

156 FERC ¶ 61,140
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Dominion Transmission, Inc.

Docket No. CP15-492-000

ORDER ISSUING CERTIFICATE

(Issued August 29, 2016)

1. On May 15, 2015, Dominion Transmission, Inc. (Dominion) filed an application pursuant to section 7(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 in Pennsylvania, Maryland, and Virginia (the Leidy South Project).

2. As discussed below, we will grant the requested authorization, subject to the conditions herein.

I. Background and Proposal

3. Dominion is a natural gas company, as defined in section 2(6) of the NGA,³ engaged in the storage and transportation of natural gas in interstate commerce subject to the Commission's jurisdiction.⁴ Dominion operates approximately 7,800 miles of pipeline in Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia.

¹ 15 U.S.C. § 717f(c) (2012).

² 18 C.F.R. pt. 157 (2016).

³ 15 U.S.C. § 717a(6) (2012).

⁴ Dominion, a Delaware corporation, is a wholly-owned subsidiary of Dominion Gas Holdings, LLC, which, in turn, is a wholly-owned subsidiary of Dominion Resources, Inc.

4. As part of the Leidy South Project, Dominion proposes to:

- replace two 1,100 horsepower (hp) compressor units with one 10,915 hp gas-fired compressor unit, and install approximately 1,300 feet of 30-inch-diameter discharge piping and auxiliary equipment at its existing Finnefrock Compressor Station in Clinton County, Pennsylvania;⁵
- install one suction filter/separator at its existing Centre Compressor Station in Centre County, Pennsylvania;
- install one new 13,220 hp gas-fired compressor unit, auxiliary equipment, and buildings at its existing Chambersburg Compressor Station in Franklin County, Pennsylvania;
- install one new 15,900 hp gas-fired compressor unit, auxiliary equipment, and buildings at its existing Myersville Compressor Station in Frederick County, Maryland;
- install one new 8,000 hp electric compressor unit, auxiliary equipment, and buildings, as well as reconfigure two existing reciprocating engines at its Leesburg Compressor Station in Loudoun County, Virginia;
- install a new cooler and filter separator at its existing Quantico Compressor Station in Fauquier County, Virginia; and
- construct and operate a new metering and regulating (M&R) station in Loudoun County, Virginia (Stonewall M&R Station).

5. Dominion conducted an open season from April 2 to April 11, 2014. As a result of the open season, Dominion executed binding precedent agreements for 100 percent of the project's capacity for 20 year terms with Panda Stonewall, LLC (Panda Stonewall) for 55,000 dekatherms (Dth) per day; Virginia Power Services Energy Corp., Inc. (Virginia Power) for 45,000 Dth per day; and Mattawoman Energy, LLC (Mattawoman)

⁵ Dominion does not request abandonment authorization pursuant to section 7(b) of the NGA because it does not propose to abandon service and the compressor units it proposes to remove will be replaced.

for 55,000 Dth per day.⁶ Dominion also conducted a reverse open season but did not receive any bids in response to its posting.

6. Dominion states that the proposed Leidy South Project will enable it to provide 155,000 Dth per day of additional firm transportation service from the Leidy interconnection in Clinton County, Pennsylvania, to the Loudoun interconnection in Loudoun County, Virginia, for Virginia Power and Mattawoman and to the proposed new meter station in Loudoun County for Panda Stonewall. Dominion estimates the cost of the Leidy South Project will be \$209,657,857.

7. Dominion proposes an initial incremental monthly firm recourse reservation charge under Rate Schedule FT. The expansion shippers have agreed to pay negotiated rates.

II. Notice, Interventions, and Comments

8. Notice of Dominion's application was published in the *Federal Register* on June 5, 2015.⁷ 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

9. The Fresh Water Accountability Project (FWAP), the Ohio Valley Environmental Coalition, and UGI Distribution Companies filed untimely motions to intervene. On September 29, 2015, Dominion filed an answer in opposition to these untimely motions to intervene. Contrary to Dominion's assertions, granting the late motions, which were filed before we began our environmental analysis of the project, will not disrupt the

⁶ Panda Stonewall and Mattawoman contemplate developing natural-gas fired power generation facilities in Loudoun County, Virginia and Prince George's County, Maryland, respectively. Virginia Power operates existing power generation facilities. Dominion will deliver gas to the Panda Stonewall Power Project at the proposed Stonewall M&R Station in Loudoun County, Virginia. The Panda Mattawoman Power Project will ultimately be served via the Dominion Cove Point pipeline, which also interconnects with the interstate pipeline systems of Transcontinental Gas Pipe Line Company, LLC and Columbia Gas Transmission, LLC.

⁷ 80 Fed. Reg. 32,101 (2015).

⁸ 18 C.F.R. § 385.214(c) (2016).

proceeding or prejudice or place additional burdens on any parties to the proceeding. Thus, we will grant the untimely motions to intervene.⁹

III. Discussion

10. Since Dominion's proposed facilities will be used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.¹⁰

A. Application of Certificate Policy Statement

11. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.¹¹ Specifically, the Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

12. Under this policy, the threshold requirement for 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 the applicant has made efforts to eliminate or minimize any adverse effect the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, and landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse

⁹ *Id.* § 385.214(d).

¹⁰ 15 U.S.C. §§ 717f(c), (e) (2012).

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

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.

13. As discussed above, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The Commission has determined, in general, that when a pipeline proposes an incremental recourse rate for a project – as Dominion does here – the pipeline satisfies the threshold requirement that the project will not be subsidized by existing shippers.¹² Because Dominion proposes to charge an incremental rate for the service proposed in this proceeding that, as discussed below, exceeds Dominion’s existing applicable system rate, we find that the threshold no-subsidy requirement under the Certificate Policy Statement has been met.

14. We find that the proposed project will not adversely affect service to Dominion’s existing customers because they will not experience degradation in service. In addition, there will be no adverse impacts on other pipelines in the region or their captive customers because the proposals are not intended to replace service on other pipelines but to create incremental capacity on a portion of Dominion’s system to serve new market requirements. Further, no pipeline company or their captive customers have protested Dominion’s proposals.

15. All of the proposed facility updates and installations will be on lands that are owned in fee by Dominion or in which Dominion holds a property interest. Moreover, the project facilities will be collocated on property with existing natural gas facilities. Thus, we find that Dominion has designed the project to minimize adverse effects on landowners and surrounding communities.

16. Dominion has executed precedent agreements with three electric power generators which fully subscribe the 155,000 Dth per day firm transportation service capability of the project for a 20-year primary term. Based on the benefits the proposed project will provide, the lack of adverse effects on existing customers, other pipelines and their captive customers, and landowners and surrounding communities, we find, consistent with the Certificate Policy Statement and section 7(c) of the NGA, that the public convenience and necessity requires approval of Dominion’s proposal, subject to the conditions listed below.

¹² See, e.g., *Dominion Transmission, Inc.*, 155 FERC ¶ 61,106 (2016); *Transcontinental Gas Pipe Line Corp.*, 98 FERC ¶ 61,155 (2002).

B. Rates**1. Initial Base Rates**

17. Dominion proposes an initial incremental monthly recourse reservation charge under its existing Rate Schedule FT of \$21.5968 per Dth. The proposed recourse charge is based on a Year 1 cost of service of \$40,170,120 and a design capacity of 155,000 Dth per day. Dominion states that the expansion shippers have agreed to pay negotiated rates.¹³ Dominion proposes to use its existing transmission depreciation rate of 2.5 percent and the pre-tax rate of return approved in Docket No. RP97-406-000.¹⁴

18. Included in the total cost of service of \$40,170,120 is an estimated \$3,307,120 for Operation and Maintenance (O&M) expenses associated with the new compression and measuring and regulating facilities. In its September 16, 2015 response to a Commission data request, Dominion provided a breakdown of the O&M expenses organized by FERC account number and itemized between labor and non-labor costs. Dominion identified a total of \$1,865,480¹⁵ in non-labor O&M expenses for FERC Accounts 853, 857, 864 and 865.¹⁶ Consistent with the Commission's regulation requiring the use of straight fixed variable rate design (SFV),¹⁷ these non-labor costs are classified as variable costs and section 284.7(e) of the Commission's regulations does not allow variable costs to be recovered through the reservation charge.¹⁸ Accordingly, Dominion must recalculate its incremental recourse reservation charge to reflect the removal of variable costs.

19. Commission policy requires that incremental rates be charged for proposed expansion capacity if the firm incremental charge will exceed the maximum system-wide

¹³ Dominion Application at 11.

¹⁴ *CNG Transmission Corp.*, 85 FERC ¶ 61,261 (1998) (Dominion was formerly known as CNG Transmission Corporation).

¹⁵ Dominion September 16, 2015 Data Response, Response No. 1 (September 2015 Data Response).

¹⁶ Accounts 853 and 864 are for transmission compression O&M; Accounts 857 and 865 are for transmission measurement and regulation O&M.

¹⁷ 18 C.F.R. § 284.7(e) (2016).

