⁰ Courts have upheld federal agencies’ use of applicants’ identified project purpose and need as the basis for evaluating alternatives.¹⁵¹ The purpose and need section of the EA complies with these principles.

6. Alternatives

108. CEQ regulations require an EA to include a brief discussion of the need for the proposal, alternatives to the proposal, and the environmental impacts of the alternatives.¹⁵² Consideration of alternatives in an EA need not be as rigorous as the consideration of alternatives in an EIS.¹⁵³

¹⁴⁹ The final EIS also explains that Commission staff deferred the analysis of need to the certificate order. Final EIS at 1-3.

¹⁵⁰ See 40 C.F.R. § 1508.9(b) (2016). See also 40 C.F.R. § 1502.13 (the purpose and need “statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.”).

¹⁵¹ See *City of Grapevine v. U.S. Department of Transportation*, 17 F.3d 1502, 1506 (D.C. Cir. 1994).

¹⁵² 40 C.F.R. § 1508.9(b) (2016)

¹⁵³ See *Myersville*, 783 F.3d at 1323.

109. Several commenters state that the EA does not adequately address alternatives for proposed Compressor Station 563, which would be located in Davidson County, Tennessee. CCSE and an individual landowner, William Robertson, also assert that alternative site C1 would result in fewer impacts to the community and the environment and, therefore, is a better site than the proposed Compressor Station 563 site.

110. The EA considers a reasonable range of alternatives including the no-action alternative, system alternatives, and compressor station site alternatives, and compressor unit alternatives.¹⁵⁴ In addition to the proposed site for Compressor Station 563, staff evaluated a total of 12 alternative sites in the EA, in Davidson, Davidson/Sumner, Robertson, and Cheatham Counties, Tennessee. As discussed in the EA, alternative site locations are constrained by engineering and logistical considerations - they must be near the pipeline, and they must be suitably located relative to where compression is needed.

111. Regarding alternative site C1 for Compressor Station 563, some factors are more favorable at this site (e.g., less prime farmland would be affected, no high seismicity areas or faults are within 10 miles, and 12 fewer residences would be within 0.5 mile of the facility). Some factors are less favorable (e.g., greater area of steep slopes and an intermittent waterbody would be crossed). In addition, site C1 would affect a similar amount of forest as the proposed site (43.2 acres for site C1 and 42.8 acres for the proposed site) although this is not correctly reflected in the EA table, which inadvertently omitted 9.4 acres of evergreen forest in the total presented for site C1. Based on the EA's overall assessment of the various factors, which do not necessarily carry equal weight, and because Tennessee indicated that the landowner would be unlikely willing to sell, the EA concludes that alternative site C1 does not have a significant advantage over the proposed site. We concur.

112. Based on the EA's analysis of the compressor station site alternatives, we agree that none of the alternatives offer significant environmental advantages over the proposed site for Compressor Station 563.

7. Water Resources

113. The FWS recommends that the project avoid and minimize impacts on water quality and high quality fish and wildlife habitat (including forests, streams, and wetlands) and preserve natural buffers around streams and wetlands. The FWS also recommends that Tennessee contact the Corps to determine whether a Clean Water Act (CWA), Section 404 permit is required. The EA addresses potential impacts on water resources, and concludes that with implementation of Tennessee's construction,

¹⁵⁴ See EA, section 3.5

restoration, and mitigation measures, no significant impacts on water resources are anticipated.¹⁵⁵ As shown in table 1-5 of the EA, Tennessee is consulting with the Corps regarding the requirement for Pre-construction Notification under CWA Section 404, Nationwide Permit 12 (Utility Activities) related to Compressor Stations 118A and 119A. Pre-construction Notifications are not required for the other compressor stations.

114. Sierra Club asserts that hydrostatic testing for the project will result in large volumes of contaminated waste water, and that the EA fails to address waste water disposal, or mitigation in the event of an accidental discharge of waste water. The EA specifically discusses hydrostatic testing, stating that hydrostatic test water for the compressor station piping will contact only new pipe, and no chemicals or additives will be added to the test water.¹⁵⁶ The EA further states that discharge points at the compressor station sites will be selected to avoid impacts on waterbody and wetland features and all test water will be discharged on site in accordance with applicable National Pollutant Discharge Elimination System or state discharge permits.¹⁵⁷ We agree with the EA's conclusion that these procedures will adequately minimize potential impacts on water resources.

115. TDEC, Division of Water Resources notes that the Sycamore Creek watershed, in which Compressor Station 563 will be built, is designated by TDEC for domestic, fish, and aquatic life, recreation, livestock water, wildlife, and irrigation uses, and requests that the EA note TDEC's classification of this watershed. Section 2.2.2 of the EA concludes that the project will not result in substantial impacts on surface waters or their uses, including the Sycamore Creek watershed. TDEC notes that the proposed actions may result in a minor increase in stormwater contribution due to the presence of impervious surfaces and requests that the Commission require Tennessee to follow stormwater best management practices during construction and operation. As section 2.2.2 of the EA states, Tennessee will implement best management practices, including the measures in our Plan and Procedures, to prevent erosion and sediment-laden stormwater from entering waterbodies.

116. Allegheny asserts that the EA does not "adequately address" the project's direct impacts on waterbodies.¹⁵⁸ Allegheny notes that construction of several compressor

¹⁵⁵ See EA, sections 2.2 – 2.3.

¹⁵⁶ See EA at 45.

¹⁵⁷ *Id.*

¹⁵⁸ Allegheny Comments at 11-15.

stations would occur in close proximity to waterbodies. Allegheny asserts that although the EA finds that Tennessee's compliance with mitigation measures will adequately protect these water resources, these measures are insufficient given past instances of Tennessee's noncompliance with mitigation measures included in certificate authorizations for its 300 Line Project.

117. The EA fully considers the impact the construction of the project will have on surface water, groundwater, and wetlands. Regarding surface water, the EA states that project activities will only cross "minor" waterbodies, and not impact any public water sources.¹⁵⁹ In addition, only minor, temporary impacts on surface waters are anticipated, and Tennessee has offered, or is required to implement safeguards and mitigation measures to further reduce potential impacts on water bodies.

118. We disagree that EA impermissibly relies on mitigation measures to assure that impacts on water resources are adequately mitigated given past instances of Tennessee's noncompliance. Here, the mitigation measures are included as conditions of the order and are mandatory and enforceable. The Commission relies on its monitoring and enforcement program to ensure that non-compliance issues will be appropriately addressed and any impacts remediated to ensure the avoidance or mitigation of any adverse environmental impacts. The Commission takes matters of non-compliance seriously, but such matters must be addressed in the proper venue. The non-compliance issues that Allegheny raises here involve a completely different proceeding and are properly addressed in that proceeding, not here. For these reasons, we agree with the EA's finding that direct impacts on waterbodies would be minor and temporary.

