

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 24, 2014

Decided June 6, 2014

No. 13-1015

DELAWARE RIVERKEEPER NETWORK, ET AL.,
PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

TENNESSEE GAS PIPELINE COMPANY, LLC AND STATOIL
NATURAL GAS, LLC,
INTERVENORS

On Petition for Review of an Order
of the Federal Energy Regulatory Commission

Aaron Stemplewicz argued the cause for petitioners. With him on the briefs was *Susan Kraham*. *Jane P. McClintock* entered an appearance.

Karin L. Larson, Attorney, Federal Energy Regulatory Commission, argued the cause for respondent. With her on the brief were *David L. Morenoff*, Acting General Counsel, and *Robert H. Solomon*, Solicitor.

John F. Stoviak argued the cause for intervenors. With him on the brief were *Pamela S. Goodwin*, *Thomas S.*

Schaufelberger, William G. Myers III, and Kirstin Elaine Gibbs. Christopher M. Heywood entered an appearance.

Before: BROWN, *Circuit Judge*, and EDWARDS and SILBERMAN, *Senior Circuit Judges*.

Opinion for the Court filed by *Senior Circuit Judge* EDWARDS.

Opinion filed by *Circuit Judge* BROWN concurring in part and concurring in the judgment.

Concurring opinion filed by *Senior Circuit Judge* SILBERMAN.

EDWARDS, *Senior Circuit Judge*: In May 2012, the Federal Energy Regulatory Commission (“Commission” or “FERC”) issued a certificate of public convenience and necessity to Tennessee Gas Pipeline Company, L.L.C. (“Tennessee Gas”), authorizing it to build and operate the Northeast Upgrade Project (“Northeast Project”). The project included five new segments of 30-inch diameter pipeline, totaling about 40 miles, and modified existing compression and metering infrastructure. Petitioners, Delaware Riverkeeper Network, New Jersey Highlands Coalition, and Sierra Club, New Jersey Chapter (collectively, “Riverkeeper”), contend, *inter alia*, that in approving the Northeast Project, FERC violated the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321-4370h, by: (1) segmenting its environmental review of the Northeast Project – *i.e.*, failing to consider the Northeast Project in conjunction with three other connected, contemporaneous, closely related, and interdependent Tennessee Gas pipeline projects – and (2) failing to provide a meaningful analysis of the cumulative

impacts of these projects to show that the impacts would be insignificant.

The Northeast Project upgraded a portion of a much longer natural gas pipeline known as the 300 Line. Taken together, the Northeast Project and the three other connected, closely related, and interdependent Tennessee Gas upgrade projects on the 300 Line constituted a complete upgrade of almost 200 miles of continuous pipeline. FERC was responsible for the environmental review of these projects because, under the Natural Gas Act, any party seeking to construct a facility for the transportation of natural gas in interstate commerce must first obtain a certificate of public convenience and necessity from the Commission. 15 U.S.C. § 717f(c)(1)(A). And before FERC may issue such a certificate, it must satisfy the requirements of NEPA by identifying and evaluating the environmental impacts of the proposed action. This means that FERC was required to prepare an Environmental Assessment (“EA”) and, if significant impacts were found, to prepare a more comprehensive Environmental Impact Statement (“EIS”). 40 C.F.R. § 1501.4.

The 300 Line carries natural gas from wells in western Pennsylvania to points of delivery east of Mahwah, New Jersey. When it was first constructed in the 1950s, the entire pipeline was built of 24-inch diameter pipe, with compressor stations located every several miles to keep the gas moving through the pipeline. The 300 Line has a Western Leg and an Eastern Leg. Expansions to the Western Leg of the pipeline added 30-inch diameter pipe and allowed it to accommodate skyrocketing natural gas production in the Marcellus Shale region, a drilling area that spreads across western Pennsylvania and neighboring states. By 2010, the Western Leg consisted of parallel, connected 24-inch and 30-inch

pipes, while the Eastern Leg consisted almost entirely of 24-inch pipe.

In 2010, the pipeline's owner, Tennessee Gas, commenced construction of what has turned out to be a complete overhaul of the Eastern Leg of the 300 Line. Tennessee Gas's upgrades to the Eastern Leg have included construction of new 30-inch pipe segments, as well as renovations to compression and monitoring infrastructure. As with the Western Leg, the improvements to the Eastern Leg produced parallel and connected 24-inch and 30-inch pipes. The result was fifteen interlocking loop segments of new pipeline that completed a full and continuous upgrade of the Eastern Leg of the 300 Line.

Tennessee Gas submitted four separate project proposals to FERC for the upgrade work on the Eastern Leg. The four upgrade projects – the third being the Northeast Project – were reviewed separately by FERC, approved, and then constructed in rapid succession between 2010 and 2013.

