CO14 – Clean Air Council

CLEAN AIR COUNCIL

June 27, 2016

Via E-Filing

Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Attn: Kimberly D. Bose, Secretary

Re: Transcontinental Gas Pipe Line Company, LLC;
Draft Environmental Impact Statement for the Planned Atlantic Sunrise Project,
Docket No. CP15-138-000

Dear Secretary Bose,

Intervenor Clean Air Council ("Council") hereby submits the following comments on the Draft Environmental Impact Statement ("Draft EIS") prepared by the Federal Energy Regulatory Commission ("FERC" or the "Commission") with respect to Transcontinental Gas Pipe Line Company, LLC's ("Williams" or "Transco") proposed Atlantic Sunrise pipeline project (the "Project"). These comments are timely submitted.

The Clean Air Council is a non-profit environmental organization headquartered at 135 South 19th Street, Suite 300, Philadelphia, Pennsylvania 19103. For nearly 50 years, the Council has fought to improve the air quality across the Mid-Atlantic region. The Council has members throughout the region. The Council's mission is to protect everyone's right to breathe clean air.

On March 31, 2015, Williams filed an application with FERC under section 7(c) of the Natural Gas Act of 1938 ("NGA") and part 157 of the Commission's regulations for a Certificate of Public Convenience and Necessity for the Project.

Williams's proposed Atlantic Sunrise Project would involve the construction and operation of approximately:

- 183.7 miles of new, greenfield natural gas pipeline in Columbia, Lancaster, Lebanon, Luzerne, Northumberland, Schuylkill, Susquehanna, and Wyoming Counties,

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Pennsylvania (57.4 miles of 30-inch-diameter and 126.3 miles of 42-inch-diameter pipeline);

- 11.5 miles of new pipeline looping in Clinton and Lycoming Counties, Pennsylvania (2.9 miles of 36-inch-diameter and 8.6 miles of 42-inch-diameter pipeline);
- 2.5 miles of 30-inch-diameter pipeline replacements in Prince William County, Virginia; and associated equipment and facilities.

In addition to the pipeline facilities, Williams proposes to construct and operate the following aboveground facilities:

- two new compressor stations in Columbia and Wyoming Counties, Pennsylvania;
- additional compression and related modifications to two existing compressor stations in Columbia and Lycoming Counties, Pennsylvania and one in Howard County, Maryland;
- two new meter stations and three new regulator stations in Columbia, Lancaster, Luzerne, Susquehanna, and Wyoming Counties, Pennsylvania; and
- minor modifications at existing aboveground facilities at various locations to allow for bi-directional flow and the installation of supplemental odorization, odor detection, and/or odor masking/deodorization equipment.

(Draft EIS at 1-1). The application was assigned Docket No. CP15-138-000.

Clean Air Council's comments address: (1) the harm to air quality from the new and existing compressor stations, (2) the lack of required public purpose of the Project, (3) the harm to wetlands and water bodies from the Project, (4) the indirect and cumulative impacts, (5) the need to bind the owner of the pipeline to the terms of any certificate of public convenience and necessity, (6) the lack of consideration of dangers from underground mine fires, and (7) the incompleteness of the Draft EIS. Specifically, the Council asks FERC to consider the following:

1. **The Compressor Station Air Pollution Emissions Would Be Significant and Not Minimized.**

The Project would increase the use of several natural gas compressor stations and involve the building of two new compressor stations. This is concerning to residents living near the sites, as compressor stations are major sources of air pollution. The air pollution comes mostly from three types of emissions: (1) engine combustion, (2) pipeline gas leaks, and (3) system upsets,

mostly blowdowns. Use of electric engines can eliminate most combustion emissions and reduce but not eliminate pipeline gas leaks.[1]

CO14-1 Proposed compressor stations 605 and 610 would use electric engines. (Draft EIS 4-285). FERC has come to the mistaken conclusion that because these stations would use electric engines, they would have "minimal operational emissions," (Draft EIS 4-194), which "would not be a concern." (Draft EIS 4-180). The Draft EIS fails to account for the air pollution generated by the blowdowns.[2] In fact, FERC has not quantified the air quality impacts from blowdowns for any of the compressor stations in the Draft EIS. This is a material flaw in the Draft EIS rendering it incomplete and requiring supplementation.

Blowdowns are a regular occurrence at compressor stations, with the average blowdown emitting around 15 Mcf of pipeline gas into the atmosphere onsite. These blowdowns emit not only natural gas, but an assortment of hazardous air pollutants for which there are no NAAQS, and which are associated with illness in neighbors to the stations.[3] The Draft EIS does not quantify these emissions, let alone judge their significance. The fact that the compressor stations are subject to the National Emission Standards for Hazardous Air Pollutants, (*see* Draft EIS 4-201), does not change the fact that stations 605 and 610 would produce quantifiable emissions at levels that are known to harm human health and the environment that the Draft EIS ignores.

CO14-2 The analysis in the Draft EIS of air pollution from the existing compressor stations is also flawed. Williams failed to provide air quality modeling data that FERC requested from Williams for air pollution from its existing compressor stations, Nos. 190, 517, and 520. FERC eventually decided to accept air quality monitoring data from Williams instead of the requested modeling data. The monitoring data that Williams has submitted so far is very limited and incomplete. Clean Air Council submitted a series of comments on this issue on February 5, 2016, February 9, 2016, March 21, 2016, April 21, 2016, and April 27, 2016. The Council incorporates those comments into this comment by reference in lieu of repeating them here.[4]

[1] U.S. EPA Natural Gas Star program PRO Fact Sheet No. 103, available at https://www3.epa.gov/gasstar/documents/installelectriccompressors.pdf, accessed May 23, 2016.

[2] The Draft EIS even fails to acknowledge any emissions from blowdowns at Stations 605 and 610: "Compressor Stations 605 and 610, which would use electric motor-driven compression, would be considered new minor emission sources because the only source of emissions would be from natural gas-fired emergency generators, gas heaters, and fugitive emissions." (Draft EIS 4-197).

[3] Southwest Pennsylvania Environmental Health Project, *Summary on Compressor Stations and Health Impacts*, February 24, 2015, attached as Exhibit A, at 4-5.

[4] Those comments are available on the CP15-138 docket at Accession Nos. 20160205-5242, 20160210-5003, 20160321-5097, 20160421-5136, and 20160427-5128. All references to Accession Numbers will be on this docket unless otherwise stated.

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CO14-1 See the response to comment FA1-143.

CO14-2 As noted in section 4.11.1.3 of the EIS, we requested that Transco complete an air quality impact analysis for the proposed modifications at Compressor Stations 517, 520, and 190. While air quality modeling is commonly used to assess potential future air quality impacts, other tools are also available to assess impacts. We reviewed the air quality monitoring data provided by Transco and determined that the monitoring data, combined with a previously submitted air quality modeling analysis, showed that the modifications to the compressor stations would not result in violations of the NAAQS; however, we requested additional information to further inform our analysis. Section 4.11.1.3 of the final EIS has been updated to reflect the additional information provided by Transco. Regarding construction at Compressor Station 517, while construction of the emission sources referenced in Transco's February 23, 2016 letter to the PADEP was completed on December 31, 2015, the deferral of particulate matter monitoring relates to ground-disturbing activities associated with construction. Restoration activities at Compressor Station 517 associated with the Leidy Southeast Expansion Project are reported bi-weekly to FERC. As of October 31, 2016, construction crews have finished work at the station; however, Transco continues to inspect erosion control devices and reports that vegetation continues to grow and that most reseeded areas exceed 70 percent cover.

CO14-2 (cont'd) To build upon certain points, however, FERC appears to be relying on Williams's representations about its monitoring program, not all of which are accurate. FERC concluded that, "[a]s previously noted, PM2.5 and PM10 monitoring at Compressor Station 517 has been deferred due to construction activities. This is consistent with EPA guidelines in the *Quality Assurance Handbook for Air Pollution Measurement Systems* (EPA, 2013b). Transco plans to commence PM10/2.5 monitoring at Compressor Station 517 in July 2016 once construction of the Leidy Southeast Expansion Project is complete." (Draft EIS 4-211). To the contrary, Williams told the Pennsylvania Department of Environmental Protection ("PADEP") that construction ended in December 2015, when the Leidy Southeast Expansion Project was brought into service.[5] FERC should try to reconcile those two representations before relying in its Draft EIS on Williams's reasoning for deferring monitoring. Again, the public should know the air quality information Williams has so far refused to monitor for and have a meaningful opportunity to comment on it before FERC makes final decisions regarding the Project. The National Environmental Policy Act ("NEPA") requires as much.

CO14-3 Similarly, FERC states that SoLoNO$_X$ Dry Low NO$_X$ Combustors are the Best Available Technology ("BAT") for controlling NO$_X$ at compressor station turbines. (Draft EIS 4-204). There is SoLoNO$_X$ technology which reduces NO$_X$ emissions to 15ppm and that which reduces it to 9ppm. It is not clear which type of this control technology equipment FERC is referring to. PADEP issued a deficiency letter to Williams on December 9, 2015 in response to its application for a plan approval permit for Station 517, distinguishing between the two types of control technology.[6] Williams told PADEP it wanted to use the dirtier technology, and PADEP insisted that BAT requires use of the cleaner technology. It appears that Williams has not told FERC which technology it proposes to use, but if Williams proposes to use the 15ppm control technology, it is failing to minimize its compressor station emissions.[7]

CO14-4 The Council feels obliged as well to address a few issues the Draft EIS discusses on page 4-216 in the "Clean Air Council" section. FERC has adopted both of Williams's positions that (1) the currently EPA-approved AERMOD model has a "performance and high concentration bias under specific low wind conditions when using the regulatory default options," and that (2) the proposed update to the model designed to find lower concentrations under low wind conditions does not find low enough concentrations. FERC has not explained what evidence it has considered in coming to those conclusions besides Williams's advocacy. The Council urges

[5] February 23, 2016 letter from Williams to Pennsylvania DEP, attached as Exhibit B.

[6] December 9, 2015 letter from Pennsylvania DEP to Williams, attached as Exhibit C.

[7] The Council is not aware of this issue having been resolved, and PADEP significantly has not issued plan approval permits to Williams for Stations 517 and 520.

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CO14-3 As previously noted, the EIS is intended to disclose potential impacts resulting from the Project, but is not intended to replace the air permitting process. Table 4.11.1-6 listed information included in Transco's air permit applications currently under review with the PADEP. As noted in section 4.11.1.2 of the EIS, Transco would be required to comply with the conditions of the air permits once they are issued, including installing Best Available Technology, as determined by the PADEP in the air permitting process. We believe that our analysis appropriately disclosed the potential impacts associated with the operational emissions from the proposed compressor station modifications associated with the Project.

CO14-4 As described in section 4.11.1.3 of the EIS, we believe that air quality modeling, specifically the EPA-approved AERMOD model, is a useful tool in estimating potential air quality impacts. We note that in a letter dated May 14, 2013, from the PADEP to the Clean Air Council, the PADEP states that AERMOD likely overestimates NO_2 concentrations at very low wind speeds. The intent of the EIS is not to debate the usefulness of air modeling as a predictive tool in air quality impact assessment, but to provide additional context to Transco's decision to complete air quality monitoring at Compressor Stations 517, 520, and 190. See the response to FA1-150 for additional information regarding a supplemental air modeling analysis completed by FERC staff.

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CO14-4 (cont'd) FERC to explain the grounds for its conclusions to selectively disregard EPA-approved modeling when industry urges that it do so.

CO14-5 Likewise, FERC states that because Williams fixed an air quality violation at Station 517, "[a]s a result, Compressor Station 517 is fully in compliance with PADEP." (Draft EIS 4-216). Respectfully, it is not clear from the Draft EIS whether FERC has done an evaluation of whether Station 517 is violating or has violated other PADEP regulations. For example, Station 517 violated its Title V air permit emissions limits for NO_X in January 2014. Also, 25 Pa. Code § 123.31 provides that "A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source, in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated." Yet Williams has permitted Station 517 to emit malodors in violation of this PADEP provision.[8] More troubling, this conclusion of FERC that the compressor station "is fully in compliance" appears to be the end of the story for FERC's analysis. What types of violations would raise a red flag for FERC? The violation earlier this year (1) occurred during the pendency of applications to FERC and to PADEP for project construction approvals at the site, (2) had to do with a pollutant (NO_X) which is of particular concern and was the pollutant at issue in an earlier violation at the site, (3) was not disclosed to FERC by Williams until Clean Air Council pointed it out, and (4) occurred at a facility where Williams has withheld air modeling and refused to monitor for certain pollutants.

Lastly in the "Clean Air Council" section, the statement that "Transco continues to consult with the Clean Air Council to attempt to resolve their concerns regarding air quality issues associated with the Project" is not precisely accurate. An "attempt to resolve" the Council's concerns regarding air quality would involve some sort of effort to reduce or mitigate the air pollution that this Project would generate. Williams has never offered to make such an effort, despite the Council's requests. Instead, Williams has just attempted to convince the Council that what it is doing is not problematic. The Council remains unconvinced, but would certainly welcome efforts by Williams to clean up its compressor station operations. Using the more advanced NO_X control technology as PADEP has urged would be a good first step.

CO14-6 None of this is to say that FERC has brushed aside every one of the Council's concerns. The Council appreciates that FERC has requested in the Draft EIS, before completion of the final EIS, additional information from Williams, including scaling measured ambient pollutant levels to full load / maximum emissions for Stations 517 and 520 and, during the comment period for the Draft EIS, providing air quality modeling for Station 190. (Draft EIS 4-215). But, Williams has decided not to comply with FERC's recommendation. Instead, on the eve of the close of the

[8] *See* June 19, 2016 letter from Gerald and Kathleen Arcuri, attached as Exhibit D.

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CO14-5 As detailed in section 4.11.1.2 of the EIS, we require that Transco obtain the appropriate air quality permits for its facilities and operate in compliance with the applicable PADEP regulations. It is not within FERC's jurisdiction to enforce individual air permit conditions. In the event that a particular permit condition is not followed, the PADEP has regulatory authority to take further actions to ensure compliance, including taking enforcement action. The PADEP has further authority to require that the facility cease operation or to rescind the permit, in which case Transco would be in violation of the terms of their Certificate with FERC. We believe that our condition is appropriate to ensure that Transco complies with the terms of the air permits obtained for the compressor stations associated with the Project.

CO14-6 Section 4.11.1.3 of the EIS has been updated to reflect the additional air quality information and monitoring data provided by Transco.

CO14-6 (cont'd) comment period for the Draft EIS, Williams filed a submission indicating that it *would not* provide air quality modeling for Station 190, and it would not even file more air quality monitoring data during the comment period. *See* Accession No. 20160624-5167, File No. 02, at page 32. Not only does this leave the record on air quality for Station 190 incomplete with no hint of when it would become complete, but it is a strong indication that Williams believes FERC will just roll over and stop asking for the needed information if Williams refuses to comply.

Moreover, the time in which to seek significant information from the applicant and incorporate it into the EIS is *before* the issuance of the Draft EIS. FERC admits that "we need to establish local background air quality," which it does not yet have, "to accurately identify potential project impacts associated with the proposed modifications at Compressor Station 190, which has the potential to be significant." (Draft EIS 4-215). Furthermore, the gaps in Table 4.11.1-13 show that FERC also needs local background air quality data for PM2.5 and NO_X which it does not yet have. Given that the concentrations of PM2.5 and NO_X are close to the NAAQS when adding regional data to modeled concentrations, and the modeled pollutant concentrations are significant for 1-hour NO_X and 24-hour PM2.5, there exists the potential for a violation of the NAAQS depending on what the air quality monitoring shows.

CO14-7 Considering these data gaps together, FERC is currently unable to evaluate meaningfully the air quality impacts of the Project with respect to the compressor stations. This is a violation of the Council on Environmental Quality NEPA regulations which FERC abides by.[9] Those regulations state that "[i]f a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." 40 CFR § 1502.9(a); *see also* § 1502.9(c)(1)(ii). The importance of material information being incorporated into a draft EIS in addition to the final EIS is that the public is given an opportunity to comment on the draft EIS and have those comments taken into consideration for the final EIS, whereas there is no requirement for such consideration after issuance of the final EIS. 40 CFR §§ 1503.1 & 1503.4.

Therefore, FERC needs to prepare a revised Draft EIS accounting for the deficiencies in its compressor station air quality evaluation.

[9] "The Commission will comply with the regulations of the Council on Environmental Quality except where those regulations are inconsistent with the statutory requirements of the Commission," which is not the case here. 18 CFR § 380.1.

CO14-7 See the response to comment PM1-70. We believe the analysis in the draft EIS and the revised analysis in the final EIS are appropriate and do not warrant the need for a supplemental draft EIS.

2. Williams Has Still Not Shown that the Project Would Have the Constitutionally Required Public Purpose, a Needed Showing to Establish Public Convenience and Necessity.

CO14-8

The use of eminent domain for the Atlantic Sunrise pipeline would do massive harm to landowners along the route, including members of Clean Air Council. The mere threat of it already has. Yet FERC barely mentions the use of eminent domain in the Draft EIS. Where it does, it describes its use, but does not measure the harm from it or assess the constitutionality of its use. (*See* Draft EIS 1-3, 4-131, 5-22). Indeed, eminent domain is not a standard topic of a NEPA environmental analysis. As the Commission has explained, "Traditionally, the interests of the landowners and the surrounding community have been considered synonymous with the environmental impacts of a project; however, these interests can be distinct. Landowner property rights issues are different in character from other environmental issues considered under the National Environmental Policy Act of 1969 (NEPA)." PL99-3-000 (09/15/99) at 24.

Nevertheless, it is crucial that, during this time in which FERC is soliciting comment on the potential harms of the Atlantic Sunrise pipeline project, it hears from the public about the propriety and constitutionality of the use of eminent domain for the Project. Clean Air Council submitted a comment to FERC on September 24, 2015 in which it explained that the evidence in the record at the time, to the extent it existed, indicated that the Atlantic Sunrise Pipeline would be for private use, not public.[10] The Council incorporates that comment into this comment by reference.

Here, it is Williams's burden to show that the use of eminent domain would be constitutional, which it has not. In the absence of such a showing, FERC cannot issue a certificate of public convenience and necessity.

a. It Is Not Within the Power of the Federal Government to Take Private Property for a Private Purpose.

The right to private property is rooted deeply in the laws of our country. It shows up in the inimitable prose of the Declaration of Independence as the "pursuit of happiness,"[11] and in

[10] *See* Accession No. 20150925-5011.

[11] The U.S. Supreme Court has written:

> Rights to life, liberty, and the pursuit of happiness are equivalent to the rights of life, liberty, and property. These are the fundamental rights which can only be taken away by due process of law, and which can only be interfered with, or the enjoyment of which can only be modified, by lawful regulations necessary or proper for the mutual good of all; and these rights, I contend, belong to the citizens of every free government.

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CO14-8 The use of eminent domain is discussed in section 4.8.2 of the EIS. Also see the response to comment PM1-1.

the Bill of Rights in the takings and due process clauses of the Fifth Amendment. The Fifth Amendment guarantees that private property may not be condemned by the state but for public use and for just compensation. U.S. Const. amend. V.

Over the centuries since the adoption of the Bill of Rights, courts and condemnors have gradually weakened those guarantees. The U.S. Supreme Court no longer reads "public use" to mean "use by the public," as it once did, reading it instead to mean "public purpose." The Supreme Court now reads even "public purpose," in turn, as encompassing takings with a significant element of private purpose. *See Kelo v. City of New London*, 545 U.S. 469 (2005).

Nonetheless, the Fifth Amendment has not been eroded away completely. Where public use is only incidental to private purpose, the taking is outside the power of the government. *Kelo*, 545 U.S. 490-491 (Kennedy, J., concurring).

b. FERC Cannot Grant a Certificate of Public Convenience and Necessity for a Project Lacking a Public Purpose.

CO14-9

The Natural Gas Act confers upon the holder of a certificate of public convenience and necessity for a pipeline the right to use eminent domain to build the pipeline. 15 U.S.C. § 717f(h). That the legislature has chosen to endow duly certificated companies with eminent domain power does not erase the constitutional requirement that private property not be taken but for public use. To the contrary, because FERC is the arm of the federal government deciding whether to grant a certificate of public convenience and necessity, the certificate applicant must demonstrate to FERC that the proposed project would be for public use. 15 U.S.C. § 717f(c)(1)(A). It is FERC's obligation in turn to ensure that certificates only issue where the use of eminent domain would be constitutional.[12]

Here, FERC cannot constitutionally grant Williams eminent domain powers for the Project without grounds for finding public use, which is primarily a factual question. *Southern Power Co. v. North Carolina Public Service Co.*, 263 U.S. 508, 509 (1924); *County of Allegheny v. Frank Mashuda Co.*, 360 U.S. 185, 190 (1959). If evidence supporting a showing of public use is not found on the record in this proceeding, the issuance of a certificate would be arbitrary and capricious. *See Missouri Pub. Serv. Comm'n v. F.E.R.C.*, 337 F.3d 1066, 1070 (D.C. Cir.

Slaughter-House Cases, 83 U.S. 36, 116 (1873).

[12] Courts hearing condemnations under the Natural Gas Act have generally held that their only function is enforcement, and that they do not have the power to question the use of eminent domain. *Kansas Pipeline Co. v. 200 Foot by 250 Foot Piece of Land*, 210 F. Supp. 2d 1253, 1256 (D. Kan. 2002) ("The court does not have jurisdiction to review a collateral attack on the FERC certificate.") (citing *Williams Natural Gas Co. v. City of Oklahoma City*, 890 F.2d 255, 262 (10th Cir. 1989)). FERC cannot, then, assume that another entity will protect citizens' constitutional rights under the Fifth Amendment.

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CO14-9 See the response to comment PM1-113.

CO14-9 (cont'd) 2003) ("FERC must articulate the critical facts upon which it relies, and when it finds it necessary to make predictions or extrapolations from the record, it must fully explain the assumptions it relied on to resolve unknowns and the public policies behind those assumptions.") (quotation marks and citations omitted).

However, as a matter of policy, FERC does not seek or gather evidence on public use or public purpose, which are different from "public convenience and necessity." FERC has published a Statement of Policy for Certification of New Interstate Natural Gas Pipeline Facilities, PL99-3-000 (09/15/99) (clarified at PL99-3-001 and -002). The Statement explains FERC's procedure for evaluating whether to issue a certificate for a new pipeline project.

FERC's first step is to examine whether the project is financially viable without subsidization from existing customers. *Id.* at 19-22. This step measures market demand, which is not the same as public need, let alone public use, neither of which FERC evaluates at this threshold stage.

The second step is to see if the applicant "minimized" harms to others and see what residual adverse effects remain. *Id.* at 23.

The third step takes into account public benefits, including need, balancing it against adverse effects. "Rather than relying only on one test for need, the Commission will consider all relevant factors reflecting on the need for the project. These might include, but would not be limited to, precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market." *Id.* at 23.

CO14-10 As an aside, and a separate flaw in Williams's application, there is a gaping lack of evidence on the docket of "demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market." Williams has even stated that it does not know who the consumers will be, or what the market will be. "The Project has not been designed to provide natural gas service to any particular end user or market." *See* Accession No. 20140903-5152. There is strong evidence, however, that the market is not being driven primarily by natural gas consumer demand, and that there is a great risk of overbuilding.[13] FERC has found that "overbuilding ... can exacerbate adverse

[13] The evidence for overbuilding is strong. Rusty Braziel, energy consultant and former Vice President of Business Development for The Williams Companies, parent to Transco, recently warned a natural gas industry conference that the pipeline projects currently planned to take gas from the Marcellus and Utica shales would likely create a significant overcapacity compared to projected production volumes. *See* Jeremiah Shelor, "Marcellus/Utica On Pace for Pipeline Overbuild, Says Braziel," *Natural Gas Intelligence*, June 8, 2016, available at http://www.naturalgasintel.com/articles/106695-marcellusutica-on-pace-for-pipeline-overbuild-says-braziel. Braziel's analysis is echoed by a report titled "Risks Associated with Natural Gas Pipeline Expansion in

CO14-10 As described in the response to comment PM1-46, the Commission acts on individual applications filed by entities proposing to construct interstate natural gas pipelines. Under section 7 of the NGA, the Commission is obligated to authorize a project if it finds that the construction and operation of the proposed facilities "is or will be required by the present or future public convenience and necessity." As discussed in section 1.0 of the EIS, Transco has executed long-term, binding precedent agreements with nine shippers for the entire proposed 1.7 MMDth/d, or about 1.65 billion cubic feet per day, of additional firm transportation capacity the Project would provide. The Commission will examine the terms of these precedent agreements as part of its non-environmental review, which will be part of the information the Commission will consider in deciding whether to issue a Certificate for the Project.