¹⁸ *Id.*

firm recourse charge.¹⁹ Dominion's proposed incremental monthly reservation charge of \$21.5968 per Dth is higher than its generally applicable Rate Schedule FT recourse reservation charge of \$3.8820 per Dth.²⁰ We do not expect that recalculation of the proposed rate to remove the variable costs identified above will result in an incremental reservation charge that is lower than Dominion's current system reservation charge. Therefore, because the appropriately calculated incremental reservation charge will be higher than the currently applicable Rate Schedule FT reservation charge, the Commission will require use of the recalculated incremental reservation charge as the initial recourse reservation rate for firm service using the proposed incremental capacity.

20. Dominion did not propose an incremental usage charge but instead included the estimated project variable costs in its incremental reservation charge. Recovery of the \$1,865,480 in variable costs attributable to the expansion capacity in a usage charge would appear to result in an incremental usage charge that is higher than Dominion's currently applicable Rate Schedule FT usage charge of \$0.0083 per Dth.²¹ Therefore, because the incremental usage charge will be higher than the currently applicable Rate Schedule FT usage charge, the Commission will require the Dominion to calculate and use an incremental usage charge for the proposed incremental capacity.

21. Dominion proposes to use its current generally applicable Rate Schedule IT rate as the interruptible rate for service provided on the project capacity. Dominion's proposal to utilize its current generally applicable Rate Schedule IT rate is consistent with Commission policy,²² and accordingly, we will approve it.

2. Fuel Retention and Other Transportation Rates

22. Dominion proposes to charge an incremental fuel retention percentage of 2.3 percent for service on the proposed project. In its September 16, 2015 Data Response, Dominion provided a fuel study supporting its proposed incremental fuel retention percentage. Dominion states that its existing system-wide fuel percentage

¹⁹ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, at 61,745 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

²⁰ Dominion Transmission, Inc., FERC NGA Gas Tariff, DOMINION Tariffs, 10.6, FT, FTNN, FTSC & IT Rates - Severed Parties, 13.0.0.

²¹ *Id.*

²² *See, e.g., Trunkline Gas Co., LLC*, 153 FERC ¶ 61,300, at P 62 (2015).

of 1.95 percent is fixed, with Dominion being “at-risk” for fuel, and that neither the rate nor methodology can be changed outside of a general NGA section 4 rate case. Dominion also notes that the project’s fuel retainage will remain fixed at the initial 2.3 percent level until such time as Dominion’s generally applicable fuel retainage is modified. We will approve Dominion’s proposal to charge an incremental fuel retention percentage of 2.3 percent for service on the project capacity.

23. Dominion states it will propose incremental reservation and usage Electric Power Cost Adjustment (EPCA) surcharges for project service, reflecting any difference between the estimated electric power charges of the project compared to the system-wide electric power charges, in a section 4 tariff filing 30 to 60 days before the in-service date of the project. In addition, Dominion states it expects changes will be required in its tariff provisions concerning the EPCA²³ and notes that these changes will affect not only project shippers, but other Dominion customers as well. However, Dominion states that it will recover the incremental electric charges relating to the project solely from the project customers.

24. Indicated Shippers²⁴ state that Dominion failed to disclose or describe the to-be-proposed EPCA-related tariff changes or explain how those changes would affect Dominion’s non-project customers. Indicated Shippers maintain that the Commission must find that any approval of Dominion’s proposed treatment of EPCA surcharges as part of the project will not constitute approval of future proposed changes in the EPCA submitted by Dominion prior to the project in-service date.

25. We will approve Dominion’s proposal to submit the proposed incremental reservation and usage EPCA surcharges for project service in a compliance filing to be made 30 to 60 days before the in-service date of the project. In the event that Dominion submits revisions to tariff provisions addressing its EPCA in a future NGA section 4 proceeding, we will address those tariff revisions at that time. No finding in this order shall be interpreted as approval of Dominion’s future tariff revisions regarding its EPCA.

3. Negotiated Rates

26. Dominion states that it intends to enter into a negotiated rate agreement with its project shippers. In certificate proceedings, we establish initial recourse rates, but do not

²³ Dominion Application at 11.

²⁴ Indicated Shippers include ConocoPhillips Company, Direct Energy Business Marketing, LLC, Noble Energy, Inc., and SWEPI LP.

make determinations regarding specific negotiated rates for proposed service.²⁵ Dominion must file its negotiated rate agreements or tariff records describing the negotiated rate associated with these services in accordance with the Alternative Rate Policy Statement²⁶ and the Commission's negotiated rate policies.²⁷ It must make this filing at least 30 days, but not more than 60 days, before the proposed effective date for such rates.²⁸

4. Reporting of Incremental Costs

27. Section 154.309 of the Commission's regulations²⁹ includes bookkeeping and accounting requirements applicable to all expansions for which incremental rates are approved to ensure that costs are properly allocated between pipelines' existing shippers and incremental expansion shippers. Therefore, Dominion must keep separate books and accounting of costs and revenues attributable to Leidy South capacity and incremental services using that capacity as required by section 154.309. The books should be maintained with applicable cross-references. 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. 710.³⁰

²⁵ *CenterPoint Energy-Mississippi River Transmission Corp.*, 109 FERC ¶ 61,007, at P 19 (2004); *ANR Pipeline Co.*, 108 FERC ¶ 61,028, at P 21 (2004).

²⁶ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *order granting clarification*, 74 FERC ¶ 61,194 (1996).

²⁷ *Natural Gas Pipeline Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042, *dismissing reh'g and denying clarification*, 114 FERC ¶ 61,304 (2006).

²⁸ Pipelines are required to file any service agreement containing non-conforming provisions and to disclose and identify any transportation term or agreement in a precedent agreement that survives the execution of the service agreement.

²⁹ 18 C.F.R. § 154.309 (2016).

³⁰ *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, FERC Stats. & Regs. ¶ 31,267, at P 23 (2008).

C. Environmental Analysis

28. On July 23, 2015, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment* (NOI). The NOI was published in the Federal Register³¹ and mailed to about 690 parties including federal, state, and local government officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and property owners affected by and within 0.5 miles of the project.

29. We received comments in response to the NOI from the Allegheny Defense Project (Allegheny); the Chesapeake Climate Action Network; the Virginia Department of Conservation and Recreation (Virginia DCR); Loudoun County, Virginia; and the Virginia Department of Game and Inland Fisheries. Allegheny commented on the direct, indirect, and cumulative effects of the Leidy South Project; upstream natural gas production in the Marcellus and Utica shale formations;³² segmentation of connected, cumulative, and similar actions; and the need for a programmatic environmental impact statement (EIS) for natural gas infrastructure projects. The Chesapeake Climate Action Network urged the Commission to consider the project's effects on climate change. Virginia DCR filed comments on natural heritage resources in the vicinity of the project facilities, and Virginia Department of Game and Inland Fisheries commented on wildlife, habitat, and stormwater controls. Loudoun County filed comments on groundwater, noise, and public safety.

30. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),³³ our staff prepared an environmental assessment (EA) for Dominion's proposal. The EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, aesthetics,

³¹ 80 Fed. Reg. 45,529 (2015).

³² Marcellus shale is a black shale geological formation containing natural gas reserves which are developed using horizontal drilling and hydraulic fracturing techniques. The Marcellus shale formation extends deep underground from Ohio and West Virginia, northeast through Pennsylvania and southern New York. The Utica shale formation lies a few thousand feet below the Marcellus shale formation in primarily the same, but slightly larger area as the Marcellus formation. *See Beardslee v. Inflection Energy, LLC*, 761 F.3d 221, 224 (2d Cir. 2014).

³³ 42 U.S.C. §§ 4321-4370f (2012).

cultural resources, air quality, noise, safety, cumulative impacts, and alternatives. The substantive comments received in response to the NOI were addressed in the EA.³⁴

31. The EA was issued for a 30-day comment period and placed into the public record on March 30, 2016. The Commission received comments on the EA from the U.S. Department of Agriculture (USDA); Myersville Citizens for a Rural Community (MCRC); the Town of Myersville; a stakeholder; and a coalition of environmental groups (collectively, Allegheny).³⁵ The Virginia Department of Environmental Quality (VDEQ) also compiled and submitted comments from various state agencies. The commenters raise concerns about the need for the Commission to issue a programmatic EIS to address multiple projects in the region; indirect impacts; the need for review of non-jurisdictional natural gas facilities; cumulative impacts; air quality; climate change and greenhouse gas (GHG) emissions; vegetation and wildlife; visual impacts; safety; and alternatives. Below, we provide clarification with respect to substantive comments on issues addressed in the EA.

1. Programmatic Environmental Impact Statement

32. The Council on Environmental Quality's (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; or (4) is proceeding with multiple projects that are temporally and spatially connected.³⁶ 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,³⁷ and the courts have concluded that there is no requirement for

³⁴ The EA provides a summary of commenters and comments received during the scoping period. EA at 6-8.

³⁵ The coalition of environmental groups includes the Allegheny Defense Project, Appalachian Mountain Advocates, Chesapeake Climate Action Network, Environmental Integrity Project, Heartwood, and Wild Virginia.

³⁶ 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) (2015)) (2014 Programmatic Guidance).