In November 2011, FERC completed the EA for the Northeast Project – the project that is the subject of the petition for review in this case – and recommended a Finding of No Significant Impact. FERC's NEPA review of the Northeast Project did not consider any of the other upgrade projects, even though the first upgrade project was under construction during FERC's review of the Northeast Project, and even though the applications for the second and fourth upgrade projects were pending before FERC while it considered the Northeast Project application. In May 2012, the Commission approved the Northeast Project, incorporating its EA and the Finding of No Significant Impact and issuing a certificate of public convenience and necessity

to Tennessee Gas. *Tenn. Gas Pipeline Co.*, 139 FERC ¶ 61,161, 2012 WL 1934728 (May 29, 2012) (“*Order*”).

Petitioners contend that FERC violated NEPA when it segmented its review of the Northeast Project, giving no consideration to that project in conjunction with the three other connected, contemporaneous, closely related, and interdependent Eastern Leg projects. Petitioners also claim that FERC failed to provide a meaningful analysis of the cumulative impacts of these projects to show that the impacts would be insignificant.

FERC argues that because each project resulted in a measurable increase in the pipeline’s overall capacity, the agency was justified in completing the NEPA analysis of the Northeast Project separately from the other projects. But FERC’s position cannot be squared with the record, which shows that by May 2012, when FERC issued the certificate for the Northeast Project, it was clear that the entire Eastern Leg was included in a complete overhaul and upgrade that was physically, functionally, and financially connected and interdependent. During the pendency of Tennessee Gas’s Northeast Project application, the other three projects that would constitute the revamped Eastern Leg were either under construction or were also pending before the Commission for environmental review and approval. Given the self-evident interrelatedness of the projects as well as their temporal overlap, the Commission was obliged to consider the other three other Tennessee Gas pipeline projects when it conducted its NEPA review of the Northeast Project.

Under applicable NEPA regulations, FERC is required to include “connected actions,” “cumulative actions,” and “similar actions” in a project EA. 40 C.F.R. § 1508.25(a). “Connected actions” include actions that are “interdependent

parts of a larger action and depend on the larger action for their justification.” *Id.* § 1508.25(a)(1)(iii). The four pipeline improvement projects are certainly “connected actions.”

There is a clear physical, functional, and temporal nexus between the projects. There are no offshoots to the Eastern Leg. The new pipeline is linear and physically interdependent; gas enters the system at one end, and passes through each of the new pipe sections and improved compressor stations on its way to extraction points beyond the Eastern Leg. The upgrade projects were completed in the same general time frame, and FERC was aware of the interconnectedness of the projects as it conducted its environmental review of the Northeast Project. The end result is a new pipeline that functions as a unified whole thanks to the four interdependent upgrades.

FERC has not shown that there are logical termini between the new segments of the Eastern Leg or that each project resulted in a segment that has substantial independent utility apart from the other parts of the Eastern Leg. Rather, FERC merely argues that one terminus was “no more logical than another,” Br. of Resp’t at 25, and that the capacity added by each project was contracted separately. These explanations are insufficient to address Riverkeeper’s segmentation claim.

On the record before us, we hold that in conducting its environmental review of the Northeast Project without considering the other connected, closely related, and interdependent projects on the Eastern Leg, FERC impermissibly segmented the environmental review in violation of NEPA. We also find that FERC’s EA is deficient in its failure to include any meaningful analysis of the cumulative impacts of the upgrade projects. We therefore grant the petition for review and remand the case to the

Commission for further consideration of segmentation and cumulative impacts.

I. BACKGROUND

A. *Applicable Statutory and Regulatory Framework*

The Natural Gas Act grants FERC jurisdiction over the transportation and wholesale sale of natural gas in interstate commerce. 15 U.S.C. § 717(b)-(c). Any person seeking to construct or operate a facility for the transportation of natural gas in interstate commerce must first obtain a certificate of public convenience and necessity from the Commission. *Id.* § 717f(c)(1)(A). FERC is authorized to issue such a certificate to any qualified applicant upon finding that the proposed construction and operation of the pipeline facility is required by the public convenience and necessity. *Id.* § 717f(e).

NEPA requires that federal agencies fully consider the environmental effects of proposed major actions, including actions that an agency permits, such as pipeline construction. 42 U.S.C. § 4332(2)(C); *see also La. Ass'n of Indep. Producers & Royalty Owners v. FERC*, 958 F.2d 1101 (D.C. Cir. 1992). FERC is therefore responsible for the NEPA review associated with natural gas pipeline construction. *Midcoast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 967 (D.C. Cir. 2000).

After determining the scope of the federal action, an agency produces an EA, which is a “concise public document” that “provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9. The scope of an agency’s NEPA review must include both “connected actions” and “similar actions.” *Id.*

§ 1508.25(a)(1), (3). Actions are “connected” if they trigger other actions, cannot proceed without previous or simultaneous actions, or are “interdependent parts of a larger action and depend on the larger action for their justification.” *Id.* § 1508.25(a)(1). And actions are “similar” if, “when viewed with other reasonably foreseeable or proposed agency actions, [they] have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” *Id.* § 1508.25(a)(3).