8. Vegetation

119. FWS recommends that all disturbed areas should be mulched and revegetated with native plant species to prevent establishment of non-native, invasive plants and maintain high quality habitats. As described in the EA, Tennessee will use agency-recommended seed mixes and implement a *Revegetation and Invasive Species Management Plan* to control the spread of noxious and invasive plants.¹⁶⁰

120. Sierra Club states that the EA fails to take into account the impacts of project deforestation on organic agriculture, due to the role that bats and birds play in natural pest control, practiced in the area of Compressor Station 563. As discussed in the EA, construction and operation of Compressor Station 563 would only affect 5.8 and 2.9 acres

¹⁵⁹ EA at 38-41.

¹⁶⁰ See EA at 53.

of mature forest, respectively.¹⁶¹ Although the EA does not specifically discuss the use of birds and bats for natural pest control, the construction and operation of Compressor Station 563 will have an insignificant impact on regional bird and bat populations, and their ability to control pests. Further, Tennessee has agreed to follow the FWS-recommended seasonal tree cutting restrictions to minimize impacts on bats and has committed to conducting tree and vegetation clearing at times outside of the migratory bird nesting season (April 15 through August 31) to avoid impacts on birds.¹⁶²

9. Wildlife

121. Allegheny and James Wright, an individual landowner, claim that the EA did not address noise impacts on wildlife, including threatened and endangered species and wildlife at Walden's Puddle.¹⁶³ Section 2.3.3 of the EA describes project noise levels in the vicinity of the compressor stations and potential effects on wildlife. The EA states that due to its distance from the Compressor Station 563 (about 0.9 mile), the Walden's Puddle Wildlife Rehabilitation and Education Center will not be affected by either construction or operational noise, which will attenuate to background levels within about 4,800 feet during construction and 2,000 feet during operation.¹⁶⁴ Relative to wildlife that will be close to the compressor station site, the EA concludes that noise impacts on wildlife will not be significant. We concur.

122. Because of large declines in honey bees and native pollinators, including the monarch butterfly, the FWS recommends revegetation of disturbed areas with native plant species, including species of nectar-producing plants and milkweed endemic to the area, and also recommends consultation with state botanists to determine appropriate species where possible. In response to this comment from the FWS, Tennessee states that it will revegetate, where revegetation is needed, with native plant species, including species of nectar-producing plants and milkweed endemic to the area. Tennessee also agrees to consult with state botanists to the extent necessary to determine appropriate species for revegetation. We conclude that Tennessee's commitments adequately address the FWS recommendations.

¹⁶¹ *Id.* at 52.

¹⁶² *Id.* at 62, 68.

¹⁶³ As noted in the EA, Walden's Puddle is a wildlife rehabilitation center located in Joelton, Davidson County, Tennessee. *See* EA at 58.

¹⁶⁴ *See* EA at 58.

10. Threatened, Endangered, and Special Status Species

123. Several commenters, including landowners, Allegheny, and Sierra Club express concern about potential impacts on threatened and endangered bat species.

124. As stated in the EA, Tennessee and the Tennessee Field Office of the FWS entered into an Indiana Bat Conservation Memorandum of Understanding (MOU) on June 24, 2015, for project activities in Tennessee (Compressor Station 563).¹⁶⁵ The MOU describes voluntary measures that Tennessee will implement to offset the habitat loss impacts on Indiana bats and northern long-eared bats in the Tennessee project area. Specifically, Tennessee has agreed to follow the FWS-recommended seasonal tree cutting restrictions; not clear more than 43 acres of forest containing suitable bat roosting structures; and contribute to the Indiana Bat Conservation Fund administered by the Kentucky Natural Lands Trust as compensation for habitat loss in Tennessee. The FWS will be responsible for ensuring that Tennessee complies with all measures agreed to in the MOU. Incidental take for the Indiana bat is provided under the terms of FWS's 2015 intra-service biological opinion with acceptance of project-specific conservation agreements, such as the MOU between Tennessee and the FWS.

125. Regarding impacts on bats in the Kentucky project areas (Compressor Stations 106, 114, and 875) the FWS's comments confirmed the conclusion of the EA, stating that the project was not likely to adversely affect the Virginia big-eared bat or the Gray bat in Kentucky. FWS also noted that Tennessee stated its intent to follow the Kentucky Field Office's Conservation Strategy for Forest-Dwelling Bats for the Indiana bat in Kentucky. The FWS states that when Tennessee completes the process outlined in the Conservation Strategy, any take would be authorized under the FWS's existing biological opinion. Therefore, Tennessee does not have to consult with the FWS for the Indiana bat in Kentucky. Because Tennessee's actions will be in compliance with the FWS's final 4(d) rule for the northern long-eared bat issued on January 14, 2016, the FWS states that the project is not likely to adversely affect the northern long-eared bat and consultation is also complete for this species. Therefore, we are no longer recommending that Tennessee consult with the Kentucky Field Office of the FWS regarding impacts on potential habitat for the Indiana bat or northern long-eared bat. EA recommended condition 15 is, therefore, not required in Appendix C to this Order.

126. Allegheny also stated that in the event further consultation with FWS is required for the project, the public must be allowed to consider and comment on any changes to the determination or analysis. In this regard, we note that the West Virginia, Kentucky,

¹⁶⁵ *Id.* at 68.

and Tennessee Field Offices of the FWS have now indicated that consultation is complete, and no further consultation will be required.

11. Land Use and Visual Resources

127. Several commenters in Davidson County, Tennessee state that constructing Compressor Station 563 at the current proposed site will change the character of their community, from rural or residential to industrial. The Metropolitan Government of Nashville and Davidson County request that the Commission not grant a Certificate of Public Convenience and Necessity for natural gas compressor stations within the jurisdictional limits of Metropolitan Nashville and Davidson County unless such facilities comply with all applicable local land use regulations, including local Ordinance No. BL2015-1210, which requires the siting of natural gas compressors in industrial zoned districts.¹⁶⁶

128. As discussed above and in the EA, several alternative sites were analyzed for Compressor Station 563; no sites offered significant environmental advantages when compared to the proposed site for Compressor Station 563. As we have stated previously, the Commission's authority under the NGA preempts county zoning ordinances.¹⁶⁷ The Commission does, however, encourage cooperation between interstate pipeline companies and local authorities, and we expect that Tennessee will comply with the county land use regulations to the maximum extent practical.

