UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

National Fuel Gas Supply Corporation	**)**	**Docket No. CP15-115-000**
Empire Pipeline, Inc.	**)**	

COMMENTS OF ALLEGHENY DEFENSE PROJECT AND PENNSYLVANIA ALLIANCE FOR CLEAN WATER AND AIR

The following comments are provided on behalf of the Allegheny Defense Project ("Allegheny") and Pennsylvania Alliance for Clean Water and Air ("PACWA") regarding National Fuel Gas Supply Corporation's ("Supply") and Empire Pipeline Company's ("Empire") (collectively, "National Fuel")[1] proposed Northern Access 2016 Project ("2016 Project" or "Project"). Supply proposes to: (i) construct 96.65 miles of 24-inch diameter pipeline; (ii) add 5,350 horsepower of compression at the Porterville, NY compressor station; (iii) construct an interconnect meter and regulation ("M&R") station with Tennessee Gas Pipeline Company's ("Tennessee") 200 Line; (iv) construct an M&R station and tie-in in Hinsdale, NY; (v) construct an interconnection with NFG Midstream Clermont; (vi) modify an existing tie-in; (vii) construct a pressure reduction station; (viii) abandon, via sale to Empire, all 3.09 miles of Supply's existing Line XM-10 pipeline; and (ix) charge an initial incremental firm recourse rate for the Project. Supply also seeks a waiver of General Terms and Conditions Section 31.1 of its tariff to permit Seneca Resources, National Fuel Gas Company's exploration and production subsidiary and the Foundation Shipper for the Project, to shift its primary delivery point for a portion of the Project's incremental capacity more than 90 days after its initial request. The Project would result in approximately 497,000 dekatherms per day of new firm capacity.

[1] National Fuel Gas Supply Corporation and Empire Pipeline, Inc. are both subsidiaries of National Fuel Gas Company.

Empire proposes to: (i) construct a new 22,214 horsepower compressor station in Pendleton, NY; (ii) construct 3.05 miles of 24-inch pipeline, replacing 3.05 miles of existing Supply 16-inch XM-10 pipeline; (iii) construct a new dehydration facility; (iv) modify two existing tie-ins; and (v) acquire from Supply the aforementioned 3.09 miles of Line XM-10. The Project would result in approximately 350,000 dekatherms per day of new firm capacity. In total, the Project would result in approximately 847,000 dekatherms per day of new firm capacity.

On July 10, 2014, National Fuel filed a request to initiate the pre-filing process for the Project, which FERC granted on July 24, 2014. On October 22, 2014, FERC published a Notice of Intent to Prepare an Environmental Assessment ("EA") for the Project. *See* 79 Fed. Reg. 64,379 (Oct. 29, 2014). On November 21, 2014, Allegheny submitted comments in response to FERC's Notice of Intent to Prepare an EA. On March 17, 2015, FERC published the Notice of Application for the Project. National Fuel requested expedited review and authorization by December 31, 2015 and that FERC process the Application pursuant to 18 C.F.R. § 385.802. *See* Application at 34.

The 2016 Project is just the latest in a series of National Fuel's "Northern Access" projects that are intended to increase capacity for transporting shale gas extracted in northern Pennsylvania to markets in the northeastern United States and Canada. Much of this increased capacity is specifically for National Fuel's own exploration and production subsidiary, Seneca Resources ("Seneca").[2] Rather than considering the true scope of National Fuel's plans to increase its "Northern Access" pipeline capacity, FERC has allowed National Fuel to split its

[2] In fact, Seneca is the sole subscriber for the entire capacity that would be created by the Northern Access 2016 Project. *See* Resource Report 1 at 1-2.

development plans into multiple smaller projects in order to avoid a finding of significance and, therefore, preparation of an environmental impact statement ("EIS").

In particular, the current Northern Access 2016 Project is connected to and, in fact, dependent on National Fuel's Northern Access 2015 Project, which FERC recently authorized on February 27, 2015. *See Tennessee Gas Pipeline Company, L.L.C. and National Fuel Gas Supply Corporation*, 150 FERC ¶ 61,160 (Feb. 27, 2015) ("Northern Access 2015 Order"). Allegheny filed a request for rehearing of FERC's order authorizing the Northern Access 2015 Project (among other projects). *See* Docket No. CP14-100-001, Accession No. 20150317-5027. Allegheny also filed a motion for stay. *Id.* at Accession No. 20150320-5232. To date, FERC has not responded to either the request for rehearing or motion for stay even though it has allowed National Fuel to move forward with construction of the Northern Access 2015 Project. *See* Docket No. CP14-100-000, Accession Nos. 20150313-4022 *and* 20150414-3012. All communications regarding this request should be addressed to and served upon:

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I. COMMENTS

A. National Fuel Gas Company is a vertically integrated company that operates in the upstream, midstream and downstream natural gas markets.

At the outset, it is important to discuss the nature of National Fuel Gas Company and its various upstream, midstream and downstream subsidiaries. National Fuel Gas Company is somewhat unique in that its subsidiaries are involved in the entire natural gas stream. National Fuel Gas Company's exploration and production operations are carried out by its upstream subsidiary, Seneca Resources. *See* National Fuel Gas Company, November 2013 Investor

Presentation at 3 (Attachment 1). National Fuel Gas Company's non-jurisdictional midstream gathering operations are carried out by National Fuel Gas Midstream Corporation while its jurisdictional midstream operations are carried about by Supply and Empire. *Id*. Finally, National Fuel Gas Company's utility and energy marketing services are carried out by its downstream subsidiaries, National Fuel Gas Distribution Corporation and National Fuel Resources, Inc. *Id*.

This sets National Fuel Gas Company apart from many other companies that come before FERC for authorization of jurisdictional infrastructure. In many instances, the companies seeking to build or expand jurisdictional infrastructure are not under the same parent company as the companies engaged in natural gas exploration and production. With National Fuel Gas Company's vertical integration, however, its subsidiaries are involved in each component of the gas stream – from exploration and production, to midstream transport, to downstream market delivery. National Fuel Gas Company presented this vertical integration to its investors in 2013 by overlaying its multiple upstream, midstream and downstream subsidiaries with the Marcellus and Utica shale formations. *See* 2013 Investor Presentation at 4-5 (Figures 1 and 2 below).

Figure 1: National Fuel Gas Company's Integrated Businesses with Significant Marcellus Exposure.

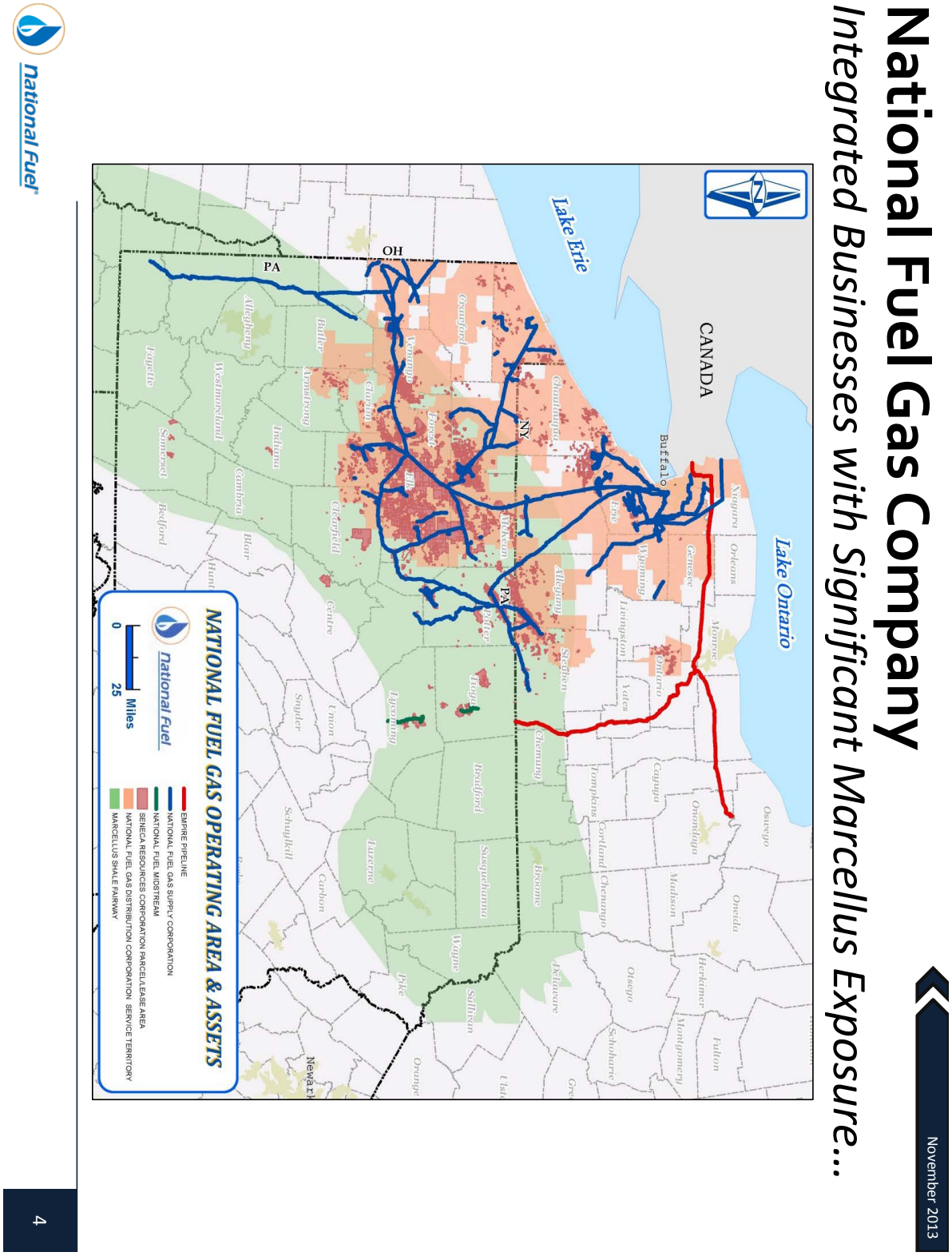
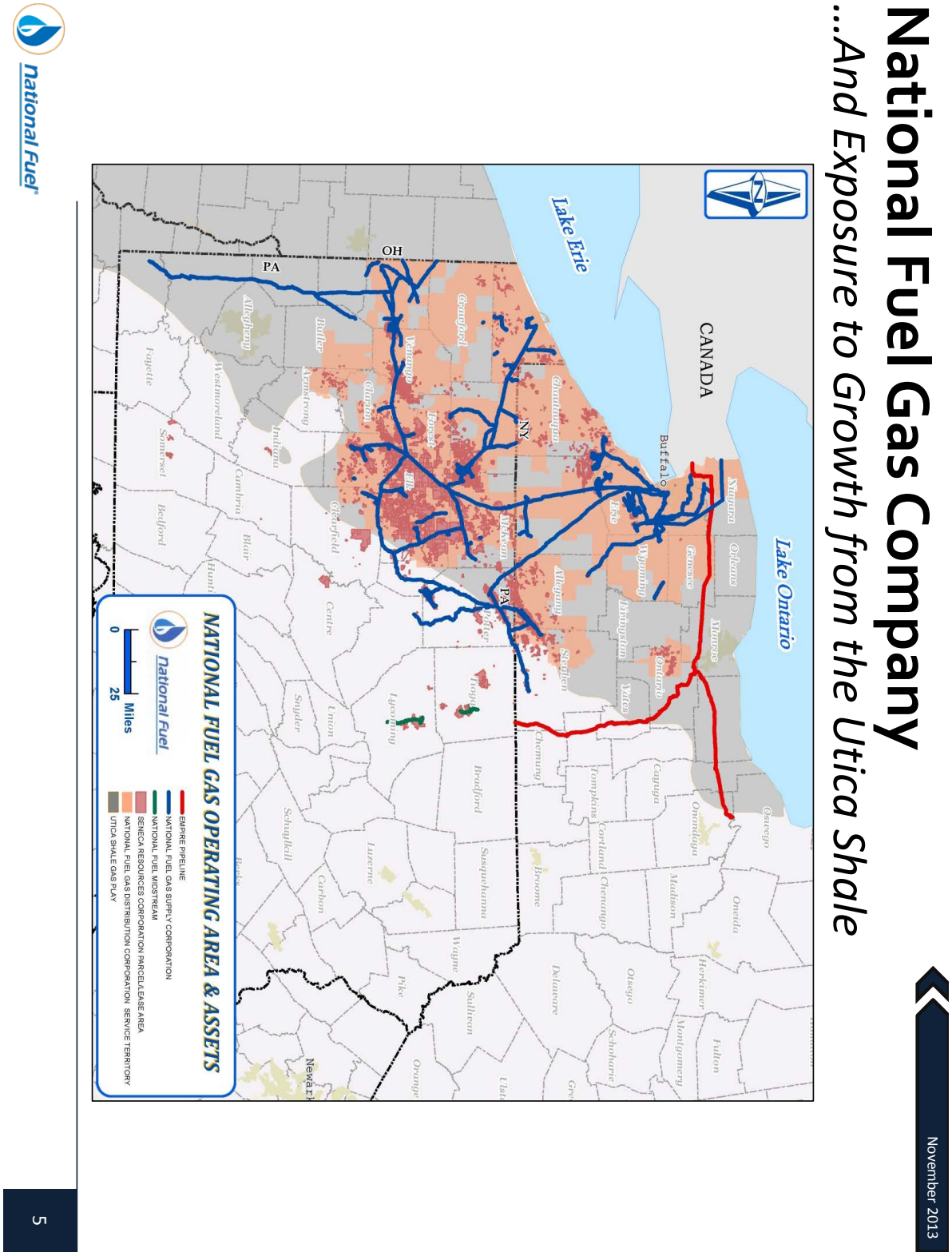


Figure 2: National Fuel Gas Company's Integrated Businesses with Exposure to Growth from the Utica Shale.



These maps identify the Marcellus and Utica shale formations in proximity to where Seneca's mineral rights are, where the three midstream companies' gathering lines and pipelines are, and where the downstream utility's service area is located. National Fuel Gas Company uses this integration and proximity to shale gas to its advantage, as explained in its most recent annual report to the Securities and Exchange Commission ("SEC"):

> The Company is a diversified energy company engaged principally in the production, gathering, transportation, distribution and marketing of natural gas. The Company operates an integrated business model centered in western New York and Pennsylvania, *an area critical to the production and transportation of natural gas from the Marcellus Shale basin. The common geographic footprint of the Company's subsidiaries enables them to* ***share management, labor, facilities and support services*** *across various businesses and* ***pursue coordinated projects designed to produce <u>and</u> transport*** *natural gas from the Marcellus Shale to markets in Canada and the eastern United States.*

National Fuel Gas Company, Annual Report (Form 10-K), at 6 (Nov. 21, 2014) (emphasis added) (Attachment 2). As will be explained below, this vertical integration demonstrates why FERC must consider, at a minimum, Seneca's gas drilling operations as an indirect and cumulative effect of the Northern Access 2016 Project. FERC cannot ignore the environmental impacts of Seneca's gas drilling when National Fuel itself boasts about the benefits of having Seneca coordinate its production operations with the Company's pipeline subsidiaries.

It is also clear that FERC must prepare a programmatic EIS for jurisdictional infrastructure projects that are designed to connect Marcellus and Utica shale gas supplies to markets. The Council on Environmental Quality ("CEQ") recently published new guidance to all federal agencies about when it is appropriate to prepare a programmatic EIS. An objective evaluation of this guidance and the fact that the gas industry, FERC and other federal agencies are collaborating to rapidly expand natural gas infrastructure in and around the Marcellus and Utica shale region, reveals an urgent need for a programmatic EIS before any further site-specific projects such as the Northern Access 2016 Project are approved.

It is also obvious that FERC has allowed National Fuel to impermissibly segment several projects over the last few years, including the Northern Access 2015 and Northern Access 2016 Projects. National Fuel is depending on the construction of the Hinsdale Compressor Station in the Northern Access 2015 Project to facilitate the construction of the proposed pipeline in the Northern Access 2016 Project. This is obvious segmentation that is prohibited under NEPA's implementing regulations. Because of the obvious connection between these two projects, we discuss this issue first.

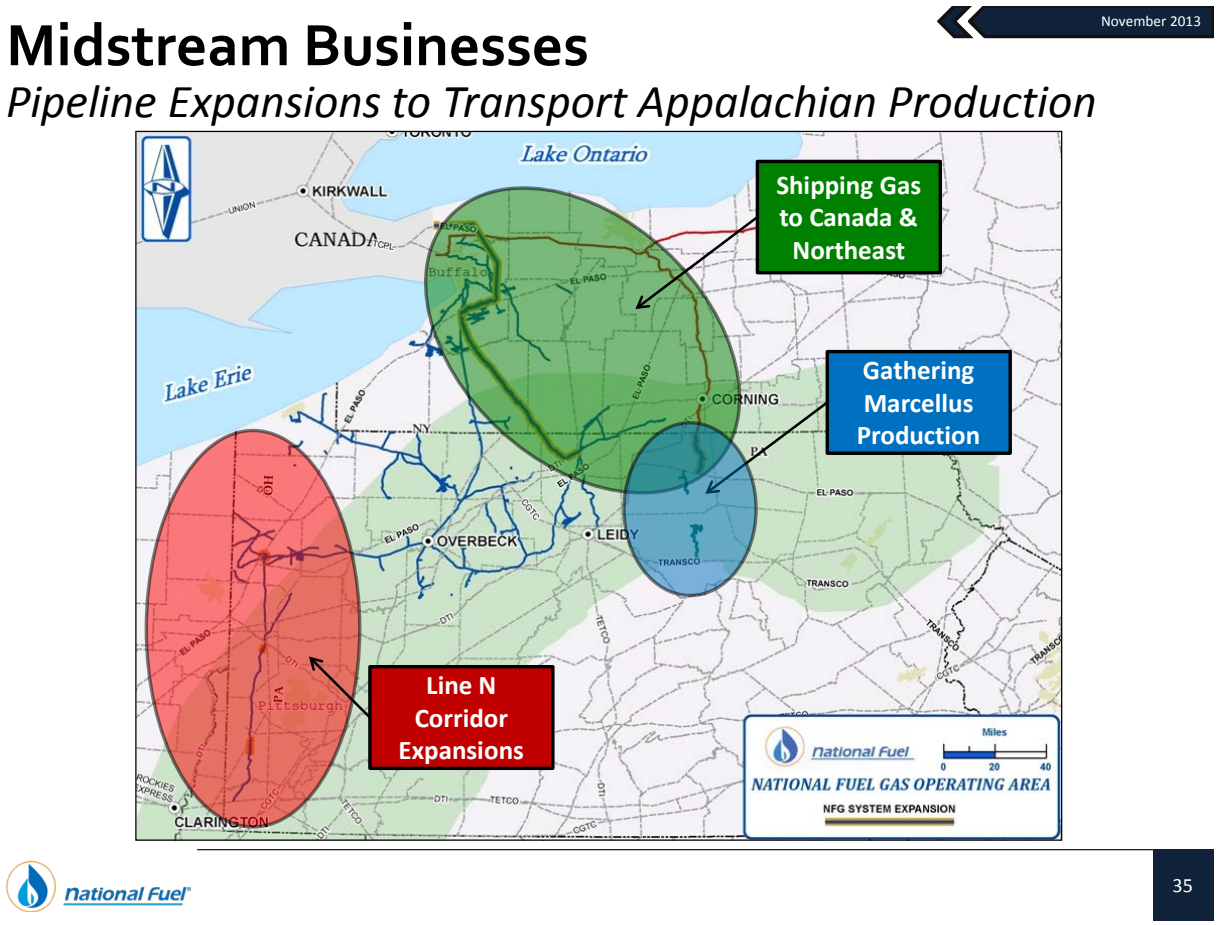
B. FERC has unlawfully permitted National Fuel to segment multiple projects in Pennsylvania and New York, including the Northern Access 2015 and Northern Access 2016 Projects.

When reviewing a proposed action, FERC must consider other connected, cumulative and similar actions to determine whether those other actions should be discussed in the same environmental analysis as the proposed action. 40 C.F.R. § 1508.25(a). Actions are connected if they are "closely related" and "automatically trigger other actions," "cannot or will not proceed unless other actions are taken previously or simultaneously," or "are interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1). Cumulative actions are those actions that, "when viewed with other proposed actions have cumulatively significant impacts" that should be discussed in the same EIS. 40 C.F.R. § 1508.25(a)(2). Significance "cannot be avoided by terming an action temporary or by breaking it down into small component parts." 40 C.F.R. § 1508.27(b)(7). Similar actions are those actions that, "when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide for evaluating their environmental consequences together, such as common timing or geography," and should be considered in the same analysis when that is the best way to "assess adequately the combined impacts of similar actions or reasonable alternatives

to such actions." 40 C.F.R. § 1508.25(a)(3). "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." *Delaware Riverkeeper v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014).

FERC has permitted National Fuel to impermissibly segment numerous projects throughout Pennsylvania and New York over the last few years. By doing so, FERC has failed to address the "true scope and impact" of National Fuel's infrastructure expansions. For example, in a 2013 presentation to its investors, National Fuel laid out precisely where its infrastructure expansions were planned:

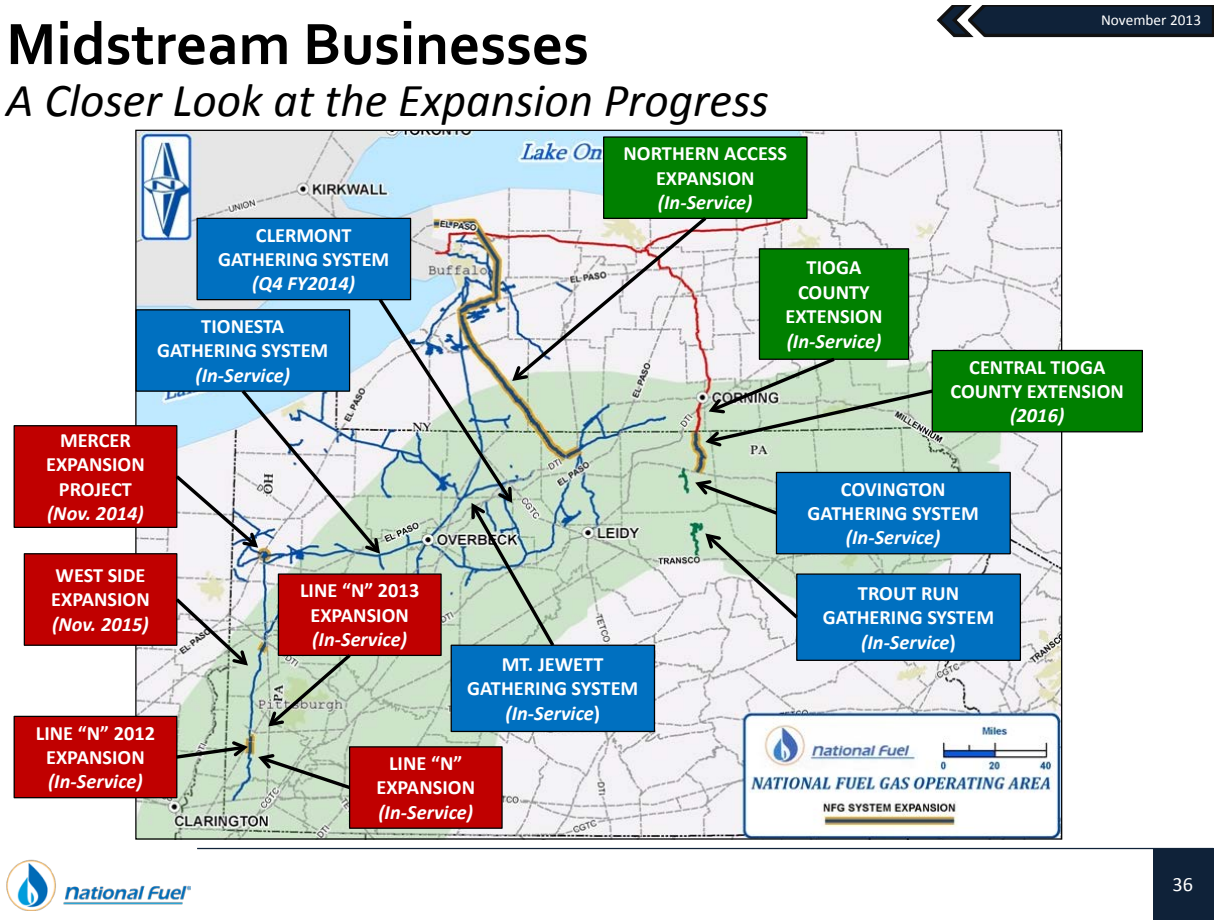
Figure 3: National Fuel's Areas for Pipeline Expansions to Transport Appalachian Production.