NEPA is “essentially procedural,” designed to ensure “fully informed and well-considered decision[s]” by federal agencies. *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978). “‘NEPA itself does not mandate particular results’ in order to accomplish [its] ends. Rather, NEPA imposes only procedural requirements on federal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions.” *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 756-57 (2004) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). “The procedures required by NEPA . . . are designed to secure the accomplishment of the vital purpose of NEPA. That result can be achieved only if the prescribed procedures are faithfully followed” *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974). In preparing an EA or EIS, an “agency need not foresee the unforeseeable, but . . . [r]easonable forecasting and speculation is . . . implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’” *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973). While the statute does not demand forecasting that is “not meaningfully possible,” an agency must fulfill its duties to “the fullest extent possible.” *Id.*

B. *Factual and Procedural History*

Both the Eastern and Western Legs of the 300 Line were initially constructed with 24-inch pipe. To accommodate increased production and demand in the natural gas market, however, Tennessee Gas embarked on upgrades installing what is known as “looped” pipeline. In a looped structure, the old pipeline is left in place, while a larger pipeline is installed in parallel, connecting to the old pipe so that the two lines function as one system. As the overall system structure expands, each additional length of 30-inch pipe or compression horsepower results in increasing returns to the pipeline’s capacity. For example, the first upgrade to the Eastern Leg (which commenced in 2010 and was completed in 2011) resulted in the installation of approximately 130 miles of new 30-inch pipe and added 350,000 dekatherms per day to the pipeline’s capacity (with each dekatherm roughly equivalent to 1,000 cubic feet of gas). The Northeast Upgrade, in comparison, added only 40 miles of new pipe but added 636,000 dekatherms per day to the system. Abbreviated Appl. of Tenn. Gas Pipeline Co. for a Certificate of Public Convenience and Necessity at 2 n.1, 4, *reprinted in* Joint Appendix (“J.A.”) 188, 190 (“Application”); Br. of Resp’t at 21.

Between 2010 and 2013, Tennessee Gas commenced four upgrade projects along the Eastern Leg. In chronological order, they are: (1) the 300 Line Project; (2) the Northeast Supply Diversification Project; (3) the Northeast Project; and (4) the MPP Project. In May 2010, FERC certified the 300 Line Project, which placed eight sections of 30-inch pipeline along the Eastern Leg of the 300 Line, and upgraded various facilities and compressor stations along the entire line. The new pipe segments were also looped, or connected, to the

existing 24-inch pipeline, and covered approximately 130 miles of the Eastern Leg, leaving seven sections of the pipeline with only the decades-old 24-inch pipe.

As construction of the 300 Line Project was underway, Tennessee Gas initiated the three additional projects mentioned above to fill in the gaps that would be left by the 300 Line Project. Specifically, in November 2010, the company applied for certification of the Northeast Supply Diversification Project to add a 6.8-mile segment to the pipeline, connecting two of the 300 Line Project sections; in March 2011, it applied for certification of the Northeast Project to add five segments (40 miles in total) of new pipeline as well as compression upgrades and various infrastructure improvements; and in December 2011, four months after soliciting contracts for the project, it applied for certification of the MPP Project, which would cover the only remaining 7.9-mile segment that was still served solely by 24-inch pipe. In November 2011, the company completed construction on the 300 Line Project.

As each of the four projects was planned, the expected increased capacity on the 300 Line (measured in dekatherms per day) was contracted to natural gas shippers through a binding open season bidding process. *See, e.g.*, Application at 10, *reprinted in* J.A. 196. All of the gas transported through the Eastern Leg, however, uses all of the now-complete sections from the four projects, passing from one segment to the next on its way to the pipeline's delivery point in New Jersey. In other words, even though each project's incremental increase in pipeline capacity was contracted for separately, all of the projects function together seamlessly.

The 24-inch pipeline is buried underground in a corridor that is maintained and kept accessible by keeping major tree

growth cleared. In general, the new 30-inch pipe was added by widening the original corridor by 25 feet, clearing and grading this strip, blasting or digging a trench, installing the pipe in the trench, covering the pipe, and then restoring the vegetation. As new segments of pipe were added, they were connected to the old pipe, to adjacent sections of new pipe, and to the compressor stations between the sections.

In its challenge to the Northeast Project, Riverkeeper is concerned with habitat fragmentation, hydrology impacts to wetlands and groundwater, and “edge effects” of deforestation. *See* Br. of Pet’rs at 29, 37, 42-43. Riverkeeper claims that the Northeast Project alone cleared 265 acres of forest and impacted 50 acres of wetlands, and that the four projects together permanently deforested 628 acres. *Id.* at 4. Riverkeeper and other commenters raised these concerns before the Commission.