³⁷ *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).

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.³⁸

33. We have explained in the past that there is no Commission plan, policy, or program for the development of natural gas infrastructure.³⁹ 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.”⁴⁰ 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,”⁴¹ which would not present “a credible forward look and would therefore not be a useful tool for basic program planning.”⁴² As to projects that have a clear physical, functional, and temporal nexus such that they are connected or cumulative actions,⁴³ the Commission will prepare a multi-project environmental document.⁴⁴

34. Allegheny and a stakeholder contend that the Commission violated NEPA by failing to prepare a programmatic EIS for natural gas infrastructure projects related to

³⁸ 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).

³⁹ 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).

⁴⁰ 15 U.S.C. §717f(e) (2012).

⁴¹ *Kleppe*, 427 U.S. at 402.

⁴² *Piedmont Env'tl. Council*, 558 F.3d at 316.

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

⁴⁴ 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).

natural gas development in the Appalachian Basin region.⁴⁵ 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.”⁴⁶

35. 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.”⁴⁷ 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.

36. 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.”⁴⁸ In support, Allegheny points to a programmatic EIS developed by the Department of Energy (DOE) and U.S. Bureau of Land Management (BLM) to consider the environmental impacts of solar energy development in six southwestern states and urged the Commission to adopt a similar approach for natural gas development in the Appalachian Basin.⁴⁹

37. 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 use its “unique vantage point” to work with pipeline companies and the public to consider the effects of a number of projects in one programmatic EIS.⁵⁰

⁴⁵ Allegheny April 29, 2016 Comments at 40-44; Natalie Pien April 29 Comments at 1-3.

⁴⁶ Allegheny April 29, 2016 Comments at 41 (citing *Kleppe*, 427 U.S. at 409-410).

⁴⁷ *Id.* at 42 (citing 2014 Programmatic Guidance at 11).

⁴⁸ *Id.* (citing 2014 Programmatic Guidance at 11).

⁴⁹ *Id.* at 44.

⁵⁰ *Id.* (citing Gov. Tom Corbett’s Aug. 19, 2014 Comments on the Atlantic Sunrise Project).

38. 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.⁵¹ 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 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.⁵²

39. 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.⁵³ In these circumstances, the Commission's longstanding practice of conducting 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."⁵⁴ Thus, here the Commission's environmental review of Dominion's actual proposed project in a discrete EA is appropriate under NEPA.

40. In sum, CEQ states that programmatic EISs 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

⁵¹ 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).

⁵² See, e.g., *Kleppe*, 427 U.S. at 401-02.

⁵³ 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.

⁵⁴ *Id.*

“provide information and analyses that can be incorporated by reference in future NEPA reviews.”⁵⁵ 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

41. CEQ’s regulations direct federal agencies to examine the indirect impacts of proposed actions.⁵⁶ Indirect impacts are defined as those “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁵⁷ 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.”⁵⁸ 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.

42. With respect to causation, “NEPA requires ‘a reasonably close causal relationship’ between the environmental effect and the alleged cause”⁵⁹ in order “to make an agency responsible for a particular effect under NEPA.”⁶⁰ As the Supreme Court explained, “a ‘but for’ causal relationship is insufficient [to establish cause for purposes of NEPA].”⁶¹

⁵⁵ 2014 Programmatic Guidance at 13.

⁵⁶ 40 C.F.R. § 1508.25(c) (2015).

⁵⁷ *Id.* § 1508.8(b).

⁵⁸ *Id.*

⁵⁹ *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752 at 767 (2004) (*Public Citizen*) (quoting *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)).

⁶⁰ *Id.*

⁶¹ *Id.*; see also *Sierra Club v. FERC*, No. 14-1275, slip op. at 15 (FERC need not examine everything that could conceivably be a but-for cause of the project at issue); *Sierra Club v. FERC*, No. 14-1249, slip op. at 13-14 (D.C. Cir. June 28, 2016) (FERC order authorizing construction of liquefied natural gas export facilities are not the legally relevant cause of increased production of natural gas).

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.⁶² 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.”⁶³

43. 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.”⁶⁴ NEPA requires “reasonable forecasting,” but an agency is not required “to engage in speculative analysis” or “to do the impractical, if not enough information is available to permit meaningful consideration.”⁶⁵

44. The Commission does not have jurisdiction over natural gas production. The potential impacts of natural gas production, with the exception of GHG emissions 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, the U.S. Environmental Protection Agency (EPA) regulates deep underground injection and disposal of wastewaters and liquids under the Safe Drinking Water Act, as well as 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.

45. As we have previously concluded in natural gas infrastructure proceedings, the environmental effects resulting from natural gas production are generally neither caused by a proposed pipeline or other natural gas infrastructure projects, nor are they reasonably foreseeable consequences of our approval of an infrastructure project, as contemplated by

⁶² *Metro. Edison*, 460 U.S. at 774.

⁶³ *Public Citizen*, 541 U.S. at 770; *see also Sierra Club v. FERC*, No. 14-1275, slip op. at 20 (affirming that *Public Citizen* is explicit that FERC, in authorizing liquefied natural gas facilities, need not consider effects, including induced production, that could only occur after intervening action by the Department of Energy); *Sierra Club v. FERC*, No. 14-1249, slip op. at 13-14 (D.C. Cir. June 28, 2016) (same); *EarthReports, Inc. v. FERC*, No. 15-1127, slip op. at 10 (D.C. Cir. July 15, 2016) (same).

⁶⁴ *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).

⁶⁵ *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1078 (9th Cir. 2011).

the CEQ regulations.⁶⁶ A causal relationship sufficient to warrant Commission analysis of the upstream production activity as an indirect impact would only exist if the proposed pipeline or Commission-jurisdictional infrastructure project would transport new production from a specified production area and such production would not occur in the absence of the proposed project facilities (i.e., there would be no other way to move the gas).⁶⁷ To date, the Commission has not been presented with a proposed infrastructure project that the record shows will cause the predictable development of gas reserves. In fact, the opposite causal relationship is 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 or gas infrastructure project 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.

46. Even accepting, *arguendo*, that a specific infrastructure project will cause 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. 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 the information necessary to reasonably foresee future production. We are aware of no forecasts by such entities, 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, 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

⁶⁶ 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), *pet. for review dismissed sub nom. Coal. for Responsible Growth v. FERC*, 485 Fed. App'x 472, 474-75 (2d Cir. 2012) (unpublished opinion).

⁶⁷ Cf. *Sylvester v. Army Corps of Eng'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. Fed. Aviation Admin.*, 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. U.S. Dep't 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).

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 they are “so nebulous” that we “cannot forecast [their] likely effects” in the context of an environmental analysis of the impacts related to construction and modification of natural gas pipeline facilities.⁶⁸

47. 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 on water resources.⁶⁹ The EPA has reached a similar conclusion.⁷⁰ 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.⁷¹ 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 DOE found that there may be a net positive impact in terms of climate change.⁷²

⁶⁸ *Habitat Educ. Ctr.*, 609 F.3d 897, 902 (7th Cir. 2010) (agency need not discuss projects too speculative for meaningful discussion).

⁶⁹ 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>.

⁷⁰ 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) (U.S. 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”).

⁷¹ DOE Addendum at 32.

⁷² *Id.* at 44.

a. **Causation**

48. Allegheny alleges that the Commission's environmental analysis of the Leidy South Project violated NEPA by failing to consider the indirect effects of natural gas production in Marcellus shale region, including the indirect emissions of methane resulting from natural gas production.⁷³ It states that because the primary receipt point for the Leidy South Project customers is in Clinton County, Pennsylvania, a region where natural gas production occurs, that the project is creating a "long-term reliance on natural gas production in this part of Pennsylvania."⁷⁴

49. 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) in *Colorado River Indian Tribes v. Marsh* (Central District of California 1985), which ignored that a stabilization project on a riverbank was a prerequisite for real estate development adjacent to the river.⁷⁵

50. The record in this proceeding does not demonstrate the requisite reasonably close causal relationship between the impacts of future natural gas production and the Leidy South Project that would necessitate further analysis.⁷⁶ 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 Leidy South Project is responding to the need for transportation, not creating it.⁷⁷

⁷³ Allegheny April 29, 2016 Comments at 13-21; 25-27.

⁷⁴ *Id.* at 15-16.

⁷⁵ *Colorado River Indian Tribes v. Marsh*, 605 F. Supp 1425 (C.D. Cal. 1985).

⁷⁶ *Coal. for Responsible Growth & Res. Conservation v. FERC*, 485 F. App'x 472, 474 (2d Cir. 2012) (unpublished opinion) (rejecting argument that the pipeline project authorized by FERC would serve as a catalyst for Marcellus shale development in the Pennsylvania counties crossed by the pipeline).

⁷⁷ Dominion's May 15, 2015 Application at 1-2.