Source: National Fuel Investors Presentation at 35 (Nov. 2013).

This map reveals that National Fuel is focusing its infrastructure expansions in three distinct, color-coded areas. The "Blue Area" indicates non-jurisdictional gathering lines for shale gas production. The other two areas are focused on jurisdictional projects to transport shale gas to market areas. The "Red Area" is focused on expansions of National Fuel's Line N corridor in western Pennsylvania. The "Green Area" is focused on expansions in northern Pennsylvania and western New York to transport shale gas to Canada and the Northeast U.S. On the next page of its presentation, National Fuel breaks down its infrastructure expansions in each color-coded area accordingly:

Figure 4: National Fuel's Segmentation of Multiple Infrastructure Expansions.



Source: National Fuel Investors Presentation at 36 (Nov. 2013).

These slides reveal that FERC has allowed National Fuel to segment multiple jurisdictional projects along its Line N corridor in western Pennsylvania. Three of these projects, the Line N Expansion, Line N 2012 Expansion and Line N 2013 Expansion, were reviewed and authorized by FERC in separate proceedings in quick succession and are already in-service. *See National Fuel Gas Supply Corporation*, 133 FERC ¶ 61,235 (2010); *National Fuel Gas Supply Corporation*, 138 FERC ¶ 61,224 (2012); *and National Fuel Gas Supply Corporation*, Docket No. CP13-80-000, Accession No. 20130419-4007. The West Side Expansion and Mercer Expansion are also along Line N and were recently approved by FERC. *See National Fuel Gas Supply Corporation*, 150 FERC ¶ 61,162 (Mar. 2, 2015).[3]

Similarly, FERC has allowed National Fuel to segment several projects in northern Pennsylvania and New York for transporting gas to the Northeast U.S. and Canada. This includes multiple projects along National Fuel's pipeline system operated by Empire and Supply. For example, Figure 4 identifies the Tioga County Extension Project, which is already in-service, and the Central Tioga County Extension Project, which has a projected in-service date in 2016. These projects are intended to expand the capacity of Empire's pipeline system into northern Pennsylvania. The map in Figure 4 shows a single pipeline extending from Corning, NY into central Tioga County, PA. National Fuel, however, split what is obviously a single pipeline expansion into two separate projects.

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[3] Allegheny filed a request for rehearing of FERC's order approving the West Side Expansion and Modernization Project. *See* Docket No. CP14-70-001, Accession No. 20150317-5027. Allegheny also filed a motion for stay of FERC's order. *See* Docket No. CP14-70-000, Accession No. 20150320-5232. Despite the fact that FERC has yet to respond to the request for rehearing or motion for stay, FERC has permitted National Fuel to begin construction activities, including tree cutting. *See* Docket No. CP14-70-000, Accession Nos. 20150310-3022 and 20150326-3031.

Figure 4 also identifies the first of National Fuel's "Northern Access Projects," which are intended to increase the capacity of Supply's pipeline system. As Figure 4 shows, the first Northern Access Project is already in service. *See also National Fuel Gas Supply Corporation*, 137 FERC ¶ 61,054 (2011). FERC also recently approved the "Northern Access 2015 Project." *See* Northern Access 2015 Order.[4] Now, FERC is reviewing National Fuel's "Northern Access 2016 Project," the subject of these comments.

In its most recent Annual Report to the SEC, National Fuel indicated that it considered its various Line N, Tioga County and Northern Access expansion projects as a coordinated effort to increase capacity for Marcellus production:

> Supply Corporation has developed its Northern Access and Line N pipeline expansion projects to receive natural gas produced from the Marcellus Shale and transport it to key markets of Canada and the northeastern United States . . . Like Supply Corporation's Northern Access project, Empire's Tioga County Extension project facilitates transportation of Marcellus Shale gas to key markets of Canada and the northeastern United States.

National Fuel Gas Company, Annual Report (Form 10-K) at 9-10 (Nov. 21, 2014). While it is too late for FERC to meaningfully consider the "true scope and impact" of many of these projects since they are already constructed and in service, it is not too late for the Northern Access 2015 and Northern Access 2016 Projects. These two projects are connected, cumulative and similar actions that should be considered together in the same EIS. By allowing National Fuel to submit two separate applications, FERC fails to address the "true scope and impact" of the overall project in violation of the rule against segmentation.

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[4] Allegheny filed a request for rehearing of FERC's order approving the Northern Access 2015 Project. *See* Docket No. CP14-100-001, Accession No. 20150317-5027. Allegheny also filed a motion for stay of FERC's order. See Docket No. CP14-100-000, Accession No. 20150320-5232. Despite the fact that FERC has yet to respond to the request for rehearing or motion for stay, FERC has permitted National Fuel to begin construction activities. See Docket No. CP14-100-000, Accession No. 20150313-4022.

1. The Northern Access 2015 and Northern Access 2016 Projects are connected actions.

The Northern Access 2015 and Northern Access 2016 Projects are connected actions because they are "closely related." 40 C.F.R. § 1508.25(a)(1). For example, according to National Fuel:

> The [Northern Access 2015] project will provide Seneca Resources….with an outlet to premium Dawn indexed markets in Canada, for their Clermont Area Marcellus production. The Northern Access 2015 project involves the construction of a new 15,400 horsepower compressor station in Hinsdale, New York and a 7,700 horsepower addition to its compressor station in Concord, New York, for service expected to commence in November 2015.

National Fuel Gas Co., Annual Report (Form 10-K), at 51. On the very same page of its Annual Report, National Fuel further states that:

> [National Fuel Gas] Supply Corporation and Empire have been working with Seneca Resources to develop a project which would move significant prospective Marcellus production from its Western Development Area at Clermont to an interconnection on Empire with TransCanada Pipeline at Chippawa ("Northern Access 2016"). Similar to the Northern Access 2015 project, this project would provide an outlet to premium Dawn indexed markets in Canada in late 2016.

Id. Thus, the Northern Access 2015 and Northern Access 2016 Projects are "closely related" as they are both in the same area and are both intended to transport Seneca's Marcellus production from the Clermont Area of McKean, Elk and Cameron Counties, Pennsylvania, to "premium Dawn indexed markets in Canada."

Furthermore, the Northern Access 2016 Project "cannot or will not proceed" in its current form without construction of the Northern Access 2015 Project. 40 C.F.R. § 1508.25(a)(1)(ii). For example, according to National Fuel's resource reports for the Northern Access 2016 Project:

> A Tie-in will be located at Hinsdale (Mainline Pipeline MP 43.05), on property that is being acquired by National Fuel and being developed *as the Hinsdale Compressor Station as part of National Fuel's Northern Access 2015 Project (under construction in*

> *2015). This tie-in will involve installation of necessary piping, valves (series of "jumper valves"), metering, and flow regulation equipment, to tie in the proposed Mainline Pipeline to Supply's existing Line X-South and a jumper connection to the Hinsdale Compressor Station*. Electric power and telecommunications will be provided from the Hinsdale Compressor Station.

Resource Report 1 at 1-10 (emphasis added). National Fuel notes elsewhere that the:

> Hinsdale Compressor Station is proposed as part of National Fuel's proposed Northern Access 2015 Project, certificated by FERC on 2/27/15 in CP14-88 and expected to be in-service prior to the construction of this [Northern Access 2016] Project.

Id. at 1-4. National Fuel is clearly relying on the construction of the Hinsdale Compressor Station in the Northern Access 2015 Project to facilitate construction of the pipeline proposed in the Northern Access 2016 Project. Indeed, each alternative proposed by National Fuel includes the tie-in facilities at the proposed Hinsdale Compressor Station. *See e.g.*, Resource Report 10 at Figure10.4-1. Therefore, the Northern Access 2016 Project "cannot or will not proceed" in its current form without the "previous[ ] or simultaneous[ ]" construction of the Hinsdale Compressor Station. 40 C.F.R. § 1508.25(a)(1)(ii). This information also clearly indicates that the Northern Access 2015 and 2016 Projects are "interdependent parts of a larger action" to provide increased capacity for shale gas production to the northeast U.S. and Canada. 40 C.F.R. § 1508.25(a)(1)(iii).

It is also important to consider the timing of the two projects. The D.C. Circuit recently stressed the importance of timing in "connected actions" segmentation claims:

> 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.

Delaware Riverkeeper v. FERC, 753 F.3d 1304, 1318 (D.C. Cir. 2014). The court went on to state that if Tennessee's projects had been separated by a decade, it would have indicated that they were standalone projects. *Id*. That, however, was not the case in *Delaware Riverkeeper* and it is certainly not the case here where the Northern Access 2015 Project was only recently approved and the Northern Access 2016 Project is currently under review. Indeed, the timing of the Northern Access 2015 and Northern Access 2016 Projects reveals that National Fuel may be abusing FERC's pre-filing process to avoid submitting applications that reflect the "true scope and impact" of its proposed activities.[5]

For example, National Fuel submitted its application for the Northern Access 2015 Project on March 7, 2014. *See* Docket No. CP14-100-000, Accession No. 20140307-5236. On July 10, 2014, National Fuel filed its request to initiate the pre-filing process for the Northern Access 2016 Project. *See* Docket No. PF14-18-000, Accession No. 20140710-5168. For the remainder of 2014 and the first two months of 2015, the Northern Access 2015 Project proceeded through the certificate application process while the Northern Access 2016 Project proceeded through the pre-filing process.

On February 27, 2015, FERC approved the Northern Access 2015 Project. *See* Northern Access 2015 Order. On March 17, 2015, National Fuel submitted its application for the Northern Access 2016 Project, transitioning it from the pre-filing stage to the certificate proceeding stage. In other words, it appears that National Fuel held off filing its application for

[5] Importantly, FERC does not consider a project to be an official "proposal" until an application is filed. Thus, no matter how detailed the plans for a project are, if that project remains in the pre-filing stage, FERC does not consider it an actual "proposal." This allows companies to segment projects that really should be considered together.

the Northern Access 2016 Project until it received FERC's authorization for the Northern Access 2015 Project. Otherwise, it would not have been able to state that "there are no applications *pending* before the Commission related to the proposed [Northern Access 2016] Project." Application at 24 (emphasis added). Had National Fuel submitted its application for the Northern Access 2016 Project *before* it received approval for the Northern Access 2015 Project, it is clear that FERC would have to consider those "related" applications together. FERC cannot allow or facilitate abuse of the pre-filing process to allow impermissible segmentation. It is obvious that the Northern Access 2015 and Northern Access 2016 Projects are closely related connected actions that must be considered in the same EIS.

2. The Northern Access 2015 and Northern Access 2016 Projects are cumulative actions that must be considered in the same EIS.

The Northern Access 2015 and 2016 Projects are also cumulative actions because they will have cumulatively significant impacts. For example, in addition to the compression that would be added through the Northern Access 2015 Project, including construction of the new Hinsdale Compressor Station, the Northern Access 2016 Project proposes nearly 100 miles of new 24-inch-diameter pipeline, the replacement of approximately 4 miles of 16-inch-diameter pipeline with 24-inch-diameter pipeline, and additional compression at the Porterville Compressor Station. *See* Application at 4-8. Reviewing these projects separately allows FERC to avoid a finding of significance by breaking the two projects down into small component parts in violation of 40 C.F.R. § 1508.27(b)(7). Thus, the "true scope and impact" of the two projects is likely to be significant and they should be analyzed together in the same EIS rather than two separate EAs. 40 C.F.R. § 1508.25(a)(2).

3. The Northern Access 2015 and Northern Access 2016 Projects are similar actions.

Finally, the Northern Access 2015 and 2016 Projects are similar actions because they share common timing and geography. As explained above, the review of the Northern Access 2016 Project is likely to substantially overlap with the construction of the Northern Access 2015 Project. This timing supports considering these projects in the same environmental analysis. *See Delaware Riverkeeper*, 753 F.3d at 1318. While the court in that case was specifically addressing timing in the context of "connected" actions, the same rationale should hold true for "similar" actions, especially when those similar actions are proposed by the same vertically-integrated company.

In addition to common timing, the Northern Access 2015 and 2016 Projects share common geography. For example, 17.6 miles of pipeline proposed in the Northern Access 2016 Project is "parallel to [National Fuel Gas] Supply's Line X-South right-of-way[.]" Resource Report 1 at 1-4. This is the same "Line X" in the Northern Access 2015 Project. In fact, one of the alternatives in the Northern Access 2016 Project appears to parallel most of Line X. *See* Resource Report 10 at Figure 10.4-1. National Fuel even presents both projects together in its presentations to investors.

Figure 5: National Fuel's Northern Access 2015 and Northern Access 2016 Projects.

Midstream

Pipeline & Storage

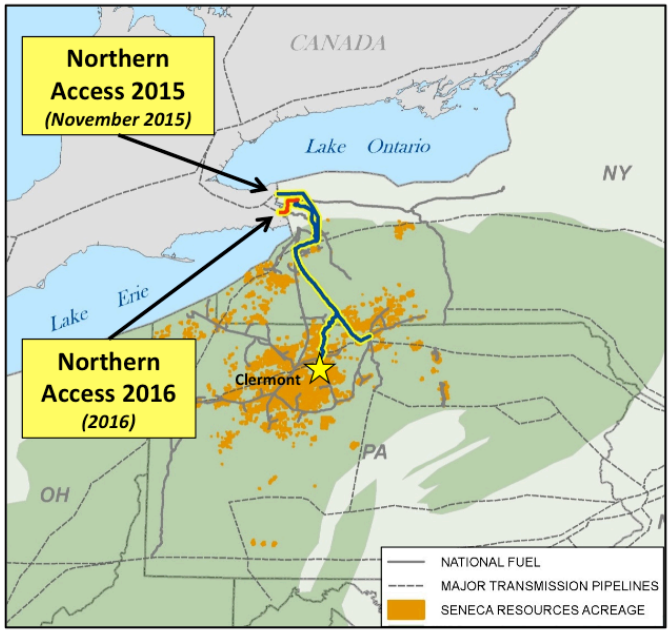
National Fuel

Expansions to Move Gas from the WDA are Significant

Projects to Support WDA Growth

Project	Capacity (Dth/day)
Northern Access 2015	140,000
Northern Access 2016[1]	350,000
Total New Capacity	**490,000**

Project	Capital Cost
Northern Access 2015	$66 million
Northern Access 2016[1]	$410 million
Total Capital Expenditures	**$476 million**



(1) Previously referred to as the Clermont to Chippawa expansion project

May 2014

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Source: National Fuel, May 2014 Investor Presentation (Attachment 3).

Therefore, the Northern Access 2015 and 2016 Project are similar actions that share common timing and geography and should be considered in the same EIS.

The problem, of course, is that FERC has already authorized the Northern Access 2015 Project. Even though Allegheny filed a request for rehearing and asked FERC to stay its order pending a decision on rehearing, FERC has allowed National Fuel to move forward with construction. FERC should withdraw its Orders authorizing the Northern Access 2015 Project and authorizing National Fuel to begin construction. National Fuel should not be allowed to

proceed with any further construction until the connected, cumulative and similar Northern Access 2015 and Northern Access 2016 Projects are considered in a single EIS.

C. FERC must take a hard look at the direct, indirect and cumulative effects of the Northern Access 2016 Project.

FERC must consider the direct, indirect and cumulative effects of the Northern Access 2016 Project. *See* 40 C.F.R. §§ 1508.7; 1508.8. This requires taking a "hard look" at the environmental consequences of the Project. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989). To satisfy the "hard look" requirement, FERC must ensure that it has "adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary and capricious." *Nevada v. Dep't of Energy*, 457 F.3d 78, 93 (D.C. Cir. 2006) (*quoting Balt. Gas & Elec. Co.*, 462 U.S. 87, 98 (1983)). As will be explained below, an objective review of the direct, indirect and cumulative effects of the Project indicates the need for FERC to prepare an EIS rather than an EA.

1. Direct Effects

FERC must consider the direct effects of the Northern Access 2016 Project. Direct effects are "caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a). The direct effects of the Project will be significant. For example, the proposed 96-mile mainline pipeline will cross 179 streams and three ponds. *See* Resource Report 2 at 2-24. Additionally, the pipeline will cross 178 surveyed wetlands. *Id*. at 2-47. This alone should tell FERC that the Project will have significant environmental impacts for which an EIS is required.[6]

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[6] Indeed, FERC's supplemental NEPA regulations require that it prepare an EIS for "major pipeline construction projects" where the applicant "us[es] rights-of-way in which there is no existing natural gas pipeline." 18 C.F.R. § 380.6(a)(3). A new 24-inch, 96-mile mainline pipeline crossing hundreds of streams and wetlands should tell FERC that this is a "major pipeline construction project." Furthermore, a majority of the pipeline construction will be in rights-of-way in which there is no existing natural gas pipeline. According to National Fuel,

While FERC often includes mitigation measures in its orders that are intended to, among other things, reduce impacts to streams and wetlands, a recent settlement between Tennessee Gas Pipeline Company ("Tennessee") and the Pennsylvania Department of Environmental Protection ("PADEP") demonstrates that these mitigation measures are not protecting streams and wetlands. In December 2014, PADEP announced an $800,000 settlement agreement with Tennessee for:

> multiple violations of the Clean Streams Law during the construction of a natural gas pipeline in 2011 and 2012 through four counties in northeast and north-central Pennsylvania. The violations occurred during construction of the [Tennessee's] "300 Line Project."

PADEP, Settlement Press Release (Attachment 4). FERC reviewed Tennessee's 300 Line Project in an EA and stated that:

> Waterbodies would be crossed in accordance with [Tennessee's Environmental Construction Plan] (as modified with our recommendations described in section 1.7.1) and state and federal permit requirements . . . Therefore, we conclude that impacts on waterbodies would be minor and temporary if the waterbody crossings are completed in accordance with the construction and restoration methods described above and detailed in [Tennessee's Environmental Construction Plan] (as modified with our recommendations described in section 1.7.1) and any site-specific measures that may be required by state permitting agencies or the COE.

300 Line Project EA at 2-18; 2-20 (Docket No. CP09-444-000, Accession No. 20100225-4001). FERC approved Tennessee's 300 Line Project on May 14, 2010. *See Tennessee Gas Pipeline Co.*, 131 FERC ¶ 61,140 (2010). FERC conditioned its authorization on "Tennessee's compliance with the environmental mitigation measures set forth in the appendix to this order." *Id*. at Ordering Paragraph E, p. 36. According to one of these mitigation measures,

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approximately 60 miles of the proposed mainline will be parallel to power line corridors and approximately 15 miles will be greenfield construction. *See* Resource Report 1 at 1-4. In other words, approximately 78% of the 96-mile pipeline will be constructed "using rights-of-way in which there is no existing natural gas pipeline." Thus, FERC's own NEPA regulations require the preparation of an EIS.

Environmental Condition 7, Tennessee was required to use a team of environmental inspectors to "sufficiently monitor construction of the project facilities." *Id*. at p. 40.

Despite the assurances in the EA and the conditions inserted into the Order authorizing the 300 Line Project, Tennessee committed "multiple violations" of the Pennsylvania Clean Streams Law that resulted in it having to enter into an $800,000 settlement with PADEP. At no point during the construction of the 300 Line Project did FERC issue a "stop work order." This indicates that either the mitigation measures that were utilized during construction of the 300 Line Project were insufficient or enforcement of those mitigation measures was insufficient (or both). Either way, it demonstrates that there is considerable daylight between the assurances made in FERC's EAs and what actually occurs on the ground.[7]

Now, National Fuel wants to build a new 96-mile pipeline that will cross 179 streams, 178 wetlands and three ponds. According to National Fuel, "erosion and sedimentation controls will be installed and maintained in accordance with [its] [Erosion and Sedimentation Control and Mitigation Plan] to minimize impacts on wetlands and waterbodies." Resource Report 2 at 2-39. Of course, FERC noted similar assurances in the EA for the 300 Line Project and yet Tennessee committed "multiple violations" of Pennsylvania's Clean Streams Law leading to an $800,000 settlement. So the question is obvious: what, if anything, has changed in FERC's mitigation of impacts to waterbodies and wetlands? FERC cannot just continue allowing companies and its staff to make broad, general assertions that mitigation plans and procedures will be adhered to in order to reduce impacts when there is evidence that such mitigation did not work in the 300 Line Project.

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[7] It should also be noted that the 300 Line Project was one of the four Tennessee projects that the D.C. Circuit held were unlawfully segmented. *See Delaware Riverkeeper v. FERC*, 753 F.3d 1304, 1318 (D.C. Cir. 2014).

Commenters would also like to point out that there is no evidence in the docket that FERC has reached out to Native Americans to participate in this proceeding. FERC "has a trust responsibility to Indian tribes [that] requires it to adhere to certain fiduciary standards in its dealings with Indian tribes." 18 C.F.R. § 2.1c(b). FERC must "assure that tribal concerns and interests are considered whenever [its] actions or decisions have the potential to adversely affect Indian tribes or Indian trust resources." 18 C.F.R. § 2.1c(e). FERC must consult with Native American tribes on the Northern Access 2016 Project.

This is particularly important in light of the increasing impacts on archaeological and cultural resources caused by fracking for shale gas. For example, a 2014 study identified 60 previously recorded sited in Washington County, Pennsylvania that were affected of threatened by gas drilling between 2000-2010. *See* Jason Espino, Assessing the Impact of Natural Gas Drilling on the Archaeological Heritage of Pennsylvania: A Case Study from Washington County, Abstract (p. iv) *available at* https://dspace.iup.edu/handle/2069/2091. The study indicated that "Marcellus well development appears to present a greater threat to archaeological resources than conventional drilling, and the pace of development since 2006 has impacted or threatened considerably more sites." *Id*.

2. FERC must consider the indirect effects of Marcellus and Utica shale gas drilling that is both causally related to and a reasonably foreseeable consequence of the Northern Access 2016 Project.

FERC must take a hard look at the indirect effects caused by the Northern Access 2016 Project. Indirect effects are:

> [C]aused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

40 C.F.R. § 1508.8(b). Shale gas development in the Marcellus and Utica shale formations is both causally related to the Project and reasonably foreseeable. Therefore, FERC has an obligation to take a hard look at the environmental effects of Marcellus and Utica shale extraction as an indirect effect of the Project.

a. There is a clear causal connection between the Northern Access 2016 Project and shale gas development in the Marcellus and Utica shale formations.

FERC has previously relied on two cases for the proposition that projects such as the one under review here and gas drilling in the Marcellus and Utica shale formations are not "sufficiently causally related." *See e.g.*, Northern Access 2015 Order at PP 59-60. One case is an unpublished Second Circuit decision. In that case, which is not binding precedent, the Second Circuit stated that there was an insufficient causal relationship between a proposed pipeline and gas drilling in the Marcellus shale formation. *See Coalition for Responsible Growth v. FERC*, 485 Fed. Appx. 472, 2012 WL 1596341 (2d Cir. 2012). In reaching this conclusion, the Second Circuit simply accepted all of FERC's arguments at face value without addressing *any* of the case law that FERC relied on in the underlying proceedings. *Id*. *See also 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). An examination of the case law demonstrates why FERC's interpretation of its NEPA obligations is without merit and the Second Circuit erred in relying on those baseless arguments.