CO14-10 (cont'd) environmental impacts, distort competition between pipelines for new customers, and financially penalize existing customers of expanding pipelines and customers of the pipelines affected by the expansion." PL99-3-001 at 4.

CO14-11 Despite the importance of this third step in the public convenience and necessity analysis, Williams provides only a one-page, reference-free argument on public benefits in its Application for Certificate of Public Convenience and Necessity. *See* Accession No. 20150331-5153 at 18. Williams's argument can be boiled down to the contentions that (1) it is a market participant and therefore is creating competition which is beneficial to consumers, and (2) "natural gas is a clean burning fuel in comparison to other fossil fuels." This is a far cry from the type of evidence FERC has suggested be placed in the record, and is undercut by contrary evidence showing that . Williams's statements on need are precisely the "[v]ague assertions of public benefits [that] will not be sufficient." PL99-3-000 at 25.

Reviewing the three steps FERC takes in determining whether to issue a certificate, at no step does FERC determine whether the pipeline will be for a public purpose. Thus the constitutional flaw inheres in FERC's policy as much as in its evaluation of Williams's application here. Returning to the Project at hand, it is clear that Williams must put evidence of public use on the record before FERC can issue a certificate of public convenience and necessity.

c. Williams and FERC Have Failed to Develop the Record Here, but what Evidence Exists on the Record Shows a Lack of Public Purpose.

Though the U.S. Constitution requires that the Project be for a public purpose if eminent domain is used, Williams has failed to develop a record before FERC demonstrating public purpose, and FERC has not requested one.[14] Moreover, the evidence of record indicates that the pipeline would be for a private purpose.

The lack of a substantial record is not due to the issue not having been raised. The use of eminent domain for this Project has been raised numerous times before FERC on this docket

Appalachia," published in April 2016 by the Institute for Energy Economics and Financial Analysis, attached hereto as Exhibit E. Among the report's conclusions, based on a broad review of market conditions and analyst reports, is that "[p]ipelines out of the Marcellus and Utica region are being overbuilt." *Id.* at 1, 3-13.

[14] To be clear, it is the applicant's burden to present facts in its application demonstrating that the proposed natural gas project would be required by the present or future public convenience and necessity. 18 CFR § 157.6(b)(2); *see also* § 157.5. This is the only place in the application FERC requires that the applicant could establish public use. Williams has not done so here.

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CO14-11 See the response to comment PM1-113.

CO14-11 (cont'd)

with no real response from the Commission, from as recently as June 14, 2016,[15] to as early as April 4, 2014.[16]

In its earlier eminent domain comment, the Council explained how the evidence then in the record showed that at least a substantial portion of the gas that would be transported by the Project would be exported, and the destination of the remaining portion was not in the record. *See* Accession No. 20150925-5011.[17] The Council concluded:

> On the record as it stands now, the Fifth Amendment to the U.S. Constitution bars FERC from issuing a certificate of public convenience and necessity, because there is no public use in building this pipeline on land wrested from others by threat or condemnation. The burden is on Williams to flesh out a factual record that can establish public use, if that can be done. Likewise, FERC must make clear how public use has been demonstrated. Without a fundamental rethinking of the Atlantic Sunrise pipeline project, Clean Air Council doubts that any grounds exist for finding public use.

Id. No new facts have been added to the record on this docket establishing public use since the Council wrote these words last September.[18] To the contrary, the evidence for private use is stronger than it was then.[19]

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[15] Letter from PA House Representative Brett R. Miller, Accession No. 20160623-0007 ("The principle behind the use of Eminent Domain has always been that the property owners and the community at large being subjected to an Eminent Domain decision would receive a benefit from the 'taking.' However, it is difficult to see how the affected areas of the 41st district will receive any tangible benefit from the use of Eminent Domain that allows a pipeline to simply pass through this district.")

[16] Letter from Andrew Gillespie of Lancaster, PA, Accession No. 20140404-5007 ("Eminent domain is to be reserved for projects of public use and good. This gas would be piped out of state, for corporate profit.").

[17] Early cases examining takings under the Natural Gas Act found public purpose in the vital importance of getting natural gas transported by pipelines to the public for their use, the pipeline company acting as a public utility. *See*, e.g., *Thatcher v. Tennessee Gas Transmission Co.*, 180 F.2d 644 (5th Cir. 1950). Congress did not contemplate at the time of the passage of the Natural Gas Act that eminent domain could be used to build a pipeline to export America's natural resources abroad. The assumptions that underlay the legislative grant of eminent domain in the Natural Gas Act no longer apply. Export projects in particular must undergo thorough scrutiny to determine whether the American public needs the pipeline for its consumption of natural gas.

[18] Worth repeating is the indisputable evidence that exports of natural gas hurt domestic gas consumers economically. "Effect of Increased Natural Gas Exports on Domestic Energy Markets," U.S. Energy Information Administration, January 2012, available at http://energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf, attached hereto as Exhibit F; *see also* Testimony of Tyson Slocum to U.S. Senate Committee on Small Business & Entrepreneurship, July 14, 2015, available at http://www.citizen.org/documents/tyson-slocum-senate-testimonynatural-gas-exports-july-2015.pdf. The benefits of exports are concentrated in the natural gas industry

CO14-11 (cont'd)

d. FERC Cannot Grant a Certificate on the Existing Record of Public Use.

Because Williams has failed to enter into the record evidence on the issue of public use under the Fifth Amendment takings clause despite the public's urging, and because FERC has failed to ask for such evidence, Clean Air Council is preparing a motion for an evidentiary hearing. Without any further record evidence, FERC will be unable to lawfully grant the use of eminent domain to Williams through the issuance of a certificate of public convenience and necessity.

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itself, which can sell product (and transmission capacity) at higher prices. This type of shift in benefits, from public consumers to private producers, cannot lawfully be facilitated by eminent domain, the purpose of which must be for the public.

[19] The Industrial Energy Consumers of America ("IECA"), a "a nonpartisan association of leading energy-intensive trade-exposed (EITE) manufacturing companies with $1.0 trillion in annual sales, over 2,900 facilities nationwide, and with more than 1.6 million employees worldwide," commented to FERC on the Jordan Cove LNG export project docket on June 1, 2016. *See* Accession No. 20160601-5296 on Docket No. CP13-483-001. IECA explained to FERC that natural gas exports not only raise prices domestically, but greatly hurt American manufacturing competitive advantage by simultaneously lowering manufacturing costs abroad. *Id.* at 3-4. IECA noted that "All of the [Department of Energy] LNG export studies show insignificant net economic gains, higher prices for natural gas, and negative impacts to wages and investment nationally." *Id.* at 7.

Also suggesting private rather than public purpose is a consideration of the economic harms the Project would likely cause. While the Council is not aware of a professional study looking into these harms with respect to Atlantic Sunrise in depth, Key-Log Economics conducted such a study of a 143-mile stretch (shorter than Atlantic Sunrise) of an interstate natural gas pipeline that would go through mostly forested and agricultural lands, like Atlantic Sunrise. *See* "Economic Costs of the Mountain Valley Pipeline: Effects on Property Value, Ecosystem Services, and Economic Development in Virginia and West Virginia," May 2016, available at http://keylogeconomics.com/wp1/wp-content/uploads/2016/05/EconomicCostsOfTheMVP_TechnicalReport_FINAL_20160516.pdf, and attached hereto as Exhibit G. The study concluded, on pages i and ii:

> Considering this eight-county region alone, estimated one-time costs range from $65.1 to $135.5 million. These one-time costs comprise lost property value and the value of ecosystem services lost during construction. Annual costs following the construction period include lower ecosystem service productivity in the MVP's [Mountain Valley Pipeline] right-of-way, lower property tax revenue due to the initial losses in property value, and dampened economic development. These total between $119.1 and $130.8 million per year and would persist for as long as the MVP right-of-way exists—that is, in perpetuity. …Putting the stream of costs into present value terms and adding the one-time costs, the total estimated cost of the MVP in the eight counties is between $8.0 and $8.9 billion.

The public is likely to bear comparable costs from the Atlantic Sunrise pipeline project. A similar analysis was done by Key-Log Economics of the proposed Atlantic Coast Pipeline. *See* "Economic Costs of the Atlantic Coast Pipeline: Effects on Property Value, Ecosystem Services, and Economic Development in Western and Central Virginia," February 2016, updated May 2016, available at http://keylogeconomics.com/wp1/wp-content/uploads/2016/05/EconomicCostsOfTheACP_TechnicalReport_REVISED_20160516.pdf. To be clear, public use is not evaluated by balancing costs against benefits. But significant costs borne by the public in contrast to large profits projected by the builders suggest that the public is not the intended beneficiary of the project.

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CO14-12

3. The Project Would Significantly Harm Pennsylvania's Water Bodies.

One of the most significant harms the Atlantic Sunrise pipeline would inflict on the natural environment if built would be to the wetlands and water bodies of Pennsylvania. If built, the pipeline would span 197.7 miles and cross 331 waterbodies. Williams would use crossing methods including dry and wet crossings, open-cut methods, and trenchless methods. The pipeline would also cross through miles of wetlands.

These water bodies are protected under the Clean Water Act. Pennsylvania issued a certification under Section 401 of the Clean Water Act that is conditional on Williams obtaining and complying with several permits, including Water Obstruction and Encroachment Permits under 25 Pa. Code § 105, known as Chapter 105, which Williams has not yet received. In fact, as detailed in the Draft EIS, the Project would cause great harm to Pennsylvania's water bodies, and violate Pennsylvania and federal law, including Chapter 105.

The Project as currently proposed would violate Chapter 105 for adverse impact on wetlands by removing smaller wetlands and compensating with consolidated replacement wetlands, as well as by harming exceptional value wetlands without meeting the requirements to do so. The plan may also violate the Endangered Species Act and would violate 25 Pa. Code § 93 by impairing high-quality streams, using potentially harmful water diversion methods, and blasting where migratory fish and endangered species reside.

Nonetheless, FERC concludes "that the Project would not have adverse impacts on surface water resources."[20] (Draft EIS ES-5). To the contrary, the impacts exist and would be major, and the Council urges FERC to not downplay them in the final EIS.

a. The Project Would Violate Chapter 105 by Destroying of Exceptional Value and Other Wetlands.

Between the European colonization of Pennsylvania and the mid-1980s, the Commonwealth lost over half of its wetlands.[21] Wetlands are now protected, with higher protections granted to more valuable wetlands. Exceptional value wetlands receive the greatest protections.

[20] The Draft EIS lists many adverse impacts before concluding that there would be none. "Adverse impact" means harm, an injury. It does not matter whether the harm is "minimized" or "mitigated" or "long-term" or "significant;" it is still harm. It frankly is indisputable that there would be adverse impacts on surface water resources, though parties could reasonably differ on the extent or gravity of them. By making such a baldly false statement as this, FERC damages its credibility and makes a mockery of the NEPA process.

[21] Thomas E. Dahl & Gregory J. Allord, U.S Geological Survey, *National Water Summary—Wetland Resources: Technical Aspects*, "History of Wetlands in the Coterminous United States," available at https://www.fws.gov/wetlands/Documents/History-of-Wetlands-in-the-Conterminous-United-States.pdf.

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CO14-12 We disagree. Wetlands are not proposed to be permanently removed and we believe the minimization measures described in sections 4.3 and 4.4 of the EIS would adequately mitigate impacts on waterbodies and wetlands, including exceptional value wetlands. As previously mentioned, the PADEP is the agency responsible for implementation of Chapter 105 permitting requirements, including development of appropriate mitigation measures. The cumulative impacts section of the EIS has been revised to acknowledge the potential cumulative impacts on wetlands and the potential for cumulative impacts on exceptional value wetlands. Also see the responses to comments FA1-6 and FA1-15.

CO14-12 (cont'd)

25 Pa. Code §§ 105.18a(a) and (b) state that the PADEP cannot grant permits for obstruction of or encroachment on exceptional value wetlands and other wetlands unless the "applicant affirmatively demonstrates in writing…that the following requirements are met: (1) the dam, water obstruction or encroachment will not have an adverse impact on the wetland, as determined in accordance with § § 105.14(b) and 105.15…" 25 Pa. Code § 105.14 states that PADEP must consider the impact on the property and wildlife when determining whether or not to issue a permit.

Williams plans to remove smaller wetlands along the right-of-way for construction of the pipeline. It proposes as compensation[22] for the loss of these small wetlands rehabilitating land into new wetlands in four consolidated large sites. First Pennsylvania Resource, LLC, *Permittee-Responsible Mitigation Master Plan for the Atlantic Sunrise Project*, page 2 (April 2015) ("Mitigation Master Plan").[23] Williams says this is ideal because the rehabilitation of smaller wetlands have a "higher rate of failure and are generally not sustainable in the long-term." *Id.*

Smaller wetlands play a critical role in reducing flooding, and wetlands in general work best as spatially distributed systems.[24] A wetland's value is not solely determined by its size; its importance is also based on its location and relations to hydrologic and biological fluxes with other landscapes. *Id.* The destruction of a series of wetlands along a linear path, many of which are naturally distributed due to their location in wild areas, cannot be compensated by the enlargement of other wetlands. Therefore, given the importance of the smaller wetlands and the high rate of failure for rehabilitation, the project would have an adverse impact on the wetlands and likely violate 25 Pa. Code §§ 105.18(a) and/or (b).

Additionally, before a state permit may issue under Chapter 105 allowing obstruction of or encroachment on exceptional value wetlands, the applicant must affirmatively demonstrate in writing that, among other things:

[22] "Mitigation" is how it is characterized. There is a consistent erroneous use of the the term "mitigation" to mean "compensation" in the Draft EIS. To mitigate is to lessen the severity of a harm. When wetlands are destroyed and other wetlands are created, there is compensation for a loss of wetlands, but the destruction of the wetlands has not been lessened in severity in any way. Natural habitats and the plants and animals who live in them are not fungible like money. They are unique. If they are killed or destroyed, there can be no mitigation as to them.

[23] Williams filed the Mitigation Master Plan on the CP15-138 docket at Accession No. 20150608-5221, File No. 2.

[24] James G. Gosselink and William J. Mitsch, *The Values of Wetlands: Landscapes and Institutional Perspectives*, ECO. ECON. 25 (2000), available at https://www.researchgate.net/publication/4839953_Valuation_of_wetlands_in_a_landscape_and_institutional_perspective.

CO14-12 (cont'd)

> (2) The project is water-dependent. A project is water-dependent when the project requires access or proximity to or siting within the wetland to fulfill the basic purposes of the project.
>
> (3) There is no practicable alternative to the proposed project that would not involve a wetland or that would have less effect on the wetland, and not have other significant adverse effects on the environment....
>
> (6) The cumulative effect of this project and other projects will not result in the impairment of the Commonwealth's exceptional value wetland resources.

25 Pa. Code § 105.18a(a). Williams has not affirmatively demonstrated either to FERC or in its applications to the PADEP that the Project is water-dependent. To the contrary, Williams can reroute the pipeline around exceptional value wetlands, but has chosen not to do so. Nor has Williams demonstrated that there is no practicable alternative to the Project that would satisfy the third requirement.

The sixth requirement is worth elaborating on. The Draft EIS contains a cumulative impact analysis for the project, including for water resources. However, there is no specific analysis of the cumulative impact on exceptional value wetland resources. The Draft EIS concludes that the measures that would be taken by Williams "would appropriately mitigate for these impacts and minimize any cumulative wetland effects." (Draft EIS 4-275). This conclusion does not follow from its analysis, which showed, among other things, the measurable permanent conversion of forested wetlands to unforested wetlands and the ongoing artificial stunting of a wider swath of forested wetlands through selective tree cutting. Also, the Draft EIS failed to consider not just the cumulative impact from the many wetlands through which the pipeline would cross, but also from other projects.

It is apparent from the Draft EIS that the Project would violate Chapter 105 through its harm to the at least 51 exceptional value wetlands it plans to obstruct or encroach upon. That the Draft EIS concludes the Project "would not have adverse impacts on surface water resources" despite the fact that it would violate the Clean Water Act shows that FERC has not taken the "hard look" required under NEPA.

b. The Project Would Harm Endangered Species and Destroy their Habitat.

According to the Mitigation Master Plan, there will be 2.66 acres of exceptional value wetlands permanently impacted by the proposed pipeline project, which are specifically protected by 25 Pa. Code §§ 105.17-18a. (Mitigation Master Plan, 7).

CO14-12 (cont'd) Even though Williams proposes to replace exceptional value wetlands at a ratio of 2.5:1 with palustrine forested wetlands, this Project still likely constitutes a violation of 25 Pa. Code § 105.18a, which states that a permit will be granted when the applicant can affirmatively show that the obstruction will not have an adverse impact on the wetlands. Impact is determined by looking at, for one, the effect on the fish and wildlife, and aquatic habitat. 25 Pa. Code § 105.14(b)(4).

CO14-13 The Council is greatly concerned that the safety of the federally-threatened, Commonwealth-endangered bog turtle cannot be guaranteed, as the exceptional value wetlands through which the Atlantic Sunrise pipeline would run are the bog turtle's preferred natural habitat. Williams's surveys for the bog turtle are not yet complete, but Williams still intends to route the pipeline through a wetland with a known bog turtle population, destroying a portion of that wetland. (Draft EIS 4-112). There are also at least 20 identified wetlands that are suitable bog turtle habitat along the Project route.

Allowing Williams to destroy the habitat of this threatened species would be highly inappropriate. Destruction and fragmentation of bog turtle habitat is the principal threat to the turtle. (Draft EIS 4-111). The Council respectfully requests FERC consider the effects to the bog turtles' critical habitat, and refrain from allowing any activity which would destroy its habitat.

CO14-14 **c. Project Construction is Likely to Harm Migratory Birds.**

There is a high likelihood that construction of the Atlantic Sunrise pipeline would significantly harm both permanent and migratory bird populations that are protected under the Migratory Bird Treaty Act ("MBTA"). (Draft EIS M-7). MBTA makes it unlawful for anyone to take the protected birds or to alter their habitat in a way that could effect a take.

Bald eagles and 17 other birds of conservation concern are known to live and breed in the project area. (Draft EIS M-18). Two birds of conservation concern use the wetlands that Williams proposes to cross as habitat: the short-eared owl and the rusty blackbird. (Draft EIS M-23). The project will thus destroy a significant amount of habitat of the protected birds and it is in violation of MBTA to take the birds or disrupt their habitat. While the U.S. Fish and Wildlife Service encourages industry to use best practices to protect migratory birds, the cumulative impacts of removing so much migratory bird habitat, even if Williams does its best to avoid direct takings, is of major concern.

CO14-15 **d. Dry Crossing Methods for Major Rivers Have the Potential to Damage High-Quality Streams and Wildlife.**

16

CO14-13 See the response to comment CO13-30.

CO14-14 Environmental inspectors would be on site to ensure that the Project is being constructed in compliance with mitigation measures and regulatory requirements. Additionally, Transco has committed to funding a FERC third-party compliance monitoring program during the construction phase of the Project. Under this program, a contractor is selected by, managed by, and reports solely to the FERC staff to provide environmental compliance monitoring services. The FERC third-party compliance monitor(s) would provide daily reports to FERC on compliance issues and make recommendations to the FERC environmental project manager on how to deal with compliance issues, variance requests, and other construction changes, should they arise. In addition to this program, FERC staff would also conduct periodic compliance inspections during all phases of construction.

Section 4.6.1.3 of the EIS describes the potential impacts on migratory birds from the Project; Transco's updated Migratory Bird Plan is provided in appendix M of the EIS. In addition, Transco is working with the FWS to develop a memorandum of understanding that would specify the voluntary conservation measures that would be provided to offset the removal of upland forest and indirect impacts on interior forest, which we are recommending Transco file with its Implementation Plan. Also see response to comment IND114-27.

CO14-15 See the responses to comments PM1-60 and PM1-71.

CO14 – Clean Air Council (cont'd)

CO15-15 (cont'd) Williams plans to dry-cross 274 waterbodies. (Draft EIS 4-60). A majority of these waterbodies are high-quality, cold water fisheries, and/or migratory fisheries ("HQ-CWF, MF"). 46 Pa. Bull. 2191 (April 30, 2016). Dry crossing involves either flume pipes or a dam-and-pump method to divert water flow around the construction. (Draft EIS 4-60). Dry crossing harms aquatic life by causing temporary and permanent modification to stream banks and aquatic habitat. (Draft EIS 4-61). These modifications are caused by the resuspension of sediments, increased turbulence, and from blocking access to migratory pathways for aquatic life. (Draft EIS 4-61). Williams plans to reduce harm to wildlife by placing a screen on the pipes. (Draft EIS 4-100). That is not enough to ensure adequate protection of aquatic life.

CO14-16 A project of this magnitude, using these methods, is likely to cause significant harm to fish, and incidental takes to endangered aquatic life within the waterbody and surrounding habitat. (Draft EIS 5-10). Section 9 of the Endangered Species Act prohibits the taking of a listed species. 18 U.S.C.A. § 1538(a)(1)(A). Taking "means to harass, harm, pursue, hunt, shoot, wound kill, trap, capture, or collect, or to attempt to engage in any such conduct." 18 U.S.C.A. § 1532(19). Within the waterbody, aquatic organisms can get caught against the screens, causing injury, death, or extreme stress.[25] Endangered plant species may be harmed through the construction of the pipeline by disturbing their soil, trampling the plant, or by uprooting the plants and transferring them from the intended construction site. Williams plans to transfer all protected species in order to avoid direct harm to the plants. (Draft EIS 5-10). Even if Williams can properly transfer the plants, the plants will further be harmed if they are not properly maintained after transplantation. Williams cannot guarantee that proper care that is needed when transferring the protected flora will occur.

CO14-17 Furthermore, HQ streams are subject to special antidegradation protections to maintain their quality. For example, 25 Pa. Code §§ 93.4a(c) and 93.4c(b)(1)(iii) do not allow for degradation of HQ streams from point source discharges unless PADEP finds that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. For nonpoint sources, such as the pollution created by dry-crossing a stream, the Pennsylvania Code requires the use of best management practices. 25 Pa. Code § 93.4c(b)(2). Trenchless crossings generally are one of the best management practices for protection of HQ waters. Williams has nowhere justified its proposed use of highly destructive trenching methods in HQ waters. There may be circumstances justifying case-by-case use of such methods in certain waters here, but if there are, Williams has not described

[25] NOAA, Northeast Fisheries Service Center, *Impacts to Marine Fisheries Habitat from Nonfishing Activities in the Northeastern United States* 221-2 (2008), available at http://www.nefsc.noaa.gov/publications/tm/tm209/pdfs/ch8.pdf.

CO14-16 There are no federally listed fish or other aquatic species within the project area. State-listed plants are addressed in section 4.7 of the EIS, which includes a description of the PADCNR's involvement in the review of the Project.

CO14-17 See the responses to comments PM1-71 and PM2-14.

CO14-17 (cont'd) them. FERC is therefore remiss in concluding that the Project would not cause adverse impacts to surface waters.