129. Commenters express concern about aesthetic appearance and lighting at Compressor Station 563. No visual impacts are anticipated from construction and operation of Compressor Station 563 due to the heavy forest vegetation around the site. Tennessee will also install downward-facing, shielded lights to mitigate off-site exposure.¹⁶⁸ We agree with the EA's conclusions that visual impacts will be sufficiently mitigated.

12. Socioeconomics

130. Some commenters note that few jobs will be created by the project following the construction phase for Compressor Station 563, and that the majority of the construction

¹⁶⁶ A copy of the Ordinance may be accessed here:
http://www.nashville.gov/mc/ordinances/term_2011_2015/bl2015_1210.pdf.

¹⁶⁷ *Dominion Transmission, Inc.*, 143 FERC ¶ 61,148, at P 64 (2013).

¹⁶⁸ See EA at 79-80.

phase workers will come from outside the local area. The EA acknowledges that the construction needs of the project require Tennessee to supplement the local labor force with non-local construction workers. In addition, while the operation of a compressor station does not require a large number of employees, it will take up to 142 temporary employees to construct Compressor Station 563.¹⁶⁹ For the estimated 12-month construction period, increases in revenues are anticipated for local businesses due to the influx of workers.¹⁷⁰

131. Other commenters express concern about traffic levels near Compressor Station 563 during construction. The EA states that, on average, each compressor station will require five to six round-trips per day for trucks delivering equipment and materials, and about 80 vehicles per day for construction workers commuting to the sites. The project will have temporary impacts on traffic during the 10 months of construction activities.¹⁷¹ In addition, Tennessee will implement measures to mitigate local traffic impacts, such as scheduling oversize/overweight equipment and materials deliveries to occur during non-peak traffic hours, installing signage and/or using flaggers at roadway turnoffs, and encouraging carpooling for workers commuting to the compressor station sites, resulting in negligible traffic impacts.¹⁷² We agree with the EA's conclusion that these measures will mitigate potential adverse effects from construction traffic.

132. The owner of a pet-sitting business, located approximately 0.8 mile from Compressor Station 563, raises concerns about potential impacts on his business due to noise and pollution. The project will be required to comply with all applicable federal and state air quality regulations and will have no significant impact on regional air quality, and as stated above, at a distance of 0.8 mile, noise from the compressor station will not be perceptible.¹⁷³

133. Several commenters express concern that the project will reduce their property values and enjoyment due to their proximity to the project. Several commenters also noted that pollution from Compressor Station 563 will interfere with their organic farming operations. As stated in the EA, operation of Compressor Station 563 is not

¹⁶⁹ *Id.* at 82-83.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 84.

¹⁷² *Id.*

¹⁷³ *See* EA at 104.

anticipated to have any impact on nearby farms. Although we are unaware of any studies that have specifically addressed the effects of compressor stations on property values, section 2.6.5 of the EA discusses studies that consider the impact of natural gas pipelines on property values and conclude they have no statistically significant impact on the values of nearby properties. As discussed in the EA, Tennessee has sited Compressor Station 563 on a forested parcel that is currently crossed by its existing pipeline system, and the existing vegetation outside of the construction footprint will provide a visual barrier to limit views of the station from nearby residences. Tennessee also proposes to paint the buildings and equipment at the station to blend into the existing natural environment and install downward-facing shield lights to mitigate off-site evening exposure. With the implementation of these mitigation measures, we agree with the EA's conclusion that the proposed compressor station will not significantly impact property values.

13. Air Quality

134. A number of commenters, including individuals and CCSE, assert that the EA underestimates the air quality impacts resulting from the project, particularly for the construction and operation of Compressor Station 563.

135. Some commenters incorrectly state that EPA standards will be surpassed; however, the EA describes that none of the compressor stations will exceed air quality regulatory limits.¹⁷⁴ The Clean Air Act Title V major source threshold is not a maximum regulatory limit; it is a value used to determine if a Title V Air Permit is required for a facility. If a facility's potential to emit exceeds the criteria pollutant or hazardous air pollutant permitting thresholds, the facility is considered a Title V major source.¹⁷⁵ As described in section 2.8.5 of the EA, operational emissions from the project will be well below the National Ambient Air Quality Standards (NAAQS).

136. CCSE takes issues with the EA's air emissions analysis, citing to the results of a separate air modeling effort conducted by William Robertson, Ph.D., which indicate that Compressor Station 563 will exceed air quality standards for nitrous oxides.¹⁷⁶ We

¹⁷⁴ See EA at 97-99.

¹⁷⁵ U.S. Environmental Protection Agency, *Title V Operating Permits, Basic Information about Operating Permits*, <https://www.epa.gov/title-v-operating-permits/basic-information-about-operating-permits>.

¹⁷⁶ Dr. Robertson's study was attached to a comment filed by CCSE on March 10, 2016 in Docket No. CP15-77-000.

disagree with the methods used and conclusions reached in Dr. Robertson's study. Dr. Robertson's approach does not follow the EPA guidelines for dispersion modeling outlined in Guideline on Air Quality Models.¹⁷⁷ Tennessee conducted dispersion modeling for Compressor Station 563 using an EPA-recommended model, AERMOD.¹⁷⁸ AERMOD uses more sophisticated air mixing modeling and incorporates National Weather Service weather and topographic data. Dr. Robertson used the annual potential to emit calculations of nitrogen oxides to calculate an hourly concentration, which is not an appropriate method according to EPA guidelines. The results of the AERMOD modeling are presented in the EA¹⁷⁹ and indicate that operation of the compressor station will not exceed any applicable NAAQS. We reiterate that the project will be required to comply with all applicable federal and state air quality regulations, and find that Tennessee appropriately modeled the operational air emission impacts of Compressor Station 563.

137. CCSE also asserts that the EA improperly relies on other agencies to mitigate air quality impacts from the project. While the EA takes into account compliance with federal and state permits, it does not defer or delegate its responsibilities to other agencies. CCSE cites *Idaho v. I.C.C.*¹⁸⁰ for support, alleging that in a similar situation, the EA fails to take an independent "hard look" at air quality impacts, because it too heavily relies on the scrutiny of other agencies.¹⁸¹ Unlike the I.C.C. in *Idaho*, here the Commission conducted a thorough review of the project's anticipated construction and operation emissions, and took federal and state air permit requirements, as well as Tennessee's stated mitigation measures, into account when making its final determination. No overreliance on or delegation of responsibilities to other agencies occurred.

¹⁷⁷ 40 C.F.R. pt. 51, App. W (rev. November 9, 2005).

¹⁷⁸ AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources and both simple and complex terrain. AERMOD or another referred dispersion model is required to be used by state permitting agencies for various EPA-mandated programs.

¹⁷⁹ See EA at 103.