For example, the Ninth Circuit has said that an agency must consider something as an indirect effect if the agency action and the effect are "two links of a single chain." *Sylvester v. U.S. Army Corps of Engineers*, 884 F.2d 394, 400 (9th Cir. 1989). This is the other case that FERC relies on for support. The issue in *Sylvester* concerned the construction of a golf course

that was part of a larger resort construction project. The golf course construction involved filling wetlands, which triggered the jurisdiction of the U.S. Army Corps of Engineers ("Corps"). The Corps limited its analysis to "the secondary and cumulative impacts of the golf course" and "did not include the other resort facilities." *Sylvester*, 884 F.2d at 400. The court held that the Corps was not required "to look further than it did" because the golf course and the resort were not "two links of a single chain" since "each could exist without the other." *Id*.

The situation in *Sylvester* is distinguishable from the situation here since National Fuel itself connects its midstream companies' gathering and interstate pipelines with its upstream company's Marcellus production:

> National Fuel's midstream operations are carried out by the interstate pipeline and storage subsidiaries, National Fuel Gas Supply Corporation and Empire Pipeline, Inc., and the gathering subsidiary National Fuel Gas Midstream Corporation. *Through these companies, National Fuel is building pipeline infrastructure in Appalachia to provide producers with a* ***critical link*** *to natural gas demand markets*. A component of the gathering system pictured here, located in Covington Township, Pa., connects Seneca's Marcellus production to the interstate pipeline system.

National Fuel, 2014 Summary Annual Report at p. 4 of PDF (emphasis added) (Attachment 5). If National Fuel considers its pipelines as a "critical link" that connect Seneca's shale gas production to "natural gas demand markets," then FERC must consider those pipelines and Seneca's shale gas production as "two links of a single chain."

In addition to connecting its pipelines to shale gas production in general, National Fuel also connects the Northern Access 2016 Project at issue here to Seneca's shale gas drilling operations. For example, National Fuel claims that construction of the Mainline Pipeline, together with modification of the Porterville Compressor Station, "will create additional capacity on [its] pipeline system that is required for the transportation of *additional* Marcellus Shale gas production." Application at 4 (emphasis added). National Fuel further states that the Project:

> [W]ill enable Supply and Empire to provide incremental firm transportation to markets in the northeastern United States and Canada through Supply and Empire's existing interconnections. Market access for [Seneca], a natural gas producer in north-central Pennsylvania, would be available at Empire's interconnection with TransCanada at Chippawa, as well as markets on [Tennessee Gas Pipeline's] 200 Line in Erie County, New York, and other interconnections with local gas distribution companies, power generators, and other interstate pipelines available on both Supply and Empire.

Resource Report 1 at 1-1. Thus, the Northern Access 2016 Project is specifically designed to enable its midstream subsidiaries, Supply and Empire, to transport additional shale gas produced by its upstream subsidiary, Seneca. Therefore, the Project and gas drilling in the Marcellus and Utica shale formations are "two links of a single chain."

Another case cited by the *Sylvester* court, *Colorado River Indian Tribes v. Marsh*, 605 F.Supp. 1425 (C.D. Cal. 1985), strongly supports the close causal connection between the Project and gas drilling. In that case, the Corps issued a permit allowing a developer to stabilize a riverbank without considering the indirect and cumulative effects of the stabilization – namely, future residential and commercial development. The court held that the Corps "assess[ed] the project with tunnel vision" that "was tantamount to limiting its assessment to primary impacts." *Colorado River Indian Tribes*, 605 F.Supp. at 1433. The court further noted that:

> The Corps should have analyzed the indirect effects of the bank stabilization on both "on site" and "off site" locations, i.e., the growth-inducing effects related to the changes in the pattern of land use and population growth. It would appear that the Corps failed to consider the cumulative impact associated with the bank stabilization project when it may have been reasonably foreseeable that the placement of ripraps was just a stepping stone to major development in the area.

Id. FERC must not repeat the mistake of the Corps by assessing the impacts of the Northern Access 2016 Project with "tunnel vision." Just as the bank stabilization was a "stepping stone" to residential and commercial development in *Colorado River Indian Tribes*, so too is the Northern Access 2016 Project in the context of induced gas development in the Marcellus and Utica shale formations. FERC must take a hard look at the indirect effects of authorizing the

Project on both "on site" and "off site" locations, including the growth-inducing effects related to the changes in the pattern of land use and related effects on air and water and other natural systems, including ecosystems. *Id*. *See also* 40 C.F.R. § 1508.8(b).

FERC has previously attempted to get around this by claiming that jurisdictional projects such as the Northern Access 2016 Project are not *causing* additional shale gas drilling but are simply *responding to* shale gas drilling that has already occurred. For example, in its decision authorizing National Fuel's Northern Access 2015 Project and Tennessee Gas Pipeline's Niagara Expansion Project, FERC stated that:

> The proposed projects are not *creating the growth* in the development of unconventional gas resources in the Marcellus region. Rather, the proposed projects are *responding to a need* for transportation of natural gas that was identified following the development of production and use of the resource. Further, such development will likely continue regardless of whether the proposed projects are approved because multiple existing *and proposed* transportation alternatives for production from the region are available.

Northern Access 2015 Order at P 61 (emphasis added). Taking the last sentence first, FERC sets up an impossible test to satisfy because it will often be able to point to other "proposed transportation alternatives for production from the region." And when FERC considers those other "proposed transportation alternatives," it will again claim there is an insufficient causal connection to gas drilling because of other "proposed transportation alternatives." This creates an endless cycle in which FERC continuously avoids ever having to address gas drilling in the Marcellus and Utica shale formations as an indirect effect of jurisdictional projects.

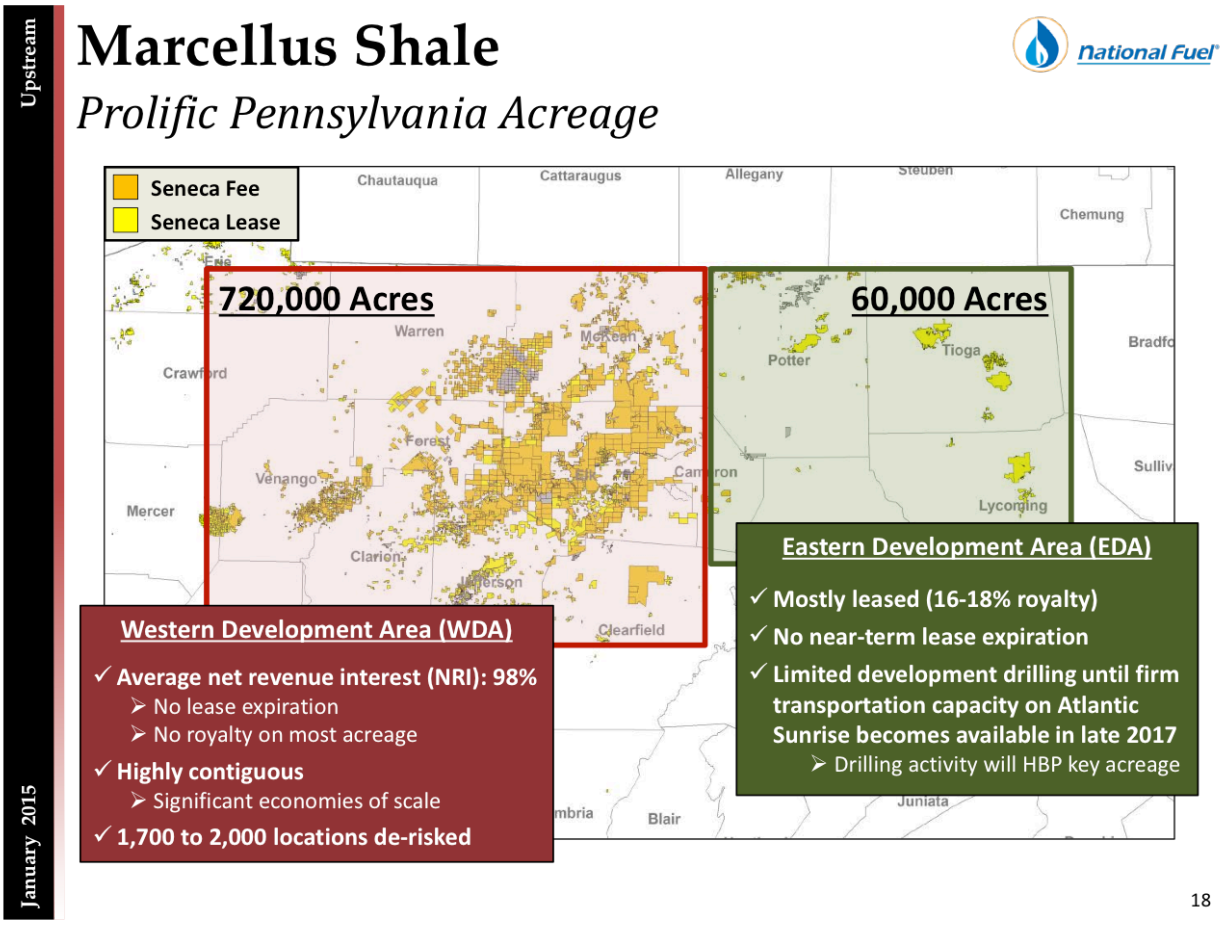
Furthermore, FERC's assertion that jurisdictional projects are simply a response to existing gas development and are not actually inducing further development is not supported by the facts. For example, according to Rice Energy, a gas drilling company operating in the Marcellus and Utica shales, one of the reasons it tells its investors to invest in it is because of "firm transportation contracts" that "de-risk production growth, ensure takeaway and limit

Appalachian basis exposure." Rice Energy, Barclays CEO Energy-Power Conference, p. 31 (Sept. 2, 2014) (Attachment 6). In other words, without the certainty that firm transportation contracts provide, producers would be much more hesitant to continue drilling new shale gas wells because they would have less confidence that there would be enough capacity for that continued production. These firm transportation contracts, as well as National Fuel's vertical integration, support the fact that projects like the Northern Access 2016 Project are sufficiently causally related to reasonably foreseeable shale gas development.

For example, in a January 2015 presentation to its investors, National Fuel stated that 1,700 to 2,000 drilling locations in Seneca's Western Development Area[8] have been "de-risked." National Fuel, January 2015 Investor Presentation at 18 (Attachment 7) (*See* Figure 6 below).

[8] National Fuel divides Seneca's gas holdings in Pennsylvania into a Western Development Area and Eastern Development Area. The Western Development Area covers approximately 720,000 acres in northwestern Pennsylvania. *See* Jan. 2015 Presentation at 18. The Eastern Development Area covers approximately 60,000 acres in northcentral Pennsylvania. *Id*.

Figure 6: Seneca Resources' "Prolific" Marcellus Shale Acreage in Pennsylvania.



It makes sense that 1,700 to 2,000 locations in Seneca's Western Development Area have been "de-risked" since National Fuel's midstream subsidiaries have executed several firm transportation contracts in recent years for increased capacity to support Seneca's production in northern Pennsylvania. *See e.g.*, Niagara Expansion Project Application at 1 (Docket No. CP14-88-000, Accession No. 20140221-5027); West Side Expansion Application at 8 (Docket No. CP14-70-000, Accession No. 20140206-5021). It is no surprise then that National Fuel says that Seneca will "focus" its drilling operations in the Western Development Area. January 2015 Investor Presentation at 21. Meanwhile, Seneca will limit drilling in its Eastern Development Area "until firm transportation capacity on [Transcontinental Pipe Line Company's] Atlantic

Sunrise [Pipeline] becomes available in late 2017." *Id*. at 18 (*see* Figure 6 above). This shows that jurisdictional projects and the increased capacity that they provide have a direct impact on if, when and where Seneca drills additional gas wells.

In its Summary Annual Report for 2014, National Fuel explained its "integrated Appalachian growth strategy":

> By virtue of its proximity to the Marcellus Shale and integration with the regulated Pipeline & Storage segment, the Utility plays a key role in National Fuel's integrated model: Significant and growing supplies of Marcellus gas are shipped to the Utility through the regulated pipeline's facilities to serve retail customers in New York and Pennsylvania; the utility and pipeline and storage subsidiaries generate synergies that reduce operating costs for both businesses; and the regulated subsidiaries support the Company's investment credit rating, resulting in a lower cost of financing to help fund the Company's growth initiatives.

National Fuel, 2014 Summary Annual Report at 2 (PDF p. 6). In the November 2013 presentation to its investors, National Fuel boasted that its "integrated businesses" have "significant Marcellus exposure" as well as "exposure to growth from the Utica Shale." National Fuel Gas Company, Nov. 2013 Investor Presentation at 4-5. National Fuel highlights Seneca's "successful delineation across a large acreage position" in its Western Development Area, explaining that "initial well test data in the Western Development Area furthers our confidence in a long-term Marcellus development program." *Id*. at 21-22.

Next, National Fuel explains how its midstream businesses (i.e., Supply and Empire) will build "pipeline expansions to transport Appalachian production." *Id*. at 35-36. National Fuel also explains how its other midstream subsidiary, National Fuel Gas Midstream Corporation, is "focus[ed] on developing and expanding [non-jurisdictional] gathering infrastructure for both Seneca and other producers." *Id*. at 37. Thus, National Fuel provides a step-by-step account to its investors of how its vertically integrated businesses explore for and develop Marcellus and Utica shale gas and build infrastructure to transport that shale gas to downstream markets.

In a February 2014 presentation to its investors, National Fuel stated that its midstream businesses (including both of the applicants for the Northern Access 2016 Project, Supply and Empire) are "positioned to serve Seneca's rapidly *growing* production." National Fuel, February 2014 Investor Presentation at 42 (emphasis added) (Attachment 8). This indicates that National Fuel's midstream companies are not simply responding to Seneca's need for increased capacity for existing production but for continued growth in production. National Fuel specifically highlights two "significant . . . expansions to move gas from the [Western Development Area]." *Id*. at 49. The two projects are the Northern Access 2015 Project and Clermont to Chippawa Project. *Id*. Of course, the Clermont to Chippawa Project *is* the Northern Access 2016 Project. *See* National Fuel, May 2014 Investor Presentation at 51, n 1 (noting that the Clermont to Chippawa Project was renamed the Northern Access 2016 Project).[9]

National Fuel's investor presentations provide a comprehensive overview of the vertical integration of its gas drilling and pipeline expansion operations and the advantages that this integration provides. National Fuel notes that its upstream operations carried out on Seneca's "high quality Marcellus acreage," including 200,000 "Tier I" acres in its Western Development Area, connects to its "interstate pipeline network" to provide "capacity to premium and alternative markets," including via its "Northern Access Projects." National Fuel, January 2015 Investor Presentation at 6. National Fuel refers to its upstream and midstream operations as working hand-in-hand toward a "common vision for growth." *Id*. It would be absurd for FERC to look at this vertical integration and claim that the Northern Access 2016 Project and Seneca's gas drilling operations are not "two links of a single chain."

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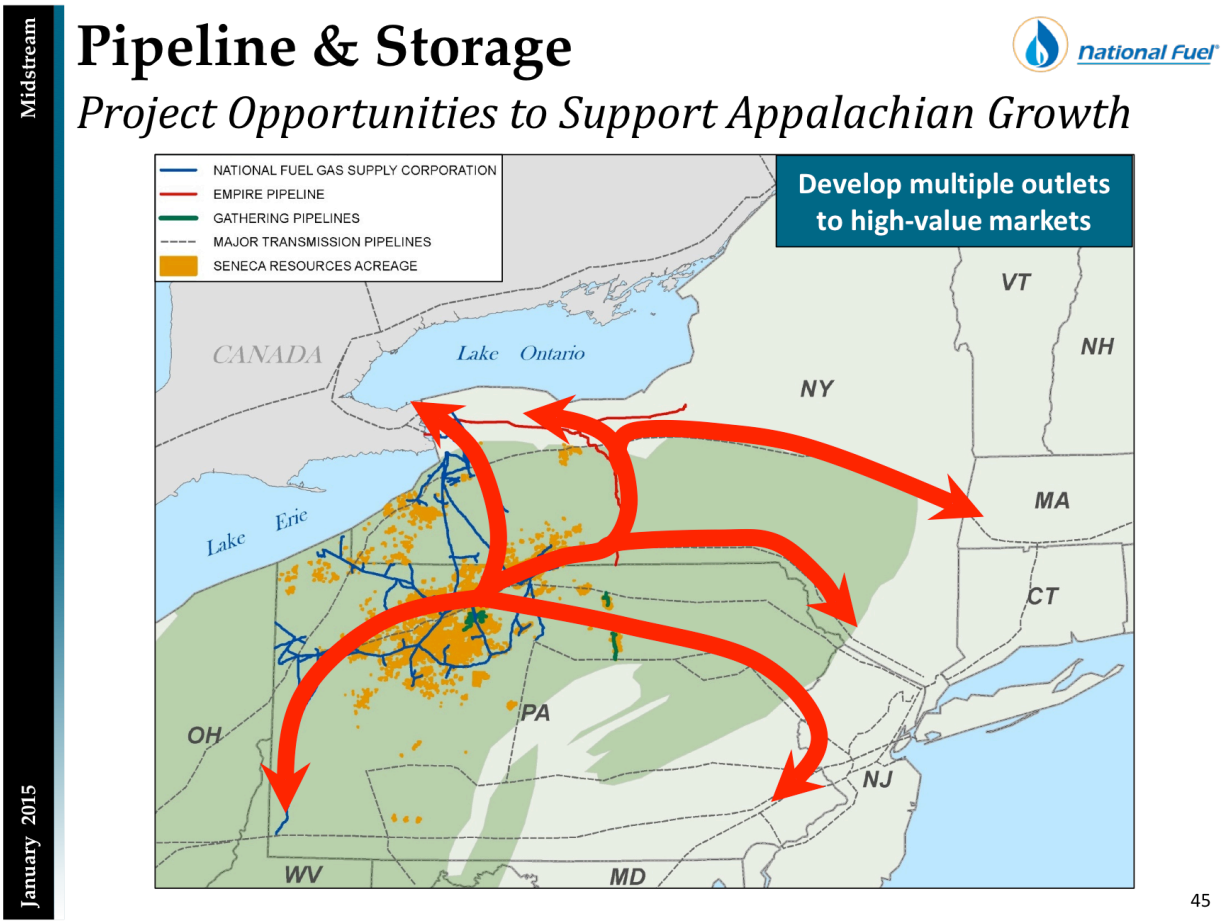
[9] This means that in February 2014, one month before it submitted its application for the Northern Access 2015 Project, National Fuel was already planning the Northern Access 2016 Project, further demonstrating that the two projects should be considered connected, cumulative and similar actions under 40 C.F.R. § 1508.25(a) and reviewed in a single EIS.

National Fuel provides a detailed breakdown of its midstream infrastructure build-out plans to support growing shale gas production. *See id*. at 41-52. This includes a map indicating Seneca's production in its Western and Eastern Development Areas flowing along jurisdictional pipelines to specific markets to the north, east, and south. *Id*. at 45 (see Figure 7 below).

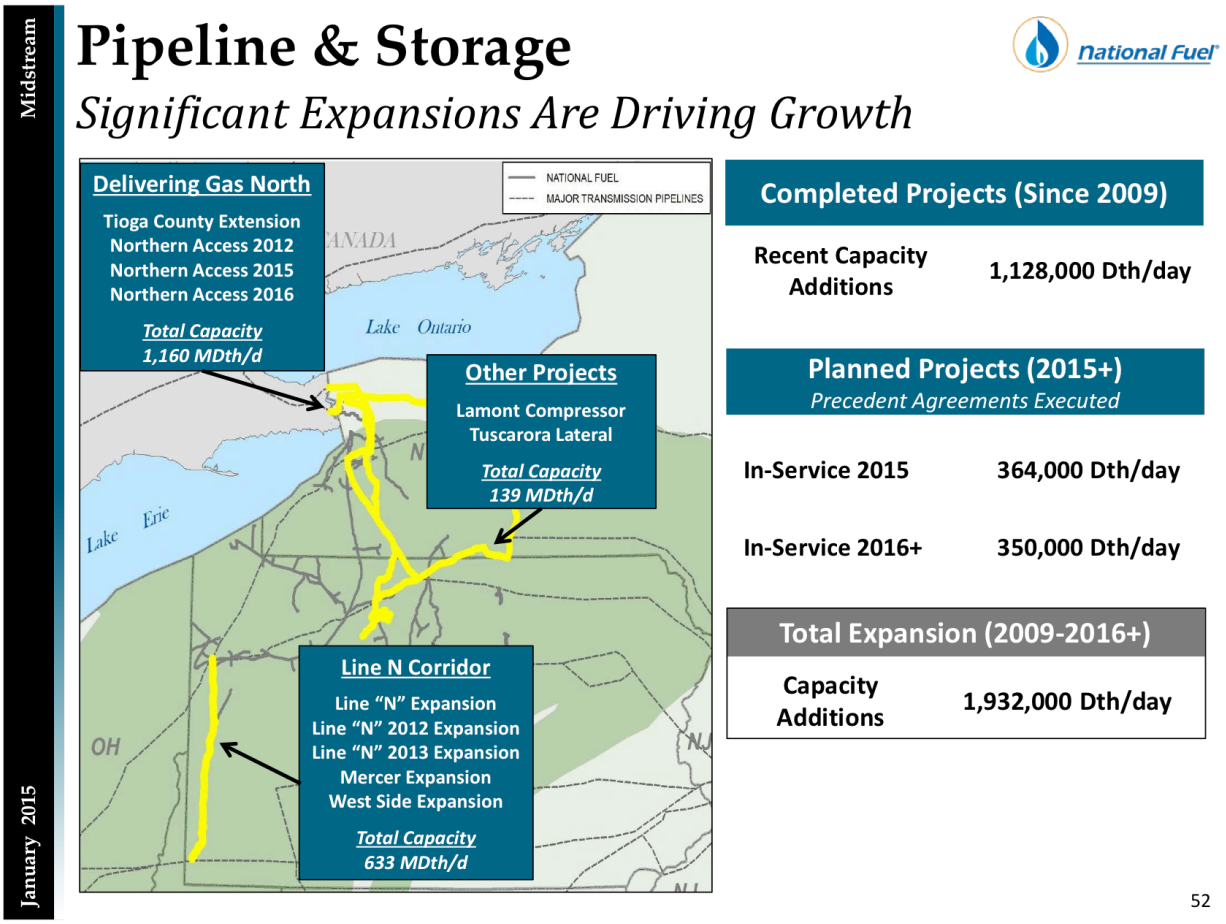
Figure 7: National Fuel's Pipeline & Storage Project Opportunities to Support Appalachian Growth.



The following several pages break down National Fuel's plans to facilitate transmission of Seneca's growing production. *Id*. at 46-51. This includes the Northern Access 2015 Project and Tennessee's related Niagara Expansion Project. *Id*. at 47. It also includes the Northern Access 2016 Project. *Id*. at 48. National Fuel then connects all of the pieces together on a single

map noting that these "*significant* [pipeline & storage] expansions are *driving growth*." *Id*. at 52 (emphasis added) (*see* Figure 8 below).