In July 2010, Tennessee Gas invoked FERC’s pre-filing process for the Northeast Project, and in October 2010 the agency issued a Notice of Intent to prepare an EA. Petitioners submitted comments on the Notice of Intent in November 2010, arguing, *inter alia*, that

[i]t is clear that the 300 Line Project and the Project at issue here are all part of a larger development plan, as they involve interlocking loop upgrades of the same pipeline. [Tennessee Gas] must not be allowed to circumvent heightened environmental scrutiny by segmenting their upgrades in such a way. The cumulative consequences of all these projects, many of them previously subject to FERC approval, must be assessed in the NEPA document.

Response to Notice of Intent to Prepare Environmental Assessment on Behalf of Delaware Riverkeeper et al., Nov. 12, 2010 at 13, *reprinted in* J.A. 162; *see also* Pa. Dep’t of Conservation & Natural Res. Comments on Notice of Intent, Nov. 23, 2010 at 7, *reprinted in* J.A. 184 (noting that the Bureau of Forestry “previously urged FERC to evaluate the entire corridor parallel to the existing . . . line”).

On March 31, 2011, Tennessee Gas submitted its certificate application for the Northeast Project. Application, *reprinted in* J.A. 186. On November 21, 2011, FERC issued an EA that recommended a Finding of No Significant Impact. Northeast Upgrade Project Environmental Assessment at 4-1, *reprinted in* J.A. 580 (“Northeast Project EA”). Petitioners and other interested parties intervened and submitted timely comments. These comments reiterated the concern that the Project’s NEPA analysis was improperly segmented and deficient in its cumulative impacts inquiry:

Remarkably, the EA fails to assess the additive effect of the Project together with the effects of existing or reasonably foreseeable gas development activities in the Project area, including . . . compressor stations, and other infrastructure. . . .

The EA is likewise inadequate in considering the combined environmental impacts of related existing and reasonably foreseeable pipelines within the Commission’s Jurisdiction. The EA identifies ten existing or proposed pipelines within fifty miles of the Project area, totaling at least 240 miles of new or improved pipeline construction. EA at 2-123-124. Five of these projects will either connect or be adjacent to the Project. EA at 2-126. However, the EA provides absolutely no detailed information or analysis relating to

the additive environmental impacts of these past, present, and proposed actions.

Comments on Environmental Assessment at 13, 17, *reprinted in* J.A. 699, 703; *see also* Hay & Newman Comments, Aug. 25, 2011 at 2, *reprinted in* J.A. 390 (“The fact that the ‘300 Line’ gas pipeline project was approved by FERC the same year of the submission of the subject application raises concerns of impermissible segmentation. It seems unlikely the approved . . . projects are not related segments to a broader phased development plan. . . .”); Pike Cnty. Conservation Dist. Comments, Dec. 20, 2011 at 3, *reprinted in* J.A. 746 (raising the same concerns).

On May 29, 2012, FERC issued the Order including a Finding of No Significant Impact and certificate approval for the Northeast Project. *Order*, 2012 WL 1934728, at *1, *11. On June 28, 2012, Petitioners submitted a request for rehearing. Petitioners claimed that:

The Commission violated NEPA by granting the Certificate for construction of the [Northeast Project] without properly applying the NEPA regulations in evaluating the significance of the Project’s impacts, without ensuring an adequate review of the Project’s cumulative impacts, and without ensuring that necessary mitigation measures would be fully implemented and complied with to minimize and avoid significant negative environmental impacts. Moreover, the Commission violated NEPA by unlawfully segmenting consideration of the [Northeast Project’s] impacts from other interdependent and inter-related projects on the Eastern Leg of the 300 Line.

Request for Reh’g at 3-4, *reprinted in* J.A. 837-38.

FERC denied this request for rehearing. It reiterated the position it took in the May 29 Order, stating that it “found that each project is a stand-alone project and designed to provide contracted-for volumes of gas to different customers within different timeframes.” *Tenn. Gas Pipeline Co.*, 142 FERC ¶ 61,025, 2013 WL 240878, at *10 (Jan. 11, 2013) (“*Reh’g Order*”). Petitioners timely filed the instant petition for review in this court.

II. ANALYSIS

A. *Standard of Review*

Judicial review of agency actions under NEPA is available “to ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious.” *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 97–98 (1983); *see also Nat'l Comm. for the New River, Inc. v. FERC*, 373 F.3d 1323, 1327 (D.C. Cir. 2004). Courts may not use their review of an agency’s environmental analysis to second-guess substantive decisions committed to the discretion of the agency. Where an issue “requires a high level of technical expertise,” we “defer to the informed discretion of the [Commission].” *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989) (internal quotation marks omitted).

Although the standard of review is deferential, we have made it clear that “[s]imple, conclusory statements of ‘no impact’ are not enough to fulfill an agency’s duty under NEPA.” *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985). The agency must comply with “principles of reasoned decisionmaking, NEPA’s policy of public scrutiny, and [the Council on Environmental Quality’s]

regulations.” *Id.* at 154 (citations omitted). And under the applicable arbitrary and capricious standard of review,

the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made. In reviewing that explanation, we must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. The reviewing court should not attempt itself to make up for such deficiencies: We may not supply a reasoned basis for the agency’s action that the agency itself has not given.