Of particular note among the waterbodies that Williams intends to cross using dry methods are two crossings of greater than 100 feet: at Tunkhannock Creek, using the dam-and-pump method, and Swatara Creek, using the flume method. (Draft EIS 4-49). Absent unusual circumstances not apparent here, it is inappropriate to do dry crossings of major waterbodies, as opposed to trenchless methods. Pennsylvania Governor Wolf's Pipeline Infrastructure Task Force report noted that "Crossings that employ trenchless technologies such as horizontal directional drilling (HDD) and micro-tunneling under the streambed are preferred for larger crossing and those with forested riparian buffers."[26]

A reduction in water quality also will not be allowed under 25 Pa. Code § 93.4a(b) unless the discharger demonstrates that the HQ stream will support applicable existing and designated water uses. Williams has to prove that the screens and methods used to protect wildlife would not interrupt the uses of the streams, which include habitat to cold water and migratory fish. Williams cannot meet this burden because of the known damage to the species caused by the chosen screening method for fish and replanting method for flora mentioned above.

CO14-18 **e. Horizontal Directional Drilling Crossings, though Preferable, still Can Harm Water Bodies.**

Williams intends to use horizontal directional drilling ("HDD"), a trenchless crossing method, for eight of the water bodies. Most of these are major water bodies including, for example, the Susquehanna and Conestoga Rivers. HDD crossings, while often preferred over crossings which trench the water body, still have often leak chemical byproducts, including lubricants, that can injure or kill aquatic life. (Draft EIS 4-101). The preparation for a HDD crossing may involve the removal of habitat of crucial species, including the bald eagle. (Draft EIS ES-9). The Draft EIS acknowledges that Williams had not completed surveys for bald eagles in the Project area. (Draft EIS 5-11).

CO14-19 Williams also expects blasting to occur to install the pipeline. Blasting can cause permanent changes to the water body and allow chemical byproduct leakage. (Draft EIS 4-101). The changes include turbidity, lower dissolved oxygen levels, and modification of riparian and aquatic habitat. (Draft EIS 4-61).

These threats to Pennsylvania waters lead to a far different conclusion than that found in the Draft EIS, that the Project "would not have adverse impacts on surface water resources."

[26] Environmental Protection Workgroup Recommendation #34. Report available at http://files.dep.state.pa.us/ProgramIntegration/PITF/PITF%20Report%20Final.pdf.

CO14-18 As noted in section 4.7.3.1 of the EIS, the Project would be constructed in compliance with the Bald and Golden Eagle Protection Act. Transco will continue to monitor the bald eagle mapping tool to identify any new nest sites that may be added to the database subsequent to its current review. Should any new occupied nest sites be discovered within 0.5 mile of the proposed route, Transco would take appropriate steps to avoid adverse impacts on them.

In the draft EIS, we recommended that Transco file with the Secretary all outstanding geotechnical feasibility studies for HDD crossing locations and identify the mitigation measures that Transco would implement to minimize drilling risks. Transco provided these studies as attachment 5 to its August 18, 2016 supplemental filing (FERC accession number 20160818-5320). Section 4.3.2.6 of the EIS has been updated to include this new information. Additionally, in the event that an HDD fails, we are recommending that Transco file final site-specific crossing plans concurrent with its application to the USACE for an alternative open-cut crossing. These plans should include scaled drawings identifying all areas that would be disturbed by construction and a description of the mitigation measures Transco would implement to minimize effects on water quality and recreational boating. In addition, a scour analysis should be conducted for these three crossings and filed concurrently with the site-specific crossing plans.

CO14-19 See the responses to comments FA1-16 and FA1-71.

CO14-20 (Draft EIS ES-5). Such a perverse conclusion indicates that FERC has not taken the "hard look" at water impacts that NEPA requires of it. *Nuclear Info. & Res. Serv. v. Nuclear Regulatory Comm'n*, 509 F.3d 562, 568 (D.C. Cir. 2007). Therefore, NEPA requires FERC to prepare a revised Draft EIS to better account for the Project's water impacts. 40 CFR § 1502.9(a).

CO14-21 **4. The Project Would Have Truly Significant Indirect and Cumulative Impacts Which FERC Has Not Acknowledged.**

The National Environmental Policy Act [27] is implicated by a major federal action, including the permitting by FERC, a federal agency, of the construction of a natural gas pipeline project such as Atlantic Sunrise.[28] NEPA and its implementing regulations require FERC to consider the full range of environmental impacts from the proposed project, including impacts that are not directly causally related to the project itself. FERC must consider all environmental impacts, including "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, [and] cultural" impacts, "whether direct, indirect, or cumulative."[29]

Regulations promulgated by the Council on Environmental Quality delineate the appropriate scope of an environmental impact statement prepared pursuant to NEPA. They document, and make clear, that an agency must consider a wide range of impacts that flow indirectly from the project, and also must consider whether unrelated projects will have environmental impacts that will combine with those of the project under consideration to have a cumulatively significant effect. The regulations state, in pertinent part:

> To determine the scope of environmental impact statements, agencies shall consider 3 types of actions . . . . They include:
>
> (a) Actions (other than unconnected single actions) which may be:
>
> 1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
>
> * * *
>
> (iii) Are interdependent parts of a larger actions and depend on the larger action for their justification.

[27] 42 U.S.C. §§ 4321-4370(h).

[28] *Id.* § 4332(2)(C).

[29] 40 C.F.R. § 1508.8.

CO14-20 See the response to comment PM1-70. We believe the analysis in the draft EIS and the revised analysis in the final EIS are appropriate and do not warrant the need for a supplemental draft EIS.

CO14-21 See the responses to comments PM1-6, PM1-40, and CO13-9.

CO14-21 (cont'd)

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

3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography . . . .[30]

In preparing a NEPA document, "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto Ins.*, 463 U.S. 29, 43 (1983) (internal quotations and citations omitted). In short, an agency action must be the product of "reasoned decisionmaking." *Id.* at 52. In carrying out its duties under NEPA, an "agency need not foresee the unforeseeable, but . . . [r]easonable forecasting and speculation is . . . implicit in NEPA, and [courts] must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry.'" *Scientists' Inst. For Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973). An agency must fulfill its duties under NEPA "to the fullest extent possible." *Id.*

a. FERC Is Ignoring its Responsibility to Consider Indirect Upstream and Downstream Environmental Impacts.

FERC is explicitly required in developing its Environmental Impact Statement to consider three types of impacts: (1) direct; (2) indirect; (3) cumulative.[31] FERC blatantly ignores this responsibility when it indicates that it cannot consider the environmental impacts of natural gas development in the Marcellus Shale—which will be necessary for and is planned to supply the gas that the Atlantic Sunrise project would transport—because this upstream and downstream development is not "directly related to the Project." (Draft EIS 4-263).

FERC itself acknowledges that at a median production rate "about 340 gas wells would be required to provide the 1.7 MMDth of gas required for the Atlantic Sunrise Project." *Id.* These wells would also require systems of gathering pipelines and compressor stations to transport the gas from the wells when it comes out of the ground to the larger Williams transmission line system and the Atlantic Sunrise project. FERC's suggestion that it cannot consider the environmental impacts of this type of upstream or downstream development—

[30] 40 C.F.R. § 1508.25.

[31] 40 C.F.R. § 1508.25(c).

CO14-21 (cont'd) clearly and inevitably caused by the Atlantic Sunrise project—because it is not directly related to the project is willful blindness to the clear requirements in the C.F.R. and in the case law that a NEPA document encompass *indirect* impacts as well as direct impacts.

FERC further suggests that it is prevented from considering the impacts of upstream and downstream natural gas development in the Marcellus Shale because "FERC's authority under the NGA review requirements relate only to natural gas facilities that are involved in interstate commerce." *Id.* In the next paragraph the Draft EIS similarly asserts: "Production and gathering activities, and the pipelines and facilities used for these activities, are not regulated by FERC but are overseen by the affected region's state and local agencies with jurisdiction over the management and extraction of the Marcellus Shale gas resource. FERC's jurisdiction is further restricted to facilities used for the transportation of natural gas in interstate commerce, and does not typically extend to facilities used for intrastate transportation." *Id.*

This too is willful blindness to the clear requirement in the C.F.R. that FERC consider the impacts of "past, present, and reasonably foreseeable future actions *regardless of what agency (Federal or non-Federal)* or person undertakes such other actions."[32] In other words, the fact that FERC may not have jurisdiction to regulate all natural gas development in the Marcellus Shale, and the fact that such development may be considered an intrastate or non-federal activity in no way eliminates FERC's duty as clearly spelled out in the C.F.R. to consider the environmental impacts of such development to the extent that it is indirectly related to the project at hand or will have environmental impacts that, when considered cumulatively with those of the project, will be significant.

CO14-22 The Draft EIS contains other examples of FERC's failure to properly apply the concept of indirect impacts. For example, Williams intends to build two new compressor stations as part of the Atlantic Sunrise project, Compressor Station 605 in Wyoming County and Compressor Station 610 in Columbia County. These stations will be powered by electric motors, and as a result it will be necessary to build new electric transmission lines to power those stations. (Draft EIS 4-260). While FERC acknowledges that construction of these electric transmission lines will result in permanent soil, land use, vegetation, wildlife, air quality, noise, and visual impacts, FERC inexplicably treats these impacts as "cumulative" impacts, rather than as impacts that are directly causally related to the project. *Id.*[33] By treating these impacts as cumulative rather than

[32] *Id.* § 1508.7.

[33] Note that the Draft EIS's analysis of these transmission line impacts assumes the lines will collectively run 1,000 feet, whereas Williams in its supplemental filing dated June 24, 2016 explains that "the current estimated length of these electric transmission lines is 4.3 miles for Compressor Station 605 and 1.8 miles for Compressor Station 610." Accession No. 20160624-5167, File No. 2, p.39. Their environmental impacts will therefore be far larger than estimated in the Draft EIS.

CO14-22 We disagree. As stated in section 4.13 of the EIS, non-jurisdictional project-related facilities are natural gas facilities that are not under the Commission's jurisdiction. Therefore, they are evaluated for cumulative impacts in section 4.13.5 of the EIS.

CO14-22 (cont'd)

direct, FERC assigns them much less significance than they are due.[34] The new power lines would be necessary specifically for and only for the Atlantic Sunrise project. All the environmental impacts resulting from their construction and operation should therefore be considered direct impacts of this project, or at a minimum indirect impacts of the project that bear a clear causal relationship to it.

b. FERC Has Not Properly Considered the Project's Cumulative Impacts.

In addition to the indirect impacts of the project, FERC must also conduct a cumulative impacts analysis. The D.C. Circuit Court of Appeals has explained that "a meaningful cumulative impacts analysis must identify (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions – past, present, and proposed, and reasonably foreseeable – that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate."[35]

A proper cumulative impacts analysis, therefore, must consider environmental impacts stemming from other projects, including those without any causal link to the project being evaluated.[36] Indeed, the U.S. Supreme Court has examined the proposition that agencies need only consider cumulative impacts that are causally related to the project at issue and rejected it. In *U.S. Department of Transportation v. Public Citizen*, the Court addressed the question of whether NEPA required an agency to assess the environmental impacts of Mexican trucks beginning to operate in the United States in conjunction with the agency's promulgation of regulations that would allow those operations. The Court found that the increase in truck traffic from Mexico did not need to be causally related to the new regulation in order to be properly considered as part of the cumulative impacts analysis.[37]

A more appropriate illustration of a proper cumulative impacts analysis can be found in *Grand Canyon Trust v. FAA*, which has been cited numerous times. That case concerned the Federal Aviation Administration's ("FAA") Environmental Assessment ("EA") on the effects of

[34] *See* Section 4.13 of Draft EIS, devoting 33 pages of the Draft EIS to cumulative impacts out of the several-hundred-page document.

[35] *Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002).

[36] *See Grand Canyon Trust v. FAA*, 290 F.3d 339, 347 (D.C. Cir. 2002) (remanding to FAA because EA failed to consider cumulative impact of noise resulting from the proposed airport project combined with noise from other airports); *see also Tomac v. Norton*, 433 F.3d 852, 864 (D.C. Cir. 2006) ("The 'cumulative' impacts to which the regulation refers are those *outside* of the project in question . . . .").

[37] 541 U.S. 752, 770 (2004).

the construction of an airport near a national park.[38] The court faulted the FAA for considering only the noise impacts on the park that would result from the construction of the airport without also considering the "total, incremental impacts of various man-made noises, such as the 250 daily aircraft flights near or over the Park that originate at, or have as their destination, airports other than" the one at issue.[39] The court similarly faulted the FAA for failing to consider the cumulative impacts of the planned expansions of other regional airports.[40] *Grand Canyon Trust* thus provides clear authority for the proposition that a cumulative impacts analysis may not be limited to those impacts that are causally connected to the agency action.

Although FERC has previously distinguished *Grand Canyon Trust* on the ground that the activities the court determined to be required in the EA were "similar to the agency's proposed action," the distinction is irrelevant.[41] The CEQ regulation defining "cumulative impact" in no way limits a cumulative impacts analysis to the effects of actions "similar" to the one at issue.[42] Moreover, the similarity of the actions was not relevant to the *Grand Canyon Trust* court's decision except insofar as it determined that a cumulative analysis of the effects of noise on the park should consider other sources of noise, which necessarily included noise from similar activities.[43] FERC's tortured reading of *Grand Canyon Trust* is little more than an attempt to dodge the requirements of NEPA.

One of the most significant cumulative environmental impacts that pipelines and other natural gas infrastructure have is forest fragmentation. It is a long-recognized principle of ecology that clearing a section of forested land to make way for human activity—whether it be a pipeline, a road, a farm, or a housing development—has significant impacts on the surrounding area and the species that live in it that go far beyond simply the acres actually cleared. This process, known as forest fragmentation, is defined by the United States Geological Survey as occurring "when large areas of natural landscapes are intersected and subdivided by other, usually anthropogenic, land uses leaving smaller patches to serve as habitat for various species."[44]

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[38] 290 F.3d at 340.

[39] *Id.* at 346.

[40] *Id.*

[41] *Cent. N.Y. Oil & Gas Co., LLC*, 138 F.E.R.C. P61,104, at 30 (2012) (Order on Rehearing, Clarification and Stay).

[42] *See* 40 C.F.R. § 1508.7.

[43] *See Grand Canyon Trust*, 290 F.3d at 346 ("Nor does the EA address the impact, much less the cumulative impact, of noise in the Park as a result of other activities, such as the planned expansions of other regional airports that have flights near or over the Park.").

[44] E. T. SLONECKER ET AL., U.S. GEOLOGICAL SURVEY., LANDSCAPE CONSEQUENCES OF NATURAL GAS EXTRACTION IN BRADFORD AND WASHINGTON COUNTIES, PENNSYLVANIA, 2004–

Fragmentation divides previously contiguous forest into "core" forest and "edge" forest.[45] Edge forest is that forest that is 300 feet or less from the new border that has been created, while core forest is the forest that remains at least 300 feet from any edge.[46] Dividing a forest with a pipeline increases the ratio of edge forest to core forest, and this leads to what are referred to as "edge effects."[47] What is meant by this is that edge forest is a very different habitat from core forest. A new edge exposes forest to different levels of light, wind, and humidity, as well as to different predators.[48] It also allows the growth of weeds and other invasive species, and changes the distribution of plant species.[49] All of these changes alter the structure of the habitat and change the types of species it can support.[50] A new edge also reduces the amount of core forest that remains. Every expansion of edge forest eliminates many square feet of core forest area. A larger core forest can support a greater variety of species, and there are some species that only thrive in core forests.[51] Elimination of core forest can therefore lead to fewer species with lower populations, which are therefore much more susceptible to extinction.[52]

The Draft EIS acknowledges the problem of fragmentation, and identifies in Appendix P other related projects, either existing, under construction, or planned, that either are or will be within ten miles of the Atlantic Sunrise project. These other projects, including transmission pipelines, gathering lines, well pads, and various other pieces of fracking infrastructure, are so numerous that it takes 33 pages to list them all. Many of the projects that are listed in Appendix P did or will involve clearing trees in forested areas, and thus will – together with the Atlantic Sunrise project – cumulatively contribute to truly significant amounts of forest fragmentation in the areas around the proposed Atlantic Sunrise route.[53]

2010 9 (2012), available at http://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf (cited in Kelsey Eggert, *Speaking for the Trees: Preventing Forest Fragmentation in Pennsylvania's Marcellus Shale Region Through Pipeline Siting*, Vermont J. Envt'l L., Vol. 17, 372, 376 n. 24).

[45] Kelsey Eggert, *Speaking for the Trees: Preventing Forest Fragmentation in Pennsylvania's Marcellus Shale Region Through Pipeline Siting*, Vermont J. Envt'l L., Vol. 17, 372, 376.

[46] *Id.*

[47] *Id.*

[48] *Id.*

[49] *Id.*

[50] *Id.*

[51] *Id.*

[52] *Id.*

[53] As FERC acknowledges the impacts of forest fragmentation generated by forest clearing, it should clarify that the use of the term "construction" in its recommendations includes any vegetation clearing, including forest clearing, whether by mechanical means, hand-cutting of trees, or otherwise. Many of FERC's recommendations ask

CO14 – Clean Air Council (cont'd)

CO14-23

The serious deficiency of FERC's cumulative impacts analysis with respect to forest fragmentation is that, although the draft EIS clearly acknowledges the problem, FERC makes no apparent attempt anywhere to quantify the significance of the problem.[54] Indeed, in Appendix P, FERC lists the cumulative impacts of many nearby pipeline projects as "negligible" because there is either "a substantial gap in time between the construction of the listed project and the anticipated Atlantic Sunrise Project schedule," or there is a "substantial distance between the listed project and the Atlantic Sunrise project." Draft EIS, App. P at P-34. However, the draft EIS indicates that FERC did not even consider large industrial actions like pipelines or well pads unless they were either within 10 miles of the proposed Atlantic Sunrise route or within a watershed crossed by the Atlantic Sunrise route,[55] in which case they certainly would be within a geographic range close enough to make them very relevant for considering forest fragmentation impacts. Draft EIS at 4-259. Moreover, failing to consider the cumulative forest fragmentation impacts of projects because they were or will be constructed at a different time than Atlantic Sunrise means ignoring the fundamental problem caused by forest fragmentation in the first place: it changes the habitat, its function, and the species it can support for decades or longer, particularly when rights of way are actively maintained i.e. cleared by pipeline companies. The fact that a project may have been constructed even several years ago in no way diminishes the cumulative forest fragmentation it may create if it impacts the same region impacted by the Atlantic Sunrise project. FERC, despite evidently being well aware of this problem, has completely failed to take this into account.

Most shocking of all, after acknowledging: (1) that the construction of the Atlantic Sunrise project alone will affect more than 1,100 acres of forested land; (2) that this can result in "alteration of wildlife habitat; the temporary displacement of wildlife, and potential secondary effects such as increased population stress, predation, and the establishment of invasive plant species"; (3) that these effects will be greatest on forest-dwelling species because of forest fragmentation whose effects will last for decades or will be permanent (Draft EIS 4-275 to 4-276); (4) that the development of the wells necessary to supply *only* the Atlantic Sunrise project

Williams to complete certain tasks before construction begins. (Draft EIS at 5-22 to 5-30). For example, Recommendation 40 reads "Prior to construction of project facilities in Pennsylvania, Transco shall file with the Secretary all survey results for timber rattlesnake, permit requirements, agency correspondence, and avoidance or mitigation measures developed in consultation with the PFBC." If construction were not interpreted to include every type of vegetation clearing, timber rattlesnake habitat could be destroyed without Williams even having surveyed the area for the rattlesnakes, rendering the recommendation useless.

[54] *See, e.g.*, Draft EIS at 4-276 ("However, the cleared rights-of-way associated with these actions would contribute to the long-term cumulative loss and fragmentation of forestland and associated wildlife habitat.")

[55] In the case of "minor actions" such as residential development or small transportation projects FERC indicated it would not even have listed them were they not within a half mile of the proposed Atlantic Sunrise route, certainly more than close enough to have cumulatively devastating forest fragmentation impacts. (Draft EIS 4-259).

CO14-23 Comment noted. See the revised text in section 4.13.8.6 of the EIS.

CO14-23 (cont'd)

itself (never mind the wells necessary to supply the numerous other projects just within 10 miles of the Atlantic Sunrise route) "could have indirect land effects totaling 7,140 acres, much of which is probably forested," (Draft EIS 4-276); (5) that "the cleared rights-of-way associated with [other nearby pipelines] would contribute to the long-term cumulative loss and fragmentation of forestland and associated wildlife habitat" (*id.),* and; (6) that "the combined long-term impacts of these actions on forests and associated wildlife habitat in the vicinity of the project would comprise hundreds of acres" (*id.*), FERC inexplicably and almost unbelievably goes on to conclude that "cumulative impacts on vegetation and general wildlife resulting from the Atlantic Sunrise Project, Marcellus Shale development, and other FERC-regulated and non-jurisdictional activities would be moderate in areas of rapid ongoing development like Susquehanna County and minor elsewhere." (Draft EIS 4-277).

This conclusion is so unsupported, and so disconnected from the reality of the incredibly significant harm that the Atlantic Sunrise project and other fracking infrastructure development near Atlantic Sunrise will cumulatively cause as a result of forest fragmentation – harm that FERC itself has to a large degree acknowledged in the Draft EIS – as to do serious harm to the credibility of all of FERC's conclusions. Moreover, the absence of any support for FERC's conclusion on this point directly contradicts the exhortation of the Supreme Court that "the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made."[56] FERC in this instance has not articulated any satisfactory explanation for its action, much less has it pointed to any rational connection between the facts it has found and the choice it has made.

It is worth noting that any attempt to suggest that it is not possible to quantify and directly analyze the cumulative effects of vegetation removal and forest fragmentation is simply wrong. CNA, a non-profit research and data analysis firm, has recently released a report funded by the Clean Air Council in which it determined the total acreage within the the Delaware River Basin that has been or will be cumulatively cleared by the major pipeline projects that go through that watershed or are proposed to.[57] Using GIS mapping technology, CNA was able to determine how much land cover of various types—forest, wetland, grassland, etc.—in total was or would be disturbed by these pipelines. CNA also determined that certain areas of the watershed, particularly Carbon, Northampton, and Chester Counties in Pennsylvania, and Hunterdon County in New Jersey were having their forests especially heavily impacted by pipeline development.[58] CNA was also able to analyze impacts on forested lands on a sub-

[56] *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto Ins.*, 463 U.S. 29, 43 (1983).

[57] Lars Hansen and Steven Habicht, *Cumulative Land Cover Impacts of Proposed Transmission Pipelines in the Delaware River Basin*, CNA, May 2016, attached as Exhibit H.

[58] *See id.* at 25, Figure 10.

CO14-23 (cont'd) watershed basis, finding the most significant impacts in the Lehigh and Middle Delaware subbasins.[59] FERC could and should undertake a similar analysis before it approves the Atlantic Sunrise project. It is eminently possible for FERC to directly and quantitatively assess the cumulative impacts of vegetation removal from the Atlantic Sunrise project and other development in the areas surrounding the Atlantic Sunrise route in terms of forest fragmentation, as well as elimination or conversion of wetlands, stream crossings, and other impacts. Such an analysis would allow FERC to understand in quantitative terms how truly significant those cumulative impacts are. It would also allow FERC to identify areas along the proposed route, as CNA did for the Delaware River Basin, that are being particularly hard hit by the cumulative impacts of such development.

CO14-24 The Draft EIS contains other examples of FERC's attempt to improperly limit the scope of its NEPA review of the project. For instance, in discussing cumulative impacts on groundwater, FERC appears to consider only the potential groundwater impacts that Atlantic Sunrise itself could have on groundwater. (Draft EIS 4-273) ("The impact of the Atlantic Sunrise Project on groundwater resources is expected to be short term and minor."). Considering the project's impact in isolation in this way directly contravenes the entire purpose of a cumulative impacts analysis. Moreover, FERC once again takes the position that it does not need to consider the impacts from fracking itself, saying that "the Atlantic Sunrise Project does not involve fracking and thus would not contribute *directly* to groundwater impacts associated with fracking." *Id.* (emphasis added). FERC's apparent attempt to limit its cumulative impacts analysis to only what it perceives to be the *direct* effects of the project on groundwater once again flies in the face of clear regulatory language and a substantial body of case law which insists that FERC's analysis must also encompass indirect effects and the cumulative effects of completely unrelated projects whose environmental impacts may nonetheless overlap with those of the project.