Figure 8: National Fuel Pipeline & Storage Expansions



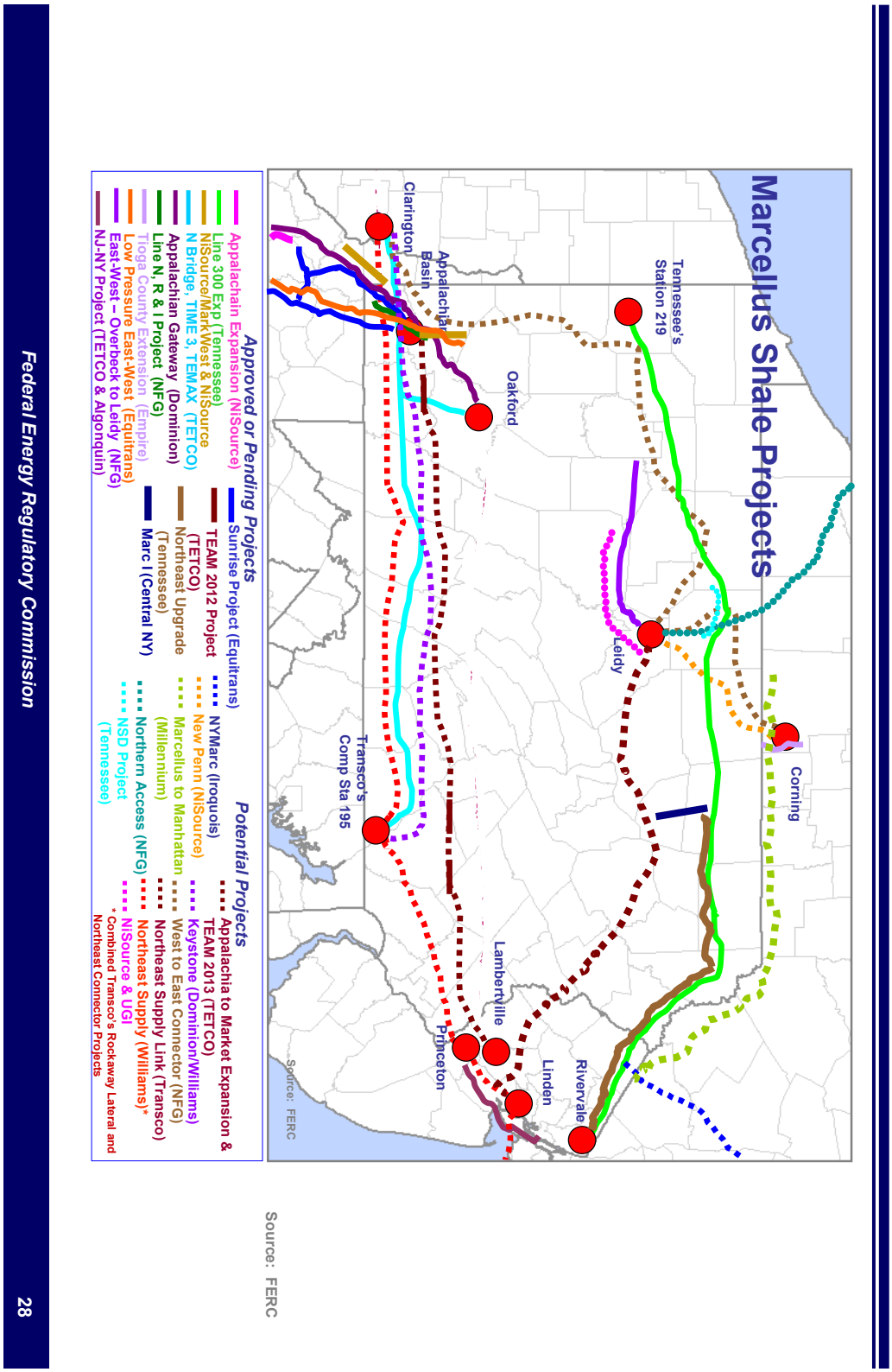
Source: National Fuel, January 2015 Investor Presentation at 52.

Thus, since 2009 National Fuel has proposed at least 11 infrastructure projects totaling nearly 2 million Dth/d of increased capacity. As explained above, FERC has allowed National Fuel to impermissibly segment most of these connected, cumulative and similar projects in a short period of time. In addition, by considering all of these projects in separate proceedings and using "tunnel vision" to ignore the broader environmental impacts that are occurring in this

region from continued inducement of gas drilling in the Marcellus and Utica shale formations, FERC utterly fails to appreciate the "true scope and impact" of these infrastructure projects.

It is also important to note that FERC itself once considered shale gas extraction and infrastructure (including transmission pipelines) as "two links of a single chain." According to a 2010 presentation in Berlin, Germany, FERC identified numerous jurisdictional "Marcellus Shale Projects" in Pennsylvania and surrounding states, including the first of National Fuel's Northern Access projects. FERC, Natural Gas in the U.S.: Supply and Infrastructure = Security, p. 28 (Oct. 26-27, 2010) (Attachment 9) (*see* Figure 9 below).

Figure 9: FERC-jurisdictional "Marcellus Shale Projects."



Source: FERC

On the next page of its presentation, FERC identified numerous jurisdictional "Natural Gas Facilities Impacting the Marcellus Shale Basin." *Id*. at 29. The projects are broken down by company and identify the capacity, miles of pipe, and compression of each project "impacting the Marcellus Shale Basin." *Id*. FERC also discussed the impacts of drilling and hydraulic fracturing for shale gas. *See id*. at 30-33 (discussing the process of hydraulic fracturing, volumetric composition of fracture fluids, and estimated water needs per shale well in the Marcellus, Barnett, Fayetteville and Haynesville Shale Basins). It is arbitrary and capricious for FERC to refer to projects under its jurisdiction as "Marcellus Shale Projects" and then claim there is an insufficient causal relationship between those projects and gas drilling in the Marcellus shale formation.

FERC's refusal to consider the effects of upstream gas drilling in the Marcellus and Utica shale formations is reminiscent of similar arguments made by the Surface Transportation Board that were rejected by the Eighth Circuit. In that case, the Surface Transportation Board argued that because many utilities were likely to switch to the kind of low-sulfur variety of coal that a planned railroad would make available, "this shift will occur regardless of whether [the railroad company's] new line is constructed." *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549 (8th Cir. 2003). The Eighth Circuit rejected this argument outright:

> ….the proposition that the demand for coal will be unaffected by an increase in availability and a decrease in price, which is the stated goal of the project, is illogical at best. The increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas. Even if this project will not affect the short-term demand for coal….it will most assuredly affect the nation's long-term demand for coal[.]

Mid States, 345 F.3d at 549. It is similarly illogical for FERC to ignore the impact that jurisdictional projects have on gas drilling in the Marcellus and Utica shale formations because once these projects are constructed and in service and the target market areas are connected to Marcellus and Utica shale gas supplies, it makes drilling in this region much more likely.

Finally, it is important to note that one of the intervenors in this proceeding, the Natural Gas Supply Association, explains how gas producers rely on infrastructure projects such as the Northern Access 2016 Project:

> Over the past decade, natural gas production has become increasingly diversified across the country bringing supply closer to the market area and end-users. Yet insufficient infrastructure can limit users' ability to tap into market supplies that are close to their market areas. Natural gas producers are doing our part, making enormous investments in exploration and production of natural gas, *while also financially committing to the pipeline projects that* ***provide the capacity needed to bring gas from supply areas to market hubs***. But *more is needed*.
>
> The path head seems straightforward: in order for Americans to take full advantage of the benefits offered by abundant natural gas supplies, *additional natural gas infrastructure must be in place* to transport natural gas from the wellhead to consumers.

Natural Gas Supply Association Comments at 2-3 (Accession No. 20150415-5228) (emphasis added). That is certainly the case here where Seneca is providing the financial commitment for the Northern Access 2016 Project to provide the capacity to get its shale gas to market.

The Northern Access 2016 Project and gas drilling in the Marcellus and Utica shale formations are "two links of a single chain." *Sylvester*, 884 F.2d 394, 400 (9th Cir. 1989). The information above clearly reveals that there is a close causal relationship between the Project and, at a minimum, Seneca's shale gas drilling operations. FERC must consider the indirect effects of this gas drilling rather than using the same kind of "tunnel vision" that the Corps used in *Colorado River Indian Tribes*. 605 F.Supp. 1425, 1433 (C.D. Cal. 1985).

b. Gas drilling in the Marcellus and Utica shale formations is reasonably foreseeable.

Gas drilling in the Marcellus and Utica shale formations is also reasonably foreseeable. An indirect impact 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." *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992). "[W]hen the *nature* of the effect is reasonably foreseeable but its *extent* is not, [an] agency may not simply ignore the effect." *Mid States*, 345 F.3d at 549 (emphasis in original). *See also Habitat Education Center v. U.S. Forest Service*, 609 F.3d 897, 902 (7th Cir. 2010). Here, it is sufficiently likely to occur that a person of ordinary prudence would take Marcellus and Utica shale gas drilling into account before reaching a decision about whether the Northern Access 2016 Project is in the public interest.

FERC, however, often claims that even if there is a causal connection between projects such as the one under review here and induced gas production, "such production is not reasonably foreseeable as contemplated by CEQ's regulations and case law." *See, e.g.*, Northern Access 2015 Order at P 62. There, FERC said that it "need not address remote and highly speculative consequences." *Id*. (*citing Hammond v. Norton*, 370 F.Supp.2d 226, 245-46 (D.D.C. 2005). FERC also said that it is not required "to engage in speculative analysis" or "to do the impractical, if not enough information is available to permit meaningful consideration." *Id*. (*citing N. Plains Res. Council v. Surface Transp. Board*, 668 F.3d 1067, 1078 (9th Cir. 2011). Finally, FERC stated:

> Knowing the identity of a supplier of gas to be shipped on a pipeline, and even the general area where a producer's existing wells are located, does not enable the Commission to forecast (as opposed to speculate about) the number, location, or timing of the development of the new or existing wells that might produce the gas which will be transported on the project facilities over their lifespans. In the absence of such information, the Commission in turn cannot forecast and analyze the specific impacts which might be associated with any additional production. No party has presented or

> referenced any accepted, detailed information that quantifies the environmental impacts of producing natural gas in the specific areas from which the proposed projects might receive their supplies. Accordingly, we find that even if we were to find the required causal relation, which we do not, there is not sufficient information available regarding potential upstream impacts to develop an analysis which would assist the Commission in either choosing between alternatives or developing mitigation measures.

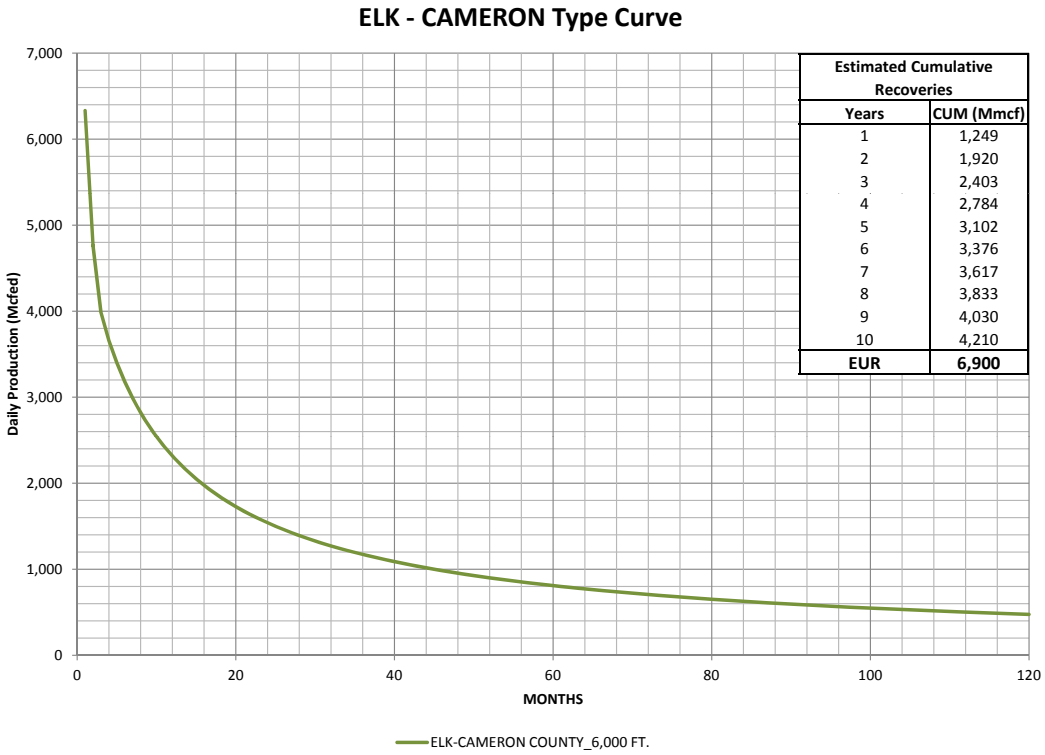
Id. FERC is mistaken on all counts.

First, by claiming that "no party has presented or referenced any accepted, detailed information that quantifies the environmental impacts of producing natural gas," FERC "would require the public, rather than the agency, to ascertain the cumulative effects of a proposed action." *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Department of the Interior*, 608 F.3d 592, 605 (9th Cir. 2010). "Such a requirement would thwart one of the 'twin aims' of NEPA – to 'ensure[ ] that the *agency* will inform the *public* that it has indeed considered environmental concerns in its decision making process.'" *Id*. (*quoting Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97, 103 S.Ct. 2246, 76 L.Ed.2d 437 (1983)) (emphasis added by Ninth Circuit). Compliance with NEPA "is a primary duty of every federal agency; fulfillment of this vital responsibility should not depend on the vigilance and limited resources of environmental plaintiffs." *City of Carmel-by-the-Sea v. U.S. Dept. of Transportation*, 123 F.3d 1142, 1161 (9th Cir. 1997) (*quoting City of Davis v. Coleman*, 521 F.2d 661, 671 (9th Cir. 1975). *See also Center for Biological Diversity v. U.S. Forest Service*, 349 F.3d 1157, 1166 (9th Cir. 2003) ("The procedures prescribed both in NEPA and the implementing regulations are to be strictly interpreted 'to the fullest extent possible' in accord with the policies embodied in the Act….'[g]rudging, pro forma compliance will not do.'") (citations omitted)). Thus, FERC's insistence that it is incumbent upon the public to produce the kind of information it claims to need is wholly inappropriate.

Second, FERC substantially misreads the case law it cites. For example, in *Hammond*, the plaintiffs challenged the Bureau of Land Management's ("BLM") analysis of an oil pipeline. According to the project proponent, Williams, the pipeline "would generally transport only 76,000 [barrels per day (bpd)]." 370 F.Supp.2d at 245. Plaintiffs alleged, however, that another pipeline could "deliver enough petroleum products to allow the Williams pipeline to run at a capacity higher than 76,000 [bpd]." *Id*. The court found that plaintiffs provided no evidence to support its claim and that "BLM did not act unreasonably in relying on the project proponent's claim." *Id*. at 246. Unlike *Hammond*, there is ample evidence here about the reasonable foreseeability of future gas drilling in the Marcellus and Utica shale formations. Indeed, as explained above, the entire purpose of the Northern Access 2016 Project is to provide increased capacity for growing shale gas production in northern Pennsylvania.

In addition, it is important to note the steep decline curve in the average Marcellus shale gas well. For example, "the average first year decline rates across Pennsylvania appear to range from approximately 60% to 80%." Penn State Extension, Appalachian Basin Decline Curve and Royalty Estimation, July 27, 2014, *available at* http://extension.psu.edu/natural-resources/natural-gas/news/2014/07/appalachian-basin-decline-curve-and-royalty-estimation-part-1 (Attachment 10). The decline rate in Seneca's Western Development Region falls within this average. For example, the type curve for Elk and Cameron Counties shows a 62% decline in production over the first year:

Figure 10: Elk-Cameron Marcellus Type Curve.



Estimated Cumulative Recoveries	
Years	CUM (Mmcf)
1	1,249
2	1,920
3	2,403
4	2,784
5	3,102
6	3,376
7	3,617
8	3,833
9	4,030
10	4,210
EUR	**6,900**

Source: National Fuel Gas Company, *available at* http://investor.nationalfuelgas.com/files/doc_financials/investor_spotlight/NFG-Marcellus-Typecurves-111513.pdf.

This is relevant since "the initial decline, or decrease in production, over the first year of operation of a shale well is an important variable in estimating the potential for future production." Attachment 10. *See also* Penn State Marcellus Center for Outreach and Research, PA Estimated Cumulative Production & Decline Curves (Attachment 11). With average first year decline rates between 60% to 80%, it is likely that more drilling and fracking will occur as the industry attempts to keep production up, thereby causing even more environmental impacts.

FERC's reliance on the Ninth Circuit's decision in *Northern Plains* is also misplaced since that case actually *supports* the need for a much more robust analysis. FERC pulls out of

context the court's statement that agencies are "not required to engage in speculative analysis." Northern Access 2015 Order at P 62. The court made clear, however, that this applied *only* when there is "not enough information [ ] available to permit meaningful analysis." *Northern Plains*, 668 F.3d 1067, 1078. The court then continued:

> However, projects need not be finalized before they are reasonably foreseeable. "NEPA requires that an EIS engage in reasonable forecasting. *Because speculation is…implicit in NEPA, [ ] 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*." Selkirk, 336 F.3d at 962 (internal quotation marks and citation omitted). As the Environmental Protection Agency (EPA) also has noted, "reasonable foreseeable future actions need to be considered even if they are not specific proposals."

Id. at 1078-79 (emphasis added). Here, there is more than enough information for FERC to perform a meaningful analysis of reasonably foreseeable shale gas drilling. FERC's rationale for not considering these indirect effects is a transparent attempt to "shirk [its] responsibilities" under NEPA by labeling any and all discussion of future environmental effects of such drilling as "crystal ball inquiry."

Indeed, FERC's test for determining whether an action is "reasonably foreseeable" would make many such analyses "crystal ball inquiries." For example, FERC says that it is not enough that it "know[s] the identity of a supplier of gas to be shipped on a pipeline, and even the general area where a producer's existing wells are located." Northern Access 2015 Order at P 62. Rather, FERC says that it must have information about the precise "number, location, or timing of the development of the new or existing wells that might produce the gas which will be transported on the project." *Id*. Without such precise information, FERC says that it "cannot forecast and analyze the specific impacts which might be associated with any additional production." *Id*. This is beyond all reason and distorts the indirect effects regulation to the point

of making it a nullity.[10] FERC does not need precise information in order to engage in reasonable forecasting.

Even so, there is more than enough information about existing and future shale gas production for FERC to engage in reasonable forecasting. According to a report by the research investment firm Morningstar, "some of the most prominent, lowest-cost, and fastest-growing Marcellus players, including Cabot Oil & Gas, Range Resources, Chesapeake Energy, EQT Corporation, and Antero Resources" have "identified *between 10 and 30 years of* ***drilling locations*** across the Marcellus, which should fuel *several more years of production growth* at relatively low cost." 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) (emphasis added) (Attachment 12). As noted above, National Fuel's presentation to its investors includes a wealth of information about its existing and reasonably foreseeable future drilling plans. For example, National Fuel identifies at least 1,021 gas well "*locations* remaining to be drilled" in its Western Development Area in northwestern Pennsylvania. National Fuel, January 2015 Investor Presentation at 24 (emphasis added). National Fuel breaks this down further into six specific areas within its Western Development Area. *Id*. Another 1,620 gas wells locations are known and remain to be drilled but "additional delineation" is required. *Id*.

National Fuel also provides in-depth detail about production in the "Clermont/Rich Valley Area" within Seneca's Western Development Area. *Id*. at 23. This area is located in the tri-county area of McKean, Elk, and Cameron Counties just east of the Allegheny National Forest. *Id*. (*see* inset). National Fuel says there are "200-250 Planned Horizontal Locations."

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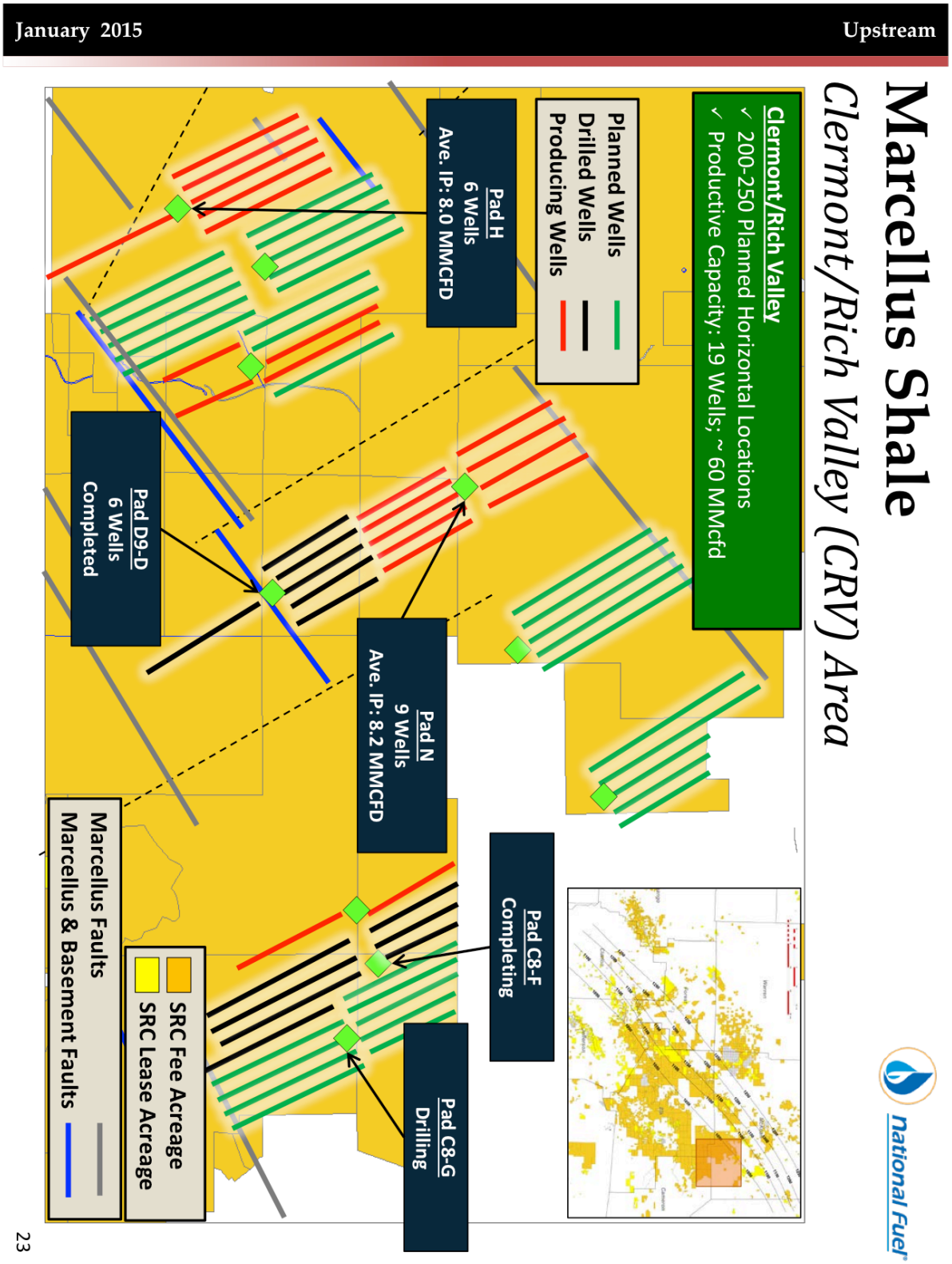
[10] FERC's interpretation also undermines the "reasonably foreseeable future actions" prong of the cumulative impact regulation. *See* 40 C.F.R. § 1508.7.

Id. National Fuel further claims that the "productive capacity" of 19 wells roughly amounts to 60 MMcfd. *Id*. The map on this slide shows well pad locations, the number of wells drilled from each pad, and whether those wells are planned, drilled, or producing. *Id*. For wells that are producing, National Fuel provides the average initial production rate. *Id*. The map of Seneca's "Clermont/Rich Valley Area" holdings is included below:

Figure 11: Seneca's Marcellus Shale Operations in the Clermont/Rich Valley Area of McKean, Elk and Cameron Counties, Pennsylvania.