51. Here, Allegheny, like the environmental groups in *Central New York Oil and Gas Co., LLC* case,⁷⁸ seeks 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 Leidy South Project.⁷⁹ 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”⁸⁰ 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.’”⁸¹ The Commission determined, and the court agreed, that the Commission need not consider the environmental impacts of production from the Marcellus Shale region when authorizing a pipeline project that would connect an interstate gas pipeline to a specific Marcellus Shale gas production region.⁸²

52. 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.⁸³ Rather, that new pipeline created a hub line that enabled gas to flow onto three major interstate pipeline systems.⁸⁴ Thus, the Commission

⁷⁸ *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).

⁷⁹ *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).

⁸⁰ *Cent. N.Y. Oil & Gas Co., LLC*, 138 FERC ¶ 61,104 at P 5.

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

⁸² *See id.* at P 37 (2011) (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).

⁸³ *Cent. N.Y. Oil & Gas Co., LLC*, 137 FERC ¶ 61,121 at P 91.

⁸⁴ *Id.*

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.⁸⁵

53. 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.⁸⁶ Moreover, the Leidy South 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 Dominion's existing system.⁸⁷ Thus, here, any link between the Leidy South Project and Marcellus Shale gas production is more attenuated than the *Central New York* case.

54. Moreover, as we have explained in other proceedings, a number of factors, such as domestic natural gas prices and production costs drive new drilling.⁸⁸ If the Leidy South 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

⁸⁵ *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").

⁸⁶ *Id.*

⁸⁷ *See* Application at 14.

⁸⁸ *Rockies Express Pipeline LLC*, 150 FERC ¶ 61,161, at P 39 (2015) (*Rockies Express*). *See also* *Sierra Club v. FERC*, No. 14-1249, slip op. at 14 (finding that FERC adequately explained why it was not reasonably foreseeable that its authorization of greater capacity at an LNG export terminal would induce additional domestic natural gas production); *Sierra Club v. Clinton*, 746 F. Supp. 2d 1025, 1045 (D. Minn. 2010) (holding that the U.S. Department of State, in its environmental analysis for an oil pipeline permit, properly decided not to assess the transboundary impacts associated with oil production because, among other things, oil production is driven by oil prices, concerns surrounding the global supply of oil, market potential, and cost of production); *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).

of transportation.⁸⁹ Again, any such production would take place pursuant to the regulatory authority of state and local governments.⁹⁰

55. 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 riprap⁹¹ to stabilize a portion of the shoreline along the Colorado River.⁹² 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.⁹³ The Court determined that the Corps – the agency responsible for issuing a permit for the riprap – 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.⁹⁴ *Colorado River* highlights the close causal relationship necessary to mandate consideration of indirect impacts – a causal link that is absent here.

b. Reasonable Foreseeability

56. Allegheny contends that natural gas production in the Marcellus and Utica Shale formations is a reasonably foreseeable impact, and that because speculation is implicit in NEPA, there is no need to know the precise location, scale, scope, and timing of shale gas

⁸⁹ *Rockies Express*, 150 FERC ¶ 61,161 at P 39.

⁹⁰ See EA at 7 (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).

⁹¹ Riprap is large boulders placed along shorebanks to stabilize the banks and prevent erosion.

⁹² *Colorado River*, 605 F. Supp. at 1432-34.

⁹³ *Id.* at 1428.

⁹⁴ *Id.* at 1433. (Corps violated NEPA by failing to consider the indirect and cumulative impacts of the residential and commercial development where it was “reasonably foreseeable that the placement of the ripraps was just a stepping stone to major development in the area”).

drilling.⁹⁵ Rather, it maintains that there is adequate information available to “engage in reasonable forecasting,”⁹⁶ 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].”⁹⁷

57. We disagree. Even if a causal relationship between the Leidy South Project 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 and location of any additional wells are matters of speculation. As we have explained in numerous other proceedings, factors such as market prices and production costs, among others, drive new drilling.⁹⁸ 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.⁹⁹ 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

⁹⁵ Allegheny April 29, 2016 Comments at 18-19.

⁹⁶ *Id.* at 20.

⁹⁷ *Id.* (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)).

⁹⁸ *Rockies Express*, 150 FERC ¶ 61,161, at P 39 (2015). *See also Sierra Club v. Clinton*, 746 F. Supp. 2d 1025, 1045 (D. Minn. 2010) (holding that the U.S. Department of State, in its environmental analysis for an oil pipeline permit, properly decided not to assess the transboundary impacts associated with oil production because, among other things, oil production is driven by oil prices, concerns surrounding the global supply of oil, market potential, and cost of production); *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).

⁹⁹ *See, e.g., Habitat Educ. Ctr. v. U.S. Forest Serv.*, 609 F.3d 897 (7th Cir. 2010) (holding that an agency does not fail to give a project a “hard look” for purposes of NEPA simply because it omits from discussion a future project so speculative that it can say nothing meaningful about its cumulative effects).

do the impractical, if not enough information is available to permit meaningful consideration.”¹⁰⁰

58. 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.’”¹⁰¹ Allegheny also cites *Mid States Coalition for Progress v. Surface Transportation Board*,¹⁰² (*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.”¹⁰³

59. 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.¹⁰⁴ 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 ensuing environmental effects.¹⁰⁵ Here, as discussed above, neither the nature *nor* the extent of the effect is reasonably foreseeable. Specifically, there is no record evidence that the Leidy South Project will induce

¹⁰⁰ *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) (speculation in an EIS is not precluded, but the agency is not obliged to engage in endless hypothesizing as to remote possibilities).

¹⁰¹ Allegheny’s April 29, 2016 Comments at 20, 22 (citing *Delaware Riverkeeper*, 753 F.3d at 1310 (quoting *Scientists’ Ins. For Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973))).

¹⁰² 345 F.3d 520 (8th Cir. 2003).

¹⁰³ *Id.* at 549.

¹⁰⁴ *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” Sierra Club’s challenge that FERC failed to consider indirect impacts of natural gas production and its claim that increased natural gas production stemmed from FERC’s authorization of liquefied natural gas export facilities).

¹⁰⁵ *Mid States*, 345 F.3d at 549.

incremental production of natural gas and, even if additional gas is induced, the amount, timing, and location of such development activity is speculative.¹⁰⁶ 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.”¹⁰⁷

60. 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.¹⁰⁸ Reasonable foreseeability was not at issue.

3. Segmentation of Non-jurisdictional Facilities

61. Allegheny asserts that the Commission segmented its environmental analysis of this project and the construction of two power plants: the Panda Stonewall Power Project, which would be located on a 101-acre site near Leesburg, in Loudoun County, Virginia; and the Panda Mattawoman Power Plant, which would be located on an 88-acre site in Brandywine, Prince George’s County, Maryland (together, the Panda Power Plants).

Specifically, Allegheny argues that the Leidy South Project and the Panda Power Plants are “connected” or “cumulative” actions under section 1508.25(a)(1) of the regulations implementing NEPA,¹⁰⁹ and that the Commission must conduct a combined review of the Leidy South Project with the Panda Power Plants.

62. The requirement that an agency consider connected or cumulative actions in a single environmental document is to “prevent agencies from dividing one project into

¹⁰⁶ 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”).

¹⁰⁷ *Sierra Club v. FERC*, No. 14-1275, slip op. at 18.

¹⁰⁸ *Del. Riverkeeper Network*, 753 F.3d at 1318 (emphasizing the importance the Court placed on the overlapping timing of the four projects).

¹⁰⁹ 40 C.F.R. § 1508.25(a)(1) (2015).

multiple individual actions” with less significant environmental effects.¹¹⁰ With the exception of hydropower projects, the Commission has no authority over the construction or maintenance of power generating plants. Accordingly, the Panda Power Plants are non-jurisdictional projects that are not “federal actions”¹¹¹ subject to the Commission’s environmental review under NEPA.¹¹² Thus, the Commission did not impermissibly segment its environmental review.

63. Nevertheless, in considering cumulative impacts attributable to Dominion’s proposed Leidy South Project, the EA identifies the Panda Stonewall Project as one project that may, when its impacts are added to those of the proposed action, result in cumulative environmental impacts.¹¹³ The EA found that, because the location of the proposed Stonewall M&R Station was already cleared for the power project, impacts of the Stonewall M&R Station on geology, soils, groundwater, wetlands, vegetation, habitat, wildlife, and cultural resources, when added to the impacts of the power plant, are not expected to result in significant cumulative impacts on these resources. However, due to the spatial and temporal overlap of the Stonewall M&R Station and the power project, cumulative impacts on land use and aesthetics, air quality, noise, and GHG emissions/climate change could occur.¹¹⁴ The EA’s cumulative impact analysis is discussed more fully below.

64. Further, the Commission notes that the State of Maryland conducted a regulatory review of the proposed Mattawoman Energy Center, ultimately determining that the project site was suitable and that the project could be constructed and operated in

¹¹⁰ *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)).

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

¹¹² *See* EA at 6.

¹¹³ The EA explains that no cumulative impacts from the construction and operation of the proposed Panda Mattawoman Power Plant would be expected, as it is more than 40 miles away from proposed project facilities, and therefore outside the 30-mile region of influence considered for this analysis. *See* EA at B-4.