CO14-25 **5. FERC Is Improperly Segmenting Atlantic Sunrise and Other Projects.**

FERC is also improperly segmenting its NEPA review of the Atlantic Sunrise project from that of various other projects. "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."[60] Under NEPA, "proposals for . . . actions that will have cumulative or synergistic environmental impact upon a region . . . pending concurrently before an agency . . .

[59] *Id.* at v.

[60] *Delaware Riverkeeper Network, et al. v. Federal Energy Regulatory Comm'n*, 753 F.3d 1304, 1313 (D.C. Cir. 2014).

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CO14-24 See the revised text in section 4.13.8.2 of the EIS.

CO14-25 See the response to comment PM3-102.

CO14-25 (cont'd)

must be considered together." Thus, "when determining the contents of an EA or an EIS, an agency must consider all 'connected actions,' 'cumulative actions,' and 'similar actions.'"[61] This rule against segmentation "prevent[s] agencies from dividing one project into multiple individual actions each of which individually has an insignificant environmental impact, but which collectively have a substantial impact."[62]

The Atlantic Sunrise project will function interrelatedly with at least two other connected actions that FERC has recently considered and approved. The Atlantic Sunrise project would involve looping the Transco Leidy Line, and the building of two greenfield pipelines with interconnects from the Leidy Line to the rest of the Transco Pipeline System, allowing significantly increased transportation of gas from the Leidy Line southward. In December of 2014 FERC approved an application for additional significant looping and a large increase in compressor capacity along the Leidy Line, referred to as the Leidy Southeast Expansion Project.[63] These recent expansions of capacity along the Leidy Line will function together with the Atlantic Sunrise project to carry significantly increased amounts of gas.

FERC also approved in 2014 a large expansion project at Dominion's Cove Point facility near Lusby in Calvert County, Maryland.[64] This liquefaction project will enable Cove Point to either receive and vaporize imported liquefied natural gas ("LNG"), or to liquefy domestically-produced natural gas for loading onto vessels for export. The Atlantic Sunrise project, as currently planned, will deliver significant amounts of gas to Cove Point for liquefaction and export. For example, it has been reported that Cabot Oil & Gas Corp. has executed a purchase agreement that will take effect when the Atlantic Sunrise goes into service whereby Cabot will ship 350 MMcfd to Dominion Cove Point via firm capacity on Atlantic Sunrise.[65] Williams's President and CEO Alan Armstrong has also described the Atlantic Sunrise project as "important infrastructure for future LNG facilities at Cove Point . . . ."[66]

These projects will all work together to bring significantly more gas from the Western part of Pennsylvania through the Leidy Line and then southward to the interconnect with

[61] *Id.* at 17 (citing 40 C.F.R. § 1508.25; *Am. Bird. Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1032 (D.C. Cir. 2008); *Allison v. Dep't of Transp.*, 908 F.2d 1024, 1031 (D.C. Cir. 1990)).

[62] *NRDC v. Hodel*, 865 F.2d 288, 297 (D.C. Cir. 1988) (internal quotation marks omitted).

[63] Order Issuing Certificate and Approving Abandonment, FERC Docket No. CP13-551-000 (December 18, 2014).

[64] Order Granting Section 3 and Section 7 Authorizations, FERC Docket No. CP13-113-000 (September 29, 2014).

[65] *See, e.g.*, Christopher E. Smith, *Cabot Secures Transco Natural Gas Pipeline Space, Sales to WGL*, Oil & Gas Journal, Feb, 21, 2014, *available at* http://www.ogj.com/articles/2014/02/cabot-secures-transco-natural-gas-pipeline-space-sales-to-wgl.html.

[66] *Williams Posts First-Quarter 2014 Financial Results*, InsuranceNewsNet News Wire, May 5, 2014 *available at* http://insurancenewsnet.com/oarticle/Williams-Posts-First-Quarter-2014-Financial-Results-a-499008.

CO14-25 (cont'd) Dominion Cove Point, the capacity of which to receive, process and export the gas is in the process of being significantly increased as a result of FERC's approval in 2014. In other words, they are interdependent parts of a larger action. The Atlantic Sunrise project is thus indisputably "connected" within the meaning of the applicable regulations to at least these other two projects recently considered by FERC,[67] and FERC is required to consider the environmental impacts of these connected actions as part of its EIS on Atlantic Sunrise. FERC's failure to do so, and its choice to instead consider the impacts of these connected and interdependent projects separately, is improper segmentation and a violation of NEPA.

The D.C. Circuit recently handed down a decision in a case with remarkably similar facts. *Delaware Riverkeeper Network v. FERC*[68] involved four separate applications to FERC for Certificates of Public Convenience and Necessity to do upgrades on one pipeline system submitted in quick succession over the course of only a few years.[69] FERC considered each application separately, without considering any of the other upgrade projects, even though several were in fact pending at the same time.[70] Because it was clear that the separately-proposed upgrades would all function together to allow a significant increase in the capacity of the entire pipeline, the D.C. Circuit held that the projects were indisputably related and significantly "connected" to each other, and that FERC had violated NEPA by improperly segmenting its review of one project from the others.[71] In the case of the instant application, failure of the EIS to consider the impacts of the Leidy Southeast Expansion and Dominion Cove Point projects represents improper segmentation and a violation of NEPA.

CO14-26

6. FERC Must Bind Meade Pipeline Co. LLC to the Terms of Any Eventual Certificate of Public Convenience and Necessity.

Under the Natural Gas Act, it is the "natural-gas company" which applies for and receives a certificate from FERC, 15 U.S.C. §§ 717a and 717f(c)(1)(A), and only that natural-gas company which may "engage in the transportation or sale of natural gas … or operate any such facilities or extensions" therefor. 15 U.S.C. § 717f(c)(1)(A). It is only that certificate holder as well which may condemn land for pipeline facilities. 15 U.S.C. § 717f(h).

While Williams has applied for a certificate for the Project, it would not own the pipeline facilities outright, nor would it operate them exclusively for more than twenty years. Rather, a

[67] *See* 40 C.F.R. § 1508.25.

[68] 753 F.3d 1304 (D.C. Cir. 2014).

[69] *See id.* at 1310.

[70] *Id.* at 1312-13.

[71] *Id.* at 1319.

29

CO14-26 Prior to issuance of a Certificate, the Commission would conduct a review of the ownership and rate structures proposed for the Project to ensure they are consistent with FERC policy and comply with FERC's rules. As described in section 1.0 of the EIS, Transco, a subsidiary of Williams, filed the application with FERC seeking a Certificate for the Project. If the Commission issues a Certificate, it would be issued to Transco.

CO14-26 (cont'd) group of business has created an independent company, Meade Pipeline Co. LLC ("Meade"), which would own the pipeline facilities, and which would split with Williams ownership of the easements and other real property interests.[72] Williams would lease the pipeline facilities for twenty years or less, after which the lease from Meade would end and the pipeline would revert to Meade.[73] Despite this, Meade and Williams have agreed for Williams to apply for the certificate in its name alone, and that "Meade shall not, by virtue of the FERC Application or the authorizations requested therein, be a holder of a certificate of public convenience and necessity under Section 7(c) of the NGA."[74]

Given that Meade will nonetheless be owning and operating the Atlantic Sunrise pipeline facilities within twenty years and would be a partial owner of them by the time of operation of the proposed pipeline, Meade must be bound by any issued certificate of public convenience and necessity. 15 U.S.C. § 717f(c)(1)(A). Likewise, if eminent domain is exercised to build Atlantic Sunrise, it should not be by Williams as a straw purchaser on behalf of the pipeline owner. *See* 15 U.S.C. § 717f(h).

7. FERC Should Require Re-Routing the Atlantic Sunrise Pipeline So It Does Not Travel Above Underground Mine Fires.

CO14-27 It should be common sense that pipelines filled with explosive, high-pressure fuel should not be built overtop of underground coal deposits suspected of being on fire. The Draft EIS explains that Williams analyzed areas of abandoned mine lands and found that the pipeline would cross 0.6 miles "characterized as high relative risk for subsidence." (Draft EIS 4-11). Amazingly, despite describing the risks of subsidence, the Draft EIS neither evaluates the potential harm from those risks, nor describes the dangers of mine fires.

The Draft EIS evaluation of mine subsidence and mine fire risk appears to have been taken from Williams's Abandoned Mine Investigation and Mitigation Report, the latest update of which Williams submitted on May 18, 2016. Attachment 6-2 to Accession No. 20160518-5016. That report finds that "no mine fires are reported to be located within 1,000 feet of the Project alignment." *Id.* at 8. However, that same report later states that the Luke Fidler mine fire could be as close as 200 feet from the proposed centerline of Atlantic Sunrise. *Id.* at 16. The report also states that "[t]he Project centerline crosses the Hickory Swamp/Hickory Ridge Colliery as well as the projected natural limits of the Glen Burn fire as reported in a report to PADEP." *Id.*

[72] *See* Construction and Ownership Agreement between Williams and Meade, attached hereto as Exhibit I, at Section 3.1 and internal Exhibit B.

[73] *See* Lease Agreement between Williams and Meade, attached hereto as Exhibit J, at Section 2.3, 4.2, and 4.3.

[74] *See* Construction and Ownership Agreement at Section 2.3.

CO14-27 See the response to comment PM3-96.

CO14-27 (cont'd)

at 15. Any of these mine fires could burn below the proposed pipeline in short order, if they are not burning there now.

The report cites two estimates of the Centralia mine fire speed of spread: PADEP's older estimate of 50-75 feet per year and a newer thermal imagery study by Professor Jennifer M. Elick concluding that the Centralia mine fire is now spreading at a rate of seven feet per year. *Id.* at 16. The report then makes two unsupported assumptions: (1) the Elick estimate disproves the PADEP estimate, and (2) the Luke Fidler mine fire would move at the same speed as the Centralia mine fire. From these two assumptions, the report concludes that "the Luke Fidler fire could take 25 or more years to reach the Project area." This alone is alarming, and it is very troubling that FERC omitted from the Draft EIS the clearly material fact that Williams reports that the ground under its pipeline could be burning within 25 years.

But even more troubling is that the Mine Investigation report's unsupported assumptions downplay the risks from the Luke Fidler and other mine fires. The report misreads the Elick study.[75] Professor Elick found that "Given the changes in the fire over the years, it is suggested that the fire is decreasing in intensity and rate of movement as it moves deeper into the subsurface." In other words, PADEP could have been correct about the speed at which the Centralia mine fire was moving at the time it made its estimate, and the fire simply slowed down over time. So the possible speed of the Luke Fidler fire could easily range within 50-75 feet per year and seven feet per year—or perhaps faster or slower. If the Luke Fidler mine fire moved at 75 feet per year toward the Atlantic Sunrise centerline from 200 feet away, it could be under the pipeline shortly after it is built. FERC simply does not have evidence before it one way or another. Without this evidence, it cannot make a determination as to the danger presented by the mine fires.

Peter G. Tipka, who lives near the Glen Burn mine fires, explained to FERC that those mine fires "are frequent contributors to Spring Season forest fires in and near Shamokin, PA and a pipeline near by should raise concern." Accession No. 20160317-5107. The Atlantic Sunrise pipeline would cross over the potential burn area of these fires. It should be clear, then, that the mine fires do not just create a risk of subsidence, but also of fire, of which there is a *frequent* history. This is not a risk that should be taken lightly when considering placement of a high-pressure, large-capacity pipeline. Yet neither the Draft EIS nor the Mine Investigation report provides any suggestions to avoid or mitigate the risk of pipeline ignition from underground mine fires, except that "measures for further assessing and monitoring mine fires will also be

[75] Elick, Jennifer M., 2011, Mapping the Coal Fire at Centralia, PA Using Thermal Infrared Imagery: International Journal of Coal Geology, vol 87, p. 197-203. Abstract available at http://www.sciencedirect.com/science/article/pii/S0166516211001510.

CO14-27 (cont'd) established in support of the Project design." When these would be established, what they would look like, how they would be implemented—Williams does not say and FERC does not know.

FERC has not taken a "hard look" at the risk of mine fires near or under the proposed pipeline, rendering the Draft EIS unlawfully incomplete. FERC must gather the information it needs to make this evaluation and produce a revised draft EIS for public comment.

CO14-28

8. FERC Has Not Satisfied its Duty under NEPA to Produce a Complete Draft Environmental Impact Statement.

As explained above, and as the Commission well knows, it is the responsibility of an agency conducting an environmental analysis under NEPA to gather all the material facts needed for that analysis when preparing a draft EIS. Also as explained above, FERC has not done so here. There are many material deficiencies in the Draft EIS, including many not yet chronicled in these comments.

This is obvious from FERC's "Recommended Mitigation" section, Section 5.2. FERC writes:

> We have included several recommendations that require Transco to provide updated information and/or documents prior to the end of the draft EIS comment period. We do not expect that Transco's responses would materially change any of the conclusions presented in this draft EIS; instead, the requested information is primarily related to ensuring that our final EIS is complete with up to date information on Transco's ongoing efforts to minimize the impacts of its Project and comply with FERC regulations.

(Draft EIS 5-21). This disclaimer appears to be cover for the disconnect between the lack of information the recommendations seek to remedy and the acknowledgment that the Draft EIS is supposed to be complete. It is belied by the text of the recommendations.

For example, Recommendation No. 22 says that "Prior to the end of the draft EIS comment period, Williams should file with the Secretary proposed mitigation measures Williams would implement to protect all Zone A source water protection areas." These concern protection of drinking water for eight separate water authorities. (Draft EIS 4-50 to 4-51). How is it not material to weighing the environmental impact of the Project the type of measures Williams would use to protect drinking water? People who drink from those municipal sources should have the opportunity to weigh in on those measures.

CO14-28 See the response to comment PM1-70.

CO14 – Clean Air Council (cont'd)

CO14-28 (cont'd)

Likewise, Recommendations No. 28 and 29 ask for additional justification for clearing additional temporary workspaces in water bodies and wetlands, submitted before the end of the Draft EIS comment period. (Draft EIS 5-27). How can FERC decide whether Williams has minimized its environmental impact if it has not given sufficient justification for its habitat destruction?

Williams has not yet determined the extent to which endangered and threatened species live along the area to be disturbed by pipeline facilities construction. *See* Recommendations No. 37-42 (Draft EIS 5-28 to 5-29). FERC does not yet know the extent of impacts the Project will have on recreation and special interest areas. *See* Recommendation No. 45 (Draft EIS 5-29). Williams has not yet determined the extent to which cultural resources lie along the pipeline route, and what plans it has to avoid or reduce harm to them. *See* Recommendation No. 50 (Draft EIS 5-29). Williams's information on compressor station air quality and noise impacts is so far wholly inadequate. *See* Recommendation No. 52-58 (Draft EIS 5-30 to 5-31).

Williams's continued supplementation of the record, up through and including a lengthy submission on June 24, 2016, the Friday before the Monday deadline for comments on the Draft EIS, renders full and informed public comment impossible. Williams also supplemented the record on May 18, 2016. In Williams's first supplement after the comment period opened for the Draft EIS, it among other things provided new information about endangered and threatened species, and cultural resources. *See* Accession Nos. 20160518-5016 and -5017. This is environmental information the public has had about two weeks less to review than the information presented in the Draft EIS.

The public has had essentially no time to review Williams's supplement filed one business day ago. It did not help that the FERC website by which the docket is made available underwent blackouts over the intervening weekend. Between these blackouts, Clean Air Council managed to download some of the files Williams posted. In that supplement, Williams responds to FERC's recommendations that ask for a response before the end of the Draft EIS comment period. *See* Accession No. 20160624-5167, File No. 2 ("June Supplement"). Williams does not follow most of FERC's recommendations. The Council looks at some of those responses here.

CO14-29

Recommendation No. 17 asks Williams to incorporate a route alternative (Alternative 24C) to avoid most heavily impacting Dr. Linda V. Quodomine's horse veterinary facilities. Williams does not do so. Instead it proposes a *more* damaging route, as described by Dr. Quodomine in her submission on Accession No. 20160526-5113.

> It is, in fact, about the most damaging route they could take. Not only would it take out over 100 fence posts (instead of about 20), but it would still preclude using that half of the farm for almost

CO14-29 In its comments on the draft EIS, Transco incorporated Alternative 24C into the proposed route along with minor route adjustments to enhance the alignment. See the revised evaluation of CPL South Alternatives 24A, 24B, 24C, and 24D in section 3.3.2 of the EIS,

CO14-29 (cont'd) two years after their construction, it would put this entire section of pipeline in the 100 year floodplain, it would involve more wetland disturbance and more tree cutting, and place it much closer to Hemlock Creek, most certainly increasing the chances of contamination from construction runoff.

Presumably this is the route Williams confirmed it would take in the June Supplement at pages 11-14. It is a material deficiency in the Draft EIS if it presumes Williams will take a *less* destructive route and it chooses instead a *more* destructive route. Williams also chose to only partially follow the route deviations in Recommendation 18. June Supplement at 15.

CO14-30

CO14-31 Williams also failed to follow Recommendation No. 22, quoted above in this section of these comments. Williams essentially said that it does not need to propose mitigation measures, and the notification plan that it would develop (for *after* a spill), it has not yet submitted. June Supplement at 17-18.

CO14-32 Nor did Williams follow Recommendation No. 33. It has not updated its Migratory Bird Plan, and "anticipates" that its discussions with the U.S. Fish and Wildlife Service will result in a memorandum of understanding on compensation for destruction of migratory bird habitat in August 2016. June Supplement at 19.

The list of FERC recommendations Williams did not follow continues:

CO14-33 • Recommendation No. 44 (Williams did not file with FERC mitigation measures to minimize impacts on a land development). *Id.* at 20.

CO14-34 • Recommendation No. 45 (Williams did not file with FERC most of the requested site-specific crossing plans for recreational and special interest areas). *Id.* at 21-23.

CO14-35 • Recommendation No. 53 (a complete failure to follow, described above in the section on compressor station emissions). *Id.* at 32.

Among (1) the facial incompleteness of the Draft EIS, (2) the continued work that Williams is doing to gather information the Project's environmental impacts, and (3) the contingency of FERC's conclusions as to environmental impact on recommendations that Williams has chosen to reject, it is clear that the Draft EIS is inadequate and legally insufficient.

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CO14-30 See the response to comment CO14-29. By incorporating Alternative 24C and the minor realignments into the proposed route, the facilities operated by Dr. Quodomine would be avoided. See the revised text in section 3.3.3 for our evaluation of the Neil Bushong Deviation, Route Deviation M-0209, Route Deviation M-0169, and Route Deviation M-0248.

CO14-31 Transco would implement its Procedures and Spill Plan to avoid or minimize effects associated with spills or leaks of hazardous liquids. These plans include storing hazardous materials away from wetlands and waterbodies, restrictions on refueling within 100 feet of wetlands and waterbodies, and the use of secondary containment structures for petroleum products. These plans would adequately address the storage and transfer of hazardous materials and petroleum products, and the appropriate response in the event of a spill. In addition, we are recommending that Transco develop a notification plan with surface water intake operators to identify the specific points of contact and procedures that Transco would implement in the event of a spill within 3 miles upstream of a surface water intake or within Zone A source water protection areas.

CO14-32 See the responses to comments CO14-14 and IND114-27.

CO14-33 Transco is continuing to consult with ELRC on an alignment that would minimize impacts on the planned development. We have included a recommendation that Transco should file with the Secretary the results of its consultations with the developer of the property and include any project modifications or mitigation measures that would be implemented to minimize impacts on the development.

CO14-34 See the response to comment PM1-70. Transco filed several of the site-specific crossing plans with its supplemental filings on June 24 and August 18, 2016. The remainder of the site-specific crossing plans would be filed with Transco's Implementation Plan for the Project, after consultations with appropriate permitting agencies are complete and any associated mitigation measures are finalized.

CO14-35 See the response to comment CO14-6.

Conclusion

CO14-36 Clean Air Council respectfully requests that FERC consider these comments. As it stands, the Draft EIS is inadequate under NEPA and must be supplemented or redone before a final EIS can be issued and before a certificate can be granted.

The Council has reviewed its share of FERC environmental analyses. The shallowness and incompleteness of the Commission's environmental review here appears to be standard practice for the Commission. The Commission's duty as a regulatory agency conducting a NEPA review is not to accept the regulated entities' representations at face value, nor to be an advocate for the expansion of natural gas transmission facilities, but to take a hard look at the environmental consequences of the proposed action and do a real evaluation of alternatives. The public does not have the resources at its disposal that the industry does, and must rely on FERC's impartiality and expertise in doing that analysis. Please take these comments into consideration and uphold your duties under NEPA.

Sincerely,

Joseph Otis Minott, Esq.
Executive Director, Clean Air Council

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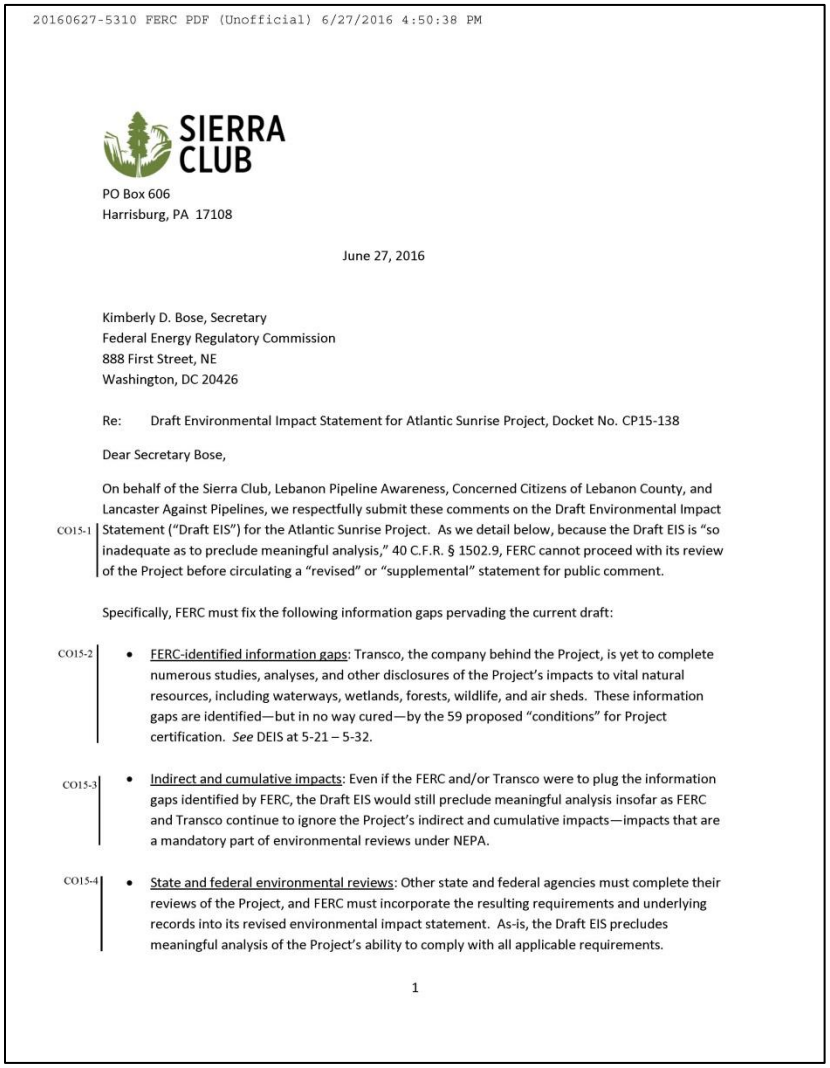
CO14-36 See the response to comment PM1-70. We believe the analysis in the draft EIS and the revised analysis in the final EIS are appropriate and do not warrant the need for a supplemental draft EIS.

The attachments to this letter are too voluminous to include in this environmental impact statement. They are available for viewing on the Federal Energy Regulatory Commission's (FERC) website at http://www.ferc.gov. Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket No." excluding the last three digits (i.e., CP15-138, PF14-8), and follow the instructions. For assistance please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, contact 202-502-8659. The Category/Accession number for this submittal is 20160627-5248.