In its most recent Annual Report to the Securities and Exchange Commission ("SEC"), National Fuel stated that:

> [National Fuel Gas] Supply Corporation and [Tennessee Gas Pipeline] have jointly developed a project that will combine expansions on both pipeline systems, providing a seamless transportation path from TGP's 300 Line *in the Marcellus fairway* to the TransCanada Pipeline delivery point at Niagara. Supply Corporation has offered 140,000 Dth per day of capacity on its system to TGP under a lease, from its Ellisburg Station for redelivery to TGP in East Eden, New York ("Northern Access 2015"). The project will provide Seneca Resources, TGP's anchor shipper, with an outlet to premium Dawn indexed markets in Canada, *for their Clermont Area Marcellus production . . .*
>
> Supply Corporation and Empire have been working with Seneca Resources to develop a project which would move *significant* ***prospective*** *Marcellus production from its Western Development Area at Clermont to an interconnection on Empire with TransCanada Pipeline at Chippawa ("Northern Access 2016")*. Similar to the Northern Access 2015 project, this project would provide an outlet to premium Dawn indexed markets in Canada in late 2016.

National Fuel Gas Co., Annual Report (Form 10-K), at 51 (Nov. 21, 2014) (emphasis added). Thus, National Fuel has provided specific details to the SEC and its investors about Seneca's gas production in the Clermont area of McKean, Elk and Cameron Counties, Pennsylvania as well as its intentions to transport that production to Canada by way of the increased capacity that will be created by the Northern Access 2015 and Northern Access 2016 Projects on Supply's and Empire's pipelines. And, according to National Fuel, at least some of these wells are "planned" wells so they are reasonably foreseeable.

Additionally, FERC is well aware of the nature of the impacts of shale gas drilling. According to a recent U.S. Geological Survey ("USGS") report:

> A recent analysis of Marcellus well permit locations in Pennsylvania found that well pads and associated infrastructure (roads, water impoundments, and pipelines) required nearly 3.6 hectares (ha) per well pad with an additional 8.5 ha of indirect edge effects (Johnson, 2010). This type of extensive and long-term habitat conversion has a greater impact on natural ecosystems than activities such as logging or agriculture, given the great dissimilarity between gas-well pad infrastructure and adjacent natural areas and the low

> probability that the disturbed land will revert back to a natural state in the near future (high persistence) (Marzluff and Ewing, 2001).

USGS, Landscape Consequences of Natural Gas Extraction in Cameron, Clarion, Elk, Forest, Jefferson, McKean, Potter, and Warren Counties, Pennsylvania, 2004-2010, p. 10 (2014) (Attachment 13). In a 2012 presentation provided through the Penn State Cooperative Extension, The Nature Conservancy ("TNC") estimated that 60,000 shale gas wells could eventually be drilled in Pennsylvania. TNC, Marcellus Gas Well & Pipeline Projections, p. 13 (Attachment 14). In its 2014 report on Marcellus shale supplies, Morningstar stated that there is "somewhere between 30 and 75 years of Marcellus resource potential at current production rates" and that "approximately 1,000 wells will need to be brought on line each year to hold gas production flat." Morningstar Energy Observer at 15; 17. In other words, at 1,000 new wells per year, there is the potential for 30,000 to 75,000 Marcellus shale gas wells. TNC's estimation of 60,000 falls squarely within Morningstar's estimations.

TNC further reviewed how these projected wells would be distributed on the landscape under various well pad development scenarios. TNC, Marcellus Gas Well & Pipeline Projections, p. 13. TNC also analyzed where Marcellus Shale drilling was likely to occur (*Id*. at 15-17) and how many miles of new pipelines and the direct and indirect effects of those pipelines on forests by 2030 (*Id*. at 21). For example, by 2030, TNC estimated that there could be 10,000 – 25,000 miles of new gathering pipelines causing an estimated 60,000 to 150,000 acres of direct forest clearing and 300,000 to 900,000 acres of forest edge effects. *Id*. at 21.

According to TNC, pipeline mileage in Pennsylvania will at least double if not quadruple by 2030. *Id*. at 22. The footprint from pipelines alone is projected to be larger than the "cumulative area impacted by all other Marcellus gas infrastructure combined." *Id*. Thus, when shale gas wells, roads, and other associated infrastructure (besides pipelines) are included, these

figures will be much higher. These are enormous impacts to our landscapes, watersheds, wildlife habitat, and recreation opportunities that FERC routinely ignores due to its self-imposed "tunnel vision."

Thus, with the information from National Fuel, USGS and TNC, FERC should be able to engage in reasonable forecasting for purposes of analyzing impacts of reasonably foreseeable gas drilling. Moreover, FERC has an independent duty to ascertain the effects of the Project. *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Department of the Interior*, 608 F.3d 592, 605 (9th Cir. 2010). Even if FERC does not know the precise location and timing of future gas drilling, "when the *nature* of the effect is reasonably foreseeable but its *extent* is not, [an] agency may not simply ignore the effect." *Mid States*, 345 F.3d at 549 (emphasis in original). *See also Habitat Education Center v. U.S. Forest Service*, 609 F.3d 897, 902 (7th Cir. 2010). Furthermore:

> *[P]rojects need not be finalized before they are reasonably foreseeable*. "NEPA *requires* that an EIS engage in reasonable forecasting. *Because speculation is … implicit in NEPA*, [] we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects are crystal ball inquiry." As the [EPA] also has noted, "reasonably foreseeable future actions need to be considered even if they are not specific proposals."

Northern Plains Resource Council v. Surface Transportation Board, 668 F.3d 1067, 1078-79 (9th Cir. 2011) (citations omitted) (emphasis added). FERC must not shirk its responsibilities under NEPA by labeling any attempt to analyze the environmental impacts of shale gas extraction in the Marcellus and Utica shale formations as "crystal ball inquiry."

3. FERC must take a hard look at the cumulative impacts of gas drilling in the Marcellus and Utica shale formations.

Even if FERC does not consider Marcellus and Utica shale gas drilling to be an indirect effect of the Projects under 40 C.F.R. § 1508.8(b), that drilling must nevertheless be considered a cumulative impact of the Project under 40 C.F.R. § 1508.7. A cumulative impact is the:

> [I]mpact 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 (emphasis added). Unfortunately, just as it often uses "tunnel vision" to avoid analyzing Marcellus and Utica shale gas drilling as an indirect effect, FERC often uses that same "tunnel vision" to largely ignore this drilling as a cumulative impact.

For example, in the EA for National Fuel's West Side Expansion Project (Docket No. CP14-70-000, Accession No. 20141208-4006), which included replacing 23 miles of 20-inch-diameter pipeline with 24-inch-diameter pipeline (the same diameter for the mainline pipeline in the Northern Access 2016 Project), FERC used "a 0.5-mile radius as the region of influence for most resources affected (not including air quality)[.]" *See* West Side Expansion EA at 45. In other words, FERC only considered the cumulative impact of shale gas drilling on resources like wildlife habitat and watersheds if that drilling fell within a 0.5-mile radius of the pipeline. As a result, FERC only included 31 wells and associated infrastructure. *Id*. There is no legitimate rationale for such a narrow cumulative impact analysis area, especially in light of how much drilling has occurred in recent years in the counties traversed by the West Side Expansion Project.

According to Pennsylvania Department of Environmental Protection ("DEP") records, between 2009-2014, there were 1,362 oil and gas wells (213 conventional and 1,149

unconventional) drilled in Allegheny, Beaver and Washington Counties, Pennsylvania, the location of the West Side Expansion pipeline replacement. PADEP, Office of Oil and Gas Management, Wells Drilled by County (Southwest District Office) (Attachment 15). By limiting the analysis area to within 0.5 miles of the pipeline and, therefore, only considering the impacts of 31 wells, FERC's cumulative impact analysis was limited to just 2% of the wells that were drilled in just the past six years in these three counties. Nevertheless, FERC concluded that this 0.5-mile "region of influence" for considering cumulative impacts was "appropriate." *National Fuel Gas Supply Corporation*, 150 FERC ¶ 61,162 at P 49 (Mar. 2, 2015).

As the EPA recently stated in another proceeding, however, "geographic proximity is not in and of itself the standard" for including other actions in a cumulative impact analysis. EPA Comments on Algonquin Gas Transmission's AIM Project at 10 (Docket No. CP14-96-000, Accession No. 20140929-5268). FERC, however, routinely *insists* on using geographic proximity to substantially narrow its review of cumulative impacts. In addition to the West Side Expansion Project example described above, FERC used similarly restrictive "regions of influence" in the following proceedings:

- In the EA for Rockies Express Pipeline's ("REX") Zone 3 East-to-West Project, FERC only considered other projects "directly in the vicinity" of the project. Zone 3 East-to-West EA at 29 (emphasis added) (Docket No. CP14-498-000; Accession No. 20141124-4007). In other words, FERC used geographic proximity as a way to substantially narrow the cumulative impact analysis area and exclude consideration of impacts from Marcellus and Utica shale gas drilling even though REX specifically stated that its project was intended to "create an additional takeaway option for Utica and Marcellus Shale Plays and Appalachian producers[.]" Application at 35 of PDF (Accession No. 20140610-5159). FERC recently approved the Zone 3 East-to-West Project. *Rockies Express Pipeline*, 150 FERC ¶ 61,161 (Feb. 27, 2015).
- In the EA for Columbia Gas Transmission's East Side Expansion, FERC used "a 0.5-mile radius as the project area/region of influence for most resources impacted (not including air quality)." East Side Expansion EA at 2-112 (Docket No. CP14-17-000; Accession No. 20140827-4001). Such a small "region of influence" ignored the cumulative impacts of shale gas drilling even though Columbia's application for the East Side Expansion states that the purpose of that project is "to construct facilities to increase its system

capacity making it possible for new sources of gas supply to meet emerging market growth needs." East Side Expansion Application at 12 (Accession No. 20131101-5125). FERC recently approved the East Side Expansion Project. *Columbia Gas Transmission*, 149 FERC ¶ 61,255 (Dec. 18, 2014).

- In the EA for TETCO's Uniontown to Gas City ("U2GC") Project, FERC "limited [its] review to projects directly in the vicinity of [the U2GC Project]." U2GC EA at 26 (Docket No. CP14-104-000; Accession No. 20140821-4005). By limiting its review to projects "directly in the vicinity" of the U2GC Project, FERC ignored the cumulative impacts of shale gas drilling even though TETCO's environmental reports for the U2GC Project explicitly stated that the project "responds to significant interests from customers regarding transportation capacity to accommodate increased production of natural gas from the emerging Marcellus Shale and Utica Shale plays in the supply rich area west of Uniontown, Pennsylvania." U2GC Resource Report 1 at 1-1 (Accession No. 20140311-5175). FERC recently approved the U2GC Project. *Texas Eastern Transmission*, 149 FERC ¶ 61,259 (Dec. 18, 2014).
- In the EA for Columbia Gas Transmission's Smithfield III Expansion, FERC only considered "projects directly in the vicinity of the [Smithfield III Expansion] Project." Smithfield III Expansion EA at 2-37 (Docket No. CP13-477-000; Accession No. 20131029-4012). By limiting its review to projects "directly in the vicinity" of the Smithfield III Expansion, FERC ignored the cumulative impacts of shale gas drilling even though Columbia's application for the Smithfield III Expansion explicitly stated that the purpose of that project was "to construct facilities necessary to transport gas from the Appalachian basin[.]" Smithfield III Expansion Application at 3 (Accession No. 20130510-5082).
- In the EA for Dominion's Clarington Project, FERC only considered other projects "within an area of influence of 5 miles of the proposed [Clarington] Project." Clarington Project EA at 39 (Docket No. CP14-496-000; Accession No. 20150115-4001). By limiting the "area of influence" to within 5 miles of the Clarington Project, FERC ignored the cumulative impacts of shale gas drilling even though Dominion's application stated that the purpose of the project is "to transport Appalachian production" from the "Marcellus and Utica shales." Clarington Project Application at 4 (Accession No. 20140602-5213).
- In the EA for Dominion's Appalachian Gateway Project, FERC only considered "other projects in the general Project area." Appalachian Gateway EA at 2-134 (Docket No. CP10-448-000; Accession No. 20110331-4001). By limiting its review to projects "in the general [Appalachian Gateway] Project area," FERC ignored the cumulative impacts of shale gas drilling even though Dominion's application expressly referenced increasing gas production "in the Appalachian region of West Virginia and Pennsylvania," including conventional and unconventional (coal bed methane and Marcellus shale) production, and stated that its project would "provide Appalachian producers a secure and reliable route to transport their growing gas supplies to high demand markets in the Mid-Atlantic and Northeastern regions." Appalachian Gateway Application at 4 (Accession No. 20100601-5221).
- In the EA for Columbia's Appalachian Expansion Project, FERC only considered other projects "within the area affected by the proposed Project." Appalachian Expansion EA at 26 (Docket No. CP08-85-000; Accession No. 20080818-4003). By limiting its review

to only those projects that occurred "within the area affected by the proposed Project," FERC ignored the cumulative impacts of shale gas drilling even though Columbia's application said its project was "driven by the need to move additional Appalachian production gas that is currently trapped in the production fields." Appalachian Expansion Project Application at 5 (Accession No. 20080229-4007).

- In the EA for National Fuel's Tuscarora Lateral Project, FERC only "considered other projects within approximately a 0.5-mile radius as the project area/region of influence for most resources affected." Tuscarora Lateral EA at 57 (Docket No. CP14-112-000, Accession No. 20141031-4002). By limiting its review so narrowly, FERC ignored the cumulative impacts of shale gas drilling even though National Fuel said that its project was intended to "provid[e] [New York State Electric & Gas] with [ ] firm access to Marcellus Shale[.]" Tuscarora Lateral Project Application at 22 (Accession No. 20140318-5167).

In all of these projects, FERC only prepared an EA, substantially limited the scope of the cumulative impact analysis area, and issued a FONSI. It is obvious that FERC is ignoring the overwhelming majority of cumulative impacts caused by gas drilling in the Marcellus and Utica shale formations. In *Kern v. BLM*, the Ninth Circuit explained that "the importance of analyzing cumulative impacts in EAs is apparent when we consider that….so many more EAs are prepared than EISs[.]" 284 F.3d 1062, 1076 (9th Cir. 2002) (internal quote and citation omitted). The court further explained that an impermissibly restrictive cumulative effects analysis "subject[s] the decisionmaking process contemplated by NEPA to 'the tyranny of small decisions.'" *Id*. at 1078 (quoting CEQ, *Considering Cumulative Effects*, at 1).

By using such restrictive geographic parameters in one project after another, FERC *has* subjected the decisionmaking process contemplated by NEPA to "the tyranny of small decisions." *Id*. FERC's "tunnel vision" necessarily ignores the vast majority of cumulative impacts of Marcellus and Utica shale gas drilling that occur outside of these arbitrary "regions of influence." In other words, FERC ignores the fact that "[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. And, since FERC refuses to consider Marcellus and Utica shale gas drilling as

an indirect effect under NEPA, it is clear that these impacts will *never* be addressed by FERC in any meaningful way even though they are obviously related to the construction and expansion of facilities under FERC's jurisdiction.

Interestingly, FERC purports to use CEQ's guidance on cumulative impacts to develop its restrictive cumulative effects analysis areas. *See e.g.*, Northern Access 2015 Order at PP 63-64. CEQ's guidance on cumulative impacts, however, actually calls for greatly expanding the scope of the analysis area. For example, CEQ states that:

> For a project-specific analysis, it is often sufficient to analyze effects within the immediate area of the proposed action. When analyzing the contribution of this proposed action to cumulative effects, however, the geographic boundaries of the analysis *almost always should be expanded*. These expanded boundaries can be thought of as differences in hierarchy or scale. Project-specific analyses are usually conducted on the scale of counties, forest management units, or installation boundaries, *whereas cumulative effects analysis should be conducted on the scale of human communities, landscapes, watersheds, or airsheds*.

CEQ, Considering Cumulative Effects under the National Environmental Policy Act, p. 12 (1997) (emphasis added). CEQ further says that it may be necessary to look at cumulative effects at the "ecosystem" level for vegetative resources and resident wildlife, the "total range of affected population units" for migratory wildlife, an entire "state" or "region" for land use, and the "global atmosphere" for air quality. *Id*. at 15. In other words, only looking at "other activities directly in the vicinity" or within 0.5 miles of the Project is clearly inconsistent with CEQ's guidance. By limiting the scope of the cumulative impacts analysis area to include only those projects that are within a narrow region of influence, FERC routinely ignores substantial and long-term effects on various resources including wildlife, vegetation, water quality, air quality and recreation caused by shale gas development.

In *LaFlamme v. FERC*, 852 F.2d 389 (9th Cir. 1988), the Ninth Circuit reviewed FERC's authorization of the Sayles Flat Project, a hydroelectric power project on the American River in

California. FERC prepared an EA for the Sayles Flat Project and ultimately issued a FONSI. In its decision, the court said that FERC violated NEPA by failing to consider the cumulative impacts of other projects on the American River Basin. Instead, FERC relied on a previous EIS for another project (the Upper Mountain Project) that was "limited to assessing the impact of *that* project's diversion dams and other proposed facilities in *that* project's area." *LaFlamme v. FERC*, 852 F.2d 389, 401 (9th Cir. 1988) (emphasis added). The court continued:

> At no point did the [Upper Mountain Project] EIS analyze the effects of *other projects*, pending or otherwise, might have on *this* section of the American River Basin. Such a narrow analysis of one project's impact on this area cannot possibly provide the necessary broad consideration of all "past, present, and reasonably foreseeable future actions" required in a cumulative impact analysis. *Considering that the Upper Mountain Project represents only the initial development of the remaining water resources in the South Fork of the American River basin, the foreseeability of future development underscores the importance of performing a comprehensive cumulative impact analysis of the project's effects on the environment* ***before any more development proceeds***. The Upper Mountain Project's EIS does not provide the necessary comprehensive analysis of the cumulative impact of all projects in this area, especially the Sayles Flat Project.
>
> Additionally, FERC's analysis of the Sayles Flat project in their order denying rehearing does not support their conclusion that this project does not have a potential for significant adverse cumulative impacts on the resources in this area. FERC and the FERC staff make the same analytical error with Sayles Flat as they did in their study of the Upper Mountain Project: *they examined the Sayles Flat project in isolation, without considering the "net" impact that all projects in the area may have on the environment*. National Wildlife Federation v. FERC, 801 F.2d at 1507. Therefore, because FERC has not considered the impact that all past, present, and reasonably foreseeable future projects may have on the basin's resources, the record simply cannot support FERC's conclusion that the Sayles Flat project does not have a potential for adverse cumulative impacts on the environment. Accordingly, FERC's decision not to prepare an EIS on the project's cumulative impacts was unreasonable.

Id. at 401-02 (emphasis added). Just as it was unreasonable for FERC to consider the Sayles Flat Project "in isolation," so too is it unreasonable for FERC to consider projects such as the one at issue here in isolation in terms of its cumulative impacts.

FERC has previously relied on two Second Circuit decisions to support its refusal to consider the cumulative impacts of gas drilling in the Marcellus and Utica shale formations.

First, FERC cites the Second Circuit's decision in *Natural Resources Defense Council v. Callaway*, 524 F.2d 79 (2d Cir. 1975), to claim that it is only required to 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." *See, e.g.*, Northern Access 2015 Order at P 63. The Second Circuit went on to state, however, that "an agency may not go to the opposite extreme" by treating a project in isolation when there is persuasive evidence concerning other projects with similar environmental consequences. *Callaway*, 524 F.2d at 88. Indeed, the court noted that such a reading was inconsistent with the intent of Congress in passing NEPA:

> As was recognized by Congress at the time of passage of NEPA, a good deal of our present air and water pollution has resulted from the accumulation of small amounts of pollutants added to the air and water by a great number of individual, unrelated sources.
>
> "Important decisions concerning the use and the shape of man's future environment continue to be made in small but steady increments which perpetuate rather than avoid the recognized mistakes of previous decades." S.Rep.No.91-296, 91 Cong., 1st Sess. 5 (1969). NEPA was, 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. The fact that another proposal has not yet been finally approved, adopted, or funded does not foreclose it from consideration, since experience may demonstrate that its adoption and implementation is extremely likely.

Id. By preparing numerous EAs for jurisdictional projects that are intended to increase takeaway capacity from the Marcellus and Utica shale formations and then largely ignoring the cumulative impacts of the gas drilling in these shale formations, FERC "perpetuate[s] rather than avoid[s] the recognized mistakes of previous decades." Commenters have submitted persuasive evidence of the past, present and reasonably foreseeable future production of gas drilling, including by National Fuel's own production subsidiary, Seneca Resources, in the Marcellus and Utica shale formations. FERC cannot go to the "opposite extreme" and just ignore this persuasive evidence

by arbitrarily developing a restrictive cumulative impact analysis area that essentially views the Project in isolation.

The second case that FERC has relied on to justify its refusal to consider the cumulative impacts of gas drilling in the Marcellus and Utica shale formations is the unpublished and non-binding decision in *Coalition for Responsible Growth v. FERC*, 485 Fed. Appx. 472, 2012 WL 1596341 (2d Cir. Apr. 17, 2012) (unpublished). *See* Northern Access 2015 Order at PP 67-68. As explained above in the section on indirect effects, the court in that case did not even discuss the underlying case law. As explained elsewhere in these comments, the case law clearly demonstrates that FERC has an obligation to consider the cumulative effects of gas drilling in the Marcellus and Utica shale formations.

For example, even if FERC does not know the extent of such drilling activities, it is certainly aware of its nature and may not simply ignore the effect by constructing an arbitrarily narrow cumulative impact analysis area. *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549 (8th Cir. 2003). As the Ninth Circuit has explained:

> [*P]rojects need not be finalized before they are reasonably foreseeable*. "NEPA *requires* that an EIS engage in reasonable forecasting. *Because speculation is … implicit in NEPA*, [] 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." As the [EPA] also has noted, "reasonably foreseeable future actions need to be considered even if they are not specific proposals."

Northern Plains, 668 F.3d at 1078-79 (citations omitted) (emphasis added). Here, FERC cannot claim it needs a crystal ball to consider Seneca's reasonably foreseeable future operations in light of the information provided in National Fuel's own reports to investors and the SEC.

It should also be noted that the Second Circuit's decision in *Coalition for Responsible Growth* improperly inserted an element of causation into the cumulative impact regulation. For example, the court said that in considering the "cumulative impact analysis" for the pipeline at

issue in that case, FERC "concluded that the impacts of [Marcellus shale] development are *not sufficiently* ***causally****-related* to the project[.]" *Coalition for Responsible Growth v. FERC*, 485 Fed. Appx. 472, 2012 WL 1596341 at 4 (2d Cir. Apr. 17, 2012) (unpublished) (emphasis added). Causation, however, is only relevant when it comes to direct and indirect effects, not cumulative impacts. *Compare* 40 C.F.R. § 1508.7 *with* § 1508.8. It was improper for the Second Circuit to insert an element of causation into the cumulative impact regulation where one does not exist. Federal agencies must consider cumulative impacts "*regardless* of what agency (Federal or non-Federal) *or person* undertakes such other actions." 40 C.F.R. § 1508.7 (emphasis added).

Another case supporting the need for FERC to consider the reasonably foreseeable impacts of Marcellus and Utica Shale gas extraction is *Natural Resources Defense Council v. Hodel*, 865 F.2d 288 (D.C. Cir. 1988). In *Hodel*, the D.C. Circuit remanded the case because the Department of Interior failed to adequately consider the "inter-regional" cumulative impacts of its 5-year oil and gas leasing program in the outer continental shelf on migratory species. *Id*. at 299. The court noted that it would "eviscerate NEPA" to approve of the DOI's environmental analysis. *Id*. FERC must not continue to ignore the "inter-regional" impacts of Marcellus and Utica Shale gas extraction.