¹¹⁴ EA at 81-89.

compliance with all applicable environmental regulations, and setting forth environmental requirements regarding all affected resources.¹¹⁵ As part of its review, the state conducted a thorough environmental review of the project.¹¹⁶ That review concluded, among other things, that, if constructed and operated in accordance the state's recommended licensing conditions, the project would have minimal impacts on visibility, vegetation, wildlife, soils, and growth in the region,¹¹⁷ would have no significant impacts on wetland communities;¹¹⁸ noted no impacts on rare, threatened, and endangered species;¹¹⁹ would have no impact on historic properties;¹²⁰ and would not cause significant noise impacts.¹²¹

65. With respect to the Stonewall Power Project, the Commonwealth of Virginia also conducted a review, though its review process was somewhat different. Rather than preparing its own environmental document, the Virginia Department of Environmental Quality sent copies of an applicant-prepared environmental assessment to other state agencies for their comments. The environmental assessment prepared by Green Energy Partners/Stonewall LLC discusses potentially affected resources, stating that, among other things, necessary state and federal wetlands authorization for the project have been received; consultation with state and federal agencies revealed no threatened or endangered species in the project area; there were no anticipated adverse impacts to historic properties; there were no anticipated impacts to wildlife, agricultural lands, or

¹¹⁵ See letter from Joseph Bartenfelder (Secretary, Department of Agriculture), David R. Craig (Secretary, Department of Planning), A. Leigh Williams, Esq. (Director, Maryland Energy Administration), R. Michael Gill (Secretary, Department of Business and Economic Development), Peter R. Rahn (Secretary, Department of Transportation), Ben Grumbles (Secretary, Department of the Environment), and Mark J. Belton, Secretary, Department of Natural Resources) to W. Kevin Hughes) (Chairman, Public Service Commission) (Case No. 9330 July 10, 2015).

¹¹⁶ Environmental Review of the Proposed Mattawoman Energy Center Project (Case No. 9330 July 10, 2015).

¹¹⁷ *Id.* at 6-2.

¹¹⁸ *Id.* at 6-4.

¹¹⁹ *Id.* at 6-5-6-6.

¹²⁰ *Id.* at 6-14.

¹²¹ *Id.* at 6-15.

recreation areas; and noise levels from the project would not exceed county-established limits.¹²² State agencies, some of which provided recommended mitigation measures, did not disagree with these findings.¹²³ On May 13, 2014, the Virginia State Corporation Commission issued an order granting the application to construct and operate the Stonewall Power Project, adopting various of the recommended environmental measures, and concluding that the project would produce significant economic benefits and that environmental concerns had been addressed.¹²⁴

66. With respect to air quality, the Maryland Public Service Commission found the proposed Mattawoman Energy Center would not cause any significant impacts to air quality and would not adversely affect the attainment of National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments. Similarly, the environmental assessment reviewed by the Virginia State Corporation Commission stated that computer modeling shows that the Stonewall Power Project would not cause any significant impacts to air quality and would not adversely affect the attainment of NAAQS. Moreover, the Commission's EA quantifies the greenhouse gas emission impacts assuming that the entire amount of natural gas to be transported by the Leidy South Project (0.155 Bcf per day) is used as fuel by gas-fired power plants.¹²⁵

67. As indicated above, the Virginia State Corporation Commission authorized construction of the Stonewall Project on May 13, 2014. The Maryland Public Service Commission approved the Panda Mattawoman Power Plant on January 12, 2016. Based on Maryland's and Virginia's analyses of the Mattawoman Energy Center and the Stonewall Power Project, respectively, we conclude that these facilities will not result in additional environmental impacts that alter our conclusions here.

¹²² Green Energy Partners/Stonewall LLC Environmental Assessment at 2-6.

¹²³ See letter from Ellie Irons, EIR Project Manager (Virginia Department of Environmental Quality) to Mr. Joel H. Peck (Virginia State Corporation Commission) (Application of Green Energy Partners/Stonewall for Construction and Operation of a 750 MW Natural Gas-Fired Combined-Cycle Electric Generating Facility in Loudoun County, PUE-2013-00104 (reviewed under DEQ # 13-181S) (dated December 19, 2013).

¹²⁴ Application of Green Energy Partners/Stonewall LLC, Case No. PUE-2013-00104, Final Order.

¹²⁵ EA at 72 (Table B-16).

4. Cumulative Impacts

68. 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”¹²⁶ The requirement that an impact must be “reasonably foreseeable” to be considered in an NEPA analysis applies to both indirect and cumulative impacts.¹²⁷

69. 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.”¹²⁸ 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.”¹²⁹ 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.”¹³⁰ 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.¹³¹

70. 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

¹²⁶ 40 C.F.R. § 1508.7 (2015).

¹²⁷ See *Sierra Club v. FERC*, No. 14-1275 slip op. at 20-21.

¹²⁸ *Kleppe*, 427 U.S. at 413.

¹²⁹ 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.

¹³⁰ *Natural Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

¹³¹ See CEQ, *Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis* at 2-3 (June 24, 2005) (2005 CEQ Guidance), http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PastActsCumulEffects.pdf.

“region of influence” in which various resources may be affected by a proposed project and other past, present, and reasonably foreseeable future actions.¹³² 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.¹³³

71. Allegheny and MCRC both maintain that the EA’s analysis of cumulative impacts was insufficient. Allegheny contends that the Commission’s cumulative impacts analysis for the Leidy South Project is “impermissibly restrictive,” and alleges that the EA failed to consider the cumulative impacts on wildlife, habitat, and air quality resulting from the combined effects of the Leidy South Project, other pipeline expansions and shale gas development in the Marcellus and Utica Shale formations. In support of this argument, Allegheny cites findings from the CEQ, the New York State Department of Environmental Conservation (New York DEC), U.S. Fish and Wildlife Service (FWS), and several academic sources that broadly conclude natural gas production and infrastructure can have adverse effects on these resources.

72. In considering cumulative impacts, CEQ advises that an agency first identify the significant cumulative effects issues associated with the proposed action.¹³⁴ The agency should then establish the geographic scope for analysis.¹³⁵ Next, the agency should establish the time frame for analysis, equal to the timespan of a proposed project’s direct and indirect impacts.¹³⁶ Finally, the agency should identify other actions that potentially affect the same resources, ecosystems, and human communities that are affected by the

¹³² See, e.g., *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,255, at P 113 (2014).

¹³³ *Id.* P 120.

¹³⁴ 1997 CEQ Guidance at 11.

¹³⁵ *Id.*

¹³⁶ *Id.*

proposed action.¹³⁷ 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.¹³⁸

73. The cumulative effects analysis in the EA took precisely the approach the CEQ guidance advises.¹³⁹ Appendix B of the EA lists present and reasonably foreseeable projects or actions that occur within the same region of influence as the Leidy South Project, and identifies projects or actions that, when their effects are combined with those of the Leidy South Project, may result in cumulative impacts.¹⁴⁰

74. Because all work would be completed at existing facilities and no wetlands or waterbodies are expected to be affected by the project, the EA found that impacts on habitat and wildlife would be largely contained within or adjacent to proposed project workspaces. Therefore, the EA evaluated other projects or actions within the same sub-watershed as the Leidy South Project, including several residential and commercial development projects that would result in the permanent loss of habitat and wildlife.¹⁴¹ However, the EA found that because these developments were located several miles from the Leidy South Project, they are not expected to result in cumulative impacts on these resources.¹⁴² Based on the small scale and minor, temporary and highly localized

¹³⁷ *Id.*

¹³⁸ *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 special competency of the agenc[y],” and is overturned only if arbitrary and capricious. *See Kleppe*, 427 U.S. at 414-15.

¹³⁹ *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.

¹⁴⁰ *See* EA at 82 (identifying the geographic area in which project impacts will be felt).

¹⁴¹ EA at 83.

¹⁴² *Id.*

impacts of the Leidy South Project, the majority of impacts on habitat and wildlife would be temporary and most resources would later return to pre-construction conditions.¹⁴³

75. The EA found that other projects and actions, when combined with the construction of the Leidy South Project, would result in cumulative adverse impacts on air quality.¹⁴⁴ Therefore, the EA considered other projects and actions that overlap in time and location with construction activities and found that emissions from construction would be short-term and highly localized, and their effects would be mitigated by the large geographical area over which the project facilities are located.¹⁴⁵ It concluded that that these construction-related emissions would not have a significant cumulative impact on air quality in the region.¹⁴⁶

76. With respect to the cumulative impact of operational emissions, the EA considered other projects and actions with potentially significant long-term stationary emission sources within a 30-mile radius of the project facilities, explaining that long-term air quality impacts are expected to be limited to within that range.¹⁴⁷ The proposed modifications at the Finnefrock, Chambersburg, and Myersville Compressor Stations would result in long-term air emissions from the combustion of natural gas and fugitive natural gas leaks.¹⁴⁸ Nevertheless, air dispersion modeling that took into account other projects or actions in addition to the proposed project demonstrated that air quality impacts from the compressor station modifications would not cause or significantly contribute to a violation of the NAAQS, and that a cumulative impact on air quality during project operation would not be significant.¹⁴⁹

¹⁴³ EA at 82.

¹⁴⁴ EA at 85-86.