¹⁸⁰ *Idaho v. I.C.C.*, 35 F.3d 585 (D.C. Cir. 1994).

¹⁸¹ *Id.* at 595.

138. Sierra Club states that the Commission should not issue a certificate until the Metro Davidson Health Department Division of Air Pollution issues a draft Title V air permit for Compressor Station 563. Environmental Condition 9 of the order states that Tennessee is required to obtain all necessary air permits under the Clean Air Act prior to construction.

139. TDEC's Division of Air Pollution Control provided several comments on air quality. TDEC requests the EA utilize a 24 Hour and Annual Standard for particulate matter with a diameter less than or equal to 2.5 microns; we note that the modeling results indicate that concentrations will not exceed the standards. TDEC requests details on the General Duty Clause under Section 112(r) of the Clean Air Act. We do not believe the clause is applicable because none of the pollutants listed in section 112(r)(3) will be located at the existing or proposed compressor stations.¹⁸² However, as per Environmental Condition 9 in Appendix C of this Order, Tennessee is required to obtain all necessary air permits under the Clean Air Act prior to construction.

140. TDEC also identifies a concern regarding fugitive emissions from construction and recommends appropriate measures be followed for identifying and disposing of asbestos-containing materials. We note that Environmental Condition 18 in Appendix C of this Order requires Tennessee to file information on asbestos-containing materials and measures to identify and handle these materials prior to beginning activities at the existing compressor stations. Tennessee will reduce construction emissions, including emissions of fugitive dust, by using water for dust control during demolition and construction, grading of roads, use of dirt and gravel access roads, and clearing lands, as described in section 2.8.6 of the EA. We agree with TDEC's recommendation that Tennessee follow state regulations when conducting any open burning of cleared vegetation.

141. TDEC requests a table of emissions data compared to the NAAQS and other permitting thresholds. The EA (table 2-27) presents a comparison of the anticipated operational emissions with the NAAQS, and the Title V and Prevention of Significant Deterioration thresholds are provided in EA section 2.8.4. We acknowledge that the NAAQS for ozone was updated in late 2015 from 0.075 parts per million to 0.070 parts per million (8-hour average). However, this change does not affect the EA's conclusion in section 2.8.5 that operational emissions from the project will be well below the NAAQS.

142. Corrina Stephens states that information on the current status of air quality in the area and the anticipated emissions from the project are not presented clearly in the EA.

¹⁸² 42 U.S.C. § 7412(r)(3) (2012).

Table 2-27 in the EA presents the projected emissions from the project, the background air quality, and the total estimated air quality impact if the project becomes operational.¹⁸³

143. Mrs. James Wright asserts that operation emissions from Compressor Station 563 will exceed the Title V threshold for nitrogen oxides, preventing other industries from locating or establishing themselves in the area. As described in the EA, the operational air emission contribution of Compressor Station 563 will not significantly contribute to cumulative effects on air quality.¹⁸⁴ Other potential projects will also have to comply with air quality regulations. We cannot predict the nature of future industrial development; however, there is no evidence that compressor stations in other areas of the U.S. have restricted industrial development in their communities. The Broad Run Expansion Project will be required to comply with all applicable federal and state air quality regulations.

144. Shari and Adrian Shanks express concern about “high levels” of air emissions during Compressor Station 563 blowdowns and the effects on breathing, fruits and vegetables, and rainwater collected for use. Infrequent blowdowns lasting about a minute may be required if any of the compressor stations have extended periods of inactivity. The primary gas released will be methane, which is nontoxic. William Robertson asserts that the Commission should mandate a gas capture system at Compressor Station 563 for blow-down events. However, given the nontoxic gas that would be emitted, the relative infrequency of blow-downs, and the short-lived nature of blow-down events, we do not expect any significant air quality impacts from blowdown events. Therefore, we see no reason to impose a gas capture system which may be costly or technically infeasible. We agree with the EA’s conclusion that the project will have no significant impact on regional air quality.

14. Noise

145. Several commenters stated that they were concerned about noise impacts from Compressor Stations 563 and 875.

146. The EA states that human hearing can detect a 3.0 dBA (i.e., decibels on the A-weighted scale) change in noise level, and describes a 5.0 dBA change as “readily noticeable.”¹⁸⁵ During operation of Compressor Station 563, noise sensitive areas

¹⁸³ See EA at 103.

¹⁸⁴ *Id.* at 119.

¹⁸⁵ See EA at 104.

between 1,040 feet and 1,390 feet from the site will experience an increase in ambient noise of between 1.2 and 4.0 dBA with all but one below 3.0 dBA. During operation of Compressor Station 875, noise sensitive areas between 1,265 feet and 2,835 feet from the site will experience an increase in ambient noise of between 0.1 and 1.2 dBA. Thus, any increases in ambient noise resulting from the operation of Compressor Stations 563 or 875 will not be readily noticeable, and in only one instance will they be perceptible.

147. TDEC recommends considering the use of electric-powered lawn equipment at Compressor Station 563 to decrease noise impacts on users of Paradise Ridge Community Park as well as reduce petroleum-fuel purchases and used oil waste. As stated in section 2.5.3 of the EA, a forested area will be maintained between the Compressor Station 563 facilities and the park to provide a noise buffer.

148. We concur with the EA noise impact conclusions that operation of the project will not have a significant impact on the noise environment in the vicinity of the compressor stations.

15. Reliability and Safety

149. Several commenters expressed safety concerns, including instances of exposed and corroded pipelines in the State of Tennessee, Kinder Morgan's (Tennessee's parent company) safety record, and the potential for failure or explosion based on increased pressure in existing older pipelines following construction of the project. Specifically, commenters stated that parts of the pipeline that were uncovered during floods in 2010 remain open and exposed in Sycamore Creek, while Tennessee states in recent filings since issuance of the EA that it obtained all state and local authorizations required to conduct the repairs necessitated by the flooding and completed those repairs in 2011. These issues are subject to the jurisdiction of the U.S. Department of Transportation (DOT), and Commission staff has informed the DOT of the concerns raised regarding Kinder Morgan's pipeline system and safety record. More generally, pipeline facilities must be designed, constructed, operated, and maintained in accordance with DOT Minimum Federal Safety Standards.¹⁸⁶ The regulations are intended to ensure adequate protection for the public and to prevent facility accidents and failures. Further, maximum operating pressures are established, in part, based on population density surrounding sections of pipeline. Tennessee would not be permitted to exceed the maximum allowable operating pressure as stipulated by DOT regulations and will be required to monitor the condition of its pipelines. Therefore, we find no evidence that the project will increase risk to public safety.

¹⁸⁶ 49 C.F.R. 192, et al. (2016).