CO15 – Sierra Club



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SIERRA CLUB

PO Box 606
Harrisburg, PA 17108

June 27, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Draft Environmental Impact Statement for Atlantic Sunrise Project, Docket No. CP15-138

Dear Secretary Bose,

On behalf of the Sierra Club, Lebanon Pipeline Awareness, Concerned Citizens of Lebanon County, and Lancaster Against Pipelines, we respectfully submit these comments on the Draft Environmental Impact Statement ("Draft EIS") for the Atlantic Sunrise Project. As we detail below, because the Draft EIS is "so inadequate as to preclude meaningful analysis," 40 C.F.R. § 1502.9, FERC cannot proceed with its review of the Project before circulating a "revised" or "supplemental" statement for public comment. CO15-1

Specifically, FERC must fix the following information gaps pervading the current draft:

- FERC-identified information gaps: Transco, the company behind the Project, is yet to complete numerous studies, analyses, and other disclosures of the Project's impacts to vital natural resources, including waterways, wetlands, forests, wildlife, and air sheds. These information gaps are identified—but in no way cured—by the 59 proposed "conditions" for Project certification. *See* DEIS at 5-21 – 5-32. CO15-2
- Indirect and cumulative impacts: Even if the FERC and/or Transco were to plug the information gaps identified by FERC, the Draft EIS would still preclude meaningful analysis insofar as FERC and Transco continue to ignore the Project's indirect and cumulative impacts—impacts that are a mandatory part of environmental reviews under NEPA. CO15-3
- State and federal environmental reviews: Other state and federal agencies must complete their reviews of the Project, and FERC must incorporate the resulting requirements and underlying records into its revised environmental impact statement. As-is, the Draft EIS precludes meaningful analysis of the Project's ability to comply with all applicable requirements. CO15-4

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CO15-1 See the response to comment PM1-70. We believe the analysis in the draft EIS and the revised analysis in the final EIS are appropriate and do not warrant the need for a supplemental draft EIS.

CO15-2 See the response to comment PM1-70.

CO15-3 We disagree. The EIS has addressed relevant indirect and cumulative impacts. See our response to comment PM1-6.

CO15-4 The Energy Policy Act of 2005 requires applicants for a FERC Certificate to file their applications for other federal permits commensurate with their FERC application filing. This provides the involved agencies with the opportunity to conduct their reviews simultaneously and allows FERC, as the lead agency, to track issues as they are addressed with the various agencies. FERC staff will continue to track other agency permitting efforts, and incorporate mitigation measures and other relevant recommendations into our NEPA review. Any additional information or changes will be reflected in the Order.

CO15-5 • Pending litigation: There are pending appeals of Pennsylvania's Section 401 water quality certification for the Project. These appeals, and any other legal challenges of the applicable reviews and permitting decisions, must be resolved before FERC can incorporate the outcomes into the revised statement and circulate it so that meaningful analysis is no longer precluded.

Ultimately, the Project poses a massive threat to local communities and treasured places, as our members testified at the recent hearings on the Draft EIS. *See e.g.*, http://goo.gl/j7f1zQ. With stakes so high, and the public record on the Project's costs and benefits so ill developed, it would be both unlawful and unconscionable for FERC to proceed with its certification decision before fixing its

CO15-6 environmental review as we outline above and detail below. Therefore, with these comments, we implore FERC to stay its review of the Project for as long as it takes to fully address each flaw, and then circulate a revised statement, as required by NEPA and good faith public service.

I. Background

On March 31, 2015, Transco filed an application with FERC under Section 7(c) of the Natural Gas Act, 15 U.S.C. § 717f, for a certificate of public convenience and necessity ("Certificate") for its proposed Atlantic Sunrise Project. *See* FERC Docket No. CP15-138- 000.

The Atlantic Sunrise Project consists of the following proposed facilities in Pennsylvania: (1) 183.7 miles of new 30- and 42-inch diameter greenfield natural gas pipeline known as the Central Penn Line ("CPL") North and CPL South; (2) 11.5 miles of new 36- and 42-inch diameter pipeline looping known as the Chapman and Unity Loops; (3) two new compressor stations; and (4) additional compression and related modifications at existing compressor stations. *See* FERC Draft Environmental Impact Statement, ES-1 ("Draft EIS").

The Project would have significant impacts on virtually every vital natural resource in its vicinity, including forests, wildlife, wetlands, watersheds, and airsheds. Notably, the Project includes two new compressor units: consisting of 62,000 hp of compression, filter separators, gas coolers, and other infrastructure such as emergency generators in Pennsylvania. These compressor units, as well as the construction equipment and other new and expanded facilities associated with the Project, will emit criteria pollutants such as nitrogen oxides ("NOx"), and hazardous air pollutants such as volatile organic compounds ("VOCs"), which also are ozone precursors. The Project also will result in the direct emission of climate-change-causing greenhouse gases ("GHGs"): carbon dioxide ("CO_2") and nitrous oxide ("N_2O") from compressor engines, line heaters, and generators; fugitive methane emissions from compressors and the pipeline; and black carbon emissions from diesel vehicles and equipment.

CO15-7 Beyond these direct impacts, the Project's express purpose—to expand gas transportation infrastructure—would have the obvious secondary (or indirect) impacts of inducing more gas extraction in the Marcellus Shale region, including extraction through high volume hydraulic fracturing. The

CO15-5 FERC staff is conducting its review as required by CEQ regulations and Commission guidelines. Should a legal proceeding result in a decision that has a bearing on the Project that warrants our consideration, it will be addressed at that time.

CO15-6 See the response to comment PM1-70.

CO15-7 See the responses to comments PM1-6 and PM1-40.

CO15-7 (cont'd) Atlantic Sunrise Project also will induce construction and operation of a new distribution system for transporting gas from the pipeline to delivery points along the seven-county route, causing additional impacts to the environment surrounding the pipeline area.

All these activities threaten our public health and environment. Key threats that have we have identified to date[1] include:

- Forest fragmentation
- Loss of use of public lands
- Soil compaction
- Noise, structural damage, and aquifer contamination
- Air quality degradation
- Loss of wetlands and water quality degradation
- Stormwater runoff and flooding
- Habitat destruction and impact on threatened and endangered species
- Impact of clean up of the Chesapeake Bay

II. Legal Obligations

The National Environmental Policy Act ("NEPA") is our "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). As such, it makes environmental protection a part of the mandate of every federal agency. See 42 U.S.C. § 4332(1). NEPA requires that federal agencies take environmental considerations into account in their decision-making "to the fullest extent possible." 42 U.S.C. § 4332. To this end, federal agencies must consider environmental harms and the means of preventing them in a "detailed statement" before approving any "major federal action significantly affecting the quality of the human environment." Id. § 4332(2)(C). When preparing an EIS, an agency must take a detailed, "hard look" at the environmental impact of and alternatives to the proposed action. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). This required analysis serves to ensure that "the agency will not act on incomplete information, only to regret its decision after it is too late to correct." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 371 (1979).

NEPA also "guarantees that the relevant information [concerning environmental impacts] will be made available to the larger audience," including the public, "that may also play a role in the decisionmaking process and the implementation of the decision." *Robertson*, 490 U.S. at 349. As the CEQ NEPA implementing regulations (adopted by FERC) explicitly provide, "public scrutiny [is] essential to implementing NEPA." 40 C.F.R. § 1500.1(b); 18 C.F.R. § 380.1 (adopting CEQ NEPA implementing regulations as FERC's own). The opportunity for public participation guaranteed by NEPA ensures that agencies will not take final action until after their analysis of the environmental impacts of their

[1] We joined many other stakeholders in requesting an extension of the public comment period on the Draft EIS. Moreover, as we note in these comments, the information gaps in the current Draft EIS preclude meaningful analysis, so these comments cannot provide an exhaustive account of all the impacts that concern the undersigned organizations.

proposed actions has been subject to public scrutiny. *See N. Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1085 (9th Cir. 2011) (where "data is not available during the EIS process and is not available to the public for comment," the process "cannot serve its larger informational role, and the public is deprived of their opportunity to play a role in the decision-making process") (quoting *Robertson*, 490 U.S. at 349).

Additionally, NEPA requires FERC to consider state laws and policies. *See* 40 CFR §§ 1502.16(c), 1506.2(d), and 1508.27(b)(10). One of the critically important Pennsylvania laws is set out in the Article I, Section 27 of the Commonwealth's Constitution. Section 27 states:

> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

As we have consistently advocated in comments on pipelines to be sited in Pennsylvania, the location of Section 27 in the Commonwealth's Declaration of Rights signifies a particular constraint on government actions because this portion of our charter "delineates the terms of the social contract between government and the people that are of such 'general, great and essential' quality as to be ensconced as 'inviolate.'" *Robinson Township, Delaware Riverkeeper Network, et al. v. Commonwealth*, 83 A.3d 901, 950, 947 (Pa. 2013) (plurality) (citing PA. CONST. art. I, Preamble & § 25). Each of the "three mandatory clauses" in Section 27 establishes distinct "substantive" constraints, and they all reinforce the government's duty to complete robust environmental reviews before taking action. *Robinson Twp.*, 83 A.3d at 950, 957; *see also* Sierra Club et al, Comments of Dec. 29, 2015 (discussing application of § 27 to Commonwealth agency decisions concerning pipeline infrastructure) *available at* http://goo.gl/WPQMLE. The third clause of Section 27 prohibits the government from infringing upon the people's environmental rights, and from permitting or encouraging the degradation, diminution, or depletion of public natural resources. *Robinson Twp.*, 83 A.3d at 953.

Moreover, Pennsylvania has expressly incorporated Section 27 requirements into its water obstruction and encroachment regulations, and there is no dispute that the latter apply to the Atlantic Sunrise Project. *See* 25 Pa.Code § 105.2(4) ("The purposes of this chapter are to . . . [p]rotect the natural resources, environmental rights and values secured by PA. CONST. art. I, § 27 and conserve and protect the water quality, natural regime and carrying capacity of watercourse.") *see also* 25 Pa.Code § 105.21(a)(4) (". . . a permit application will not be approved unless the applicant demonstrates that . . . [t]he proposed project or action is consistent with the environmental rights and values secured by Pa. Const. Art. I, § 27 and with the duties of the Commonwealth as trustee to conserve and maintain public natural resources of this Commonwealth."). "A person may not construct, operate, maintain, modify, enlarge or abandon a . . . water obstruction or encroachment without first obtaining a written permit from the Department." 25 Pa.Code § 105.11(a). DEP will only review an application if it is "complete,"

meaning that "the necessary information is provided and requirements under the act and this chapter have been satisfied by the applicant." 25 Pa.Code § 105.13a.

Yet Pennsylvania has not yet completed the applicable water permitting for the Atlantic Sunrise Project. Nor have several appeals of the Commonwealth's Section 401 water quality certification for the Project
CO15-8 | been resolved. FERC's Draft EIS is will remain "so inadequate as to preclude meaningful analysis," unless FERC awaits the resolution of the appeals and duly considers the applicable state law and policy requirements, especially those set out in Article I, Section 27 of the Pennsylvania Constitution.

III. The direct effects on protected and sensitive waterbodies and wetlands are significant and require more information about mitigation plans from state and federal agencies.

The Atlantic Sunrise Project would directly impact dozens of protected and Transco proposes at least 327 waterbody crossings in Pennsylvania as part of its Atlantic Sunrise Project. See DEIS at 4-48. 210 crossings would impact perennial waterbodies, 79 would impact intermittent waterbodies, and 38 would impact ephemeral waterbodies. Id. Of the 327 waterbody crossings, 58 would impact high-quality, cold water fisheries ("HQ-CWF") waters. See id., Table 4.3.2-5.

Whether a waterbody qualifies for HQ or EV protection depends on it meeting certain chemical or biological conditions. See 25 Pa. Code § 93.4b(a). "Under the chemical test, a surface water is HQ if long-term water quality (at least 1 year of data) for 12 chemical parameters is better than levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water." DEP, Water Quality Antidegradation Implementation Guidance, 2 (2003), available at http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-47704/391-0300-002.pdf. "Under the biological test, a water is HQ if "(a) in comparison to a reference stream, the water shows a macroinvertebrate community score of 83% or greater using a protocol based on EPA's Rapid Bioassessment Protocol (RPB); or (b) the water is a Class A wild trout stream designated by the [PAFBC] following public notice and comment." Id.

CO15-9 | DEP's decision whether to permit Transco to cross dozens of HQ streams is a significant matter as DEP has a duty to "conserve and maintain" these protected waterbodies. PA.CONST. art. I, § 27. According to FERC, however, Transco is proposing to use trenchless crossing methods at just two of the HQ stream crossings. See DEIS, App. K, Table K-1. Moreover, of the 327 total waterbody crossings, Transco has proposed trenchless crossings at just 8 of these waterbodies. See id. DEP must require Transco to reconsider use of these trenchless methods for the other proposed crossings of HQ waterbodies. This should be included as a condition of DEP's WQC for the Atlantic Sunrise Project and as a condition by FERC.

It is critically important that DEP and FERC to mandate the use of trenchless crossing techniques. In its recent water quality certification denial for the proposed Constitution Pipeline, the New York Department of Environmental Conservation ("NYDEC") explained that "[o]pen trenching is a highly impactful construction technique involving significant disturbance of the existing stream

CO15-8 See the responses to comments CO15-4 and CO15-5.

CO15-9 FERC requires that applicants comply with the Plan and Procedures, which have specific crossing requirements for sensitive waterbodies such as trout streams. It is our expectation that Transco will work with the PADEP to address any additional crossing requirements for particularly sensitive high-quality waterbodies.

bed and potential long-term stream flow disruption, destruction of riparian vegetation and establishment of a permanently cleared corridor." NYDEC, Notice of WQC Denial for Constitution Pipeline, p. 8 (Apr. 22, 2016) ("Constitution WQC Denial"), available at http://www.dec.ny.gov/docs/administration_pdf/constitutionwc42016.pdf. In addition, NYDEC explained the importance of looking at the cumulative impacts of pipeline construction:
Cumulatively, impacts to both small and large streams from the construction and operation of the [Constitution Pipeline] Project can be profound and include loss of available habitat, changes in thermal conditions, increased erosion, creation of stream instability and turbidity, impairment of best usages, as well as watershed-wide impacts resulting from placement of the pipeline across water bodies in remote and rural areas. Id. at 12.

NYDEC's WQC denial for the Constitution Pipeline is a cautionary tale for DEP as it considers whether to issue permits for the proposed Atlantic Sunrise Project since both projects are part of Williams' expansion efforts in the Appalachian basin. See Williams, Expansion Projects, available at http://co.williams.com/expansionprojects/. According to NYDEC, Constitution Pipeline's "Trenchless Feasibility Study" did not include information requested by multiple agencies and "did not provide a reasoned analysis to enable [NYDEC] to determine if the [Constitution Pipeline] Project demonstrates compliance with water quality standards." Constitution WQC Denial at 10-11. NYDEC further explained that:

> Of the 251 streams to be impacted by the [Constitution Pipeline] Project, [the Trenchless Feasibility] Study evaluated only 87 streams, in addition to the Schoharie Creek, as part of the Phase I desktop analysis which Constitution used to determine if surface installation methods warranted consideration for a trenchless design. Of the 87 streams reviewed, Constitution automatically eliminated 41 streams from consideration for trenchless crossing because those streams were 30 feet wide or less . . . Using its review criteria, Constitution's [Trenchless Feasibility] Study finally concluded that only 11 stream crossings of the 251 displayed preliminary evidence in support of a potentially successful trenchless design and were chosen for the Phase III geotechnical field analysis. [NYDEC] staff consistently told Constitution that its November 2013 Trenchless Feasibility Study was incomplete and inadequate.

Id. at 11 (emphasis added) (citation omitted).

CO15-10 Transco has not submitted a similar trenchless feasibility study for the Atlantic Sunrise Project. If not, why not? If so, does DEP have it and does it suffer from the same inadequacies that plagued the one prepared for the Constitution Pipeline? For example, did Transco "automatically eliminate" streams from consideration for trenchless crossing because they were 30 feet wide or less? These are important questions that must be answered in light of the fact that there are more stream crossings involved in the Atlantic Sunrise Project than in the Constitution Pipeline Project and even fewer proposed uses of trenchless crossings.

CO15-10 FERC requires that applicants comply with the FERC's Plan and Procedures, which allow the use of other dry crossing methods for sensitive waterbodies such as trout streams. We have found, as has other research (see Moyer and Hyer, 2009 and Reid et al., 2002), that the installation of pipelines by dry crossing methods (such as the dam-and-pump and flume methods) has little to no effect on mean downstream Total Suspended Solids concentrations and that turbidity measurements are not significantly affected during construction. The results of studies indicate that dry crossing methods are highly effective at limiting sediment release to aquatic ecosystems during pipeline construction and minimizing the associated impacts on fish and fish habitat. Studies have shown that the measured effects were often observed only during the installation and removal of the dams, and the duration of these effects were very brief. Transco's proposed crossing methods would satisfy our requirements and minimize waterbody impacts. However, FERC's requirements do not preclude states from requiring other methods, including trenchless methods, pursuant to their responsibilities under section 401 of the Clean Water Act.

CO15-10 (cont'd) According to FERC, the only "site-specific crossing plans" that Transco has provided are "for the five major waterbody crossings" of the Susquehanna River (two crossings), Tunkhannock Creek, Conestoga River, and Swatara Creek. DEIS at 4-49 (citation omitted).

This is woefully insufficient. DEP must require Transco to submit site-specific crossing plans for all waterbody crossings and provide a detailed trenchless feasibility study such as the one that NYDEC sought (but never received) in the Constitution Pipeline proceeding. This should be included as a condition for the Atlantic Sunrise Project. FERC cannot approve this project going forward until Transco submits this information and makes it available for additional public review and comment.

A. The Atlantic Sunrise Project does not clear identify dozens of protected and sensitive wetlands in the Commonwealth.

We have previously commented to Pennsylvania DEP that the Chapter 105 of the Pennsylvania code establishes a clear regulatory regime for protecting wetlands. See generally, 25 Pa. Code 105.17-105.18a, et seq. In Pennsylvania, wetlands are classified as either exceptional value ("EV") wetlands or "other wetlands." 25 Pa. Code § 105.17(1)-(2). EV wetlands exhibit one or more of the following characteristics:

> (i) Wetlands which serve as habitat for fauna or flora listed as "threatened" or
> (ii) Wetlands that are hydrologically connected to or located within 1/2- mile of
> (iii) Wetlands that are located in or along the floodplain of the reach of a wild trout
> (iv) Wetlands located along an existing public or private drinking water supply,
> (v) Wetlands located in areas designated by the Department as "natural" or "wild" areas within State forest or park lands, wetlands located in areas designated as Federal wilderness areas under the Wilderness Act (16 U.S.C.A. §§ 1131-1136) or the Federal Eastern Wilderness Act of 1975 (16 U.S.C.A. § 1132) or wetlands located in areas designated as National natural landmarks by the Secretary of the Interior under the Historic Sites Act of 1935 (16 U.S.C.A. §§ 461-467).

25 Pa. Code § 105.17(1)(i)-(v).

Any wetlands that do not meet at least one or more of the abovementioned characteristics are defined as "other wetlands." 25 Pa. Code § 105.17(2). It is important that the correct classification is identified because it determines the level of environmental protection for the wetland and is reflective of the functions and values of that wetland. For example, proposed projects are not permitted to have an "adverse impact" on an EV wetland. 25 Pa. Code § 105.18(a). Neither DEP or the Corps have conducted an independent survey to determine whether all wetlands have been identified and that they have been correctly identified.

Pipeline construction can have significant adverse impacts on wetlands. For example, construction of Tennessee Gas Pipeline Company's "300 Line" in northern Pennsylvania "highly

impacted" the hydrological connectivity between a wetlands complex and a stream to the point that the stream, which had previously flowed from the wetlands complex, is now "barely discernible." See Attachment 1.[2] In addition, according to the Western Pennsylvania Conservancy, construction of a pipeline through Tamarack Swamp in Clinton County "appears to have been particularly disruptive, physically separating contiguous sections of wetland, altering hydrological patterns and introducing strips of highly altered substrate that will not easily recover." Western Pennsylvania Conservancy, Clinton County Natural Heritage Review at 79 (2002), available at http://www.clintoncountypa.com/departments/county_departments/planning/pdfs/Natural%20Heritage%20Inventory.pdf.

The Atlantic Sunrise Project will almost certainly have significant "adverse impacts" on numerous EV wetlands in Pennsylvania. FERC's DEIS for the Atlantic Sunrise Project identifies at least 51 EV wetlands that would be crossed by the proposed pipeline. See DEIS at 4-71. In only six of these wetlands, however, is Transco proposing to utilize a conventional bore or horizontal directional drill ("HDD") crossing method. See id. at 4-47. DEP must require Transco to reconsider use of these trenchless methods for the other proposed crossings of EV wetlands. This should be included as a condition of DEP's WQC for the Atlantic Sunrise Project.

It is also important for DEP or the Corps of Engineers to perform its own, independent analysis to determine whether Transco and FERC have correctly classified and included all EV wetlands. While
CO15-11 FERC's DEIS references the Chapter 105 regulations for EV wetlands classifications, there is no analysis as to how FERC reached its conclusion that there are only 51 EV wetlands that would be crossed by the Project. Thus, it is possible that wetlands that qualify as EV wetlands were improperly omitted from, incorrectly defined, or mischaracterized in the DEIS.

B. FERC must consider the cumulative impacts of the Atlantic Sunrise Project, including shale gas development, on public natural resources.

As part of its review of Transco's applications for water obstruction and encroachment permits, DEP must consider the cumulative impacts associated with shale gas development on the Commonwealth's public natural resources. See 25 Pa. Code § 105.14(b).

Secondary impacts are: associated with but not the direct result of the construction or substantial modification of the . . . water obstruction or encroachment in the area of the project and in areas adjacent thereto and future impacts associated with . . . water obstructions or encroachments, the

[2] This attachment was part of Tennessee Gas Pipeline Company "Aquatic Resources Report" in for its proposed Susquehanna West Project and was included as Appendix 2-A in Resource Report 2. See FERC Docket No. CP15-148-000, Accession No. 20150402-5213.

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CO15-11 As described in section 4.4.1 of the EIS, Transco classified wetlands based on Cowardin type, which is a widely used system that categorizes wetlands based on systems (e.g., palustrine) and classes (e.g., emergent, scrub-shrub, and forested). Transco also classified wetlands meeting exceptional value criteria in accordance with Title 25 Pa. Code Chapter 93. Transco completed wetland surveys within a 300-foot-wide survey corridor during the 2014, 2015, and 2016 field seasons. Section 4.4 of the EIS has been revised to include updated information regarding wetland impacts, including those on exceptional value wetlands.

construction of which would result in the need for additional . . . water obstructions or encroachments to fulfill the project purpose. Id. § 105.14(b)(12). DEP must also consider the cumulative impacts of the Atlantic Sunrise Project and "other potential or existing projects." Id. § 105.14(b)(14). "In evaluating the cumulative impact, the Department will consider whether numerous piecemeal changes may result in a major impairment of the wetland resource." Id.

By reversing the flow of its long haul mainline, constructing the Central Penn Line and two loops, and adding new and expanded compressor stations, Transco will provide natural gas companies with greatly increased capacity for transporting current and reasonably foreseeable shale gas production from northern Pennsylvania to other states and international markets. This will cause secondary and cumulative impacts on the Commonwealth's waterbodies and wetlands as additional forestland is converted to roads, well sites, gathering lines and other infrastructure associated with shale gas development. It will also contribute to secondary and cumulative impacts on other Commonwealth resources, including public lands, threatened and endangered species, and air quality. As the Pennsylvania Supreme Court made clear in Robinson Township:

> 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.

83 A.3d 901, 976 (Pa. 2013).

CO15-12 It is therefore imperative that FERC (and PADEP) carefully consider the secondary and cumulative impacts of shale gas development "before it acts" on Transco's certification application. *Id.* at 952 n. 41 (2013) (emphasis added).