¹⁴⁵ EA at 82, 85.

¹⁴⁶ EA at 85.

¹⁴⁷ EA at 82. The 30-mile (50 kilometer) region of influence used to evaluate cumulative impacts to air quality is a well-established distance that is used by the U.S. EPA for cumulative modeling of large PSD sources. *See* 40 C.F.R. Pt. 51, App. W, sec. 4.1 (Traditional Stationary Source Models).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

77. Allegheny contends that the EA should have considered the combined impact of the operating emissions from the Stonewall M&R Station and the Panda Stonewall Power Project, which will be located on the same property. The power project was approved by the Virginia State Corporation Commission in May 2014 to meet regional electricity demand. It is a major source that must comply with the Clean Air Act's (CAA) PSD program and was required to complete detailed air dispersion modeling to demonstrate compliance with the NAAQS.¹⁵⁰ The modeling included a background concentration that was added to the modeled concentration to account for other sources not directly simulated in the model. The power project will also be subject to state emission limits.

78. The EA explains that the potential emissions from the Stonewall M&R Station comprise only 1 percent of the major source threshold for Title V permitting (100 TPY) and 0.4 percent of the applicable PSD major source threshold (250 TPY) under the CAA. Thus, the EA concludes that, although the Stonewall M&R Station would be on the same property as the Panda Stonewall Power Project, emissions from it would be negligible and are not expected to significantly contribute to a cumulative effect on air quality in the area.

79. 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.¹⁵¹ 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 "has an obligation under NEPA to take a hard look at these impacts on a much broader scale..."¹⁵² Allegheny asserts that because speculation is implicit in NEPA, the Commission must forecast reasonably foreseeable future actions even if they are not specific proposals.¹⁵³

80. Commission staff appropriately determined that any impacts of the Leidy South Project will not add to incremental cumulative environmental impacts of Marcellus and

¹⁵⁰ EA at 85-86.

¹⁵¹ Allegheny's April 29, 2016 Comments at 39 (citing *Nat. Res. Def. Council v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988) (*Hodel*)).

¹⁵² *Id.* at 33 (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, 11035-37 (Oct. 7, 2014) (published online on Sept. 4, 2014)).

¹⁵³ *Id.* at 42.

Utica Shale gas production. 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.

81. Because the impacts associated with Dominion’s Leidy South Project would primarily be limited to existing compressor and M&R station sites it proposes to modify, the EA concluded that the potential for cumulative impacts would be localized, with the exception of air quality. Commission staff identified the appropriate “region 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 Dominion’s proposed Leidy South Project, which involves temporary construction impacts on 151.6 acres and permanent impacts to 39.2 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.

82. 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.

83. 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*. This is consistent with the CEQ’s Guidance¹⁵⁴ and case law.¹⁵⁵ There is a geographic limit to

¹⁵⁴ EA at 36-38.

¹⁵⁵ 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)).

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.”¹⁵⁶

84. 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).

85. In contrast, the “plan” before us is for the modification of existing facilities. Indeed, nearly all project construction would take place with areas previously affected by existing facilities. 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 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,”¹⁵⁷

¹⁵⁶ *TOMAC*, 433 F.3d at 864 (emphasis added) (quoting *Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002)).

¹⁵⁷ *Hodel*, 865 F.2d 288 at 297 (citing *Kleppe*, 427 U.S. at 410) (emphasis added).

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.

86. We find that, because nearly all project construction would be contained within previously disturbed areas at existing facilities, the cumulative impacts of the proposed project, when combined with other known or reasonably foreseeable projects, would be short-term and minimal, and would not contribute significantly to cumulative impacts.

5. Air Quality

87. Allegheny expressed concern about air quality impacts and the associated health effects resulting from the project facilities, and contends that the Commission may not use the issuance of air quality permits under the CAA to demonstrate that the project will have no significant air quality impact under NEPA.¹⁵⁸

88. Section B.7.1.2 of the EA describes the compressor station modeling analyses used to evaluate the cumulative air quality impacts, which include the total emissions from project facilities, existing background concentrations, and potentially significant neighboring emission sources. This type of modeling is beyond what is required by the state permitting process and provides a comprehensive and conservative analysis to ensure protection of public health and welfare. The EA analyzes the results of the modeling for the Finnefrock, Chambersburg, and Myersville Compressor Stations and concludes that the project compressor station modifications will result in continued compliance with the NAAQS, which are protective of human health, including children, the elderly, and sensitive populations.¹⁵⁹ The EA found that a similar modeling analysis was unnecessary for the Stonewall M&R Station because the potential emissions are small and not expected to have a significant impact on ambient air quality.¹⁶⁰ Therefore, with the mitigation measures proposed by Dominion, the EA concludes the construction and operation of the proposed project facilities will not have a significant impact on air quality in the project area or region.¹⁶¹

¹⁵⁸ Allegheny's April 29, 2016 Comments at 8.

¹⁵⁹ EA at 71.

¹⁶⁰ *Id.* at 70.

¹⁶¹ *Id.* at 70-72.

89. The MCRC contends that the EA does not account for potential episodic high exposures from the Myersville Compressor Station. Dominion's air quality analysis used the AERMOD screening model and assumed continuous operation at maximum rates for all existing and proposed compression equipment.¹⁶² Even with these conservative assumptions, the EA concludes that the modeling demonstrated compliance with the NAAQS, which, as stated above, are designed to be protective of public health. In addition, the Myersville Compressor Station is designed to comply with and will be required to maintain compliance with applicable regulations including new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAPs). Any deviations from these regulatory standards, including episodic high exposures, must be reported to EPA or the jurisdictional state agency responsible for air quality. Evaluations of unplanned events or startup emissions during the operation of the compressor station expansion are speculative. Because the project will comply with applicable regulations that are protective of public health, we conclude that the facility modifications are not likely to result in significant air quality impacts.

90. Citing a recent air quality modeling study by the Massachusetts Institute of Technology and information from the Environmental Health Perspective¹⁶³ and Southwest Pennsylvania Environmental Health Project, the MCRC contends that the EA lacks a substantive analysis of emissions impacts on the citizens of Myersville. As discussed above, the EA analyzed conservative air quality modeling in demonstrating that impacts from the compressor stations will be below the NAAQS, and the equipment will meet or exceed the requirements of all applicable NSPS and NESHAPs. Therefore, we concur with the conclusions of the EA that the facility modifications will not result in significant air quality impacts to the citizens of Myersville.

91. The MCRC states that the ambient air in the Middletown Valley (Myersville area) frequently experiences an inversion that affects air dispersion and results in a disproportionate impact on citizens of Myersville in comparison to other parts of Frederick County.¹⁶⁴ In support of this argument, MCRC presents a chart in which it attempts to correlate the Myersville area's higher population density (compared to the

¹⁶² AERMOD is an EPA-approved air quality quantitative modeling program that provides a comprehensive and conservative analysis of air quality impacts.

¹⁶³ The Environmental Health Perspective is a peer-reviewed journal of environmental and health research and news. It is affiliated with the National Institute of Environmental Health Sciences, the National Institutes of Health, and the U.S. Department of Health and Human Services.

¹⁶⁴ MCRC's April 28 Comments at 6.

rest of Frederick County) with a larger increase in air quality impacts. It also alleges that the Commission's modeling of air impacts from the Myersville Compressor Station is flawed because it used data from the monitoring station at Frederick Airport, which is more than 12 miles away from the Myersville area.

92. MCRC's arguments are unavailing. First, MCRC has not demonstrated that citizens of the Myersville area have been disproportionately affected by air quality impacts. The chart used by MCRC attempts to show that, because Myersville is located in a valley with a higher population density than the surrounding area, that air quality impacts are exacerbated in that area. However, MCRC fails to provide any evidence that the citizens of Myersville and the Middletown Valley experience increased levels of respiratory illness or other adverse impacts attributable to air quality. Additionally, the surface and upper air meteorological data used for the Myersville Compressor Station dispersion modeling analysis are the closest and most representative data available and, therefore, the meteorology used to evaluate air impacts in the EA are consistent with all state and federal requirements.

93. Allegheny claims that the EA understates the significance of indirect air emissions that would be caused by the Leidy South Project. Specifically, Allegheny points to the magnitude of the modeled nitrogen dioxide (NO₂) impacts compared to background concentration of NO₂ for the Finnefrock Compressor Station and questions the use of background NO₂ data in place of a single, constant numeric background concentration that would be applied to every modeled hour of the analysis. VDEQ notes that the Leesburg Compressor Station would be located in a designated ozone nonattainment area for nitrogen oxides (NO_x) and volatile organic compounds (VOC), and recommends that precautions are taken to restrict the emissions of NO_x and VOCs during construction.

94. The analysis in the EA conservatively assumes that the compression equipment (for both the Leidy Station¹⁶⁵ and Finnefrock Compressor Station) will be operated continuously at maximum capacity throughout the year. Additionally, the model uses the conservative ambient ratio method to determine NO₂ impacts when modeling all nitrogen oxides (NO and NO₂). Consequently, we find that the modeled NO₂ concentration is conservative and protective of air quality in the vicinity of the Finnefrock Compressor Station.