Motor Vehicle Mfrs. Ass’n of the U.S., Inc. v. State Farm Mut. Auto. Ins., 463 U.S. 29, 43 (1983) (internal quotation marks and citations omitted). In sum, an agency action will be set aside as arbitrary and capricious if it is not the product of “reasoned decisionmaking.” *Id.* at 52.

B. *Segmentation*

An agency impermissibly “segments” NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and impact of the activities that should be under consideration. The Supreme Court has held that, under NEPA,

“proposals for . . . actions that will have cumulative or synergistic environmental impact upon a region . . . pending concurrently before an agency . . . must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action.” *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976).

Regulations promulgated by the Council on Environmental Quality in 1978 dictate the appropriate scope of a NEPA document. The regulations state, in relevant part, that:

To determine the scope of environmental impact statements, agencies shall consider 3 types of actions . . . They include:

(a) Actions (other than unconnected single actions) which may be:

(1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

* * *

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences

together, such as common timing or geography. . . .

40 C.F.R. § 1508.25.

The justification for the rule against segmentation is obvious: it “prevent[s] agencies from dividing one project into multiple individual actions each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” *NRDC v. Hodel*, 865 F.2d 288, 297 (D.C. Cir. 1988) (internal quotation marks omitted). NEPA is, “in large measure, an attempt by Congress to instill in the environmental decisionmaking process a more comprehensive approach so that long term and cumulative effects of small and unrelated decisions could be recognized, evaluated and either avoided, mitigated, or accepted as the price to be paid for the major federal action under consideration.” *NRDC v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

Thus, when determining the contents of an EA or an EIS, an agency must consider all “connected actions,” “cumulative actions,” and “similar actions.” 40 C.F.R. § 1508.25(a); *see also, e.g., Am. Bird Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1032 (D.C. Cir. 2008) (reviewing the agency’s application of the regulations in its preparation of an EA); *Allison v. Dep’t of Transp.*, 908 F.2d 1024, 1031 (D.C. Cir. 1990) (reviewing the agency’s application of the regulations in its preparation of an EIS). As noted above, in their claims before FERC, Petitioners and other commenters argued that, in the NEPA review of the Northeast Project, FERC was obliged to consider the impacts from other connected actions on the Eastern Leg of the 300 Line, and to assess the cumulatively significant impacts of the four closely related and interrelated projects. In our view, these claims are meritorious.

The disputed Northeast Project was the third of the four pipeline construction projects completed in quick succession on the Eastern Leg of the 300 Line. As noted above, when FERC issued the certificate for the Northeast Project, it was clear that the entire Eastern Leg was included in a complete overhaul and upgrade. During the course of FERC's review of the Northeast Project application, the other three upgrade projects were either under construction (as with the 300 Line Project) or were also pending before FERC for environmental review and approval (as with the Northeast Supply Diversification Project and the MPP Project). The end result is a single pipeline running from the beginning to the end of the Eastern Leg. The Northeast Project is, thus, indisputably related and significantly "connected" to the other three pipeline upgrade projects.

It is noteworthy that FERC does not at all address the requirements of 40 C.F.R. § 1508.25(a)(1) or § 1508.25(a)(3) in defending its determination that the four projects should be treated separately. Indeed, FERC never even cites the applicable regulations which form the basis of Petitioners' claims in this case. *See* Br. of Resp't at ix (nowhere citing 40 C.F.R. § 1508.25). Instead, FERC relies on the four factors we announced in *Taxpayers Watchdog v. Stanley*, 819 F.2d 294 (D.C. Cir. 1987), to argue that it did not impermissibly "segment" its NEPA analysis. But as we made clear in *Coalition on Sensible Transportation, Inc. v. Dole*, 826 F.2d 60, 68 (D.C. Cir. 1987), an agency's consideration of the proper scope of its NEPA analysis should be guided by the governing regulations. There, we stated that "[i]n considering the proper scope of the . . . project, the district court quite properly referred to Federal Highway Administration regulations." *Id.* We then quoted the agency-specific scoping regulations that govern in the context of a federal highway

project. *Id.* (quoting 23 C.F.R. § 771.111(f)). We then remarked that *Taxpayers Watchdog* relied on “the same or closely similar factors.” *Id.* But even if the analyses were closely related, the point remains: the agency’s determination of the proper scope of its environmental review must train on the governing regulations, which here means 40 C.F.R. § 1508.25(a). In any event, as we explain below, FERC’s position fails even on its own terms.

In *Taxpayers Watchdog* we stated that “[t]he rule against segmentation . . . is not required to be applied in every situation.” 819 F.2d at 298. It is possible, in some circumstances, for an agency to determine that physically connected projects can be analyzed separately under NEPA. *Taxpayers Watchdog*, for example, involved a NEPA review of a subway construction project in which plans for a large project were abandoned in favor of a shorter length of rail. The court explained that the new plans could be properly analyzed without regard to potential further development because the shorter segment “(1) has logical termini; (2) has substantial independent utility; (3) does not foreclose the opportunity to consider alternatives; and (4) does not irretrievably commit federal funds for closely related projects.” *Id.* The first two factors cited in *Taxpayers Watchdog* are relevant in this case.