150. Noting that Compressor Station 563 will be in a historically active seismic area, TDEC states that it supports building design and construction that meets the current International Building Code guidelines for facilities in seismic zones, which would minimize life-threatening structural damage during an earthquake. Tennessee will design and construct its facilities in accordance with applicable federal, state, and local regulations.

16. Cumulative Impacts

151. CEQ defines “cumulative impact” as “the impact on the environment which results from the incremental impact of the action [being studied] when added to other past, present, and reasonably foreseeable future actions”¹⁸⁷ The requirement that an impact must be “reasonably foreseeable” to be considered in a NEPA analysis applies to both indirect and cumulative impacts.

152. The “determination of the extent and effect of [cumulative impacts], and particularly identification of the geographic area within which they may occur, is a task assigned to the special competency of the appropriate agencies.”¹⁸⁸ CEQ has explained that “it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”¹⁸⁹ Further, a cumulative impact analysis need only include “such information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well-nigh impossible.”¹⁹⁰ An agency’s analysis should be proportional to the magnitude of the environmental impacts of a proposed action; actions that will have no significant direct and indirect impacts usually require only a limited cumulative impacts analysis.¹⁹¹

¹⁸⁷ 40 C.F.R. § 1508.7 (2016).

¹⁸⁸ *Kleppe*, 427 U.S. at 413.

¹⁸⁹ CEQ, *Considering Cumulative Effects Under the National Environmental Policy Act* at 8 (January 1997) (1997 CEQ Guidance), http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf.

¹⁹⁰ *Natural Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

¹⁹¹ See CEQ, *Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis* at 2-3 (June 24, 2005) (2005 CEQ Guidance),

(continued...)

153. As we have explained, consistent with CEQ guidance, in order to determine the scope of a cumulative impacts analysis for each project, Commission staff establishes a “region of influence” in which various resources may be affected by both a proposed project and other past, present, and reasonably foreseeable future actions.¹⁹² While the scope of our cumulative impacts analysis will vary from case to case, depending on the facts presented, we have concluded that, where the Commission lacks meaningful information regarding potential future natural gas production in a region of influence, production-related impacts are not sufficiently reasonably foreseeable so as to be included in a cumulative impacts analysis.¹⁹³

154. Allegheny and CCSE both argue that the EA’s cumulative impacts analysis is deficient. Allegheny contends that the Commission’s cumulative impacts analysis for the Broad Run Expansion Project is “impermissibly restrictive,” because it excludes shale gas drilling and therefore ignores the impact that gas drilling has on wildlife habitat and threatened and endangered species.¹⁹⁴ In support of this argument, Allegheny cites findings from the CEQ, the New York State Department of Environmental Conservation (New York DEC), FWS, and several academic sources that broadly conclude natural gas production and infrastructure can have adverse effects on wildlife. CCSE asserts that while the EA lists 22 oil and gas projects that are potentially cumulative project impacts, the Commission’s analysis of the impacts is generic at best.¹⁹⁵

155. Allegheny asserts that the Commission misreads the 1997 Cumulative Effects Guidance to “develop [the EA’s] restrictive region of influence.”¹⁹⁶ Allegheny notes that the 1997 Cumulative Effects Guidance contrasts between a project-specific analysis, for which it often suffices to analyze effects within the immediate area of the proposed action, and an analysis of the proposed action’s contribution to cumulative effects, for

http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PastActsCumulEffects.pdf.

¹⁹² See, e.g., *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,255, at P 113 (2014).

¹⁹³ *Id.* P 120.

¹⁹⁴ Allegheny Comments at 26-30.

¹⁹⁵ CCSE comments at 13-14 (citing EA at 115-120, Appendix B).

¹⁹⁶ *Id.* at 10.

which “the geographic boundaries of the analysis almost always should be expanded.”¹⁹⁷ Allegheny cites *Natural Resources Defense Council v. Callaway* to bolster its claim that the Commission cannot treat each project in isolation where evidence exists that other projects with similar environmental consequences exist.¹⁹⁸ Allegheny also cites research that identifies the impacts that shale gas drilling will have throughout the Marcellus and Utica shale formations, obligating the Commission under NEPA to take a hard look at these impacts on a broader scale.¹⁹⁹

156. CCSE and Corrina Stephens, a landowner, claim that the EA is deficient because it did not include the impacts from the Cane Ridge Compressor Station, to be constructed in Nashville, Tennessee, by Columbia Gulf Transmission, LLC (Columbia Gulf).

157. In considering cumulative impacts, CEQ advises that an agency first identify the significant cumulative effects issues associated with the proposed action.²⁰⁰ The agency should then establish the geographic scope for analysis.²⁰¹ Next, the agency should establish the time frame for analysis, equal to the timespan of a proposed project’s direct and indirect impacts.²⁰² Finally, the agency should identify other actions that potentially affect the same resources, ecosystems, and human communities that are affected by the proposed action.²⁰³ As noted above, CEQ advises that an agency should relate the scope of its analysis to the magnitude of the environmental impacts of the proposed action.²⁰⁴

¹⁹⁷ *Id.* at 10 (citing 1997 Cumulative Effects Guidance at 12).

¹⁹⁸ 524 F.2d 79 (2d Cir. 1975) (*Callaway*).

¹⁹⁹ Allegheny Comments at 33.

²⁰⁰ 1997 CEQ Guidance at 11.

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ See 2005 CEQ Guidance at 2-3, n.89, which notes that agencies have substantial discretion in determining the appropriate level of their cumulative impact assessments and that agencies should relate the scope of their analyses to the magnitude of the environmental impacts of the proposed action. Further, the Supreme Court held that determination of the extent and effect of cumulative impacts, “and particularly identification of the geographic area within which they occur, is a task assigned to the

(continued...)

158. The cumulative effects analysis in the EA took precisely the approach the CEQ guidance advises.²⁰⁵ The EA established regions of influence for the Broad Run Expansion Project depending on the resource that may be impacted.²⁰⁶ The regions of influence vary from the footprint of the project for geology and soils, to the immediate watershed boundary for water resources, and to within five miles of project facilities for fisheries, vegetation, wildlife, and threatened and endangered species. The EA independently identified 86 cumulative actions that are taking place that would occur within both the regions of influence and the time span for potential impacts from the project.²⁰⁷

159. The EA determined that the project would not contribute to any cumulative impact on the existing conditions of the majority of resource areas studied, and would have minor (not significant), temporary cumulative impacts on vegetation and wildlife, threatened and endangered species, noise levels, and air quality.²⁰⁸ We disagree with CCSE's claim that the EA did not sufficiently analyze the 22 oil and gas projects that the EA identifies as having potential cumulative project impacts. Appendix B to the EA includes a complete listing of all oil and gas projects evaluated for potential cumulative impacts, as well as the potential resource areas affected. Taking these projects and their cumulative impacts into account, the EA found that the Broad Run Expansion Project, when its impacts were added to the impacts of the referenced projects, would not contribute significantly to any cumulative impacts.²⁰⁹

160. In addition, Allegheny questions the region of influence considered for cumulative impacts on waterbodies and wetlands. Allegheny states that although the EA states the region of influence for these resources is the immediate watershed boundary (HUC 12) surrounding each compressor station, that is not actually the watershed boundary but the

special competency of the agenc[y],” and is overturned only if arbitrary and capricious. *See Kleppe*, 427 U.S. at 414-15.