One of the impacts that FERC largely ignores by virtue of its arbitrarily narrow "regions of influence" is the impact that shale gas drilling has on wildlife habitat. According to recent research published in Environmental Science & Technology:

> Potential effects [of shale gas drilling] on terrestrial and aquatic ecosystems can result from many activities associated with the extraction process and the rate of development, such as road and pipeline construction, well pad development, well drilling and fracturing, water removal from surface and ground waters, establishment of compressor stations, and by unintended accidents such as spills or well casing failures….The cumulative effect of these potential stressors will depend in large part on the rate of development in a region. Depending on extent of development, oil and gas extraction has the potential to have a large effect on associated wildlife, habitat and aquatic life.

Brittingham, M.C., et al., Ecological Risks of Shale Oil and Gas Development to Wildlife, Aquatic Resources and their Habitats, Environmental Science & Technology, pp. 11035-11037 (Sept. 4, 2014) (citations omitted) (Attachment 16). This research further explains the impacts of shale gas drilling:

- Shale oil and gas development changes the landscape. Land is cleared for pad development and associated infrastructure, including pipelines, new and expanded roads, impoundments, and compressor stations, and much of this exploration and development is occurring in relatively undeveloped landscapes. Seismic testing, roads, and pipelines bisect habitats and create linear corridors that fragment the landscape. *Id*. at 11037 (citations omitted).
- Habitat fragmentation is one of the most pervasive threats to native ecosystems and occurs when large contiguous blocks of habitat are broken up into smaller patches by other land uses or bisected by roads, transmission lines, pipelines or other types of corridors. Habitat fragmentation is a direct result of shale development with roads and pipelines having a larger impact than the pads (Table 1). For example, in Bradford and Washington counties Pennsylvania, forests became more fragmented primarily as a result of the new roads and pipelines associated with shale development, and development resulted in more and smaller forest patches with loss of core forest (forest > 100 m from an edge) at twice the rate of overall forest loss. Pipelines and roads not only resulted in loss of habitat but also created new edges. Similar results have been shown in other studies. *Id*. (citations omitted).
- Fragmentation from linear corridors such as pipelines, seismic lines, and roads can alter movement patterns, species interactions and ultimately abundance depending on whether the corridor is perceived as a barrier or territory boundary or used as an avenue for travel and invasion into habitats previously inaccessible. *Id*. (citations omitted).
- [T]he New York State Department of Environmental Conservation estimates that development of one horizontal well requires over 3300 one-way truck trips. This is a concern because roads of all types have a negative effect on wildlife through direct mortality, changes in animal behavior, and increased human access to areas, and these negative effects are usually correlated with the level of vehicular activity. Even after a well is drilled and completed, new roads and pipelines provide access for more people, which results in increased disturbance. *Id*. at 11038 (citations omitted).
- In Wyoming, Sawyer et al. found that mule deer migratory behavior was influenced by disturbance associated with coal bed gas development and observed an increase in movement rates, increased detouring from established routes, and overall decreased use of habitat along migration routes with increasing density of well pads and roads. *Id*. (citations omitted).
- Exploration and development of the shale resource is associated with both short-term and long-term increases in noise. In the short term, site clearing and well drilling, [high volume hydraulic fracturing], and construction of roads, pipelines and other infrastructure are a limited time disturbance similar to disturbance and sound associated with clearing

land and home construction (Table 1). Depending on number of wells drilled, construction and drilling can take anywhere from a few months to multiple years. Compressor stations, which are located along pipelines and are used to compress gas to facilitate movement through the pipelines, are a long-term source of noise and continuous disturbance (Table 1). Because chronic noise has been shown to have numerous costs to wildlife, compressors have potential to have long-term effects on habitat quality. *Id*. (citation omitted).

- For many species of wildlife, sound is important for communication, and noise from compressors can affect this process through acoustical masking and reduced transmission distances. Studies on effects of noise from compressors on songbirds have found a range of effects including individual avoidance and reduced abundance, reduced pairing success, changes in reproductive behavior and success, altered predator-prey interactions, and altered avian communities, for example, refs 55-59 Greater sage-grouse (*Centrocercus urophasianus*) gather at leks where males display in order to attract females. Lek attendance declined in areas with chronic natural gas-associated noise and, experimentally, sage-grouse were shown to experience higher levels of stress when exposed to noise. *Id*. (citations omitted).
- Because of the large overlap between the Appalachian shale play and core forest habitat in the East, many forest species are vulnerable to development. Area-sensitive forest songbirds are primarily insect-eating Neotropical migrants, are an important component of forest ecosystems, and, as a group, many have declined in numbers in response to forest fragmentation. These birds are area-sensitive because breeding success and abundance are highest in large blocks of contiguous forest, and numerous research studies have documented negative effects of fragmentation on abundance and productivity….The impact that shale development has on this group of species will depend on the scale and extent of development. *By some estimates, less than 10% of potential shale gas development has occurred in the Appalachian basin. If this is the case, there is the potential for a 10-fold increase in the amount of shale gas development which would likely have negative impacts on area-sensitive forest songbirds and other forest specialists*. *Id*. at 11040 (citations omitted) (emphasis added).
- Development of shale resources, which clears land for well pads and roads, is occurring across a large portion of the native range of brook trout, especially in Pennsylvania (Figure 3). If remaining high-quality stream reaches become unsuitable to brook trout, there may be further fragmentation of the larger meta-population. *Id*.
- Freshwater mussels are an additional taxonomic group of interest because of already high numbers of listed species and relative sensitivity to toxicants. The endangered Indiana Bat, (*Myotis sodalis*), is another example of a species where a large portion of its native range is within areas of shale development (Figure 3). Gillen and Kiviat 2012 reviewed 15 species that were rare and whose ranges overlapped with the Marcellus and Utica shale by at least 35%. The list included the West Virginia spring salamander (*Gyrinophilus subterraneus*), a species that is on the IUCN Red List as endangered and whose range overlaps 100% with the shale layers. It requires high quality water and is sensitive to fragmentation suggesting that this species is at great risk to oil and gas development. The list also included eight Plethodontid salamanders, a group that tends to be vulnerable because of the overlap between their range and shale layers, their dependence on moist environments and sensitivity to disturbance. *Id*. at 11040-11041.

The Brittingham research demonstrates the substantial impact that shale gas drilling is having and will continue to have on wildlife throughout the Marcellus and Utica shale region, especially if FERC continues facilitating such drilling by authorizing infrastructure projects such as the ones proposed here without analyzing the cumulative impacts on wildlife and disclosing that information to the public.

The U.S. Fish and Wildlife Service recently expressed concerns about the potential noise impacts of National Fuel's Tuscarora Lateral Project on wildlife:

> Since the project involves the increase of horsepower at one compressor station and the construction of a new station, we recommend the FERC request data on operating noise levels at the compressor stations, and an analysis be completed of how the project noise levels will affect wildlife. Noise levels over background levels can adversely affect wildlife, particularly songbirds, that rely on call identification for successful breeding. If noise levels will exceed background levels, the environmental document should identify mitigation measures that will be employed to reduce noise impacts on wildlife such as vegetation screening or barriers.

U.S. Fish and Wildlife Service January 27, 2015 Letter to FERC (Docket CP14-112-000, Accession No. 20150202-0104). While these comments were specific to the Tuscarora Lateral Project, the same rationale applies for other projects as well, such as the Northern Access 2016 Project under review in this proceeding. In addition to the noise impacts from new and expanded compressor stations, the cumulative noise impacts of Marcellus and Utica shale gas development on wildlife must be considered.

For example, it is possible that the dramatic increase in shale gas drilling in northern Pennsylvania has disrupted bobcat populations. In 2012, for example, the New York Department of Environmental Conservation (NYDEC) had revised its "Bobcat Management Plan" because:

> Observations by hunters and trappers, and reports from the general public suggest that bobcat populations are increasing and expanding throughout New York State outside of their historic core range in the Taconic, Catskill, and Adirondack mountains and into central and western New York. *In addition, emigration of bobcats from Pennsylvania has likely fostered growth of the*

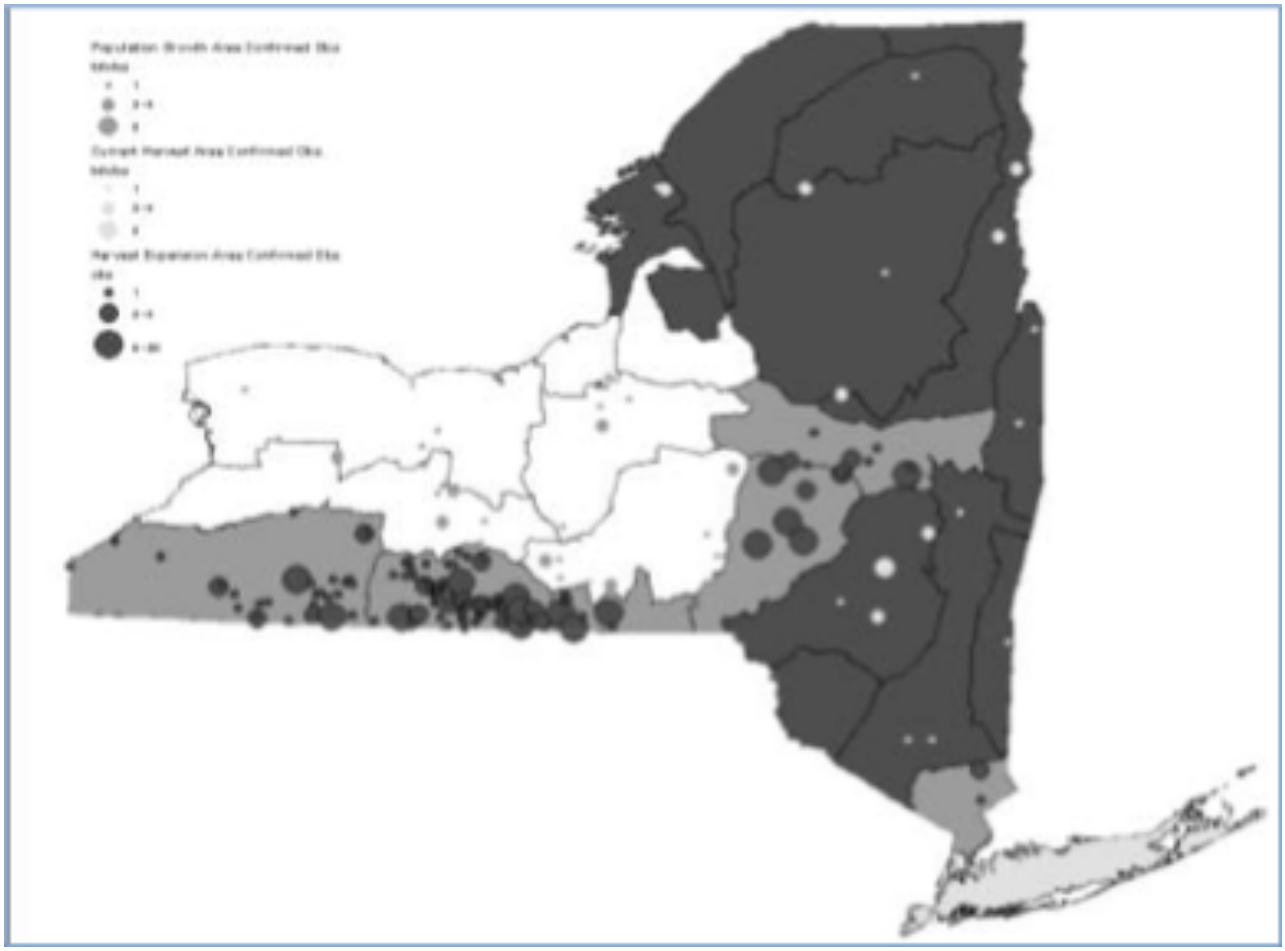
> *bobcat population in the southern tier of the state* (Matt Lovallo, Pennsylvania Game Commission, personal communication).

New York Department of Environmental Conservation. Management Plan for Bobcat in New York State 2012-2017. p. 8. 2012 (emphasis added). *available at:* http://www.dec.ny.gov/docs/wildlife_pdf/finalbmp2012.pdf. The plan further stated:

> The presence of bobcat in New York's Southern Tier has *increased dramatically* over the past decade. What began as occasional sightings along the New York/Pennsylvania border has progressed to large numbers of observations, trail camera photos, and incidental captures and releases by trappers. *Over the past five years* there have been 332 bobcat observations documented in the harvest expansion area (Figure 4).

Id. at 17 (emphasis added). The following figure, showing the number confirmed bobcat observations in New York from 2006-2011, reveals a concentration of observations along the Pennsylvania border:

Figure 12: Total Confirmed Bobcat Observations, 2006-2011.



Source: NYDEC Bobcat Management Plan, p. 17.

While NYDEC was documenting an increase in bobcat observations along the Pennsylvania border between 2006-2011, the following table reveals how many Marcellus Shale gas wells were drilled in northern Pennsylvania counties:

Table 1: Marcellus shale gas wells drilled in 9 northern Pennsylvania counties (2005-2011).

	Year						
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
PA County							
McKean	0	1	1	4	7	20	17
Potter	0	1	7	4	7	34	16
Tioga	0	1	0	12	117	272	260
Bradford	0	2	0	25	145	398	423
Susquehanna	0	1	2	34	89	111	220
Elk	1	1	4	6	4	13	21

Cameron	0	0	0	2	3	4	7
Clinton	0	0	0	4	9	33	35
Lycoming	0	0	5	11	23	116	294

Source: PADEP. http://www.depreportingservices.state.pa.us/ReportServer/Pages/ReportViewer.aspx?/Oil_Gas/Wells_Drilled_By_County.

This demonstrates that at the same time the gas industry began and then rapidly escalated gas drilling across the northern tier of Pennsylvania, the bobcat population in the southern tier of New York "increased dramatically." Since "there are no Marcellus Shale wells in New York due to the moratorium (and now, ban) on hydraulic fracturing in New York," Northern Access 2015 EA at 52, this suggests that the rapid increase in shale gas drilling in Pennsylvania may be causing "emigration of bobcats from Pennsylvania" into southern New York.

National Fuel's 2013 Annual Report further suggests why this could be happening. For example, National Fuel states that:

> Seneca Resources' *24-hour operations in the Marcellus Shale* allow for significant operational efficiencies, leading to lower well costs and the ability to develop more horizontal wells during the year.

National Fuel 2013 Annual Report, p. 3 (emphasis added) (Attachment 17). National Fuel may benefit from the "lower well costs" but FERC has a duty to analyze the costs to wildlife that live in the remote, forested areas where these "24-hour operations" are occurring. This is particularly relevant in this case since the Northern Access 2016 Project "will create additional capacity on National Fuel's pipeline system . . . for transportation of additional Marcellus Shale gas production." Application at 4. And since Seneca, who is the Foundation Shipper for the Project, is intending to drill at least an additional 1,020 gas wells in its Western Development Area's "Tier I acreage," *see* Attachment 7 at 24, it is clear that Seneca will continue to operate 24-hours-a-day, thereby further impacting wildlife habitat in this remote part of Pennsylvania.

FERC must also examine the cumulative impacts on public lands and resources. For example, the pipeline would cross the North Country National Scenic Trail in Bear Creek State Forest in Cattaraugus County, New York. The pipeline would enter Bear Creek State Forest from the south at milepost 57.26 and cross the North Country National Scenic Trail at milepost 57.55. Resource Report 8 at 8-39. The pipeline would be constructed on the east side of an existing power line, requiring additional (and permanent) clearing of trees for the right-of-way. *See* National Fuel, Aerial Map Series at 48. This will cause further fragmentation in what is already a "small state forest of 547 acres." New York State Department of Environmental Conservation, Bear Creek State Forest, *available at* http://www.dec.ny.gov/lands/63657.html. It will also increase impacts on hikers and backpackers who use the North Country National Scenic Trail. FERC must disclose how many other crossings of public lands and the North Country National Scenic Trail have occurred over the past five years and how many are currently pending. As gas drilling and jurisdictional projects increase, the impacts to public recreation also increases. FERC cannot continue considering these impacts in a vacuum.

As National Fuel notes, Bear Creek State Forest is designated as a "State Reforestation Area." Resource Report 8 at 8-39. According to New York's Environmental Conservation Law ("ECL"), Reforestation Areas are established and maintained for "watershed protection, the production of timber and other forest products, and for recreation and kindred purposes[.]" ECL 9-0501(1). These lands "shall be forever devoted to the planting, growth and harvesting of such trees[.]" *Id*. It is also worth noting that under the existing New York State Forest Management Plan, it is official "policy [ ] to decline any commercial mining application(s) pertaining to State Forest lands, as the impacts from these activities are not compatible with the purposes for which Reforestation Areas were purchased." NYS Strategic Plan for State Forest Management at 240,

available at http://www.dec.ny.gov/lands/64567.html. The construction of the mainline will have effects similar to mining in that it will require the permanent removal of trees, undermining the very purpose for which these lands were acquired and set aside. Therefore, construction of the proposed pipeline in Bear Creek State Forest is not compatible with the purposes for which these lands were acquired.

As for the North Country Trail, Congress designated it as a National Scenic Trail in March 1980. National Park Service, North Country National Scenic Trail Management, *available at* http://www.nps.gov/noco/learn/management/index.htm. The North Country Trail is administered by the National Park Service and is intended to be a "premier hiking and backpacking trail which is nationally significant in its scenic and recreational qualities." *Id*. As shale gas drilling and related pipeline construction projects increase throughout the region, impacts to National Scenic Trails like the North Country Trail are increasing as well.

For example, in addition to the proposed crossing in Bear Creek State Forest in the Northern Access 2016 Project, the proposed Rover Pipeline would cross the North Country National Scenic Trail twice in Ohio. *See* Energy Transfer Partners, Rover Pipeline, Resource Report 8 at 8-19 (Docket No. CP15-93-000, Accession No. 20150220-5241). The proposed Atlantic Coast Pipeline would cross the Appalachian Trail, also a National Scenic Trail. *See* Dominion, Atlantic Coast Pipeline, Draft Resource Report 1 at 1-11 (Docket No. PF15-5-000). The proposed Atlantic Sunrise Pipeline would also cross the Appalachian Trail. *See* Transcontinental Pipe Line Company, Atlantic Sunrise Pipeline, Resource Report 8 at 8-51 (Docket CP15-138-000, Accession No. 20150331-5153). These are long-term impacts to outdoor recreation experiences that are supposed to provide high-quality, scenic opportunities.

FERC must take a hard look at how its authorizations are directly impacting these and other outdoor recreation opportunities.

FERC must also consider a National Fuel gas storage lease renewal in Allegany State Park in New York. On March 16, 2015, the New York State Office of Parks, Recreation and Historic Preservation held a public meeting about a lease renewal for Supply's Limestone Storage Field under Allegany State Park. *See* New York Parks, Recreation and Historic Preservation, Press Releases, State Park to Host Public Meeting on Renewal of Gas Storage Lease, Mar. 6, 2015, *available at* http://www.nysparks.com/newsroom/press-releases/release.aspx?r=1177 (Attachment 18). This gas storage area is located near the pipeline proposed in the Northern Access 2016 Project and should be considered an integral part of National Fuel's overall goals to increase production, transport and delivery of shale gas. If approved, Supply's lease would be extended for another 15 years. *Id*. This would presumably cover most, if not all, of the time period covered by the precedent agreements between Supply, Empire and Seneca for the Northern Access 2016 Project. Thus, FERC must consider the lease renewal in its analysis of the Project.

FERC must also consider impacts to the Allegheny National Forest and state forests, parks and gamelands in Pennsylvania. As noted above, Seneca's drilling activities are focused in its Western Development Area, which includes portions of Jefferson, Forest, Elk, McKean and Cameron Counties, Pennsylvania. This includes lands in the Allegheny National Forest, Elk State Forest, Clear Creek State Forest, Clear Creek State Park, Cook Forest State Park and other public lands in Pennsylvania. The Northern Access 2016 Project is directly related to increasing capacity for Seneca's production in this area. Therefore, FERC must consider the cumulative impacts to these public lands and resources caused by increasing shale gas production.

It is important that FERC consider the fact that conventional (shallow) oil and gas drilling has already substantially impacted the Allegheny National Forest, Pennsylvania's only national forest. In 2009, Allegheny National Forest officials submitted declarations in Federal court documenting the impacts of oil and gas drilling in the Allegheny National Forest. For example, former Bradford District Ranger Anthony Scardina declared that:

> …the [Bradford Ranger] District *can no longer ensure that surface resources are being adequately protected, especially resources like water and wildlife that cross watershed boundaries*, given the *accelerated pace of new applications* and *magnitude of existing roads and well pads*. *Nor can the District ensure that multiple-use resource benefits are being provided in the public interest as mandated by Congress in the Multiple-Use Sustained-Yield Act of 1960 or National Forest Management Act of 1976*.

Minard Run Oil Co. v. U.S. Forest Service, Case No. 1:09-cv-00125-SJM, Doc. No. 18-5, Declaration of Anthony Scardina, p. 5. June 25, 2009 (emphasis added) (Attachment 19).

Similarly, former Forest Supervisor Leanne Marten declared that:

> When you combine *past [oil and gas] development with* ***future projections***, there are *many uncertainties* as to the environmental, social, and economic effects of these activities and questions *as to whether the Forest Service can adequately protect water, wildlife and other surface resources* or achieve national forest objectives to serve the public interest…Given the level of past and ongoing development, *it is no longer possible to propose adequate mitigation of surface impacts on resources such as water and wide-ranging wildlife species without a broader scale cumulative effects analysis*.
>
> In many cases, the majority of surface effects from private OGD activities is the result of construction of roads to access well sites. The miles of road and their associated fragmenting impact across the Forest is something that cannot be overlooked or fairly assessed under present conditions by simply looking at OGD applications on a case-by-case basis.

Minard Run Oil Co. v. U.S. Forest Service, Case No: 1:09-cv-00125-SJM, Doc. No. 18-2, Declaration of Leanne Marten, pp. 3-4. June 25, 2009. (emphasis added) (Attachment 20).

These statements document the Federal government's admission that oil and gas drilling in the Allegheny National Forest has been so damaging that the agency charged with administering and protecting this national forest, the U.S. Forest Service, can no longer ensure that it can carry out its congressionally-mandated duties to protect watersheds and wildlife habitat. The purpose of

the Northern Access 2016 Project is to build a large-diameter pipeline into Seneca's Western Development Area, which includes large portions of the Allegheny National Forest. Thus, FERC has an obligation to consider, at a minimum, Seneca's past, present and reasonably foreseeable gas drilling in and around the Allegheny National Forest.

Now, shale gas drilling poses even greater impacts on an already severely fragmented landscape. And it is not just the Allegheny National Forest but all of our rural landscapes in Pennsylvania. For example, between 2009-2014, approximately 14,900 new conventional oil and gas and unconventional shale gas wells were drilled in Pennsylvania. *See* PADEP, Office of Oil and Gas Management, Wells Drilled by County (Southwest, Northwest and Northcentral District Offices) (Attachments 15, 21 and 22, respectively). In McKean County, the site of the proposed pipeline and part of Seneca's "Tier I" acreage in its Western Development Area, over 1,760 conventional and unconventional shale gas wells were drilled between 2009-2014. *See* Attachment 21. In the other four counties of Seneca's Tier I acreage (Forest, Elk, Jefferson and Cameron Counties), over 1,750 conventional and unconventional shale gas wells were drilled between 2009-2014. *See* Attachments 21 and 22. That means that in just these five counties, over 3,500 wells have been drilled in the last five years. This is nearly 25% of all of the oil and gas wells drilled in Pennsylvania since 2009. These wells require trees to be cut for roads, well sites, gathering lines, wastewater ponds and other supporting infrastructure, contributing to increased in habitat fragmentation, erosion/sedimentation and impacts on recreation. At a minimum, the "region of influence" for the Pennsylvania portion of the Northern Access 2016 Project must include the five counties identified in Seneca's Tier I acreage of its Western Development Area (McKean, Elk, Forest, Jefferson and Cameron Counties). FERC must

consider the past, present and reasonably foreseeable future impacts of oil and gas drilling in these counties.