C. FERC must consider the cumulative impacts of shale gas on the Susquehanna Watershed and Chesapeake Bay

FERC must consider the cumulative impacts of shale gas development on the Susquehanna River watershed and Chesapeake Bay. The Susquehanna River is the "longest, commercially nonnavigable river in North America" according to the Susquehanna River Basin Commission. The Susquehanna River basin is "comprised of six major subbasins," has "more than 49,000 miles of waterways," and is "made up of 63 percent forest lands."
http://www.srbc.net/pubinfo/docs/SRB%20General%205_13%20Updated.pdf

In addition, the Susquehanna River is "the largest tributary of the Chesapeake Bay[.]" Id. The Susquehanna River comprises "43 percent of the Chesapeake Bay's drainage area" and provides "50 percent of its fresh water flows." Id. Thus, [t]he river and the Bay are two integral parts of one ecosystem" and "pollution that flows into Pennsylvania's rivers and streams [within the Susquehanna River watershed] finds its way to the Chesapeake Bay." Chesapeake Bay

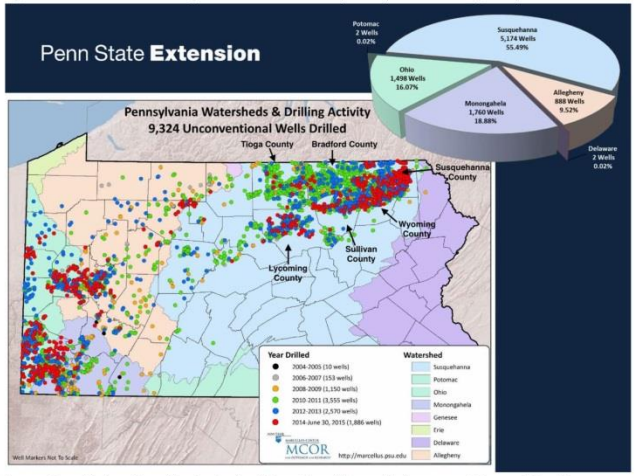
CO15-12 See the response to comment PM1-6.

Foundation, The Susquehanna River, available at http://www.cbf.org/about-the-bay/more-than-just-the-bay/susquehanna-river.

Over the past decade, "vast areas of some of the most pristine and sensitive habitats within the [Chesapeake] Bay watershed face an ever growing wave of industrialization" – shale gas development. Chesapeake Bay Foundation, Natural Gas, available at http://www.cbf.org/about-the-bay/issues/natural-gas-drilling. "Because of the magnitude and intensification of natural gas drilling and the associated infrastructure it brings, unconventional gas development threatens to have a profound impact on the landscape of the Bay watershed for generations to come." Id. "The cumulative impacts from the construction and operation of well pads, access roads, pipelines, and compressor stations, as well as the water quality impacts and air pollution from trucks, well drilling, and ships may pose a risk to the Chesapeake Bay and the rivers and streams that feed into it." Id.

These are important considerations as DEP reviews Transco's application for the Atlantic Sunrise Project. The entire Pennsylvania component of the Atlantic Sunrise Project is located within the Susquehanna River watershed. See FERC DEIS at 4-48, Table 4.3.2-1. In addition, at least 55% of the over 9,300 shale gas wells that have been drilled in Pennsylvania, have been drilled in the Susquehanna River watershed. See Figure 1 below.

Figure 1: Unconventional shale gas wells drilled in Pennsylvania (2004 – June 30, 2015).



Source: Penn State – Marcellus Center for Outreach and Research, Resources: Maps and Graphs, available at http://www.marcellus.psu.edu/images/Watershed%20Map%2020150630.jpg. (Note: County names and arrows added.)

Between 2004 and April 30, 2016, at least 1,356 "unconventional" shale gas wells were drilled in Bradford County, 896 were drilled in Tioga County, 926 were drilled in Lycoming County, 123 were drilled in Sullivan County, 255 were drilled in Wyoming County, and 1,277 were drilled in Susquehanna County. See DEP, Office of Oil and Gas Management, Wells Drilled by County (Northcentral District Office) (Attachment 2). That is over 4,830 shale gas wells drilled over the in this region of Pennsylvania since 2004, all of which are in the Susquehanna River watershed.

CO15-13 FERC must consider the impacts of this level of shale gas development on the Susquehanna River watershed and Chesapeake Bay before it issues any approval for the Atlantic Sunrise Project. Pennsylvania is a partner in the Chesapeake Bay Program[3] and has signed the Chesapeake Bay Watershed Agreement.[4]

[3] http://www.chesapeakebay.net/about/partners
[4] http://www.chesapeakebay.net/chesapeakebaywatershedagreement/page

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CO15-13 See the response to comment PM1-6.

The Agreement includes the following goals:

- Sustainable Fisheries Goal: Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.
- Vital Habitats Goal: Restore, enhance and protect a network of land and water habitats to support fish and wildlife and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.
- Water Quality Goal: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.
- Healthy Watersheds Goal: Sustain state-identified healthy waters and watersheds, recognized for their high quality and/or high ecological value.
- Climate Resiliency Goal: Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions.
- Land Conservation Goal: Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.[5]

Pennsylvania is obligated to meet nitrogen, phosphorus, and sediment load limits set by EPA's Chesapeake Bay TMDL[6] Currently, Pennsylvania is not on track to meet its nitrogen and sediment goals[7] Pennsylvania's Chesapeake Bay Strategy (2016) is an attempt to remedy this deficiency but focuses on improvements to agriculture and stormwater runoff.[8]

CO15-14 Atlantic Sunrise will contribute to erosion and sediment runoff into the tributaries of Chesapeake Bay during construction as well as during operation (due to vegetation clearing of rights of way)[9] The erosion and sedimentation contribution to waterways pollution has not been quantified in the draft EIS.

Neither DEP, EPA, FERC, the Corps of Engineers or any other agency has evaluated how the impacts of Atlantic Sunrise would affect the achievement of PA's Chesapeake Bay Watershed Agreement goals or its Chesapeake Bay TMDL goals[10]

In addition, it is critical that DEP consider the impacts on the Susquehanna River watershed and Chesapeake Bay from future shale gas development, especially as this development encroaches upon

[5] *Id.*
[6] https://www.epa.gov/chesapeake-bay-tmdl
[7] http://files.dep.state.pa.us/Water/ChesapeakeBayOffice/DEP%20Chesapeake%20Bay%20Restoration%20Strategy%20012116.pdf
[8] *Id.*
[9] http://delawareriverkeeper.org/sites/default/files/resources/Reports/Jane%20Davenport%20ABA%20Paper%20January%209%202012%20Final.pdf
[10] See fn. 3.

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CO15-14 See the responses to comments PM1-71 and PM1-92.

CO15 – Sierra Club (cont'd)

the most forested part of the Susquehanna River watershed. As Figure 1 above shows, most of the shale gas development that has occurred in the Susquehanna River watershed has been concentrated in six counties in northeastern Pennsylvania. While some of this development has certainly impacted forests, much of the existing shale gas development has occurred areas dominated by agriculture. Compare Figure 1 with Susquehanna River Basin Commission, Susquehanna River Basin – Land Use Land Cover, 2006, available at http://srbc.net/atlas/downloads/BasinwideAtlas/PDF/1507_LandUse.PDF.

As the shale gas industry expands to the south and west of this region, however, it impacts forested lands. This is very concerning since forested lands "contribute[ ] the lowest loading rate per acre of all the land uses[.]" Environmental Protection Agency, Chesapeake Bay TMDL, Section 4, p. 4-36, available at https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document ("Chesapeake Bay TMDL").

According to the U.S. Geological Survey:

> Natural gas exploration and development result in spatially explicit patterns of landscape disturbance involving the construction of well pads and impoundments, roads, pipelines, and disposal activities that have structural impacts on the landscape . . . Forest loss as a result of disturbance, fragmentation, and edge effects has been shown to negatively affect water quality and runoff (Wickham and others, 2008).

Slonecker, E.T., et al., Landscape Consequences of Natural Gas Extraction in Bradford and Washington Counties, Pennsylvania, 2004-2010: USGS Open-File Report 2012-1154, p. 8 (2012), available at https://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf ("USGS Report"); see also STAC (Chesapeake Bay Program Scientific and Technical Committee). 2013. Exploring the environmental effects of shale gas development in the Chesapeake Bay Watershed, STAC Publ. #13-01, Edgewater, MD. p. 16, available at http://www.chesapeake.org/pubs/297_Gottschalk2013.pdf ("STAC Report") ("well pad[s] and associated infrastructure (including roads and pipelines) . . . change the hydrology and sediment, nutrient, and organic export to receiving streams . . . lead[ing] to altered flow regimes and habitats and increased sedimentation and nutrient input into streams").

It is no surprise that researchers have concluded that one of the "key priorities" for protecting Chesapeake Bay is to require that there is "no net loss of forest lands." Claggett, Peter, and Thompson, Renee, eds., 2012, Proceedings of the Workshop on Alternative Futures – Accounting for growth in the Chesapeake Bay watershed: USGS Open-File Report 2012-1216, p. 8, available at http://pubs.usgs.gov/of/2012/1216/OFR2012-1216.pdf.

CO15-15 FERC and other agencies must consider how the loss of forested areas from past, present and future shale gas development will impact the Susquehanna River watershed and compliance with the ChesapeakeBay TMDL, which EPA approved in 2010. See Chesapeake Bay TMDL. "[A] TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet applicable [water quality standards]." Id. at Section 1, p. 1-15. The Chesapeake Bay TMDL identified three pollutants of concern –

CO15-15 Section 4.5.5 of the EIS assesses the extent and impact of tree clearing within the region of influence (or geographic scope) for the Project. An assessment of the broader impacts of shale gas development, including the associated clearing of trees, is beyond the scope of this project review. See the response to comment PM1-6.

CO15-15 (cont'd) nitrogen, phosphorus, and sediment. Id. at Section 2, p. 2-7. Clearing forested areas for roads, pipelines, well pads and other shale gas infrastructure will increase sediment loads into the Susquehanna River watershed, which could cause Pennsylvania to fall short of its obligations pursuant to the Chesapeake Bay TMDL.

Regardless of whether shale gas development in the Susquehanna River watershed causes significant impacts on Chesapeake Bay, researchers "agree[ ] that there is a high probability of a possible-long term landscape effect in Pennsylvania (and maybe all states in the active [shale gas] development area), and each jurisdiction will perhaps need to offset their load allocations." STAC Report, p. 17. These researchers also stressed the importance of permitting processes that are "project-based rather than individual site-based" and requiring that "permits provide potential build-out scenarios to provide better potential cumulative effects information." Id. at 5. This is not being done in Pennsylvania.

According to the Susquehanna River Basin Commission ("SRBC"), as of 2012, there were at least 2,000 shale gas well pads in the Susquehanna River Basin, "creat[ing] 13,000 acres of disturbed lands" from the well pads themselves and associated road construction. Id. at 11. However, "[t]his level of disturbance should be viewed as a minimum, since additional lands must also be cleared for gathering and transmission pipelines." Id. Thus, the acres disturbed from shale gas development is likely much higher than 13,000 acres.

According to the Nature Conservancy, shale gas companies could drill 27,600 wells in the Susquehanna River basin by 2030. Id. Extrapolating from the SRBC's calculations, that would result in approximately 6,900 well pads, assuming four wells per pad. Subtracting the existing 2,000 well pads results in an additional 4,900 well pads, which would create an additional 31,850 acres of disturbed lands. Again, these figures are conservative since they are only based on SRBC's estimates for the well pad and associated road network. The Nature Conservancy believes that up to 110,000 acres of forested land could be cleared by 2030. Id.

FERC must consider how this level of disturbance to forested lands in the Susquehanna River watershed will impact water quality within the basin and sub-basins as well as Pennsylvania's compliance with the Chesapeake Bay TMDL.

CO15-16 **IV. Cumulative impacts of shale gas development on terrestrial and aquatic habitats and wildlife have not been—yet they must be—disclosed in the Draft EIS.**

Recent research on the impacts of shale gas drilling on wildlife habitat (terrestrial and aquatic) underscores the importance of considering these impacts before acting on Transco's permit applications. For example, according to Souther et al. (2014), studies indicate that "shale- gas development will affect ecosystems on a broad scale" but that "site-specific or single variable risk assessments likely underestimate threats to ecological health." Souther et al. (2014), Biotic impacts of energy development from shale: research priorities and knowledge gaps. Frontiers in Ecology and the Environment 12(6): 334, available at

CO15-16 See the response to comment FA1-177. An assessment of the broader cumulative impacts of shale gas development, including impacts on terrestrial and aquatic habitats and wildlife, are beyond the scope of this project review. See the response to comment PM1-6.

http://www.morgantingley.com/wp-content/uploads/2014/08/SoutherEtAl_FREE2014.pdf. In order to bridge this divide, these researchers emphasized the urgent need to better understand a host of variables, including the "cumulative ecological impacts of shale development." Id. at 334.

The USGS report on Bradford and Washington Counties documents how shale gas development in Pennsylvania is has already caused "extensive and long-term habitat conversion":

> 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 (9 acres) per well pad with an additional 8.5 hectares (21 acres) 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 Report at 10.

This "extensive and long-term habitat conversion" does not only impact the terrestrial ecosystem but also the aquatic ecosystem since "[f]orest loss as a result of disturbance, fragmentation, and edge effects has been shown to negatively affect water quality and runoff (Wickham and others, 2008)[.]" Id. at 8.

Indeed, according to recent research that was 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), available at https://www.researchgate.net/publication/265343414_Ecological_Risks_of_Shale_Oil_and_Gas_Development_to_Wildlife_Aquatic_Resources_and_their_Habitats.

The impacts of shale gas development are significant because it "changes the landscape" as "[l]and is cleared for pad development and associated infrastructure, including pipelines, new and expanded roads, impoundments, and compressor stations[.]" Id. at 11037 (citations omitted). "Seismic testing, roads, and pipelines bisect habitats and create linear corridors that fragment the landscape." Id.

"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." Id. "Habitat fragmentation is a direct result of shale development with roads and pipelines having a larger impact than the pads." Id. (citations omitted). In Bradford County, 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." Id. (citation omitted). "Pipelines and roads not only resulted in loss of habitat but also created new edges." Id. "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).

According to the New York Department of Environmental Conservation, "development of one horizontal [shale] well requires over 3300 one-way truck trips." Id. at 11038 (citation omitted). "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." Id. (citations omitted). "Even after a well is drilled and completed, new roads and pipelines provide access for more people, which results in increased disturbance." Id. "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. (citation omitted).

Shale gas development "is associated with both short-term and long-term increases in noise." Id. "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." Id. (citation omitted). "Depending on number of wells drilled, construction and drilling can take anywhere from a few months to multiple years." Id.

"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." Id. (citation omitted). "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." Id.; see also U.S. Fish and

Wildlife Service Letter January 27, 2015 Letter to FERC (FERC Docket CP14-112-000, Accession No. 20150202-0104) ("[n]oise levels over background levels can adversely affect wildlife, particularly songbirds, that rely on call identification for successful breeding."). "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 . . . Greater sage-grouse (Centrocercus urophasianus) gather at leks where males display in order to attract females." Id. "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." Id. at 11040. "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." Id. (citations omitted). "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[.]" Id. "The impact that shale development has on this group of species will depend on the scale and extent of development." Id. "By some estimates, less than 10% of potential shale gas development has occurred in the Appalachian basin [and] [i]f 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. (emphasis added) (citation omitted).

"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." Id. (emphasis added) (citation omitted). "If remaining high-quality stream reaches become unsuitable to brook trout, there may be further fragmentation of the larger meta-population." Id. "Rare species with limited ranges are always a concern when development occurs" and any type of disturbance can be very detrimental to them." Id. "Freshwater mussels are an additional taxonomic group of interest because of already high numbers of listed species and relative sensitivity to toxicants." Id. (citation omitted). "Gillen and Kiviat 2012 reviewed 15 species that were rare and whose ranges overlapped with the Marcellus and Utica shale by at least 35%." Id. "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." Id. This salamander "requires high quality water and is sensitive to fragmentation suggesting that this species is at great risk to oil and gas development." Id. "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.

"Habitat fragmentation, effects on water quality and quantity, and cumulative effects on habitats and species of concern have already been identified as problems and are expected to increase in magnitude as shale resource development continues to expand." Id. at 11043. Brittingham et al. (2014) "suggests

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that species and habitats most at risk are ones where there is an extensive overlap between a species range or habitat type and one of the shale plays (leading to high vulnerability) coupled with intrinsic characteristics such as limited range, small population size, specialized habitat requirements, and high sensitivity to disturbance." Id.

"Examples include core forest habitat and forest specialists, sagebrush habitat and specialists, vernal pond inhabitants, and stream biota." Id. Brittingham et al. (2014) demonstrates the substantial impact that shale gas drilling is having and will continue to have on terrestrial and aquatic habitats and wildlife throughout the Marcellus and Utica shale region. Such impacts will only worsen if DEP and FERC continue facilitating such drilling by authorizing infrastructure projects such as the one proposed here without analyzing their cumulative impacts.

CO15-17 The Draft EIS fails to take a "hard look" at these cumulative impacts.

V. Cumulative impacts on public lands have not been properly disclosed.

The Draft EIS lists potential impacts as part of the cumulative impacts review as:

- geology and soils;
- groundwater, surface water, and wetlands;
- vegetation;
- wildlife;
- fisheries and aquatic resources;
- land use, recreation, special interest areas, and visual resources;
- socioeconomics (including traffic);
- cultural resources; and
- air quality and noise.

Draft EIS 4-271

The Draft EIS calculates direct land use impact from drilling well pads and associated facilities due to the flow of the pipeline: "A recent assessment of the land requirements and impacts associated with natural gas wells determined that about 9 acres of land is necessary for each well pad and associated infrastructure (roads, water impoundments, and pipelines). This same assessment concluded that an additional 21 acres of indirect edge effects results from each well (Johnson et al., 2010). Based on these assumptions, the development of 340 wells (the number of wells estimated to supply the volumes associated with the Atlantic Sunrise Project) could affect 3,060 acres of land and have indirect land effects totaling 7,140 acres, much of which is probably forested ." 4-276 However, this calculation assumes that 340 wells are sufficient to supply the gas flow during the entire service life of the Atlantic Sunrise Project and that no replacement wells will need to be put into drilled. As the Draft EIS concedes in another section: "Because well production declines over time, the actual number of wells necessary to supply the Atlantic Sunrise Project over many years would be much higher." 4-263

The subsection purporting to discuss the cumulative impacts includes a description of potential cumulative impacts associated with the general development of identified FERC-regulated projects, Marcellus Shale development, nearby non-jurisdictional project-related actions, residential

CO15-17 See the response to comment CO15-16.

development projects, and transportation projects, the scope of the projects considered is generally limited to those within 10 miles of the proposed pipeline.

The land use changes caused by shale gas development are having and, if not properly regulated, will continue to have profound and long-term ecological consequences in Pennsylvania. While many of these impacts have occurred on private lands, the gas industry continues encroaching on Pennsylvania's public lands, which provide some of the most remote, forested wildlife habitat not only in Pennsylvania but in the eastern United States. DEP has an obligation to "conserve and maintain" Pennsylvania's public resources, including public lands and, therefore, must consider and disclose how its approval of Transco's application would further degrade Pennsylvania's state forests and other public lands.

In 2002, researchers modeled the extent of forest fragmentation in the United States. Riiters, et al., Fragmentation of Continental United States Forests, Ecosystems (2002) p. 820, available at http://www.mrlc.gov/pdf/ecosystems_riitters02.pdf The researchers used "[a] lattice of 56.25 km^2 cells . . . to summarize forest area and fragmentation statistics."
Based on this, the researchers created two maps of forest cover in the continental US. See p.820, Figures 4A and 4B. The maps map clearly shows that northern Pennsylvania not only has the highest amount of "interior forest" in the state but some of the highest amounts of interior forest remaining in the eastern United States. The majority of these remaining "interior forests" are "concentrated in public ownership and/or landforms that are not suitable for agriculture or urban development." p.821

The results underscore the importance of Pennsylvania's public lands. "Fragmentation can have a variety of direct and indirect impacts at the scales examined here, including changes in microclimate and pollution deposition (Erisman and Draaijers 1995; Weathers and others 2OOO), wildlife movement (Gardner and others 1991), habitat suitability (Pearson and others 1996; Burke and Nol 2000), invasive species (Jones and others 2000), and tree biomass (Laurance and others 1997, 2001)" Id. at 821

Pennsylvania's public lands not only provide some of the most remote, interior forest left in the Commonwealth, they also are an invaluable source for low-impact outdoor recreation. Pennsylvania's "[s]tate forests provide unique opportunities for dispersed, low-density outdoor recreation that can be obtained only through large blocks of forest." DCNR, 2015 Draft State Forest Management Plan, p. 166, available at http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_20031287.pdf.

Pennsylvania's state forests contain "some of the most remote and wild forest in the Mid-Atlantic Region." DCNR, Impacts of Leasing Additional State Forest for Natural Gas Development, 14, available at http://www.dcnr.state.pa.us/cs/groups/public/documents/document/d_000603.pdf. "The largest and most remote areas are found . . . in the Northcentral portion of the state." Id.
These remote, critically important public forests are threatened by shale gas development.

According to the DCNR:

> The majority of [shale gas] development [on state forests] has occurred in the Devonian-aged Marcellus Shale. Approximately 1.5 million acres of state forest lands lie within the prospective limits of the Marcellus Shale. Assuming a drainage area of 120 acres per well, the [DCNR's Bureau of Forestry (Bureau)] expects that approximately 3,000 wells may be drilled to fully develop the lands it currently has leased . . . In recent years, there has been a marked increase in the development of the Ordovician-aged Utica Shale in western Pennsylvania and eastern Ohio . . . As development moves eastward from the Pennsylvania-Ohio border, the [Bureau] has seen an increased interest in the Utica Shale on state forest lands. Development of the Utica has become increasingly prevalent adjacent to state forest lands, primarily in Tioga County and the northwestern section of the state forest system.

DCNR, 2015 Draft State Forest Management Plan, 134-35 (emphasis added).

DCNR further explains how shale gas development would cause long-term impacts on state forest lands:

> Unconventional shale-gas development can cause short-term or long-term conversion of existing natural habitats to gas infrastructure. The footprint of shale-gas infrastructure is a byproduct of shale-gas development. The use of existing transportation infrastructure on state forest lands, such as roads and bridges, increase considerably due to gas development . . . Shale-gas development requires extensive truck traffic by large vehicles, which may require upgrades to existing roads to support this use. These upgrades may affect the wild character of roads, a value that is enjoyed by state forest visitors . . . Noise from compressors can dramatically affect a state forest user's recreational experience and generate conflict. Unlike compressors, most sources of potential noise on state forest land are temporary in nature . . . The development of oil and gas resources requires pipelines for delivering the product to market. When compared to other aspects of gas development, pipeline construction has the greatest potential to cause forest conversion and fragmentation due to the length and quantity of pipelines required.
> Id. at 136-38.

It is imperative that DEP and other state agencies fulfill their constitutional obligation to "conserve and maintain" Pennsylvania's irreplaceable public lands, which are largely co-extensive with its remaining interior forest habitat.

CO15-18 FERC has an obligation to consider how its decision on Transco's applications will further Marcellus and Utica shale gas development on state forest and other public and private lands. DCNR has modeled how shale gas development in Tioga State Forest, just a few miles south of the Atlantic Sunrise Project area, could quickly erode the forest's "wild character" with new roads and well pads. See DCNR, Impacts of Leasing Additional State Forest for Natural Gas Development, 20-28. First, the model shows this portion of Tioga State Forest as it exists with no gas wells. Id. at 20. Next, DCNR states that an "estimated 54 new well pads could be developed within the next 5-10 years in this ~ 6 5,000 acre landscape view." Id.

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CO15-18 See the responses to comments PM1-6 and PM1-40.