²⁰⁵ *See* EA at 81-89. We also note that the 1997 Guidance states that the “applicable geographic scope needs to be defined case by case.” 1997 CEQ Guidance at 15.

²⁰⁶ EA at 113.

²⁰⁷ *Id.* at 112

²⁰⁸ *Id.* at 113.

²⁰⁹ *Id.*

sub-watershed boundary.²¹⁰ According to Allegheny, if the Commission expanded its analysis to the actual watershed boundary (HUC 10), it likely would have included many of the unconventional shale gas wells identified in Kanawha County and other adjacent counties in West Virginia.

161. The EA concluded in section 2.11.3 that the project would not have any significant cumulative impacts within the immediate watershed studied via the HUC 12 standard. Commission identified HUC 12 as the appropriate standard for this project with which to assess cumulative impacts on waterbodies. Had the EA utilized the HUC 10 standard and included a larger watershed in its region of influence, the project still would not result in any significant cumulative impacts on the larger watershed. While it is true that a wider scope would naturally incorporate more activities, it does not follow that additional impacts would be discovered, because the impacts of this project would not extend outside the boundary of the local HUC 12 watershed. The Commission supports staff's use of the HUC 12 standard for this project, and its determination that the project would not have resulted in any significant impacts on water resources.

162. Regarding the proposed Cane Ridge Compressor Station, we note that Columbia Gulf filed to construct a 41,000 hp compressor unit in the Cane Ridge area of Davidson County, Tennessee, as part of its proposed Gulf XPress Project filed in Docket No. CP16-361-000, on April 29, 2016, which was after the March 11, 2016 issuance of the EA in this proceeding.

163. According to appendix 1I of Columbia's application, the Gulf XPress Project would be 24.1 miles southeast of the Broad Run Expansion Project facilities in Davidson County. The Commission will evaluate the impacts of this project, including cumulative effects, in the NEPA document for the Gulf XPress Project.

164. Allegheny cites *Natural Resources Defense Council v. Hodel* to bolster its claim that the Commission is required to consider the "inter-regional" cumulative impacts of Marcellus and Utica shale development activities.²¹¹ Allegheny also maintains that recent research identifies the "substantial impact" that shale gas drilling will have throughout the Marcellus and Utica shale formations, and that the Commission must take

²¹⁰ Allegheny Comments at 37-38 (citing U.S. Geological Survey, Federal Standards and Procedures for the National Boundary Dataset – Techniques and Methods 11-A3, p. 1, 2013) (*Hodel*)).

²¹¹ Allegheny Comments at 37 (citing *Nat. Res. Def. Council v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988)).

a hard look at these impacts on a much broader scale.²¹² Allegheny asserts that because speculation is implicit in NEPA, the Commission must forecast reasonably foreseeable future actions even if they are not specific proposals.²¹³

165. As noted above, and consistent with CEQ guidance, to determine the scope of the cumulative impacts analysis in an environmental document, Commission staff establishes a “region of influence” to define the area affected by the proposed action in which existing and reasonably foreseeable future actions may also result in cumulative impacts. Based on this, Commission staff appropriately determined that any impacts of the Broad Run Expansion Project will not add to incremental cumulative environmental impacts of Marcellus and Utica shale gas production.

166. Because the impacts associated with the Broad Run Expansion Project would be limited to the two existing and four new compressor stations, the EA concluded that the potential for cumulative impacts would be localized, with the exception of air quality. Commission staff identified appropriate “regions of influence” for considering cumulative effects, and properly excluded from its cumulative impacts analysis the impacts from shale gas drilling in the Marcellus and Utica shale formations. Given the large geographic scope of the Marcellus and Utica shale, the magnitude of the type of analysis requested by Allegheny – of the impacts of gas drilling in the Marcellus and Utica shale formations – bears no relationship to the limited magnitude of Tennessee’s proposed Broad Run Expansion Project, which involves temporary construction impacts on 240 acres of land and permanent impacts to 183 acres of land. Moreover, even if the Commission were to vastly expand the geographic scope of the cumulative effects analysis, the impacts from such development are not reasonably foreseeable.

167. In our view, Allegheny’s arguments regarding the geographic scope of our cumulative impacts analysis are based on their erroneous claim, discussed above, that the Commission must conduct a regional programmatic NEPA review of natural gas development and production in the Marcellus and Utica shale formations, an area that covers potentially thousands of square miles. We decline to do so. As the Commission has explained, there is no Commission program or policy to promote additional natural gas development and production in shale formations.

²¹² *Id.* at 33-34 (citing M.C. Brittingham, et al., *Ecological Risks of Shale Oil and Gas Development to Wildlife, Aquatic Resources, and Their Habitats*, 48 ENVTL. SCIENCE & TECHNOLOGY 11034 (Oct. 7, 2014) (published online on Sept. 4, 2014)).

²¹³ *Id.* at 42.

168. We also disagree with Allegheny's argument that the Commission's use of regions of influence is inconsistent with CEQ regulations. Our cumulative impacts analysis considered the additive impact of a proposed action's direct and indirect effects with other past, present, or reasonably foreseeable actions that have impacts occurring in the same region, and within the same time span, *as the impacts of the proposed action*. We believe this is consistent with the CEQ's Guidance²¹⁴ and case law.²¹⁵ There is a geographic limit to the scope of a cumulative impacts analysis. Courts have held that a meaningful cumulative impacts analysis must identify five things: "(1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected *in that area* from the proposed project; (3) other actions-past, present, and proposed, and reasonably foreseeable-that have had or are expected to have impacts *in the same area*; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate."²¹⁶

169. Allegheny's reliance on *Hodel* is unavailing. Allegheny interprets this case to mean that the Commission must consider the reasonably foreseeable impacts of shale gas extraction at a broader scale. We disagree. In *Hodel* the court considered the U.S. Department of the Interior's EIS conducted in conjunction with its plan to award five-year leases for hydrocarbon exploration and production on multiple offshore blocks. The court found that the EIS focused primarily on assessing impacts associated with the region proximate to each lease block, and thereby failed to capture potential inter-regional cumulative impacts on migratory species if exploration and production were to take place simultaneously on several lease blocks within the migratory range of a species. However, *Hodel* considered a plan for resource-development leasing over a vast geographic area (including the North Atlantic, North Aleutian Basin, Straits of Florida, Eastern Gulf of Mexico, and waters off California, Oregon, and Washington).