FERC is also not adequately considering the environmental health effects on human communities that are being told they must accept gas infrastructure in their communities. For example, at a recent luncheon at the National Press Club, FERC Chairman Cheryl LaFleur stated that "our nation is going to have to grapple with our *acceptance* of gas generation and gas pipelines if we expect to achieve our climate and environmental goals." National Press Club Luncheon With FERC Chairwoman Cheryl LaFleur at 6, Jan. 27, 2015 (emphasis added) (Attachment 23). The fact that the FERC Chairwoman claims that we must accept more gas infrastructure "to achieve our climate and environmental goals" obligates the agency to give even more attention to the climate change impacts of shale gas development and its effects on human health (in addition to other effects).

For example, according to a recent article in the Dallas Morning News, recent studies indicate that we are only beginning to understand the health impacts of shale gas development:

> **Long-term effects:** Researchers interviewed people living near gas wells and interviewed them again about 25 months later. People who had moved from gas production areas, or who lived in places where gas activity had diminished, reported fewer symptoms when reinterviewed.
>
> **Short-term exposure to high pollution levels:** Scientists examined whether people living in gas-producing areas have enough facts to make informed health choices. They found that government monitoring was insufficient to address chemical mixtures and other risks.
>
> **Effects on animals:** One study looked at whether animals' health might be affected by nearby gas operations. Dogs were found to be particularly sensitive, suggesting both health concerns for the animals and new ways to track pollution through animals' exposures.

Randy Lee Loftis, Studies explore concerns about natural-gas production and health, Dallas Morning News, Mar. 2, 2015, *available at* http://www.dallasnews.com/news/metro/20150302-

studies-casting-light-on-natural-gas-production-and-health.ece (emphasis in original) (Attachment 24). This is one of the many reasons why, as will be explained in greater detail below, FERC must prepare a programmatic EIS for gas infrastructure projects that are increasing takeaway capacity from the Marcellus and Utica shale formations. If Chairwoman LaFleur says that the country must accept more gas infrastructure "to achieve our climate and environmental goals," then FERC has a duty to take a hard look at the environmental and human health impacts caused by that increase in infrastructure. FERC cannot just look at one side of the ledger to get as much infrastructure in place as possible before the public understands has an opportunity to appreciate the true scope and impact of this infrastructure build-out. FERC must "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). FERC cannot know the extent of environmental and human health impacts when it uses restrictive cumulative effects analysis areas and never considers the true nature and scope of the rapid build-out of infrastructure on a regional level.

In a recent report published by the National Institute of Environmental Health Sciences ("NIEHS"), researchers explained that "[t]he development of unconventional natural gas in the Marcellus shale in Pennsylvania has the potential to exacerbate several pathways for entry of radon into buildings." Joan A. Casey, et al., Predictors of Indoor Radon Concentrations in Pennsylvania, 1989-2013. NIEHS. 5 (Apr. 9, 2015) (Attachment 25). This is a concern since "[e]xposure to radon-222 – an inert, odorless, and carcinogenic gas – is the second leading cause of lung cancer worldwide." *Id*. at 4 (citations omitted). According to the NIEHS report, the USGS has recorded the median radium concentration in Marcellus shale produced water that is "nearly 500 times the federal drinking water limit" and "far exceeds the industrial discharge

limit." *Id*. at 5. Preliminary USGS data suggests that "shale gas may have higher radon levels than other natural gas sources." *Id*. at 6.

These are major concerns in light of the fact that there has been a "general rise in [radon] concentrations since 2006" when the Marcellus fracking boom was just getting underway. *Id*. at 19. According to one of the researchers in the NIEHS Report:

> [b]y drilling 7,000 holes in the ground, the fracking industry may have changed the geology and created new pathways for radon to rise to the surface . . . Now there are a lot of potential ways that fracking may be distributing and spreading radon."

Johns Hopkins Bloomberg School of Public Health, Increased Levels of Radon in Pennsylvania Homes Correspond to Onset of Fracking, Apr. 9, 2015, *available at* http://www.jhsph.edu/news/news-releases/2015/increased-levels-of-radon-in-pennsylvania-homes-correspond-to-onset-of-fracking.html (Attachment 26). If this increase in radon has been detected with the drilling of approximately 7,000 shale gas wells, what will be the health-related impacts if the "projection of 60,000 wells in Pennsylvania by 2030" comes to pass? NIEHS Report at 19 (citation omitted).

According to an article in *Environmental Health Perspectives*:

> Fracking in the Marcellus has advanced so quickly that public understanding and research on its radioactive consequences have lagged behind, and there are many questions about the extent and magnitude of the risk to human health. "We are troubled by people drinking water that [could potentially have] radium-226 in it," says David Brown, a public health toxicologist with the Southwest Pennsylvania Environmental Health Project. "When somebody calls us and says 'is it safe to drink our water,' the answer is 'I don't know.'"

Radionuclides in Fracking Wastewater – Managing a Toxic Blend, *Environmental Health Perspectives*, Vol. 122, No. 2 at A53 (Feb. 2014), *available at* http://ehp.niehs.nih.gov/wp-content/uploads/122/2/ehp.122-A50.pdf. (Attachment 27). Moreover:

> even if fracking the Marcellus ceased overnight, the questions and potential problems about radioactivity would linger. "Once you have a release of fracking fluid into the

> environment, you end up with a radioactive legacy," says [Duke University geochemist Avner] Vengosh.

Id. at A54. According to a report by Radioactive Waste Management Associates:

> There are several steps in the Marcellus shale drilling process that allow radionuclides, particularly Radium- 226, to concentrate in liquid waste. First, drilling fluids that include various chemical additives are artificially introduced into the borehole by high-pressure injection. Drilling fluids are used during the drilling process to cool and lubricate the drill bit, prevent the well hole from caving in, and circulate drill cuttings to the well surface. Formation water, or natural brine, contained within the pore spaces and fractures of the rock, through which the drill bit progresses, can mix with the drilling fluid and be circulated to the well surface. The formation water can be contained in the rock formations for centuries and can contain extremely high levels of water-soluble radionuclides that are present in the underground formations. In addition to mixing with brine, the drilling fluid may also become contaminated when it comes in contact with radioactive rock. Radium-226 is a highly water-soluble radionuclide and will preferentially dissolve in the drilling fluid under the pressure and temperature conditions below ground. Drilling fluid can be reused many times and radium will progressively concentrate in it after each reuse. Since no sources specify the radioactivity of produced water, we assume that it is the same as brine, which is measured at 15,000 pCi/L . . . Radium-226 has a half-life of 1600 years and, if deposited in [a] landfill, will remain there essentially forever . . . Ra-226 is a carcinogen and, when ingested or inhaled, concentrates in the bone and can cause leukemia.

Marvin Resnikoff, et al., Radioactivity in Marcellus Shale at 7 of PDF, May 19, 2010, *available at* http://rwma.com/Marcellus%20Shale%20Report%205-18-2010.pdf (Attachment 28).

This radioactive legacy cannot just be brushed under the rug and ignored by FERC. FERC is asking the citizens of Pennsylvania to bear increasing burdens to their landscapes and health allegedly in the name of "clean energy." But there is nothing "clean" about facilitating the extraction of shale gas from thousands, or tens of thousands, of wells across Pennsylvania and giving no consideration to what must be done with radioactive waste that must be disposed of in some way. If Chairwoman LaFleur says that citizens in Pennsylvania just have to "accept" more shale gas infrastructure to facilitate fracking, then FERC has an obligation to analyze the health-related impacts of fracking for shale gas. The citizens of Pennsylvania and other states

impacted by shale gas extraction are not guinea pigs for the natural gas industry's quest for short-term profits from the shale gas boom.

D. FERC must consider a broad range of reasonable alternatives.

FERC must consider alternatives to the proposed action in the EA. *See* 40 C.F.R. § 1508.9(b). National Fuel's resource reports are insufficient for a consideration of alternatives to the proposed action. Therefore, the EA must consider a broader range of alternatives to the Northern Access 2016 Project.

FERC must provide a fair analysis of the "no action" alternative. The "no action" alternative serves as a baseline for measuring the impacts of the proposed action. Not surprisingly, National Fuel's resources reports do not provide for a fair accounting of the "no action" alternative. According to National Fuel:

> National Fuel's customers have expressed the need for additional firm transportation capacity to serve growing markets. The northeast region has inadequate infrastructure to transport natural gas from production locations in the central Marcellus fairway to large, well established domestic and Canadian markets. Unless new infrastructure is constructed, markets would not have access to this new low-cost shale gas supply choice. The Northern Access 2016 Project is being developed to meet the growing needs in the Northeast and Canada by providing access to low-cost shale gas.

Resource Report 10 at 10-2. In other words, because National Fuel's "customers" (in this case its own subsidiary, Seneca) say that they need increased capacity, the *only* option is to build the project. Indeed, National Fuel says that if the "no action" alternative is selected, the "stated purpose of the Project (i.e., transportation of low cost Marcellus production to markets in the U.S. and Canada)." *Id*. at 10-3. The "no action" alternative should not be measured by whether or not Seneca receives the increased capacity it says it needs but by whether the alleged demand can be met by other methods, including conservation, energy efficiency, other sources of energy (such as wind and solar) and a combination of these other methods.

National Fuel tries to downplay these other options by claiming that "even with increases in energy conservation and energy efficiency, energy demand is projected to increase through 2040 (EIA 2014)." *Id*. However, the fact that "energy demand is projected to increase" does not mean that this demand must be met by increasing capacity for shale gas. Moreover, National Fuel does not consider the combined effect of utilizing other methods to meet the alleged demand.

For example, in regards to energy conservation, National Fuel says that "energy conservation *alone* would not fully obviate the need for the Project." *Id*. at 10-4 (emphasis added). National Fuel further states that "renewable energy sources . . . are insufficient to meet the current demand[.]" *Id*. at 10-7 – 10-8. At no point, however, does National Fuel consider the combined effect of energy conservation and renewable energy sources. Indeed, at no point does National Fuel quantify what it would take to meet the equivalent of the proposed increased capacity of the Project. FERC must consider and quantify the combined effects of energy conservation, efficiency and renewable sources in comparison to the proposed action.

E. FERC must prepare a programmatic EIS that analyzes natural gas infrastructure projects related to takeaway capacity from the Marcellus and Utica shales.

FERC must prepare a programmatic EIS for natural gas infrastructure projects that are expanding takeaway capacity from the Marcellus and Utica shale formations. CEQ regulations and guidance support the need for a regional programmatic EIS to better inform the public about the true nature and scope of natural gas infrastructure projects that are pending before FERC or are reasonable foreseeable. Furthermore, FERC is actively engaged with the natural gas industry to rapidly deploy infrastructure in order to coordinate and harmonize the gas industry with electric utilities.

1. CEQ regulations/guidance and case law support preparation of a programmatic EIS.

A programmatic EIS is sometimes required for "broad Federal actions." 40 C.F.R. § 1502.4(b). "Programmatic NEPA reviews address the general environmental issues relating to broad decisions, such as those establishing policies, plans, programs, or suite of projects, and can effectively frame the scope of subsequent site- and project-specific Federal actions." CEQ, *Effective Use of Programmatic NEPA Reviews*, p. 10 (2014) (Attachment 29). "A well-crafted programmatic NEPA review provides the basis for decisions to approve such broad or high-level decisions such as identifying geographically bounded areas within which future proposed activities can be taken or identifying broad mitigation and conservation measures that can be applied to subsequently tiered reviews." *Id*. Additionally:

> Programmatic NEPA reviews may also support policy- and planning-level decisions when there are limitations in available information and uncertainty regarding the timing, location, and environmental impacts of subsequent implementing action(s). For example, in the absence of certainty regarding the environmental consequences of future proposed actions, agencies may be able to make broad program decisions and establish parameters for subsequent analyses based on a programmatic review that adequately examines the reasonably foreseeable consequences of a proposed program, policy, plan, or suite of projects."

Id. at 11. In other words, just because future gas infrastructure projects may be theoretical does not mean that FERC would not be able to "establish parameters for subsequent analyses." In fact, this may assist FERC (and the public) in understanding the broader reasonably foreseeable consequences of jurisdictional projects and non-jurisdictional gas drilling in the Marcellus and Utica shale formations.

The 2014 Guidance recommends preparing 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." *Id*. at 21. Additionally, CEQ says that "broad Federal actions may be implemented over large geographic areas and/or a long time frame" and "must include connected and cumulative actions, and the responsible official should consider whether it is helpful to include a series or suite of similar actions." *Id*. at 22.

According to CEQ, the benefit of a programmatic EIS is obvious:

> When the public has a chance to see the big picture early it can provide fresh perspectives and new ideas before determinations are made that will shape the programmatic review and how those determinations affect future tiered proposals and NEPA reviews. Early outreach also provides an opportunity to develop trust and good working relationships that may extend throughout the programmatic and subsequent NEPA reviews and continue during the implementation of the proposed action.

Id. at p. 25 (citations omitted). Furthermore:

> Programmatic NEPA reviews provide an opportunity for agencies to incorporate comprehensive mitigation planning, best management practices, and standard operating procedures, as well as monitoring strategies into the Federal policymaking process at a broad or strategic level. These analyses can promote sustainability and allow Federal agencies to advance the nation's environmental policy as articulated in Section 101 of NEPA.
>
> By identifying potential adverse impacts early during the broad programmatic planning, programmatic NEPA reviews provide an opportunity to modify aspects of the proposal and subsequent tiered proposals to avoid or otherwise mitigate those impacts. A thoughtful and broad-based approach to planning for future development can include best management practices, standard operating procedures, adaptive management practices, and comprehensive mitigation measures that address impacts on a broad programmatic scale (e.g., program-, region-, or nation-wide).

Id. at 35. All of this supports the need for FERC to prepare a programmatic EIS for natural gas infrastructure and gas development in the Marcellus and Utica shale formations so that the public has a chance to see the big picture.

According to the Energy Information Administration ("EIA"), there at least 57 natural gas infrastructure projects that have either recently been put into service or are either in the planning stage or under environmental review in the Northeast, Midwest, and Southeast. EIA,

Today in Energy, *Some Appalachian natural gas spot prices are well below the Henry Hub national benchmark*, Oct. 15, 2014, *available at* http://www.eia.gov/todayinenergy/detail.cfm?id=18391 (Attachment 30) (Note: scroll to bottom of page and click on the link titled "Several pipeline projects are underway" for a spreadsheet listing the 57 pipeline projects. The spreadsheet is included as a PDF in Attachment 31). Of these 57 pipeline projects, 56 are dedicated to transporting Marcellus and/or Utica shale gas away from states like Pennsylvania. *See* Attachment 31. This is an enormous expansion of the natural gas pipeline system and much of it is due to gas drilling in the Marcellus and Utica shale formations.

For example, in 2013, EIA stated that although natural gas pipeline capacity investment had slowed in 2012:

> Limited capacity additions were concentrated in the northeast United States, mainly focused on removing bottlenecks for *fast-growing Marcellus shale gas production*. *More than half of new pipeline projects that entered commercial service in 2012 were in the Northeast*.

EIA, Today in Energy, *Over half of U.S. natural gas pipeline projects in 2012 were in the Northeast*, Mar. 25, 2013, (emphasis added) *available at* http://www.eia.gov/todayinenergy/detail.cfm?id=10511 (Attachment 32). In December 2014, EIA stated:

> Spurred by growing natural gas production in Pennsylvania, West Virginia, and Ohio, the natural gas pipeline industry is planning to modify its system to allow bidirectional flow to move up to 8.3 billion cubic feet per day (Bcf/d) out of the Northeast….In addition to these bidirectional projects in the Northeast, the industry plans to expand existing systems and build new systems to transport natural gas produced in the Northeast to consuming markets outside the region.

EIA, Today in Energy, *32% of natural gas pipeline capacity into the Northeast could be bidirectional by 2017*, Dec. 2, 2014, *available at*

http://www.eia.gov/todayinenergy/detail.cfm?id=19011 (Attachment 33). It is clear that there is broad Federal action being implemented over a large geographic area and that natural gas infrastructure projects have similar proposed methods of implementation and similar best practice and mitigation measures. Therefore, FERC must prepare a programmatic EIS.

Finally, case law supports the preparation of a programmatic EIS in appropriate circumstances. In *Kleppe v. Sierra Club*, the Supreme Court recognized that NEPA may mandate a comprehensive EIS "in certain situations where several proposed actions are pending at the same time." 427 U.S. 390, 409 (1976). Further, the Court noted that:

> when several proposals….that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental impacts must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action.

Id. at 410.

Appellate courts have also defined a two-pronged inquiry to establish whether a programmatic EIS is appropriate: (a) Could the programmatic EIS be sufficiently forward looking to contribute to the decisionmakers' basic planning of the overall program? and, (b) Does the decisionmaker purport to 'segment' the overall program, thereby unreasonably constricting the scope of primordial environmental evaluation?" *Churchill County v. Norton*, 276 F.3d 1060, 1076 (9th Cir. 2001) (citing *Nat'l Wildlife Fed'n v. Appalachian Reg'l Comm'n*, 677 F.2d 883, 889 (D.C. Cir. 1981)). *See also Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 159 (D.C. Cir. 1985). Here, a programmatic EIS would be sufficiently forward looking to contribute to FERC's (and the public's) basic understanding of the true scope of the current and reasonably foreseeable build-out of gas infrastructure to connect the Marcellus and Utica shale formations to market areas. With respect to the second prong, FERC cannot escape the existence of a comprehensive program with cumulative environmental effects by "disingenuously

describing it as only an amalgamation of unrelated smaller projects." *Churchill County*, 276 F.3d at 1076 (*citing Nat'l Wildlife Fed'n*, 677 F.2d at 890).

In *City of Tenakee Springs*, the court held that:

> Where there are large scale plans for regional development, NEPA requires both a programmatic and site-specific EIS. See City of Tenakee Springs, 778 F.2d at 1407 (citations omitted). This court has held that where several foreseeable similar projects in a geographical region have a cumulative impact, they should be evaluated in a single EIS. See LaFlamme v. Federal Energy Regulatory Commission, 852 F.2d 389, 401-02 (9th Cir. 1988). There, emphasizing the likelihood of future development, the court remanded to [FERC] for further consideration of cumulative impacts because the agency had examined single projects in isolation without considering the net impact that all the projects in the area might have on the environment. See LaFlamme, 852 at 401-03.

915 F.2d at 1312. As will be explained below, there are clearly large-scale plans for regional development of gas infrastructure to facilitate transmission of Marcellus and Utica shale gas to market areas. FERC, therefore, must prepare a programmatic EIS that considers the regional impacts of such development. Its refusal to do so is arbitrary and capricious.

2. FERC is engaged in regional development and planning with the gas industry to rapidly and substantially build out infrastructure to connect Marcellus and Utica gas supplies to markets.

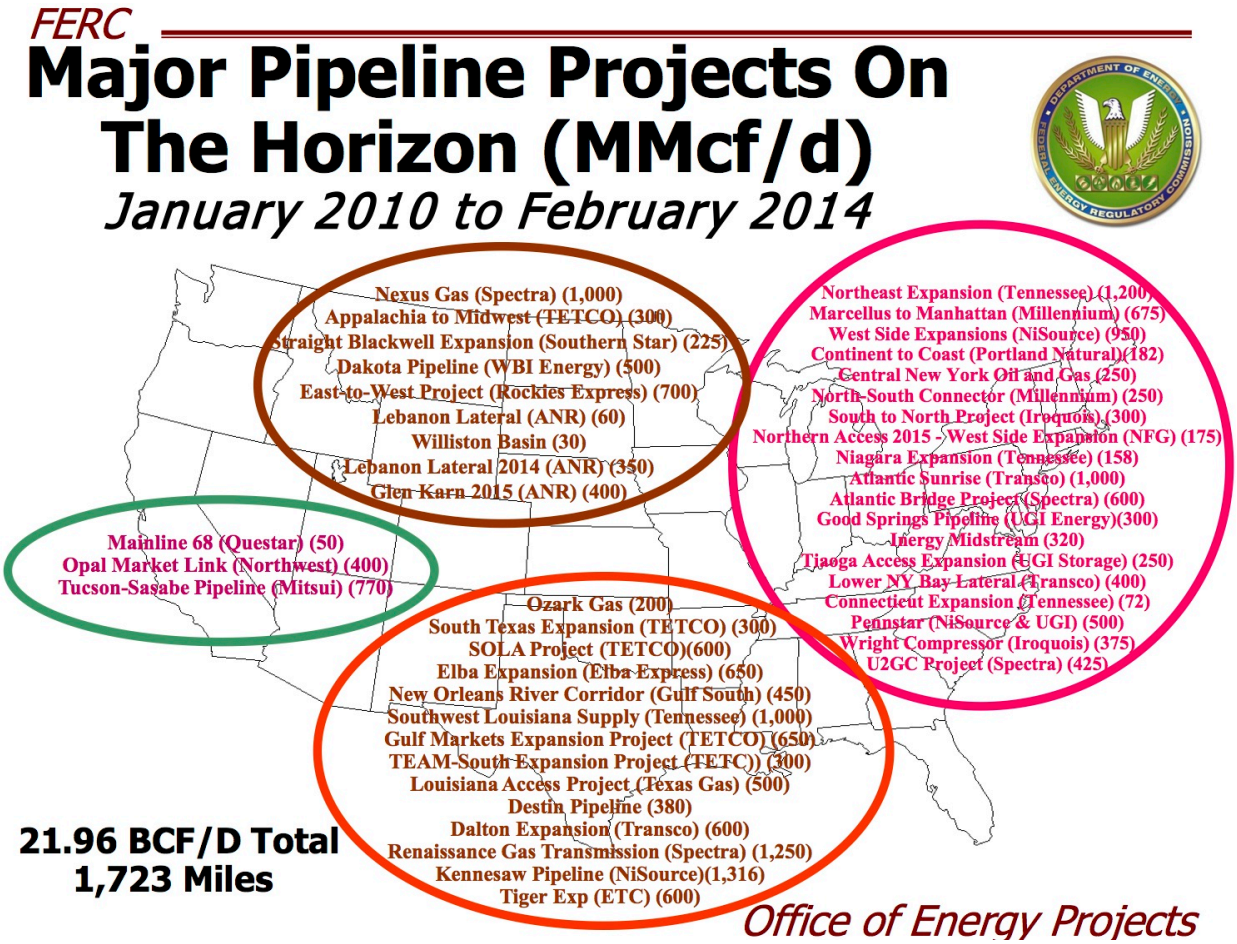
FERC has previously claimed that it need not prepare a programmatic EIS because "[t]here is no Commission plan or policy to promote the unconventional production of, or increase reliance on, natural gas" and that it is simply responding to infrastructure projects "proposed and developed by private industry[.]" *See e.g.*, Northern Access 2015 Order at P 54. This is disingenuous, at best. In 2009, for example, former FERC Chairman Jon Wellinghoff dissented in an order authorizing the importation of LNG because, according to the Chairman:

> A noteworthy advantage of the Marcellus shale is its proximity to the markets in the mid-Atlantic and South Atlantic regions. The Marcellus shale extends through much of the Appalachian basin, with the core running through Pennsylvania and parts of West Virginia, Ohio, and New York. The effective delivery of Marcellus shale gas could be accomplished with expansion of pipeline and storage infrastructure in the region. For

> example, Columbia Gas has proposed to expand its storage facilities in Ohio, in part, to facilitate access to increased production in the Appalachian basin.