95. As discussed in the EA, Loudoun County, Virginia, where the Leesburg Compressor Station is located, is within the Northeast Ozone Transport Region (OTR), as designated in the CAA. States in this region are required to submit a State

¹⁶⁵ The Leidy Station is an existing compressor station located adjacent to the Finnefrock Compressor Station in Clinton County, PA.

Implementation Plan (SIP);¹⁶⁶ thus stationary sources such as the Leesburg Compressor Station are subject to more stringent permitting requirements (including for ozone precursors like NO_x and VOCs) and various regulatory thresholds are lower for the pollutants that form ozone, even if they meet the NAAQS.¹⁶⁷

96. With respect to the one-hour NO₂ background concentration, the use of a numeric (constant) value can overestimate the background concentration for short averaging period standards like the one-hour NO₂ NAAQS. Thus, the use of time varying background concentrations are not uncommon for completing a one-hour NO₂ analysis. For these reasons, we find that the use of an hourly NO₂ background file for the modeling is acceptable. Both the one-hour and annual NO₂ modeled concentrations, despite conservative operational and emission rate assumptions, were below the NAAQS.¹⁶⁸ Therefore, we concur with the EA's conclusion that the modifications to the Finnefrock Compressor Station will not have significant impacts on air quality.

6. Climate Change

97. Allegheny contends that the EA's use of the global warming potential (GWP)¹⁶⁹ in the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (AR4) of 25 for methane over a 100-year period in its analysis of GHG emissions associated with the construction and operation of the project is improper because the IPCC has published its Fifth Assessment Report (AR5), estimating the GWP for methane to be 36 over a 100-year period and 86 over a 20-year period.¹⁷⁰ Specifically, Allegheny believes the use of the 100-year period is inappropriate given the importance of timely action with regard to climate change.

¹⁶⁶ The CAA requires state and local air quality management agencies to develop SIPs in order to show how they will attain and maintain the NAAQS. *See* <https://www3.epa.gov/airquality/urbanair/sipstatus/overview.html>.

¹⁶⁷ EA at 58.

¹⁶⁸ *Id.* at 70.

¹⁶⁹ The global warming potential is a ratio relative to carbon dioxide that is based on the properties of the GHG's ability to absorb solar radiation as well as the residence time within the atmosphere. *See* EA at 58.

¹⁷⁰ The IPCC's 5th assessment report was finalized in November 2014. This report is available online at: http://www.ipcc.ch/publications_and_data/publications_and_data.shtml.

98. The EA appropriately relied on the GWP value for methane of 25 over a 100-year period because this is the value EPA established on November 29, 2013 in a rulemaking for reporting GHG emissions.¹⁷¹ Similarly, in this final rulemaking, EPA supported the adoption of the published IPCC AR4 GWP values over the AR5 values.¹⁷² We find no basis to dispute a conclusion reached by EPA in a rulemaking that was subject to public notice and comment.

7. Wildlife and Vegetation

99. The VDEQ indicates that the little brown bat and tricolor bat were added to the state endangered species list on April 1, 2016, after issuance of the EA. These species are not listed as federally threatened or endangered. The EA outlines that construction of the project will involve limited tree clearing within existing facility property lines. In addition, we accessed information from the Virginia Department of Game and Inland Fisheries which indicates that the nearest hibernacula for either the little brown bat or the tricolor bat are more than 74 miles away from any of the project facilities in Virginia. Therefore, we conclude that the project will not impact the little brown bat or tricolor bat.

100. Allegheny asserts that Commission staff's consultation with FWS on the northern long-eared bat and Indiana bat was based on incomplete information because it did not consider the effects of increased operational noise on these species. In support of its comment, Allegheny cites to a study that evaluated compressor station noise impacts on echo-locating bat species and found marginal evidence that compressor station noise may reduce activity levels of low-frequency echo-locating bat species. Because neither the northern long-eared bat nor the Indiana bat are low frequency echo-locating species, this study is inapposite. Allegheny points to a separate study that evaluated impacts of

¹⁷¹ EPA supported the 100-year time period over the 20-year period in its summary of comments and responses in the final rulemaking, *2013 Revisions to the Greenhouse Gas Reporting Rule and Final Confidentiality Determinations for New or Substantially Revised Data Elements*, establishing the methane GWP at 25 (Final Rule). 78 Fed. Reg. 71,904 (Nov. 29, 2013).

¹⁷² *Id.* In the Final Rule, EPA explained that using a GWP of 25 for methane over a 100-year period will ensure compatibility with the United Nations Framework Convention on Climate Change (UNFCCC), President Obama's Climate Action Plan, and the President's pledge to reduce U.S. GHG emissions by 17 percent below 2005 levels by 2020. EPA also explained that the GWP values in the IPCC's AR5 were unlikely to come into use by the UNFCCC or other widespread use for several years. It stated that, though the IPCC finalized AR4 in 2007, the UNFCCC only adopted those values for parties' Inventory submissions beginning in 2015.

broadband noise on foraging by gleaning bats. Neither the northern long-eared bat nor the Indiana bats are gleaning bats species, and there is insufficient information available to conclude that the broadband noise studied is comparable to compressor station noise. Further, staff's consultation with the FWS included information about the scope of the project and, as detailed in section B.4.3.2 of the EA, the FWS agreed that the project is not likely to adversely affect the Indiana bat or the northern long-eared bat.

101. Additionally, Dominion's recommended tree clearing restrictions will also minimize project impacts on federally listed bats. The EA indicates that tree clearing throughout the entirety of the project would occur only between September 1 and March 31 based on the *Adaptive Management Practices for Conserving Migratory Birds* document provided by the FWS Pennsylvania Field Office. However, on March 8, 2016 following issuance of the EA and additional consultation, the FWS' Virginia Field Office determined that tree clearing at the Leesburg Compressor Station should not occur between April 15 and September 15, rather than the timing restriction referenced for Pennsylvania. As such, we revised recommendation 11 from the EA accordingly, and have included this restriction in environmental condition 11 in Appendix B to this Order.

102. As stated in the EA, construction activities at the Myersville Compressor Station may result in clearing up to 0.5 acre of forest/woodland. As a result, the town of Myersville states that Dominion will be required to submit a Forest Conservation Plan to the town and provide either forest conservation at the site or payment in lieu of reforestation. Dominion has committed to obtaining all necessary permits prior to construction that will address the Town of Myersville's conservation recommendation.

8. Visual Aesthetics

103. MCRC restates concerns it previously raised in Docket No. CP12-072¹⁷³ regarding the visual impact of the Myersville Compressor Station, and contends that the EA did not adequately address the combined visual impact of the Leidy South Project and the existing compressor station. As explained in the EA, the modifications that will be constructed as part of the Leidy South Project will be similar in appearance and scale to the existing compressor station and will not occur within or near any local visual resource

¹⁷³ FERC proceeding in which the Commission authorized the construction and operation of the Myersville Compressor Station.

areas or visually sensitive areas.¹⁷⁴ Therefore, the facility modifications will not result in a significant cumulative visual impact in the area.

9. Safety

104. In its continued concern regarding the safety of the Myersville Compressor Station, the MCRC asserts that errors in the pipeline incident reporting process and accident statistical data, as well as overworked safety inspectors, are evidence that the U.S. Department of Transportation's Pipeline Hazardous Materials Safety Administration (PHMSA) cannot ensure public safety. More specifically, the MCRC asserts that Commission staff failed to evaluate the cumulative safety risk posed by the proposed expansion of the facility. The MCRC contends that staff did not consider a 2014 recommendation by the National Transportation Safety Board that PHMSA revise the Gas Transmission Pipeline Integrity Management Rules to include principal arterial roadways within the list of "identified sites" for determining the location of High Consequence Areas (HCA).

105. On April 8, 2016, PHMSA promulgated a proposed rule that would create a moderate consequence area (MCA) to identify additional non-HCA pipeline segments that would require integrity assessments, thus assuring timely discovery and repair of pipeline defects in MCA segments. Under this proposed rule, PHMSA would incorporate designated interstates, freeways, expressways, and other principal four-lane arterial roadways within the new definition of MCAs. The proposed rule has not been finalized at this time. However, in compliance with section 157.14(a)(9)(vi) of the Commission's regulations,¹⁷⁵ Dominion has certified that it will design, install, inspect, test, construct, operate, replace, and maintain the project facilities in accordance with federal safety standards and plans for maintenance and inspection. The Commission accepts this certification and does not impose additional safety standards other than PHMSA standards. Therefore, the EA properly concludes that the proposed modification of the Myersville Compressor Station will represent a minimal increase in risk to the public.

¹⁷⁴ See EA at 54; see also *Myersville*, 783 F.3d at 1325 (rejecting MCRC's concerns about the Myersville station's impact on property values based in part on the finding that "views of the compressor station would be significantly screened by natural vegetation both in summer and winter").

¹⁷⁵ 18 C.F.R. § 157.14(a)(9)(vi) (2016).