170. In contrast, the "plan" before us is for the modification of two existing compressor stations, and construction of four new compressor stations. Because we find the proposal will have no reasonably foreseeable impacts on shale development, we find no reason to adopt a region of influence for reviewing cumulative impacts that would include the

²¹⁴ See 1997 Cumulative Effects Guidance at 12-16.

²¹⁵ See, e.g., *Sierra Club v. FERC*, No. 14-1275, slip op. at 21 (FERC must identify the relevant geographic area for the cumulative impacts analysis; i.e., the "area in which the effects of the proposed project will be felt") (quoting *TOMAC, Taxpayers of Michigan Against Casinos v. Norton*, 433 F.3d 852, 864 (D.C. Cir. 2006)).

²¹⁶ *TOMAC*, 433 F.3d at 864 (emphasis added) (quoting *Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002)).

Marcellus and Utica shale formations. The Department of Interior's leasing of large tracts in federal waters in *Hodel* is dissimilar from the Commission's case-by-case review of individual and independent infrastructure projects. Whereas mineral leases, especially those that cover extensive and contiguous areas, establish the location and time frame for future development, the Commission does not permit, and indeed has no jurisdiction over, activities upstream of the point of interconnection with an interstate pipeline, e.g., leasing, exploration, production, processing, and gathering. To the extent the court in *Hodel* was persuaded by an earlier Supreme Court statement that under NEPA "proposals for . . . related actions that will have cumulative or synergistic environmental impact upon a region *concurrently pending before an agency* must be considered together,"²¹⁷ production and gathering activities in the Appalachian shale areas are not related actions concurrently pending before the Commission. Thus, there is no way to relate any specific production and gathering activities to this project.

171. We find that, because nearly all project construction would be relatively minor, the cumulative impacts of the proposed project, when combined with other known or reasonably foreseeable projects, would be short-term, minimal, and not contribute significantly to cumulative impacts.

17. Climate Change

172. Allegheny claims that the Commission failed to include greenhouse gas (GHG) emissions, including carbon dioxide and methane, from the construction and operation of the Broad Run Expansion Project, the consumption of the gas it would transport, and the increased shale gas drilling the project would induce, in its EA. Allegheny further notes that the operation of the project would emit 43 million tons of carbon dioxide per year, the impacts of which could be assessed through the use of the "social cost of carbon" tool.²¹⁸

173. The EA acknowledges the dangers of GHG emissions, and the types of emissions that may result from the operation of the project. The EA further states that currently, no standard methodology exists that would enable the Commission to determine what global, physical environmental impacts would result from the project's incremental addition of GHG's to the atmosphere.²¹⁹ The EA notes, however, that the certificate

²¹⁷ *Hodel*, 865 F.2d 288 at 297 (citing *Kleppe*, 427 U.S. at 410) (emphasis added).

²¹⁸ Allegheny Comments at 43.

²¹⁹ EA at P 118.

authorization requires Tennessee to record and submit GHG emissions from project facilities to state authorities.

174. The social cost of carbon tool provides monetized values, on a global level, of addressing climate change impacts and is intended for estimating the climate benefits of rulemakings and policy alternatives. While we recognize the availability of this tool, we find that for the following reasons, it would not be appropriate or informative to use for this project: (1) the EPA states that “no consensus exists on the appropriate [discount] rate to use for analyses spanning multiple generations”²²⁰ and consequently, significant variation (between 300 and 400 percent) in output can result; (2) the tool does not measure the actual incremental impacts of a project on the environment; and (3) there are no established criteria identifying the monetized values that are to be considered significant for NEPA purposes. While the tool may be useful for rulemakings or comparing alternatives using cost/benefit analyses where the same discount rate is consistently applied, it is not appropriate for estimating a specific project’s impacts or informing our analysis under NEPA. Section 2.11.9 of the EA appropriately discusses climate change as a cumulative impact of the project.

18. Environmental Analysis Conclusion

175. Based on the analysis in the EA, we conclude that if constructed and operated in accordance with Tennessee’s application and supplements, and in compliance with the environmental conditions in Appendix C of this Order, our approval of this proposal will not constitute a major federal action significantly affecting the quality of the human environment.

176. 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 or operation of facilities approved by this Commission.²²¹

²²⁰ See *Fact Sheet: Social Cost of Carbon* issued by EPA in November 2013, <http://www.epa.gov/climatechange/Downloads/EPAactivities/scc-factsheet.pdf>.

²²¹ See 15 U.S.C. § 717r(d) (state or federal agency’s failure to act on a permit considered to be inconsistent with Federal law); see also *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988) (state regulation that interferes with the Commission’s regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 243 (D.C. Cir. 2013) (noting that state and

(continued...)

IV. Conclusion

177. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application(s), as supplemented, and exhibits thereto, submitted in support of the authorization 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 described more fully herein and in the application.

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

(C) The certificate authority granted in Ordering Paragraph (A) shall be conditioned on the following:

(1) completion of construction of the proposed facilities and making them available for service within two years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;

(2) compliance with all applicable regulations under the NGA, including paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

(3) compliance with the environmental conditions listed in Appendix C of this Order; and

(4) execution of firm transportation service agreement(s) equal to the levels of service and in accordance with the terms of service represented in the precedent agreement prior to commencing construction.

(D) Tennessee's incremental recourse rates for transportation service under Rate Schedule FT-A are approved, subject to revisions, as described above.

local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

(E) Tennessee's request to charge its applicable general system rate under Rate Schedule IT for any interruptible service on the expansion facilities is approved.

(F) Tennessee shall file an executed copy of the non-conforming agreement disclosing and reflecting all non-conforming language not less than 30 days and not more than 60 days, prior to the commencement of service on the project.

(G) Tennessee's request for a predetermination supporting rolled-in rate treatment for the costs of the Replacement Component of the Project in its next general NGA section 4 rate proceeding is granted, barring a significant change in circumstances.

(H) Tennessee's request to utilize currently effective fuel and lost and unaccounted for charges is denied. Tennessee is directed to file incremental fuel and lost and unaccounted for charges applicable to the project when it files its actual tariff records, as directed below.

(I) Tennessee shall file revised actual tariff records no earlier than 60 days and no later than 30 days, prior to the date the project facilities go into service including work papers in spreadsheet format with formulas for its revised incremental recourse rates and fuel and lost and unaccounted for charges, as discussed above.