Logical Termini

FERC has not articulated any viable reason why it completed its NEPA review of the Northeast Project without regard to the other three projects on the Eastern Leg of the 300 Line. The agency does not contend that the four projects were properly divided pursuant to some “logical termini,” or rational end points. Rather, FERC simply asserts – in its brief to this court, not in the agency action under review – that its

choice is not arbitrary and capricious if “one terminus is no more logical than another.” Br. of Resp’t at 25. This will not do. Under this line of reasoning, FERC could have certified pipeline construction in one-mile sections, or hundred-yard sections, or one-foot sections.

FERC relies on a NEPA case that addressed highway construction, *Coalition for Sensible Transp.*, 826 F.2d 60. But that case lends little support to the agency’s position. *Coalition for Sensible Transportation* concerned a road construction project in Montgomery County, Maryland. *Id.* at 62. The project was intended to widen approximately sixteen miles of Interstate 270 and modify five interchanges along the way. “The stretch of I-270 at issue runs north from the Spur connecting I-270 to I-495 (the Washington Beltway). It is a heavily travelled route for traffic entering and leaving the District of Columbia and also for local traffic between and within the various nearby towns.” *Id.* The opinion noted that “in the context of a highway within a single metropolitan area – as opposed to projects joining major cities – the ‘logical terminus’ criterion is unusually elusive. . . . Fully 45 percent of the traffic now using the road neither originates nor terminates at the Beltway. Thus the Beltway is no more logical as a terminus than the Spur.” *Id.* at 69. To the extent that the Eastern Leg pipeline is comparable to a highway, it is more analogous to a highway that connects two major points than one section of a web of metropolitan roadways for which the logical termini criterion loses significance.

In rejecting the appellants’ claims in *Coalition for Sensible Transportation*, the court also noted that “it is inherent in the very concept of a highway network that each segment will facilitate movement in many others; if such mutual benefits compelled aggregation, no project could be said to enjoy independent utility.” *Id.* The same cannot be said

about a single pipeline on which each newly constructed part facilitates service only within the bounds of the same start and end points. There are no spurs, interchanges, or corridors connected to the Eastern Leg. There is a single pipeline running from the beginning to the end of the Eastern Leg. The pipeline is linear and physically interdependent, and it contains no physical offshoots. In sum, *Coalition for Sensible Transportation* is inapposite.

Substantial Independent Utility

FERC has also failed to show that the Northeast Project had substantial independent utility separate from the other three pipeline renovation projects on the Eastern Leg of the 300 Line. Tennessee Gas and FERC contend that the Northeast Project has independent utility because the company secured new shipping contracts in anticipation of the increased capacity that would come with the completion of the project. Br. of Resp't at 20-24; Br. of Intervenors at 10-12. This argument is unpersuasive.

First, FERC has a “threshold requirement” for pipelines proposing new projects: the “pipeline must be prepared to support the project financially without relying on subsidization from existing customers.” *Order*, 2012 WL 1934728, at *4. As a result of this policy, Tennessee Gas was required to contract for increased capacity prior to upgrading the Eastern Leg of the pipeline. The commercial and financial viability of a project when considered in isolation from other actions is potentially an important consideration in determining whether the substantial independent utility factor has been met. FERC’s reliance on the shipping contracts in this case, however, is insufficient because the contracts do not show that the Northeast Project was driven by independent financial considerations apart from the other projects.

Indeed, it is clear from FERC's Order that the upgrade projects on the Eastern Leg are financially interdependent. The Order states:

Tennessee calculated this [Northeast Project capacity] rate using the costs and design capacities of both the proposed Northeast Upgrade Project and the . . . 300 Line Project. . . . The 300 Line Project makes it possible for Tennessee to achieve the capacity increase of the Northeast Upgrade Project at a much lower cost than would have been possible absent construction of the 300 Line Project Market Component facilities.

Id. at *2.

It is also noteworthy that Tennessee Gas sought an "exception" to the normal policy of "incremental pricing for all projects" in its Northeast Project application. FERC explained this in its Order:

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

Tennessee further notes that in the precedent agreement that provided the market support for the 300

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

Id. at *6. Not only did Tennessee Gas acknowledge the functional interdependence of the 300 Line Project and the Northeast Project, it made clear that the projects are financially interdependent as well. Indeed, Tennessee Gas’s prior agreement with EQT Energy was made in *express contemplation* of the synergies to be obtained between the 300 Line and the Northeast Project. Even if the Northeast Project has utility, it is plainly not *independent* utility.