AES Sparrows Point LNG, LLC & Mid-Atlantic Express, LLC, 126 FERC ¶ 61,019, Dissent at 4 (2009). Since Chairman Wellinghoff's dissent in 2009, FERC's other Commissioners have joined in the spirit of that dissent as FERC approves one project after another that connects the Marcellus and Utica shale formations to downstream markets. As FERC's 2010 presentation in Berlin demonstrates, just a year after Chairman Wellinghoff's dissent, there were at least 25 jurisdictional "Marcellus Shale Projects" that were either "approved," "pending," or "potential" projects. *See* Figure 9. Between 2010-2014, FERC knew that there were at least 45 jurisdictional projects "on the horizon":

Figure 13: FERC: Major Pipeline Projects on the Horizon (MMcf/d)
January 2010 to February 2014



Source: FERC, *available at* http://www.ferc.gov/industries/gas/indus-act/pipelines/horizon-pipe.pdf.

It is also important to note that most, if not all, of the projects in the "eastern" circle are designed to increase takeaway capacity from the Marcellus and Utica shale regions. Even several of the projects identified in the "northern" and "southern" circles are designed to increase takeaway capacity from the Marcellus and Utica shales.

Attached to these comments is a PDF containing maps of many jurisdictional projects that FERC has reviewed in recent years (or is reviewing now). *See* Attachment 34. These maps highlight dozens of jurisdictional projects, all of which are related to increasing capacity for Marcellus and Utica shale gas supplies. These maps indicate the regional nature of this

infrastructure build-out to connect Marcellus/Utica shale gas supplies to markets. FERC is not just an impartial arbiter deciding whether each individual application is required by the public convenience and necessity. Rather, FERC is deeply involved with the gas industry (and the electric industry) to help ensure that gas infrastructure is rapidly and substantially expanded.

For example, in 2012, FERC initiated several docket proceedings related to the coordination of the natural gas and electricity markets. See *Coordination Between Natural Gas and Electricity Markets* (Docket No. AD12-12-000); *Coordination of the Scheduling Processes of Natural Gas Pipelines and Public Utilities* (Docket No. RM14-2-000); *Order Initiating Investigation into ISO and RTO Scheduling Practices*, 146 FERC ¶ 61,202 (Docket Nos. EL14-22 et seq.); and *Posting of Offers to Purchase Capacity*, 146 FERC ¶ 61,203 (Docket No. RP14-442). FERC explained that "since natural gas is expected to be relied on much more heavily in electricity generation, the interdependence of these industries merits careful attention." *Coordination Between Natural Gas and Electricity Markets* (Docket No. AD12-12-000, Accession No. 20120215-3066). In ordering further conferences and reports, FERC highlighted the "growing concern regarding natural gas-electric interdependencies and in particular whether the natural gas and electric industries are prepared to work together seamlessly in an environment of increasing reliance on the use of natural gas as a fuel for electric generation." *Coordination Between Natural Gas and Electricity Markets*, 141 FERC ¶ 61,125 at P 1 (Nov. 15, 2012). One of the issues that "spurred significant discussion and concern" was "whether electric market incentives are adequate to ensure gas-fired generator performance or otherwise signal the need for pipeline infrastructure to meet growing needs." *Id*. at P 3, n. 2.

Since FERC's order in Docket No. AD12-12, FERC's staff has produced several quarterly reports providing updates on "national and regional Gas-Electric Coordination

Activities." *See e.g.*, Gas-Electric Coordination, Quarterly Report to the Commission, p. 1 Sept. 18, 2014 (Docket No. AD12-12-000; Accession No. 20140918-3029). According to this report:

> The Eastern Interconnection Planning Collaborative (EIPC) is now working on the Target 2 study, which will evaluate the adequacy of the natural gas infrastructure in 2018 and 2023 to meet the expected core load and non-core gas-fired generation requirements on a Winter Peak Day and a Summer Peak Day. Work is focused on finalizing the second set of natural gas and electricity market assumptions on core and non-core demand levels such as *infrastructure expansions*, load growth, LDC expansion, and oil-to-gas conversion for Target 2 model inputs….
>
> ….The ICF-led study on Long-term Electric and Natural Gas Infrastructure Requirements in the Eastern Interconnection, prepared for NARUC and the Eastern Interconnection States Planning Council (EISPC), examines the potential build-out of natural gas infrastructure required to supply power and gas customers to 2030 under three demand and policy scenarios for the power sector in the Eastern Interconnect region. *The preliminary study results presented in September find that the overwhelming factor driving natural gas infrastructure development is the demand for electricity*.

Id. at pp. 5-6 (emphasis added). FERC staff then highlights "relevant natural gas filings" (pp. 15-17) and "relevant electric filings" (pp. 18-19) in its "coordination" efforts. Thus, it is clear that the backbone of FERC's "Coordination Between Natural Gas and Electricity Markets" is ensuring there is sufficient gas infrastructure in place to meet future demand for electricity. FERC is, therefore, deeply engaged in long-term regional development and planning with the natural gas and electric industries. This is precisely the kind of "broad Federal action" that requires preparation of a programmatic EIS.

Industry comments in Docket No. RM14-2-000 shed further light on FERC's involvement in regional gas infrastructure development and planning. For example, according to the Independent Oil & Gas Association of West Virginia:

> As the Marcellus and Utica Shale formations in West Virginia, Pennsylvania, and Ohio have been developed over the past five years, many of the interstate pipeline expansion projects have been backed by producers who have entered into long-term firm transportation agreements to ensure that their natural gas reaches the marketplace demanding new or geographically more attractive supplies. IOGA encourages power generators or others that may not hold firm capacity to link up with natural gas producers

> and marketers with supply and capacity to structure capacity release and supply deals that will provide them with the energy services and reliable supply required by the electric transmission grid….In IOGA's view, suppliers and traditional firm purchasers have and will continue to step forward and support new pipeline capacity projects to move gas to market and ensure reliability[.]

Comments of IOGA of West Virginia at 7 (Docket No. RM14-2-000, Accession No. 20141128-5093). According to the Natural Gas Supply Association: ("NGSA")

> *As **FERC <u>and</u> industry participants** address transitional issues of increased reliance on natural gas by the power sector*, the natural gas industry's achievement in serving the power sector's substantial growth in natural gas demand cannot be overlooked. Because the United States is blessed with an abundant supply of clean-burning natural gas, and new technologies to develop shale gas, growth in natural gas production has been enormous. Over the past decade alone, production has increased by approximately 43 percent; growing from nearly 50 Bcf/d in 2005 to 71 Bcf/d projected for 2015. In fact, production has increased by 28 percent in just the past five years, allowing gas sellers to accommodate the 25 percent growth in power generation demand in the same timeframe. However, to take full advantage of these abundant new supplies, *additional gas infrastructure **must be in place** to transport and store natural gas from the wellhead to the point of consumption*.

Comments of NGSA at 3-4 (Docket No. RM14-2-000, Accession No. 20141128-5031) (emphasis added). According to comments submitted on behalf of the Environmental Defense Fund, Conservation Law Foundation, The Sustainable FERC Project, and Clean Energy Group:

> Better price signals coming from shorter duration gas-for-electric generation services *will call forth competitive offerings in* shorter term capacity release, third-party and pipeline no-notice services, and *incremental pipeline expansions (e.g., looping and compression)* which will institutionalize such sub-day services.

Comments of EDF, *et al*. at 19 (Docket No. RM14-2-000, Accession No. 20141128-5097) (emphasis added).

According to PJM Interconnection's 2013 annual report, its transmission system "is clearly undergoing an extraordinary transition as many coal-fired power plants retire and more natural gas-fired plants are built." PJM 2013 Annual Report, p. 8 (Attachment 35). PJM further explained that:

> PJM and other grid operators, *along with the gas industry and regulatory agencies*, are carefully examining the gas/electric interface to identify issues and develop solutions….In a major initiative *with Department of Energy funding*, six grid operators partnered to analyze the *natural gas infrastructure* serving a large portion of the Eastern Interconnection. They are PJM, the Midcontinent ISO, ISO-New England, the New York ISO, the Tennessee Valley Authority and the Ontario Independent Electricity System Operator.
>
> The study is being coordinated by the Eastern Interconnection Planning Collaborative, the umbrella organization for electric grid planning activities in the Eastern Interconnection.

Id. at pp. 22 (emphasis added).

Not only is FERC coordinating this infrastructure build-out with the gas and electric industries – it is also coordinating it with the Obama administration. For example, in March 2012, President Obama issued an executive order to allegedly "improve" federal permitting and review of infrastructure projects "in order to significantly reduce the aggregate time required to make decisions[.]" Exec. Order No. 13,604, 77 Fed. Reg. 18887 (Mar. 28, 2012). In April 2012, President Obama signed another executive order directing federal agencies to coordinate their efforts "for overseeing the safe and responsible development of unconventional domestic natural gas resources *and associated infrastructure*[.]" Exec. Order 13,605, 77 Fed. Reg. 23105 (Apr. 17, 2012) (emphasis added). Therefore, the President has clearly directed federal agencies, including FERC, to expedite permit reviews for pipelines and to coordinate efforts to facilitate shale gas extraction and the infrastructure projects needed to transport that gas to markets.

As explained above, FERC has been quite busy over the last several years ensuring that gas infrastructure projects are approved so there is increased capacity to keep gas producers confident that they can keep drilling more shale gas wells. FERC is also playing a central role in the development of the Obama administration's so-called "Clean Power Plan." For example, FERC Chairwoman Cheryl LaFleur recently stated that "FERC will have an essential role to play

as the [EPA's] clean power plan and our response to climate [change] is implemented." Attachment 23 at 4. Chairwoman LaFleur continued:

> Starting with infrastructure, I think additions to both the gas and electric infrastructure will be needed to carry out the clean power plan. And in the case of gas pipelines and compressor stations, FERC is the one who does the environmental review, permits them and decides the rates. Building block two of the clean power plan . . . calls for substantially increasing the utilization of the natural gas plants that exist all around the country. That's existing plants. Now, I believe based on everyone I've talked to, that meeting the goals of the clean power plan will also lead to the construction of a lot of new gas generation[.] . . As for FERC, I think our work on permitting gas infrastructure is going to be essential to the successful implementation of the clean power plan.

Id. at 5-6.

It is beyond dispute that FERC is engaged in long-term regional gas infrastructure planning and development related to the Marcellus and Utica shale formations. The Department of Energy, FERC's parent department (42 U.S.C. § 7171), funded a "major initiative" to "analyze the natural gas infrastructure serving a large portion" of the areas where Marcellus and Utica shale gas are being and will increasingly be delivered as the government and industry work to increase coordination between the gas and electric industries. FERC has been working with the gas and electric industries for the last several years to coordinate the gas and electric markets and now sees its role in this coordination as "essential" to meet the goals of the Obama administration's Clean Power Plan. All of this information demonstrates that there is an urgent need for a forward-looking comprehensive programmatic EIS that thoroughly evaluates all environmental impacts together in a single document.

When FERC claims that it only reviews individual proposals as they are filed, it obfuscates its active participation in this large-scale planning to build out infrastructure in order to increase takeaway capacity from the Marcellus and Utica shale formations. FERC also avoids meaningfully analyzing the direct, indirect and cumulative effects on this region as a whole,

including the impacts of Marcellus and Utica shale gas development.[11] FERC also substantially limits the development and consideration of reasonable alternatives to natural gas as a supply for electric generation. Therefore, FERC must prepare a programmatic EIS that addresses recent, present, and reasonably foreseeable gas infrastructure projects related to the Marcellus and Utica shale formations and the coordination between the natural gas and electricity markets.

The benefits of preparing a programmatic EIS may best be demonstrated by two recent examples. In 2005, the Corps, EPA, Department of Interior's Office of Surface Mining, U.S. Fish & Wildlife Service, and West Virginia Department of Environmental Protection published a "Mountaintop Mining / Valley Fills in Appalachia Final Programmatic Environmental Impact Statement" ("Mountaintop Mining PEIS"). *See* EPA, Mid-Atlantic Mountaintop Mining, *available at* http://www.epa.gov/region3/mtntop/eis2005.htm. The Mountaintop Mining PEIS evaluated options for "improving agency programs" under the Clean Water Act (CWA), Surface Mining Control and Reclamation Act (SMCRA) and the Endangered Species Act (ESA) in order to "reduc[e] the adverse environmental impacts of mountaintop mining operations and excess spoil valley fills [] in Appalachia." Mountaintop Mining PEIS at 1. The Mountaintop Mining PEIS was "designed to inform more environmentally sound decision-making for future permitting" of mountaintop removal coal mining in Appalachia and included "a substantial amount of environmental and economic data" that provided "much valuable information [to]

[11] The fact that gas drilling activities are not regulated by FERC is irrelevant since FERC must consider these cumulative impacts "regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. Indeed, CEQ emphasizes that "all NEPA reviews," regardless of whether it is a site-specific review or a programmatic review, are concerned with reasonably foreseeable cumulative impacts (as well as direct and indirect effects). CEQ, *Effective Use of Programmatic NEPA Reviews*, p. 23 (2014). CEQ further says that one of the benefits of a programmatic review is that "impacts can often be discussed in a broad geographic and temporal context with particular emphasis on cumulative impacts." *Id*. at p. 33.

assist [the] respective agencies to better coordinate the review necessary under each agency's mandates." *Id*. According to the preparers, the results of preparing the Mountaintop Mining PEIS would "contribute to more efficient decision-making by coordinating data collection and environmental analyses by the respective agencies, resulting in better permit decisions on a watershed basis." *Id*. Importantly, the Mountaintop Mining PEIS analyzed "the scope of remaining surface-minable coal in the study area," which included the states of Kentucky, West Virginia, Tennessee, and Virginia. *Id*. at III.o-1 (Attachment 36).

Another recent programmatic EIS further demonstrates why FERC should prepare one for gas infrastructure related to the Marcellus and Utica shale formations. In July 2012, the Department of Energy and Bureau of Land Management ("BLM") published a final programmatic EIS for Solar Development in southwest United States. See BLM, Final PEIS for Solar Energy Development in Six Southwestern States, available at http://solareis.anl.gov/documents/fpeis/index.cfm. According to the Executive Summary:

> This document was prepared by the [BLM] and [DOE] as co-lead agencies (Agencies). The BLM and DOE prepared this document in consultation with cooperating agencies and in accordance with [NEPA], as amended; the [CEQ], DOE, and Department of the Interior regulations implementing NEPA (40 CFR Parts 1500-1508, 10 CFR Part 1021, 43 CFR Part 46); and the Federal Land Policy and Management Act of 1976, as amended.

Solar FPEIS, Executive Summary at Cover Page (Attachment 37). For DOE, the Solar FPEIS "includes the evaluation of developing new guidance to further facilitate utility-scale solar energy development and maximize the mitigation of associated environmental impacts." *Id*. at ES-1.

These programmatic EISs demonstrate that FERC is clearly capable of performing a similar analysis in relation to infrastructure projects that are connecting Marcellus and Utica shale gas supplies to market areas. The industry is well aware of the infrastructure it says will be

necessary over the next few decades. For example, in a 2014 report, the Interstate Natural Gas Association of America ("INGAA") stated that it expects over 338,000 miles of natural gas and over 15,000 miles of natural gas liquids pipelines to be built in North America between 2014-2035. INGAA, North American Midstream Infrastructure through 2035: Capitalizing on Our Energy Abundance, Executive Summary, p. 19 (Mar. 18, 2014) (Attachment 38). According to INGAA:

> [M]idstream infrastructure development is *crucial* for efficient delivery of growing supplies to markets. Sufficient infrastructure goes *hand in hand* with well-functioning markets. Insufficient infrastructure can constrain market growth and strand supplies, potentially leading to price volatility and reduced economic activity….
>
> ….*The growth of liquids production* ***hinges on the development of transport capability*** *and markets for liquids*. Absent such development, NGL production would be stranded in a number of key areas, posing not only challenges for liquids development, but for gas development as well. Natural gas pipelines require that gas transport takes place within certain tolerances for BTU content. Thus, lack of adequate infrastructure for processing and transport of NGL eventually leads to stranded gas supplies because the gas lines will be unable to receive and transport the liquids-laden stream if they are to remain within the required tolerances.

Id. at 1; 8 (emphasis added). In other words, INGAA explains why FERC not only needs to prepare a programmatic EIS for jurisdictional projects but also why these projects are, in fact, causally connected to reasonably foreseeable gas drilling in the Marcellus and Utica shale formations. According to INGAA, insufficient pipeline capacity constrains growth and strands supplies. Moreover, the growth of liquids production "hinges on the development of transport capability." This supports the need to consider these impacts comprehensively at a regional level as well as at the site-specific project level.

Finally, it should be noted that two branches of Pennsylvania's government have recently discussed the growing impacts on the state from both jurisdictional and non-jurisdictional

projects related to shale gas extraction. In 2013, the Pennsylvania Supreme Court put into context the landscape-level impacts caused by shale gas extraction:

> By any responsible account, the exploitation of the Marcellus Shale Formation will produce a detrimental effect on the environment, on the people, their children, and future generations, and potentially on the public purse, perhaps rivaling the environmental effects of coal extraction.

Robinson Township v. Commonwealth of Pennsylvania, 83 A.3d 901, 976 (Pa. 2013). FERC willfully chooses to ignore the vast majority of these impacts by claiming that production is not "sufficiently causally related" for purposes of an indirect effects analysis and by using arbitrarily restrictive analysis areas for purposes of a cumulative effects analysis. This is inconsistent with FERC's obligations under NEPA.

In comments on Transcontinental Pipe Line Company's proposed Atlantic Sunrise Project, Pennsylvania Governor Tom Corbett expressed concerns that FERC's piecemeal approach to infrastructure projects is causing too many impacts on our environment and communities:

> The *significant increase in infrastructure development* to transport natural gas to markets raises unique concerns and questions for communities who host these pipelines. I have heard from many citizens of Pennsylvania who live near or along the proposed corridor of the Atlantic Sunrise pipeline and are concerned about the potential environmental impact of this project….While your current review is focused specific to the proposed Atlantic Sunrise pipeline, I also strongly encourage FERC to seek coordination to the greatest extent possible among other proposed pipeline projects that seek to move natural gas to market. A recurring issue raised by local residents is whether we are efficiently deploying infrastructure – and the appropriate level of communication is occurring between potential project developers – in a manner that minimizes and mitigates overall disturbance on both the environment and local communities. Such coordination and efficiency has the advantage of maximizing benefit to consumers as well. *Given the agency's regulatory responsibility, and unique vantage point of being aware of other potential projects, I believe FERC is best suited to consider these factors* as you continue your review of this proposed project.

Gov. Tom Corbett's comments on the Atlantic Sunrise Project, Aug. 18, 2014 (emphasis added) (Docket No. PF14-8-000; Accession No. 20140825-0011). As Mr. Corbett aptly pointed out,

FERC's "unique vantage point of being aware of other potential projects" supports the need for it to seek coordination with pipeline companies and the public in order to reduce environmental impacts from redundant pipeline construction that is obviously targeting to same region. Mr. Corbett's comments are particularly on-point when one considers the map of "Marcellus Shale Project" in Pennsylvania and surrounding states that FERC included in its 2010 presentation. *See* Figure 9. The redundant nature of multiple pipeline projects paralleling each other across Pennsylvania reveals the short-sighted nature of current gas infrastructure development impacting this region and the urgent need for a programmatic EIS so such redundancies can be reduced as much as possible.

FERC must prepare a programmatic EIS for infrastructure projects targeting the Marcellus and Utica shale formations. Without looking at the impacts of infrastructure projects on a regional level, there is no baseline for FERC to measure impacts of future site-specific projects.

F. The Northern Access 2016 Project is not required by the public convenience and necessity.

When deciding whether to issue a certificate of public convenience and necessity ("Certificate"), FERC examines the interests of the applicant's existing customers, interests of other pipelines and their customers, interests of landowners and communities, environmental impacts, alternatives, technical competence, financing, rates, market demand, eliminating bottlenecks, access to new gas supplies, increasing electric reliability, advancing clean air objectives, long-term feasibility, and other issues concerning a proposed project that are relevant to the public interest. Certification of New Interstate Natural Gas Pipeline Facilities, Statement of Policy, 88 FERC ¶ 61,227, Docket No. PL99-3-00 (Sept. 15, 1999) at 22-23, 27, *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement). It is

clear that FERC gives significant weight to a few of these factors but downplays or ignores other factors. This bias is evident in the application and heavily favors the granting of certificates.

For example, National Fuel states in conclusory terms that the "public benefits that the Project offers are far more substantial than any potential adverse effects." Application at 28. National Fuel then states that "[s]trong market demand exists for the Project." *Id*. Just because Seneca wants additional capacity so it can continue drilling shale gas wells does not mean that the Project is required by the public convenience and necessity. Indeed, it is decidedly not in the public interest to perpetuate our addiction to dirty fossil fuels when we need to keep fossil fuels in the ground if we are to meaningfully address climate change.

FERC cannot place significant weight on market demand and access to new gas supplies in the Marcellus and Utica shale formations while downplaying the environmental impacts of the proposed action, including the indirect and cumulative impacts of shale gas extraction. If FERC is going to weigh market demand and access to new supplies, however, it must balance its consideration of these factors with a corresponding assessment of the environmental impacts of accessing these new gas supplies to meet that alleged market demand. Indeed, FERC claims that one of the goals of the Certificate Policy Statement is "the avoidance of unnecessary disruption of the environment." Certificate Policy Statement at 2. FERC cannot say, however, that it is seriously considering "the avoidance of unnecessary disruption of the environment" when it refuses to consider the indirect and cumulative effects of accessing new gas supplies in the Marcellus and Utica shale formations.

In addition to the avoidance of unnecessary disruption of the environment, two other goals of the Certificate Policy Statement provide further support for the need to prepare a comprehensive programmatic EIS. These goals include avoiding the potential for overbuilding

and the unneeded exercise of eminent domain. Certificate Policy Statement at 2. The sheer number of "Marcellus Shale Projects" that FERC has reviewed and approved in recent years, including many redundant pipelines that parallel each other, suggests that FERC is allowing overbuilding to occur, which also means that it may be facilitating the unneeded exercise of eminent domain. *See* Figure 9; *see also* FERC, A View From the Beltway at 7-9 (Attachment 39). Indeed, perhaps this is why FERC is now complaining that it is receiving "unprecedented opposition." National Press Club Luncheon With FERC Chairman Cheryl LaFleur, Jan. 27, 2015 (emphasis added). By considering these issues in a programmatic EIS, FERC, the gas industry, and the public could get a better sense of the infrastructure build-out that is already underway so that environmental impacts can be identified, avoided, and mitigated as much as possible. This would advance FERC's goals in the Certificate Policy Statement.

III. CONCLUSION

FERC should prepare an EIS for the Northern Access 2016 Project that takes a hard look at direct, indirect and cumulative impacts. FERC must consider Marcellus and Utica shale gas drilling as both an indirect and cumulative effect of the Project. Such drilling is an indirect effect because it is both causally related to the Project and is reasonably foreseeable. Such drilling is also a cumulative effect and cannot be ignored because of an arbitrary "region of influence" that serves to substantially restrict the geographic scope of the analysis area so as to eliminate consideration of relevant cumulative impacts.

FERC must consider other connected, cumulative and similar actions in the same EIS, including National Fuel's connected, cumulative and similar Northern Access 2015 Project. FERC should withdraw its order authorizing the Northern Access 2015 Project. FERC should also withdraw all orders allowing National Fuel to construct the Northern Access 2015 Project.

FERC must also prepare a separate programmatic EIS that addresses natural gas infrastructure projects that are targeting the Marcellus and Utica shale formations to increase takeaway capacity. No site-specific jurisdictional projects should be authorized until that programmatic EIS is completed.

Dated: April 16, 2015

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of FERC's Rules of Practice and Procedure, 18 C.F.R. § 385.2010, I, Ryan Talbott, hereby certify that I have this day served the foregoing document upon each person designated on this official list compiled by the Secretary in this proceeding.

Dated: April 16, 2015

Respectfully submitted,

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