10. Alternatives

106. MCRC states that the EA does not adequately consider existing systems as alternatives to the Leidy South Project.¹⁷⁶ The EA states that Dominion's PL-1 pipeline and the Columbia Gas Transmission system are the only existing systems that, due to their proximity to the Panda Stonewall Power Project, could serve the needs of Dominion's customers.¹⁷⁷ In order to meet capacity and natural gas demand at the power project, expansion of the Columbia Gas system would require approximately 40 miles of new pipeline, which would impact over 400 acres of land.¹⁷⁸ Looping Dominion's system, rather than increasing compression as proposed, would require installing approximately 68 miles of pipeline loop, and would impact over 800 acres of land.¹⁷⁹ The EA concludes that neither alternative would offer a significant environmental advantage to the Leidy South Project, which is expected to impact approximately 152 acres of land. Based on the EA's consideration of these alternatives, the Commission rejects both of MCRC's proposed alternatives because they would create a greater environmental disturbance than the proposed project.¹⁸⁰

107. MCRC believes that the EA does not adequately consider electric compression for the Myersville Compressor Station modifications. We previously considered electric compression at the Myersville Compressor Station in Docket No. CP12-72 and determined that, due to the environmental impacts associated with construction and operation of the necessary electric transmission infrastructure (transmission line, substation, etc.), electric-driven compression would not provide a significant

¹⁷⁶ MCRC's April 28, 2016 Comments.

¹⁷⁷ EA at 92.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *See Myersville*, 783 F.3d at 1324 (affirming FERC's rejection of MCRC's proposed looping alternative to the construction of the Myersville station because the 30-mile-long loop would require a significantly greater amount of land and cause greater environmental impacts).

environmental advantage to natural gas-driven compression.¹⁸¹ In addition, emissions from the power plant providing electricity would contribute to air quality impacts.¹⁸² Thus, an electric-driven compressor station alternative would not provide a significant environmental advantage to the incremental expansion of the existing natural gas-fired compression at the Myersville Compressor Station.

108. A stakeholder contends that the EA fails to consider renewable energy or energy efficiency programs as alternatives to the proposed action. The EA explains that, while renewable sources of energy or programs that promote energy efficiency may be reasonable alternatives to power-generating facilities, they are not alternatives to the Leidy South Project, which is a natural gas transmission project.¹⁸³ The EA explains that authorizations related to how a region will meet its demand for electricity are beyond the scope of the Commission's jurisdiction, and are therefore not considered in the EA.¹⁸⁴

11. Additional Comments

109. USDA raised concerns about possible impacts on properties with Natural Resource Conservation Service (NRCS) easements in Centre and Franklin Counties, Pennsylvania. However, after receiving specific geographic data for the project, USDA confirmed on the public record that the project will not impact any NRCS easement holdings.¹⁸⁵

110. The VDEQ summarized the state permitting requirements for the project and recommended adherence to applicable state and local erosion and sediment control and stormwater management laws and regulations. As summarized in Appendix A of the EA, Dominion states that it will obtain all necessary state permits and obtain applicable erosion and sediment control plan reviews. In addition, environmental condition 7 in

¹⁸¹ See Environmental Assessment for Dominion's Allegheny Storage Project, Docket No. CP12-72-000, at 97-98 (filed June 2012) (finding use of electric compressors at Myersville station would require 10 additional acres of land for a new power line); see also *Dominion Transmission, Inc.*, 141 FERC ¶ 61,240, at PP 61,108 (2012) (rejecting use of electric compressors as not environmentally preferable).

¹⁸² See Dominion's September 4, 2015 Response to Data Request at 55-56.

¹⁸³ EA at 7.

¹⁸⁴ *Id.*

¹⁸⁵ See USDA's June 6, 2016 filing.

Appendix B of this Order requires Dominion to obtain all federal authorizations prior to construction, which will include certain authorizations delegated to VDEQ.

12. Environmental Analysis Conclusion

111. We have reviewed the information and analysis contained in the EA regarding potential environmental effects of the Leidy South Project. Based on our consideration of this information and the discussion above, we agree with the conclusions presented in the EA and find that the project, if constructed and operated as described in the EA, is an environmentally acceptable action. We are accepting the environmental recommendations in the EA and are including them as conditions in Appendix B to this Order.

112. 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.¹⁸⁶

IV. Conclusion

113. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto, and all comments submitted herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Dominion Transmission, Inc. authorizing it to construct and operate the Leidy South Project, as described and conditioned herein, and as more fully described in the application.

¹⁸⁶ 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, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and 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).

(B) The certificate authority issued in Ordering Paragraph (A) is conditioned on Dominion's:

- (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 Commission regulations including, but not limited to, Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;
- (3) compliance with the environmental conditions in Appendix B to this Order; and
- (4) execution, prior to the commencement of construction, of contracts for the firm service volumes equivalent to those reflected in its precedent agreements.

(C) Dominion's incremental base reservation charge under Rate Schedule FT is approved, subject to the condition described above.

(D) Dominion shall file actual tariff records with the incremental base reservation charge and the incremental base usage charge no earlier than 60 days, and no later than 30 days, prior to the date the project facilities go into service.

(E) Dominion shall keep separate books and accounting of costs attributable to the proposed incremental services, as described above.

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

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix A

List of intervenors:

- Allegheny Defense Project
- Anadarko Energy Services Company
- Atmos Energy Corporation
- Atmos Energy Marketing, LLC
- Chevron U.S.A., Inc.
- Conoco Phillips Company
- Consolidated Edison Company of New York, Inc. and Philadelphia Gas Works (joint motion)
- Direct Energy Business Marketing, LLC
- Exelon Corporation
- Heartwood
- Myersville Citizens for a Rural Community, Inc.
- National Fuel Gas Distribution Corporation
- National Grid Gas Delivery Companies
- New Jersey Natural Gas Company
- New York State Electric and Gas Corporation and Rochester Gas and Electric Corporation (joint motion)
- NJR Energy Services Company
- Noble Energy, Inc.
- Panda Power Funds
- Piedmont Natural Gas Company, Inc.
- Public Service Company of North Carolina
- SWEPI, L.P.
- Washington Gas Light Company
- Wild Virginia

Appendix B Environmental Conditions

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

1. Dominion Transmission, Inc. (Dominion) 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. Dominion must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during the construction and operation activities 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**, Dominion 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 EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as described in the EA, as supplemented by filed maps and/or alignment sheets. **As soon as they are available, and before the start of construction**, Dominion shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all work sites approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances

must be written and must reference locations designated on these alignment maps/sheets.

5. Dominion shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying any facility relocations, staging areas, storage/equipment 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 the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

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

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of this authorization and before construction begins,** Dominion shall file an Implementation Plan with the Secretary for review and written approval by the Director of the OEP. Dominion must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Dominion would 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 Dominion would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - c. the number of EIs assigned per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instruction Dominion would give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
 - f. the company personnel (if known) and specific portion of Dominion's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Dominion would follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Beginning with the filing of its Implementation Plan, Dominion shall file updated status reports with the Secretary on a **monthly basis until all construction and restoration activities are complete**. On request, these status reports must also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Dominion'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 that 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 Dominion from other federal, state, or local permitting agencies concerning instances of noncompliance, and Dominion's response.
8. **Prior to receiving written authorization from the Director of the OEP to commence construction of any project facilities**, Dominion shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
9. Dominion must receive written authorization from the Director of OEP **before placing the project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the areas affected by the project are proceeding satisfactorily.
10. **Within 30 days of placing the authorized facilities in service**, Dominion shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions Dominion has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
11. Dominion shall not clear trees between April 15 and September 15 at the Leesburg Compressor Station.
12. **Dominion shall file with the Secretary prior to commencing construction** at the Stonewall Metering and Regulating Station, a revised consultation letter and corresponding Virginia Department of Historic Resources concurrence that no historic properties are affected by the modified area of potential effect.
13. Dominion **shall not begin construction** of facilities and/or use of staging, storage, or temporary work areas and new or to-be-improved access roads at the Leidy Compressor Station **until**:

- a. Dominion files with the Secretary:
 - (1) remaining cultural resources survey report(s);
 - (2) site evaluation report(s) and avoidance/treatment plan(s), as required; and
 - (3) comments on the cultural resources reports and plans from the Pennsylvania State Historic Preservation Office and any interested Indian tribes.
 - b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
 - c. the FERC staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Dominion in writing that treatment plans/mitigation measures (including archaeological data recovery) may be implemented and/or construction may proceed.
14. Dominion shall file noise surveys with the Secretary **no later than 60 days** after placing each expanded compressor station (i.e., Finnefrock, Chambersburg, Myersville, and Leesburg) in service. If a full load condition noise survey is not possible, Dominion shall provide an interim survey at the maximum possible horsepower load and provide the full load survey **within 6 months**. If the noise attributable to the operation of all of the equipment at the compressor station, under interim or full horsepower load conditions, exceeds a day-night sound level of 55 A-weighted decibels at any nearby noise sensitive areas, Dominion shall file a report on what changes are needed and should install the additional noise controls to meet the level **within 1 year** of the in-service date. Dominion shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days after it installs the additional noise controls**.