CO15-18 (cont'd) at 21. Next, DCNR ranks the existing landscape in terms of its "wild character" before drilling, ranging from "primitive" and "semi-primitive" to "semi-developed." Id. at 22. When DCNR overlays new roads and well pads, it results in "significant decreases in Primitive and Semi-Primitive" forests and "a dramatic increase in semi-developed [ ] areas." Id. at 23-25. DCNR says that 54 new well pads in this part of Tioga State Forest would result in a net loss of 8,171 acres of primitive forest, a net loss of 5,274 acres of semi-primitive forest, and a net gain of 13,545 acres of semi-developed area. Id. at 27. DCNR concludes that any "additional natural gas development involving surface disturbance would significantly damage the wild character of the state forest." Id. at 28 (emphasis added). In addition to significantly damaging the wild character of the state forests, additional shale gas development would damage waterbodies and wetlands as a consequence of more roads, well pads and associated infrastructure.

As described in detail by Allegheny Defense Project's comments, FERC's approval of Transco's applications would allow Transco and other operators to significantly expand the capacity of pipeline system in Pennsylvania. A likely consequence of that decision would be increased shale gas drilling on nearby state forest lands in the watershed of west branch of the Susquehanna River. The expansion of shale gas development surrounding Pine Creek Gorge is a testament to the fact that the Commonwealth's agencies, including DEP, are failing to "conserve and maintain" these vital public resources for "all the people, including generations yet to come." PA. CONST. art. I, § 27. The failure to protect public resources has consequences for ecological concerns identified in our comments.

The Draft EIS identifies the development of gas wells and gathering systems in the Marcellus shale region as projects the effects of which warrant inclusion in an analysis of cumulative impacts, but it fails to include the required analysis with respect to the incremental impact of the Project's effects when added to the to the impacts caused by those Marcellus shale development activities. For example, in discussing Sunoco's Mariner East Project, the Draft EIS states: "The Mariner East 2 Pipeline Project would result in impacts similar to the Atlantic Sunrise Project. If constructed in 2016, as currently envisioned, it could contribute to cumulative impacts near where it crosses the Atlantic Sunrise Project pipeline route. The effect, however, would be localized and would be mitigated by measures required by federal, state, and/or local permitting authorities." 4-269.

The Draft EIS impermissibly relies entirely on presumed compliance with permitting requirements to justify its conclusion that no cumulative impacts will result from the Project. It justifies the failure to conduct the requisite cumulative impacts analysis on the false assumption that someone else will be reviewing the proposed Projects. This reasoning ignores the very purpose of a cumulative impacts analysis. Id.

Approving Transco's application for the Atlantic Sunrise Project will likely lead to more shale gas development in this region, which means more fragmentation and impacts to public recreation from new roads, well pads, and other associated infrastructure. DEP and FERC must address these secondary and cumulative impacts before making a decision on Transco's applications.

CO15-19 **VI. Cumulative impacts on special-status species have not been properly disclosed.**

CO15-19 We disagree. As described in section 4.7 of the EIS, we have determined that the Project *may affect, but would not likely adversely affect* the northern long-eared bat, Indiana bat, bog turtle, and northeastern bulrush. Our determination is based on the current status of each species, which takes into account past effects as well as the direct, indirect, and incremental cumulative impacts on each species and its habitat.

CO15 – Sierra Club (cont'd)

CO15-19 (cont'd)

In addition to wildlife in general, FERC must consider the cumulative impacts of the Atlantic Sunrise Project, including (but not limited to) gas drilling, production and transport, on special-status species, including state-listed threatened, endangered, and candidate species. Transco and FERC acknowledge that the Atlantic Sunrise Project would directly impact habitat and, in some instances, known locations, for several special-status species, including bog turtle, timber rattlesnake, northeastern bulrush, eastern small-footed bat, and Allegheny woodrat. DEP has a constitutional and statutory duty to conserve and maintain these species under PA. CONST. Art. I, Sec. 27. Before FERC can issue an approval of this Project, it must comprehensively examine and fully discuss the cumulative impacts of the Atlantic Sunrise Project on these species.

1. Bog Turtle

The bog turtle is a state-listed endangered species in Pennsylvania. See FERC DEIS at 4-111. It is also listed as "threatened" in Maryland and North Carolina and on the federal endangered species list. Id. "One of the smallest turtles in the world . . . , [t]he greatest threats to the bog turtle are the loss and fragmentation of its habitat." Id.

Initial surveys for the Atlantic Sunrise Project "identified suitable bog turtle habitat in 18 delineated wetlands, 9 in Lebanon County and 9 in Lancaster County." Id. at 4-112. Further surveying identified at least one bog turtle population within one wetland complex in Lancaster County. Id. According to FERC, "Transco is currently developing the Phase 2/3 survey report, which will be submitted to the FWS and FERC." Id. DEP and FERC cannot issue permits until this and other such reports are completed, submitted to the respective agencies, and a conclusion that there will be no impacts to listed species is reached.

Statements in FERC's DEIS raise serious questions about the potential impacts to bog turtles in this wetland. For example, FERC claims that the "bog turtles in the wetland complex are confined to the northern end of the wetland and are not using the portion of the wetland within or adjacent to the proposed project workspace." Id. (emphasis added). FERC does not define what it means by "confined" but we doubt that there are impenetrable barriers that prevent bog turtles from "using the portion of the wetland within or adjacent to the proposed project workspace." Just because bog turtles are not currently using one portion of a wetland at a particular time does not mean that they will not use it at another point in time. FERC and DEP must require that Transco investigate the potential using a trenchless crossing method of this wetland.

2. Timber Rattlesnake

FERC must consider the cumulative impacts of the Atlantic Sunrise Project on the timber rattlesnake, "a state-listed candidate species, [which] has known critical habitat in the proximity of the project area." FERC EA at 32. A "candidate species" is one that "could achieve endangered or threatened status in the future." 58 Pa. Code § 75.3(a). Any "persons

CO15-19 (cont'd)

who hunt, take, catch or kill" timber rattlesnakes in Pennsylvania must first "have a permit." 58 Pa. Code § 79.6(a).

It is important to note that the timber rattlesnake is already "extirpated from Maine, Rhode Island, and Ontario," listed as "state endangered in New Hampshire, Vermont, Massachusetts, Connecticut, Ohio, and New Jersey," listed as "threatened in New York, and considered a species of concern in West Virginia and Maryland." PAFBC, Species Action Plan – Timber Rattlesnake, p. 4 (June 2011), available at http://fishandboat.com/water/amprep/species-plan-timber-rattlesnake.pdf. In comparison, the timber rattlesnake "continues to persist in relatively large population densities across some regions of Pennsylvania, though these populations are highly disjunct." Id. "Consequently, Pennsylvania may function as a stronghold for the continued survival of this species."7 (emphasis added) (citation omitted).

According to DCNR, "[t]he largest populations of timber rattlesnakes occur in remote, heavily forested regions of Pennsylvania, which means they often call state forests home." DCNR, Rattlesnakes in Pennsylvania State Forests (emphasis added), available at http://dcnr.state.pa.us/forestry/wildlife/rattlesnakes/index.htm. Pennsylvania's "2.2 million acres of State Forest lands provide the largest blocks of timber rattlesnake range remaining in the Northeastern states." Id. (emphasis added).

Pipeline construction and shale gas drilling could permanently change habitat. According to PAFBC, some of the leading threats to timber rattlesnakes include "natural resource extraction and associated infrastructure development," "habitat destruction or disturbance in hibernacula areas," "increase of human activity within habitat range," "new road construction," and "high vehicular traffic on previously low volume roadways." Id. at 5. These are precisely the kinds of impacts that result from pipeline construction and shale gas drilling. FERC and other federal agencies have an obligation to conserve and maintain timber rattlesnake and other threatened, endangered, candidate and sensitive species. According to the PAFBC, "in the past decade, encroachment by oil and gas development into Timber Rattlesnake strongholds has increased significantly with the relatively new shale gas industry in this Commonwealth." 45 Pa.B. 47, 6661, 6694 (Nov. 21, 2015). "The northcentral portions of the range, once considered the core undisturbed populations, have been subject to high volume of exploration, well pad construction, pipeline construction, associated roads and infrastructure." Id.

The timber rattlesnake is still a protected species in Pennsylvania and DEP has an obligation to "conserve and maintain" this and other threatened, endangered, candidate and sensitive species. PA. CONST. art. I, § 27. Before FERC makes a decision on Transco's applications, it must consider how the Atlantic Sunrise Project and the cumulative impacts of shale gas development as well as other pipeline projects will impact timber rattlesnake and ensure that this species and its prospects for survival.

3. Northeastern Bulrush

CO15-19 (cont'd)

Northeastern bulrush is a state-listed endangered species in Pennsylvania. See FERC DEIS at 4-113. It is also listed as endangered in Maryland and on the federal endangered species list. Id. Northeastern bulrush is a "wetland plant . . . [o]ccurring in isolated areas scattered across seven states [that] is difficult to find and difficult to recognize." FWS, Northeastern Bulrush, available at https://www.fws.gov/northeast/pdf/bulrush.pdf. "[H]abitat alternations that make a site consistently drier or wetter could make life impossible for northeastern bulrush." Id.

"Activities such as filling or ditching in a wetland can destroy or degrade this species' habitat and pose a threat." Id. The key to recovery for northeastern bulrush is "preventing habitat destruction and deterioration at sites where the plan now grows and any additional locations as they are found." Id.

According to FERC, "northeastern bulrush could occur in Clinton, Columbia, and Luzerne Counties, and its range overlaps with the proposed pipeline route in Columbia and Luzerne Counties." FERC DEIS at 4-113 (citations omitted). Surveys identified northeastern bulrush in at least one wetland in Luzerne County and a second wetland in northern Columbia County. Id. According to FERC, Transco revised its route to avoid direct impacts on northeastern bulrush in the Luzerne County wetland, but the project "does not avoid the wetland entirely." Id. The project will also come within 50 feet of the other wetland in Columbia County. Id. The potential impacts requires avoidance or mitigation which is not documented here.

This treatment of cumulative impacts falls short of what is required by NEPA—namely, a comprehensive analysis of the incremental impacts of the Project when considered in addition to other past, present, and reasonably foreseeable future actions. See 40 C.F.R. § 1508.7; *see also* Oregon Natural Res. Council Fund v. Brong, 492 F.3d 1120, 1132–33 (9th Cir. 2007) ("One of the specific requirements under NEPA is that an agency must consider the effects of the proposed action in the context of all relevant circumstances, such that where 'several actions have a cumulative . . . environmental effect, this consequence must be considered . . . .") (quoting Neighbors of Cuddy Mountain v. U.S. Forest Serv., 137 F.3d 1372, 1378 (9th Cir. 1998)). Assessing the impacts of a proposed action within the context of existing and foreseeable effects in the same area yields "a realistic evaluation of the total impacts" and ensures that an EIS does not impermissibly "isolate a proposed project, viewing it in a vacuum." Grand Canyon Trust v. Fed. Aviation Admin., 290 F.3d 339, 342 (D.C. Cir. 2002).

Even if the Commission concludes that the amount of habitat lost because of Atlantic Sunrise Project construction does not constitute a significant adverse impact, the additive impact of this habitat loss along with the destruction of habitat caused by past, present, or reasonably foreseeable gas development activities and other development activities in the region (already identified in the Draft EIS) could constitute an adverse impact. This is precisely the analysis that NEPA requires agencies to undertake.

CO15 – Sierra Club (cont'd)

CO15-20 **VII. The Atlantic Sunrise project will have significant impacts on local air quality, which have not been properly disclosed.**

The Draft EIS acknowledges that construction and operation of the proposed projects will result in result in emissions of various air pollutants, including NOx, VOCs, carbon monoxide, particulate matter, sulfur dioxide, and GHGs, particularly methane. These pollutants affect air quality—and therefore human health—in a variety of ways. NOx is a precursor of both ozone and fine particulate matter ("PM2.5") particulate matter is linked to increased heart attacks, aggravated asthma and decreased lung function, and for people with heart or lung diseases, premature death, to coughing, chest pain, and throat irritation. VOCs are also an ozone precursor. Ozone exposure can lead to coughing, chest pain, and throat irritation. It also worsens bronchitis, emphysema, and asthma, and can reduce lung function.

The most common hazardous air pollutants associated with natural gas development are n-hexane and the "BTEX compounds" benzene, toluene, ethylbenzene, and xylenesis also emitted from natural gas operations, is a probable human carcinogen. Benzene is a known human carcinogen, and formaldehyde, which is also emitted from natural gas operations, is a probable human carcinogen. See Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 76 Fed. Reg. 52,738, 52,745 (Aug. 23, 2011).

With respect to air quality, the Draft EIS concludes:

> The new and modified compressor stations would have long-term impacts on local air quality. Because Compressor Stations 605 and 610 would have electric-driven compressors, the operational emissions would primarily be minor fugitive methane emissions and would not have a significant impact on local air quality.
>
> Modifications at the Compressor Stations 517, 520, and 190 have the potential to be significant; therefore, we requested that Transco complete an air quality impact analyses at these three stations to document that the proposed emission modifications, along with existing emissions and background air quality, would not have a significant impact on local air quality and would not result in violation of the NAAQS.

Draft EIS at 4-210.

Air quality impacts from compressor stations can be judged by reviewing ambient air quality monitor data, by measuring emissions at full load, and by conducting air quality modeling. Transco has fulfilled none of these requirements.

As to direct emissions from new and modified Transco compressor stations, the Draft EIS states:

> The air monitoring data Transco provided for Compressor Stations 517 and 520 were not operating at full load and Compressor Station 190 was not in operation; therefore, we are requesting that Transco update the ambient data to reflect the ambient impacts at full

CO15-20 Section 4.11.1.2 of the EIS lists air permitting requirements applicable to the Project, including project components located within the Northeast Ozone Transport Region. See the response to comment PM4-61 regarding the air quality operational impact analysis completed for the Project and additional information requested. See the response to comment CO9-13 regarding fugitive methane emissions.

CO15-20 (cont'd)

permitted load. Providing the updated air monitoring data **prior to** the issuance of the final EIS will allow us to adequately and conservatively estimate impacts.

Draft EIS at 4-215.

As to modeled emissions, the Draft EIS states:

> [Prior to the end of the comment period], Transco should file . . . the results of an air quality screening (AERSCREEN) or refined modeling analysis (AERMOD or EPA-approved alternative) for all of the emission-generating equipment (including existing equipment) at Compressor Station 190, if Compressor Station 190 is not in operation for a substantial time during the monitoring period between February and July 2016. The results should indicate the local modeled ambient emissions, plus the modeled incremental increase in emissions of criteria pollutants from the modifications. Transco should include supporting calculations and provide a narrative explaining the justification for the modeling methodology.

Id.

Of course, the public cannot comment on these yet un-filed analyses during the comment period. When a significant issue, such as local air quality, is identified but not addressed, the public is deprived of the opportunity to play a significant role in the decision-making process. *See* Robertson.

In addition, the Draft EIS fails to adequately address fugitive methane emissions from the proposed Atlantic Sunrise project and related facilities. The Draft EIS asserts that fugitive methane emissions from the operation of the proposed pipeline, including compressor stations, are "minor." Draft EIS at 4-210. In particular, the Commission provides no analysis of potential malfunctions of either pipeline or compressors that could lead to unintended emissions of various pollutants. This is a significant oversight, given that the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA") reports 322 significant pipeline incidents in 2015 alone - resulting in $322 million in damages.[11]

FERC's failure to undertake a meaningful analysis of the effects of emissions from the Atlantic Sunrise Project construction and operation is particularly concerning, given that Pennsylvania and Maryland are located in the Northeast Ozone Transport Region ("OTR") and the proposed construction would result in significant emissions of NOx and VOCs. Draft EIS at 4-194.

The area is already a moderate ozone nonattainment area for VOCs and NOx for New Source Review permitting purposes:

[11] U.S. DOT, PHMSA, Significant Pipeline Incidents, https://hip.phmsa.dot.gov/analyticsSOAP/saw.dll?Portalpages Significant pipeline incidents are defined as those that involve a fatality or injury, $50,000 or more in total costs, highly volatile liquid releases of five barrels or more or other liquid releases of fifty barrels or more, or liquid releases resulting in an unintentional fire or explosion.

CO15-20 (cont'd)

Section 184 of the CAA established the Northeast Ozone Transport Commission to assist in developing recommendations for the control of interstate air pollution in these 13 northeast states, referred to as the Northeast Ozone Transport Region (OTR). All major sources in these states are treated as being in at least a moderate ozone nonattainment area for permitting purposes. Compressor Stations 517 and 520 in Pennsylvania and Compressor Station 190 in Maryland would be affected by these OTR requirements and are described further in this document. Draft EIS at 4-194.

The Draft EIS does not undertake any analysis of the potential impacts from construction emissions and permanent long term emissions from the Atlantic Sunrise project on workers and residents living in an area which is already considered non-attainment for those pollutants.

Conclusion

To date, the Atlantic Sunrise Project has evaded the comprehensive environmental impact disclosure and public participation requirements of NEPA. The current FERC approach – to identify problems to be addressed later - undermines comprehensive, in-depth analysis and long-term planning. It encourages gas development while ignoring myriad adverse impacts on public health, public wellbeing, and public natural resources. If FERC is to fulfill its legal obligations and its function as an agency in the service of the public, FERC must fix the Draft EIS's fatal flaws outlined above.

CO15-21 Because the flaws can only be cured through the disclosure of substantial amounts of missing information, we urge the Commission to (1) collect the missing information, (2) independently verify the accuracy and completeness of the supplemental information, and (3) circulate a revised environmental impacts statement for public review and comment.

We, the undersign organizations, also support the detailed comments filed today by the Allegheny Defense Project et al.

Respectfully submitted,

Thomas Y. Au, Conservation Chair
Sierra Club, Pennsylvania Chapter

Ann Pinca, President
Lebanon Pipeline Awareness

Pam Bishop and Doug Lorenzen
Concerned Citizens of Lebanon County

Eva Telesco, Malinda Harnish Clatterbuck, Tim Spiese
Lancaster Against Pipelines

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CO15-21 See the response to comment PM1-70.

CO16 – The Accokeek

ORIGINAL

The Accokeek, Mattawoman, Piscataway Creeks Communities Council, Inc.
Public Comments on the Atlantic Sunrise Project

June 27, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: FERC Docket No. CP15-138-000 / Atlantic Sunrise Project

Dear Deputy Secretary Davis,

The Accokeek, Mattawoman, Piscataway Creeks Communities Council, Inc. ("AMP Creeks"), by and through undersigned counsel, hereby submits its public comments in the above-cited CO16-1 matter. In addition to the comments contained herein, AMP Creeks requests an extension of the public comment period in this matter for 30 days to allow the public to review the June, 24 2016 Supplemental Information Filing by Transcontinental Gas Pipeline Company, LLC ("Transco"). AMP Creeks also requests new public meetings in the geographic areas affected by the ASP changes contained in the supplemental filing by Transco. Transco submitted its supplemental filing after the close of business one business day before the close of the public comment period. Transco's action denies the public meaningful review and input into the project at issue. The public has a vested interest in reviewing this material and commenting further on the supplemental information. As such, FERC must allow the public adequate time to review and comment on the information.

CO16-2 AMP Creeks now turns to the Draft Environmental Impact Study (DEIS) in this matter. The DEIS is deficient in its various analyses of this project. AMP Creeks discusses FERC's particularly egregious deficiencies herein: 1) FERC is engaging in impermissible segmentation in its review of the ASP; 2) FERC's analysis of the socio-economic impacts contained in the DEIS are deficient and its conclusions are wrong; and 3) FERC has failed to include and analyze data properly, as stated in other public comments and adopted below. AMP Creeks requests that FERC conduct new analyses regarding segmentation and the socio-economic impact of the ASP on communities. FERC should revise and reissue the DEIS for public review and comment on these substantial issues.

The bottom line is that FERC must not issue a Certificate of Public Convenience and Necessity (CPCN) in this matter until it addresses the multitude of deficiencies contained in the DEIS. AMP Creeks and other public commenters raise issues that FERC must address before moving forward.

1

CO16-1 See the responses to comments PM1-70 and PM1-130.

CO16-2 See the response to comment PM1-70.

CO16-3 **I. FERC'S ANALYSIS OF THE ASP CONSTITUTES UNLAWFUL SEGMENTATION**

FERC's analysis of the ASP constitutes impermissible segmentation. FERC must perform a new analysis that takes into consideration the entirety of all other pipeline infrastructure that will connect to the ASP. The ASP is not a stand-alone project. The DEIS must consider the ASP in conjunction with Dominion Cove Point, compressor stations, the Leidy Line and other infrastructure to which it will connect. The ASP simply has no function or purpose without such other infrastructure. The ASP is not a stand-alone project and FERC's analysis fails to adequately consider the impact of the entire system, of which ASP is one segment. AMP Creeks requests that FERC perform an analysis of the entire system as a whole.

II. FERC HAS NOT IDENTIFIED ALL THE ASP'S ENVIRONMENTAL HARMS

Due to FERC's impermissible segmentation, the DEIS is deficient in identifying or representing all of the harms caused by the ASP to the environment and communities. FERC must consider all cumulative harms by the ASP. In its DEIS, FERC has not evaluated the complete build-out and gas footprint the ASP would create in the shale fields and other gas infrastructure. FERC must perform a complete evaluation and release a revised version of its DEIS for public review and comment.

CO16-4 Furthermore, AMP Creeks hereby adopts and incorporates by reference the public comments of the Delaware Riverkeeper Network (DRN) and Schuylkill Pipeline Awareness (SPA) in this matter, submitted June 21, 2016 and attached hereto as Exhibit 1. AMP Creeks shares all concerns discussed therein and raises those issues here as its own. AMP Creeks adopts the comments of DRN and SPA in order to minimize repetitive arguments. AMP Creeks also adopts the requests contained in comments by DRN and SPA.

III. SOCIO-ECONOMICS IMPACTS AS OUTLINED IN THE DEIS

CO16-5 Doctor Lynne Y. Lewis, PhD, Chair of Economics at Bates College, has reviewed the DEIS on the proposed Atlantic Sunrise Project ("ASP"). The following is her analysis of the socio-economic impacts as outlined in the DEIS (all references to the first person "I" refer to Dr. Lewis herself, as she authored the analysis).

The socioeconomics as outlined on pages 4-166 - 4-180 concludes that "construction of the project would not have a significant adverse impact on local populations, housing, employment, or the provision of community services." This analysis is completely void of long term permanent changes in the local economy. Best practices in cost-benefit analysis discounts short term effects (construction) because they are short term. For this DEIS to be complete, a long term analysis must be included. Even for the short term, the arguments that the impacts would be minor or negligible are not substantiated with evidence from other comparable construction projects.

The report cites potential benefits to the economy that are the short term (temporary) benefits to

CO16-3 See the responses to comments PM1-6 and PM3-102.

CO16-4 See responses to comments CO9-1 through CO9-25.

CO16-5 Comment noted.

CO16-5 (cont'd) local sales tax revenue and payroll tax revenue. Payroll tax revenues are only relevant if these are new jobs and not simply jobs that are moving from elsewhere in the economy. Again, long term impacts are completely missing. Also missing from the socioeconomics section are the economic impacts on recreation and wildlife. While these are addressed in other places in the document, the important economic costs are missing from the study. To ignore these economically important costs of the project is fundamentally flawed.

Most importantly, the expected impacts on property values as outlined in the DEIS is biased and misses much of the literature on the effects on property values as outlined in detail below. Given the vast literature on the impacts of these types of projects on property values, it is my expectation that the ASP project will negatively impact residential and recreation land property values.