FERC’s argument in this case that the “substantial independent utility” standard is satisfied when an individual project is “completed and in-service” and “meets specific customer demand,” Br. of Resp’t at 21, proves too much. Under this approach, Tennessee Gas could have proposed two-mile segments, or one-mile segments, or one-hundred-yard segments for NEPA review, so long as it produced shipping contracts in anticipation of the increased capacity attributable to each of these new segments. To interpret the “substantial independent utility” factor to allow such fractionalization of interdependent projects would subvert the whole point of the rule against segmentation.

The “specific customer demand” argument relied on by FERC paints a false picture. In truth, what happened is that

Tennessee Gas had to justify its applications for pipeline upgrades by showing that there would be customers to purchase the increased gas volume that would come as a result of an upgrade. There are no “Northeast Project customers” as such. Gas does not enter and exit the pipeline between segments on the Eastern Leg of the 300 Line. *See* Application at 1, 15, *reprinted in* J.A. 187, 201; Tennessee Gas Pipeline Environmental Report at 10-5, *reprinted in* J.A. 329. And customers do not take gas from the Northeast Project portion of the Eastern Leg. In this respect, the Northeast Project portion of the pipeline is not the equivalent of a highway spur, interchange, or corridor that has utility independent of another highway to which it connects. The Northeast Project’s utility is inextricably intertwined with the other three improvement projects that, together, upgrade the entire Eastern Leg of the 300 Line.

Project Timing

FERC also argues that the timing of the project applications defeats Petitioners’ segmentation claim because NEPA analyses should not cover projects already completed or not yet proposed. Br. of Resp’t at 26. NEPA, of course, does not require agencies to commence NEPA reviews of projects not actually proposed. *E.g., Weinberger v. Catholic Action of Haw.*, 454 U.S. 139, 146 (1981). While Riverkeeper’s challenge is limited to FERC’s NEPA review of the Northeast Project, this challenge includes the question whether FERC was obliged to take into account the other “connected” or “similar” projects on the Eastern Leg when it conducted the NEPA review for the Northeast Project.

The temporal nexus here is clear. Tennessee Gas proposed the Northeast Project while the 300 Line Project was under construction, and FERC plainly was aware of the

physical, functional, and financial links between the two projects. And FERC's consideration of the Northeast Project application overlapped with its consideration of the remaining two projects. Indeed, FERC's review of the Northeast Project overlapped with its review of the Northeast Supply Diversification Project for the first six months and with the MPP Project's review for the final six months. Thus, FERC was obliged to take into account the condition of the environment reflected in the recently related and connected upgrades. The adjacent lands were recently disturbed, wildlife faced a larger habitat disruption, there was an increase in pressure and gas moving through the system, and wetlands and groundwater flow was disrupted. These effects could not be ignored in FERC's NEPA review of the Northeast Project.

Tennessee Gas states that it did not know at the time it commenced the 300 Line Project that it was embarking on a series of upgrade projects that would soon transform the entire pipeline. That may be so. But the important question here is whether FERC was justified in rejecting commenters' requests that it analyze the entire pipeline upgrade project once the Northeast Project was under review and once the parties had pointed out the interrelatedness of the sequential pieces of pipeline which were, in fact, creating a complete, new, linear pipeline. Because of the temporal overlap of the projects, the scope and interrelatedness of the work should have been evident to FERC as it reviewed the Northeast Project. Yet FERC wrote and relied upon an EA that failed to consider fully the contemporaneous, connected projects.

We emphasize here the importance we place on the timing of the four improvement projects. Separated by more time, the projects could have utility *independent* of the other projects. That is, the indications of the financial and functional interdependence of the projects might have been

subsumed by the fact that Tennessee Gas constructed each project to be a standalone improvement for a substantial period of time. To take an obvious example, if the 300 Line Project had been placed into service a decade before FERC considered the Northeast Project application, the timing of the projects would support, rather than undermine, the conclusion that the projects had utility independent of each other. Here, however, the timing does not support the independence of the projects; rather, we are left with the fact that financially and functionally interdependent pipeline improvements were considered separately even though the there was no apparent logic to where one project began and the other ended.

* * *

For the reasons explained above, we find that FERC's NEPA review of the Northeast Project violated the segmentation rule. When FERC was reviewing the Northeast Project application, it was undeniably aware that the previous and following projects were also under construction or review, and that each phase of the development fit with the others like puzzle pieces to complete an entirely new pipeline.

FERC has suggested that the Petitioners should have anticipated the future upgrades and raised their concerns during FERC's NEPA review of the 300 Line Project. This argument rings hollow in light of Tennessee Gas's and FERC's assertions that they did not know of the future upgrades when FERC initially reviewed the 300 Line Project. Petitioners raised their objections to FERC's segmented analysis of the connected projects once it became clear that there were going to be four connected and interrelated upgrade projects on the Eastern Leg of the 300 Line. When the connections and interdependencies became clear and were

brought to FERC's attention, the agency was obliged to assess the entire pipeline for environment effects.