(J) Tennessee shall keep separate books and accounts of costs attributable to the proposed Broad Run Expansion Project, as described above.

(K) The untimely motions to intervene are granted pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix A
Timely, Unopposed Interventions

- Allegheny Defense Project
- National Fuel Gas Distribution Corp.
- National Grid Gas Delivery Companies
- New Jersey Natural Gas Company
- NiSource Distribution Companies²²²
- NJR Energy Services Company
- PSEG Energy Resources & Trade, LLC
- Tennessee Customer Group²²³
- Tennessee Valley Authority

²²² NiSource Distribution Companies include: Columbia Gas of Kentucky, Inc., Columbia Gas of Ohio, Inc., and Columbia Gas of Pennsylvania, Inc.

²²³ The Tennessee Customer Group is comprised of: Centerpoint Energy Resources Corp.; City of Clarksville Gas and Water Department, City of Clarksville; City of Corinth Public Utilities Commission; Delta Natural Gas Company, Inc.; Greater Dickson Gas Authority; Hardeman Fayette Utility District; Henderson Utility Department; Holly Springs Utility Department; Humphreys County Utility District; Town of Linden; Morehead Utility Plant Board; Portland Natural Gas System, City of Portland; Savannah Utilities; Springfield Gas System, City of Springfield; City of Waynesboro; West Tennessee Public Utility District; Athens Utilities; City of Florence, Alabama; Hartselle Utilities; City of Huntsville, Alabama; Municipal Gas Authority of Mississippi; North Alabama Gas District; Tuscumbia Utilities and Sheffield Utilities.

Appendix B**Untimely, Unopposed Interventions**

- Anadarko Energy Services Company
- Atmos Energy Corp.
- Chevron U.S.A., Inc.
- ConocoPhillips Company
- Direct Energy Business Marketing, LLC
- Exelon Corp.
- Heartwood
- James Wright
- Lane Brody
- Lori Birckhead
- Michael Younger
- New England Local Distribution Companies²²⁴
- Ohio Valley Environmental Coalition
- Piedmont Natural Gas Company
- Pivotal Utility Holdings, Inc.²²⁵
- Shell Energy North America, L.P.

²²⁴ The New England Local Distribution Companies include: Bay State Gas Company (d/b/a Columbia Gas of Massachusetts), The Berkshire Gas Company, Liberty Utilities (EnergyNorth Natural Gas) Corp. (d/b/a Liberty Utilities), Connecticut Natural Gas Corporation, Fitchburg Gas and Electric Light Company, City of Holyoke, Massachusetts Gas and Electric Department, Northern Utilities, Inc., NSTAR Gas Company, The Southern Connecticut Gas Company, Westfield Gas & Electric Department, Yankee Gas Services Company

²²⁵ Pivotal Utility Holdings, Inc. represents: Chattanooga Gas Company, Elizabethtown Gas Company, and Northern Illinois Gas Company.

Appendix C

Environmental Conditions

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

1. Tennessee Gas Pipeline Company, L.L.C. (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 the 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 (EI), and contractor personnel will be informed of the EIs' 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 soon as they are available, and before the start of construction**, Tennessee shall file with the Secretary any revised detailed survey 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 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 pipelines or aboveground 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 maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all facility relocations, staging areas, warehouse/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 our Upland Erosion Control, Revegetation, and Maintenance Plan, 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:

- (i) implementation of cultural resources mitigation measures;
 - (ii) implementation of endangered, threatened, or special concern species mitigation measures;
 - (iii) recommendations by state regulatory authorities; and
 - (iv) agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of the Certificate and before construction begins**, 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, 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);
 - f. the company personnel 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. Tennessee shall employ at least four EIs for the project. The EIs shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Tennessee shall file updated status reports with the Secretary on a **biweekly 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 EI 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.
9. **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).
10. Tennessee must receive written authorization from the Director of OEP **before placing the project facilities into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the project sites and other areas affected by the project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized 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 installed 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.

12. **Prior to construction of Compressor Stations 118A and 119A**, Tennessee shall file a blasting plan with the Secretary, for review and written approval by the Director of OEP.
13. **Prior to abandonment or construction activities at Compressor Station 106**, Tennessee shall file with the Secretary, for review and written approval by the Director of OEP, a plan for handling potential polychlorinated biphenyl (PCB)-affected groundwater at Compressor Station 106 developed in coordination with the Kentucky Department for Environmental Protection.
14. **Prior to construction of Compressor Stations 118A and 119A**, Tennessee shall consult the West Virginia Department of Environmental Protection (WVDEP) and file with the Secretary designs for culverts that will be constructed at Compressor Stations 118A and 119A and any WVDEP comments on the designs.
15. Tennessee shall not clear trees outside the window of August 16 to March 31 in project workspaces in Tennessee or outside the window of November 15 to March 31 in project workspaces in West Virginia.
16. Tennessee shall file a noise survey with the Secretary **no later than 60 days** after placing each compressor station into service. If a full load condition noise survey is not possible, Tennessee shall provide an interim survey at the maximum possible horsepower load and provide a full load survey **within 6 months**. If the noise attributable to the operation of the project equipment under interim or full horsepower load exceeds a day-night noise level of 55 decibels on the A-weighted scale at any nearby noise sensitive area, Tennessee shall:
 - a. file a report on what changes are needed;
 - b. install additional noise controls to meet the level within 1 year of the in-service date; and
 - c. confirm compliance with this requirement by filing a second full horsepower load noise survey with the Secretary no later than 60 days after it installs the additional noise controls.
17. **Prior to any abandonment activities at Compressor Stations 106 and 114**, Tennessee shall file the following information with the Secretary for review and written approval by the Director of OEP:
 - a. identification of any equipment, including compressor units and piping, proposed for abandonment that may be contaminated with PCBs;
 - b. verification that the appropriate PCB testing would be conducted on this equipment, and discussion of how any abandoned PCB-contaminated facilities would be properly disposed of; and
 - c. measures to be implemented to provide adequate worker safety for handling PCB-contaminated materials.

18. Prior to any abandonment or construction activities at Compressor Stations 106 and 114, Tennessee shall file the following information with the Secretary for review and written approval by the Director of OEP:
 - a. identification of any known facilities to be abandoned or disturbed having asbestos-containing materials (ACMs);
 - b. protocols to comply with the appropriate requirements to identify ACMs that might be encountered;
 - c. if facilities with ACMs would be abandoned or disturbed, methods to separate the ACMs for proper disposal; and
 - d. protocols for worker protection and proper disposal of ACMs.