On the record before us, we find that FERC acted arbitrarily in deciding to evaluate the environmental effects of the Northeast Project independent of the other connected actions on the Eastern Leg. There were clear indications in the record that the improvement projects were functionally and financially interdependent, and the absence of logical termini suggests that the four projects functioned as one unified upgrade of the Eastern Leg. And the temporal overlap serves to reinforce this conclusion.

C. Cumulative Impacts

Many of the same points that support Riverkeeper's segmentation claim also sustain its contention that FERC's EA is deficient in its failure to include any meaningful analysis of the cumulative impacts of Tennessee Gas's projects.

Cumulative effects are defined by the Council on Environmental Quality as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. We have explained that "a meaningful cumulative impact analysis must identify (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.” *Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002). The three Eastern Leg upgrade projects preceding and following the Northeast Project were clearly “other actions – past, present, and proposed, and reasonably foreseeable.” *Id.*

FERC’s Order approving the Northeast Project acknowledges that commenters requested that the agency consider the other upgrade projects on the Eastern Leg and the cumulative impacts of the projects viewed together. *Order*, 2012 WL 1934728, at *49. In response, FERC summarily stated that the construction impacts “were temporary,” and “separated by time and distance” from the Northeast Project. *Id.* As we have explained, the record simply does not support this conclusion.

FERC’s EA for the Northeast Project states, in conclusory terms, that the connected pipeline projects were “not expected to significantly contribute to cumulative impacts in the Project area.” Northeast Project EA at 2-127, *reprinted in J.A. 557*. This cursory statement does not satisfy the test enunciated in *Grand Canyon Trust*. The EA also contains a few pages that discuss potential cumulative impacts on groundwater, habitat, soils, and wildlife, but only with respect to the Northeast Project. It is apparent that FERC did not draft these pages with any serious consideration of the cumulative effects of the other project upgrades on the Eastern Leg of the 300 Line. In light of the close connection between the various sections of the line that have been upgraded with new pipe and other infrastructure improvements, FERC was obliged to assess cumulative impacts by analyzing the Northeast Project in conjunction with the other three projects.

III. CONCLUSION

For the foregoing reasons, we grant the petition for review insofar as it challenges FERC's segmentation of its NEPA review of the Northeast Project, and its failure to adequately address the cumulative impacts of the four upgrade projects on the Eastern leg of the 300 Line. We hereby remand the case to FERC for further consideration of these two issues.

BROWN, *Circuit Judge*, concurring in part and concurring in the judgment: I join Part II.C of the majority opinion, granting the petition for FERC’s failure to adequately address the cumulative impacts of the four upgrade projects. As I see it, the practical effect of the Court’s segmentation holding—now that several of the projects are complete—can only be FERC’s need for a more thorough cumulative impacts analysis. Therefore, I would have focused on that aspect of Petitioners’ wide-ranging and evolving challenges, and I would have declined to delve into the murky waters of backwards-looking segmentation review, especially since improper segmentation was raised only at the end of the lengthy approval process and scarce case law is available concerning gas pipelines, which, as the majority also explains, are distinct from highways and railways.

Nevertheless, I agree with the majority that “[m]any of the same points [from] Riverkeeper’s segmentation claim . . . sustain its contention that FERC’s EA is deficient in its failure to include any meaningful analysis of the cumulative impacts of Tennessee Gas’s projects.” Maj. Op. at 27. The close timing, functional interdependence, and physical connectedness of the four upgrade projects inform the need for FERC to address the cumulative impacts of the other projects within the Northeast Project’s EA. Here, FERC utterly failed to explain why timing and distance—factors that actually show the connectedness of the projects—justify excluding the other upgrade projects from the cumulative impacts analysis. *See* J.A. 554–57 (excluding consideration of the Northeast Supply Project because it was “at least 25 miles from” the Northeast Upgrade Project). For this reason, I would grant the petition and remand the case to FERC for further consideration of the appropriate cumulative impacts.

SILBERMAN, *Senior Circuit Judge*, concurring: I join Judge Edwards' opinion because of the emphasis he puts on the timing of these different projects, but I do think Judge Brown has a good point in suggesting that the "cumulative impact" issue is a stronger ground upon which to base the decision.

* * *

Petitioner's brief, unfortunately, was laden with obscure acronyms notwithstanding the admonitions in our handbook (and on our website) to avoid uncommon acronyms. Since the brief was signed by a faculty member at Columbia Law School, that was rather dismaying both because of ignorance of our standards and because the practice constitutes lousy brief writing.

The use of obscure acronyms, sometimes those made up for a particular case, is an aggravating development of the last twenty years. Even with a glossary, a judge finds himself or herself constantly looking back to recall what an acronym means. Perhaps not surprisingly, we never see that in a brief filed by well-skilled appellate specialists. It has been almost a marker, dividing the better lawyers from the rest.

We have recently been rejecting briefs that do not adhere to our instructions, and counsel should be warned that if a brief is rejected and has to be rewritten, they will not be able to alter the word limits.