IV. THE ASP WILL DIMINISH PROPERTY VALUES

CO16-6 The DEIS states in section 4.9.4 (pp4-173-174) that there is no indication that the ASP will have an adverse impact on property values adjacent to or near the ASP. There is a substantial **peer-reviewed** literature that finds quite the opposite. I provide a review of that literature here. The DEIS cites to several studies which purport to demonstrate that no such adverse affects on property value exist. However, this conclusion is severely flawed, as is the methodology used in the studies cited in the DEIS is not based on accepted statistical practice. Additionally, the DEIS has chosen to cite only those studies that support this claim, several of which have been prepared by industry that stands to benefit from the pipeline. For FERC not to consider the entire body of literature on this subject, and especially to utilize peer reviewed journal articles, is inherently flawed. In particular, the DEIS, relies on two studies contracted by the Interstate Natural Gas Association of America Foundation (INGAA) to make its case that the effect on property values will be negligible. The most recent (2016) study was prepared by Integra Realty Resources as contracted for by INGAA. (The earlier study was contracted for with Allen, Willliford and Seale, Inc. Rights of Way Valuations.) To the best of my knowledge, neither of these studies was peer reviewed. Clearly this is not an objective study if paid for by a party in favor of expansion. The DEIS is flawed in that regard with its presentation of only a subset of studies. For the DEIS to cite such a study without also citing studies that support alternative scenarios is incomplete. Regardless, the study contains numerous flaws. Two of the study sites they use utilize data from the time period 2008-2015. This time period contains a large downturn in real estate market conditions. The study does not adjust for this structural break in market conditions. The comparison of means method is especially simplistic and does not prove the impacts of location on property values. The statistical (regression) analysis is also extremely simplistic. They do not calculate the marginal willingness to pay for location.

In economics, the accepted methodology is a hedonic property value analysis, which estimates sales price as a function of home characteristics. The INGAA study does present a simple linear estimation of home prices, but neglects the locational characteristics including census characteristics such as school quality and crime rates, land use characteristics, distance from the pipeline, etc that have been shown to strongly influence property values. The estimations the

CO16-6 We disagree. As described in section 4.9.5 of the EIS, based on reviews of the literature, FERC found no consistent information suggesting that the presence of a natural gas pipeline easement would decrease property values, although no study can predict valuation changes for any specific property. Also see the response to comment PM1-177.

CO16-6 (cont'd)

INGAA study reports very likely suffers from omitted variable bias since they do not include many of the important locational features that homebuyers look for.

There is now a fairly extensive peer reviewed body of literature that supports the claim that environmental amenities such as clean, free-flowing rivers, good air quality, open space, etc. provide positive value, including to local property values. Conversely, locations in proximity to environmental disamenities such as dirty rivers, landfills, hazardous waste sites, and sewage treatment plants, reduce property values. People are willing to pay more to be further away from those negatives.

With respect to pipelines, the literature is indeed mixed, however, recent literature has found significant negative impacts, and in fact, when homeowners have been made aware of the pipeline as in the ASP case, the (negative) impacts are larger. Hansen et al., 2006 use the hedonic property valuation method to estimate the effect on housing prices of a fuel pipeline in Washington State. While they find no effect prior to a 1999 rupture and explosion, they find a significant negative effect after the explosion suggesting that perceived risk can impact property values. This effect diminishes as you get farther from the pipeline, which is consistent with other literature that uses distance as a dependent variable. Location is a very important factor in real estate valuation.

Hernstadt and Sweeney (2016) examine the opposition to pipeline expansion and find that most homeowners who live near a pipeline are unaware of its existence, but when made aware of it, the effects on property values go from neutral to negative. In fact, using San Bruno housing data (pre and post explosion and post information letter), they find a significant capitalization effect (negative) on house prices. They find there is ambivalence to the current pipeline network, but a strong and negative reaction to proposed pipeline projects. The information of the existence of a pipeline has a negative impact on property values. The work of Freybote and Fruit's (2016) work supports this theory. They find (using hedonic property value models) that higher perceived risk from underground natural gas transmission pipelines reduces property values. This work suggests that, given the awareness of the ASP proposal in the region, the impacts on property values will be significant and negative. Hedonic property value models of water quality support this claim. Home buyers are frequently unaware of local water quality conditions, but when made aware, the impact on property values is negative.

Muehlenbachs et al. (2015) use data from Pennsylvania to estimate the impacts on property values from shale gas development. They find large negative impacts on nearby groundwater-dependent homes. They do find that homes with water provision exhibit small positive impacts. This result is important when considering siting and impacts on groundwater. This paper was published in the *American Economic Review*, one of the top 3 journals in Economics.
Winkler and Gordon (2013) examine the impact of the BP Gulf Oil Spill on property values. Not only do they find a 7%-8.8% decline in condominium prices, they find a 50% decline in sales volume. Boxall et al., 2005, find that oil and sour gas facilities located within 4 km of rural residential properties significantly and negatively affect their sale price.

CO16-6 (cont'd) All of these studies are consistent with the extensive literature on the effect of environmental disamenities on property values. Simons et al. (2006) provides a nice summary. They present a meta-analysis of 75 peer reviewed studies that look at the effects on property values of environmental disamenities a such as leaking underground storage tanks, superfund sites, landfills, water and air pollution, power lines, pipeline ruptures, nuclear power plants, animal feedlots and several other urban nuisance uses. Unsurprisingly, all of these environmental characteristics have a negative impact on property values.

On the other hand, environmental improvements including dam removal can improve property values. In some of my own work (Lewis et al., 2008), we find a sizable penalty for homeowners living near industrial dam sites, but that penalty disappears post dam removal. Provencher et al., (2008) also finds that small dam removals improve nearby property values. In related work, in a study from Oregon, Netusil (2006) looks at the economic effects of riparian corridors and upland wildlife habitat, found strong evidence that property owners place a premium on lots with habitat providing the highest ecological values and a discount on lots with lower-valued habitat. The economic benefit of being adjacent to a rivers and streams and high-quality riparian corridors even extended to properties up to ½ mile from the valued resource. In her more recent work, Netusil (2013) also find that environmental amenities have a positive impact on property values. In an early work on this topic, Streiner and Loomis (1995) present results from a hedonic analysis of urban stream restoration projects using seven projects located in three counties in California. The authors' estimate that restoration projects that reduce flood damage and improve fish habitat increase property values by 3 to 13 percent of the mean property price in the study area.

In Dr. Lewis's opinion, these studies offer convincing evidence of, what seems in hindsight, an obvious conclusion-- people place a higher value on property adjacent to environments that are more natural and perceived as being more healthy and vibrant.

Given the evidence in the peer reviewed literature, the ASP can be expected to negatively impact property values in the short term and very likely in the long term as well.

VI. REFERENCES CITED IN DR. LEWIS'S ANALYSIS

Boxall, Peter C., ing H. Chan, Melville L. McMillan. 2005. The impact of oil and natural gas facilities on rural residential property values: a spatial hedonic analysis. *Resource and Energy Economics*, vol. 27, Issue 3, October pp. 248-269, ISSN 0928-7655, http://dx.doi.org/10.1016/j.reseneeco.2004.11.003.

Freybote, Julia and Eric Fruits. 2015. Perceived Environmental Risk, Media, and Residential Sales Prices. *Journal of Real Estate Research*: vol. 37, No. 2, pp. 217-244.

Hansen, Julia, Earl D. Benson and Daniel A. Hagen. 2006. Environmental Hazards and Residential Property Values: Evidence from a Major Pipeline Event doi: 10.3368/le.82.4.529. Land Economics November vol. 82 no. 4 529-541.

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Hernstadt, Evan and Richard Sweeney. 2016 draft paper. Pipeline Incidents and Local Aversion to Infrastructure Expansion.

Lewis, Lynne Y., Curtis Bohlen, and Sarah Wilson. 2008. Dams, dam removal, and river restoration: A hedonic property value analysis. *Contemporary Economic Policy* vol.26.2: 175-186.

Muehlenbachs, Lucija, Elisheba Spiller and Christopher Timmins. 2015. The Housing Market Impacts of Shale Gas Development. *American Economic Review*, 105(12): 3633-59.

Netusil, Noelwah R. 2013. Urban Environmental Amenities and Property Values: Does Ownership Matter? *Land Use Policy* 31: 371-377.

Netusil, Noelwah R. 2006. Economic Valuation of Riparian Corridors and Upland Wildlife Habitat in an Urban Watershed *Journal of Water Research and Education* 134 (July): 39-45.

Provencher, Bill, Helen Sarakinos, and Tanya Meyer. 2008. Does small dam removal affect local property values? An empirical analysis. *Contemporary Economic Policy* vol.26.2: 187-197.

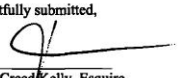
Simons, Robert and Jesse Saginor. *2006.* A Meta - Analysis of the Effect of Environmental Contamination and Positive Amenities on Residential Real Estate Values. *Journal of Real Estate Research*: 2006, Vol. 28, No. 1, pp. 71-104. doi: 10.3368/le.89.4.614Land Economics November 1, 2013 vol. 89 no. 4 614-631

Winkler, Daniel T. and Bruce L. Gordon. 2013. The Effect of the BP Oil Spill on Volume and Selling Prices of Oceanfront Condominiums. doi: 10.3368/le.89.4.614 *Land Economics* November. vol. 89 no. 4 614-631

VII. CONCLUSION

For the reasons discussed herein, FERC must not move forward on the ASP until it has cured the deficiencies in its DEIS.

Respectfully submitted,



Joseph Creed Kelly, Esquire
Law Office of Joseph Creed Kelly

Counsel for AMP Creeks

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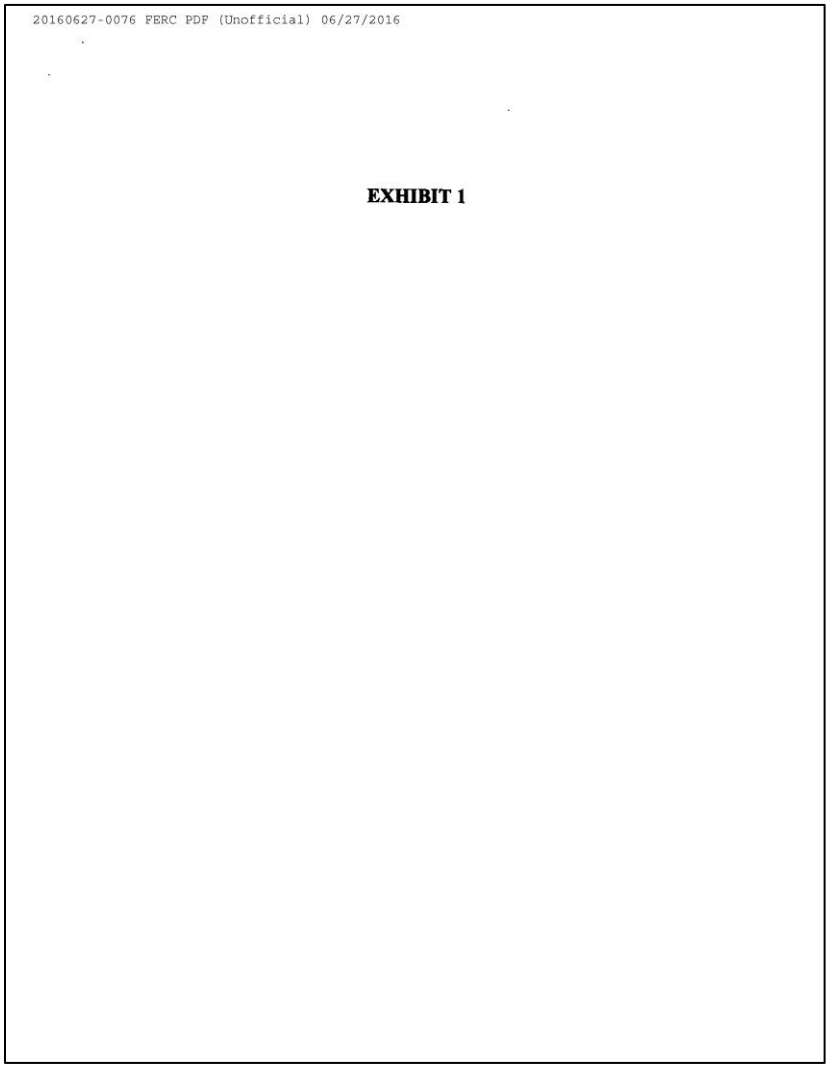

20160627-0076 FERC PDF (Unofficial) 06/27/2016
EXHIBIT 1

Delaware Riverkeeper Network * Schuylkill Pipeline Awareness

June 21, 2016

Mr. Nathaniel J. Davis, Sr.,
Deputy Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street NE, Room 1A
Washington, DC 20426
FERC Docket No: *CP15-138-000 www.ferc.gov*

Provided via web portal at www.regulations.gov on June 22, 2016 and provide on FERC Docket at www.ferc.gov (Docket No CP15-138-000)

Re: FERC Lebanon Public Hearing and Comment on Draft FERC EIS (DEIS) on Atlantic Sunrise Pipeline – Docket ID: FERC-2016-0660 www.regulations.gov

Dear Mr. Davis:

Concerned residents of Schuylkill Pipeline Awareness (SPA) and staff of Delaware Riverkeeper Network (DRN) attended the Lebanon County Joint FERC/Army Corps of Engineers (Corps) public hearing on the Draft EIS (DEIS) last week. Residents from Schuylkill County who will be directly and indirectly impacted drove as far as 1.5 hours to get to this public hearing. Many testifying believed the DEIS and FERC process was grossly inadequate and expressed the need for a longer comment period by FERC and additional hearings in their county. SPA and DRN present were shocked to understand from the FERC representative near the close of the meeting that an extension likely will not be made of the official public comment on the FERC DEIS despite the community and many comments requesting this extension since the release of the DEIS on May 12, 2016.

This is grossly inappropriate of FERC and does not allow due process for the public to weigh in especially for a 197 mile long pipeline that would impact 10 counties of the state of Pennsylvania. Having only 45 days for public review of this lengthy yet incomplete document is too little time for the communities that are harmed to be able to weigh in effectively. We also understand from the DEIS that much of the data in the **EIS is based on remote-sensed data**. This means that the information provided is not complete yet FERC is forcing the public to comment on incomplete information by providing this sharp deadline of June 27 at 11:59pm. This is a failing of the public process.

Furthermore, given that the Chapter 105 comment has been extended by the Pennsylvania Dept. of Environmental Protection (DEP) for another 60 days – adding a total of at least 90 days for residents to review this related application on the harms to wetlands and waterbodies – it

would only be fair for FERC to announce a similar extension. With the following devastating impacts of this pipeline cited in the FERC DEIS, and other agency extensions at a bare minimum FERC needs to provide more time and at best deny the certificate outright due to the evident harms or redo the EIS to incorporate all the harms this project would bring:

- Due to recent failures, explosions and problems, the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) is currently proposing vast changes to its safety regulations for the nation's to discuss the proposed gas transmission pipelines – public comment is open until July 7, 2016. How can FERC another federal agency proceed with this harmful project while new protections are being considered? The project should be put on hold, public period extended, to incorporate these sorely needed changes at a minimum. All members of the public can submit comments by any of the following methods referencing Docket No. PHMSA-2011-0023: E-Gov Web Site: http://www.Regulations.gov. This site allows the public to enter comments on any Federal Register notice issued by any agency. Fax: 1-202-493-2251. Mail: DOT Docket Management System: U.S. DOT, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001.

- **The DEIS Does Not Represent nor Cover All of the Harms the Atlantic Sunrise Pipeline Would Cause to the environment and communities**. The calculations in the FERC DEIS are grossly understated despite litigation and court decisions ruling against FERC practices by the courts urging FERC to consider ALL Cumulative harms and to stop segmentation practices that piece meal harms and ignore the big picture (*Delaware Riverkeeper Network vs. FERC*). It is unacceptable that FERC in its EIS yet again for this proposed pipeline, is not evaluating the complete build out and gas footprint this pipeline would create in the shale fields as well as its connection to other gas infrastructure including export facilities. These impacts need to be added into the EIS and another version of the EIS provided in the future that adequately accounts for all of these cumulative harms.

- FERC's DEIS states that **29 percent of the surface waters to be cut by the pipeline were only identified using remote sensing.** This level of care and desk top review without verification in the field for Pennsylvania streams, forests and properties is woefully insufficient and will cause pollution and harm to our communities. **It is unlawful to issue permits based on remote sensed data.**

CO16 – The Accokeek (cont'd)

- According to the FERC DEIS the AS pipeline **would cut across 58 High Quality streams and a total of at least 331 waterbodies and 250 wetlands** would be cut (approximately 50.4 wetland acres).

- According to the FERC DEIS, **45 interior forests would be cut across** – yet there appears to be no acknowledgment of the science that at least 300 feet on either side of a forest cut causes continued and permanent harm to the forests. Acreages are therefore not likely accurate in the DEIS.

- Abandoned mine drainage, sink holes, possible dewatering of streams, mine subsidence, mine fires, and other hazards are also concerns in areas the pipeline would cut where anthracite mining has been conducted – according to the FERC Draft EIS, 3.9 miles of the proposed pipeline could be in a high, moderate or low risk for subsidence which could cause potential and irreparable harm to streams, wetlands and groundwater resources.

- The AS route would cut across **443 tracts of agricultural lands enrolled in the Clean and Green Program** which uses PA tax payer dollars to preserve vital farmland and the rural quality of our region.

- Transco/Williams identified 410 architectural resources and 31 archeological sites within the direct path of the proposed pipeline. Transco continues to strong arm SHPO to remove some of these historic treasures from stronger protections to build their pipeline (State Historic Preservation Office). And again many surveys required have not yet been conducted so the public does not have complete information at this time to comment fully on these harms.

- In addition to sensitive waterbodies, **impaired streams would also be further impacted by this project, adding injury from pipeline cuts to at least 42 streams** of which many are already polluted and on PA's dirty water list (303d list) already due to siltation problems which is often a direct impact from pipeline cuts with open trench wet crossings. Blasting of at least 20 waterbodies is also being proposed.

These are just some of the impacts and inadequacies that were identified with a quick review of this over 1,300 page document, yet FERC believes these harms are insignificant. With such devastating impacts, it is, at a bare minimum, FERC's obligation to extend this comment period and to in fact announce this extension before the very end of the original date of June 27 at 11:59pm. The community deserves more time to comment and by closing this short comment period while yet the FERC representative at the Lebanon hearing stating comments will be

considered by FERC after the comment period closes, FERC is confusing the public and harming the community. Will those comments after the deadline be part of the public record? What does this mean that comments will be considered after the comment period? What recourse does the public have if FERC closes the comment period and their concerns are ignored? What requirements will FERC have to respond to those comments after the comment period closes? **We look forward to a response promptly by FERC regarding its intention on the comment period and we believe the community deserves a response and clarity before the June 27th 11:59pm deadline as a courtesy.**

In the meantime, these concerns below we believe show significant harm and we disagree with FERC of its conclusions that harms will be insignificant – comments below only apply to Schuylkill County sections of the CPL South Line due to time constraints but being FERC may not provide an extension we share these points now as they relate to Schuylkill County impacts that the community has expressed major concern over. **SPA and DRN request FERC reject the certification of this detrimental project or redo the DEIS with complete and cumulative consideration of the harms that have been grossly missed and then reopen a new public comment period for a cumulative EIS, and extend all public comment adequately.**

- At Mile Post (MP) 67.7 and MP 80.5 – 2 aboveground MLVs (mainline valves) – Eldred Township and Pine Grove Township – these above ground valve stations often leak fugitive methane emissions causing air pollution to our area and climate impacts worldwide. Fugitive emissions also appear to be grossly underestimated especially with our knowledge of methane as a powerful Climate Forcer. 2012 and 2015 air sampling and studies conducted by Drexel University indicates **buried pipelines sampled had elevated methane concentrations in the air for 18% of the measurements taken**; background concentrations of methane have substantially increased (despite decrease in drilling, yet increase in production); and emissions from transmission related infrastructure are variable but significant (Dr. Peter DeCarlo, Clean Air Council webinar on Air Impacts, June 21, 2016). Recent ozone regulations also show major exceedances of Pennsylvania's air standards for ozone. For example on June 20th, 2016, Pennsylvania DEP data indicated violations of ozone at the 8-hour 70 ppm ozone standard for air stations located in the following counties: Bucks, Chester, Lehigh, Northampton, Montgomery, Delaware, and Philadelphia (it's important to note not all counties are tested). Recent improvements in methane detection also indicate far more leakage than what the industry or FERC appears to account for:

- Bedrock conditions along 70% of the route for CPL South are shallow which means **BLASTING** may have to occur to dig and blast bedrock to dig the pipeline trench. **This**

CO16 – The Accokeek (cont'd)

also means that top soils are fragile and very thin and the pipeline will cause major disruption to these delicate soils. This is not addressed fully in the EIS.

- **Endangered bog turtle** - In Schuylkill County it appears that though parts of the pipeline would cut across the Swatara Watershed where bog turtle, a federally endangered species have been found, FERC and FWS (fish and wildlife service) is sherking responsibility to demand bog turtle survey be done for this endangered species in Schuylkill County full cloth. This is unacceptable being that there are known occurrences of bog turtle in Schuylkill County as recent at 2007.

- **Hunting and fishing impacts on State Game Land 132** CPL South would cross Pennsylvania SGL 132 between MPs 78.9 and 79.7 in Schuylkill County collocated with an existing oil pipeline right-of-way. A total of 22.9 acres of SGL 132 land would be affected during construction, including 7.8 acres of open land on the existing oil pipeline right-of-way and **15.1 acres of upland mature forest** outside of the maintained right-of-way. Hunters, hikers, and backpackers come from far away and nearby to recreate and enjoy Schuylkill County lands yet FERC is not considering these impacts fully. With large tracts of Schuylkill County forests harmed by coal mining, these increased harms to what land remains intact is an insult to our community that already suffers from past exploitation of the fossil fuel industry.

- **Hunting and fishing impacts on Pennsylvania State Game Land 084** - CPL South would cross Pennsylvania SGL 084 between MPs M-0194 1.0 and MP 83.4 along an existing electric transmission line right-of-way in Schuylkill and Northumberland Counties. A total of 26.5 acres of SGL 084 land would be affected during construction, including 7.2 acres of open land on the existing electric transmission line right-of-way and 19.6 acres of upland forest outside of the maintained right-of-way. Following construction, Transco would maintain an additional 5.1 acres of permanent right-of-way adjacent to the existing right-of-way through SGL 084. **About 7.3 acres of upland forest would be permanently converted to open land** for operation of CPL South. Hunters, hikers, and backpackers come from far away and nearby to recreate and enjoy Schuylkill County lands yet FERC is not considering these impacts fully. With large tracts of Schuylkill County forests harmed by coal mining, these increased harms to what land remains intact is an insult to our community that already suffers from past exploitation of the fossil fuel industry.

- The Appalachian Trail extends west to east across the length of Lebanon County, Pennsylvania. The proposed CPL South route would cut across the Appalachian Trail at

CO16 – The Accokeek (cont'd)

MP M-200 0.1 on land owned by the Commonwealth of Pennsylvania and managed by the PGC within SGL 211. This is yet another time that this important trail is being disregarded by FERC for a for profit pipeline.

- **Endangered Bats** - FERC's analysis does not protect federally listed bat species like the northern long eared bat and Indiana bats that have been documented at 5 portals from the Abandoned Mine Land Inventory in Schuylkill County; FERCs EIS states at least 682 acres of suitable habitat for Indiana bats will be disturbed by the pipeline (cutting of forests where bats roost). An important hibernation area of bats was also documented by Williams/Transco in Schuylkill County during January 2015 surveys – yet FERC says there will be no long term impacts to these federally listed species that are important for our agriculture community and natural pest control. Transco completed mist netting surveys for bats at 312 sites. Of the 312 sites surveyed, 277 sites were targeted and required for survey for the current project alignment. All 277 target sites, which represents 100 percent of the current alignment, were surveyed. **Transco captured 70 northern long-eared bats during the mist-netting surveys. Fifty-two of these captured northern long-eared bats were radio-tagged. All but one of the northern long-eared bats were captured along the pipeline route;** one was captured along an access road. Plus the surveys and complete reports have not yet been filed – so again how can the public evaluate all information if Transco is still not completed these required reports? FERC's rationale of this project "*may affect, but it not likely to adversely affect the Indiana bat*" is false and not in line with the federal endangered species act.

- **Bald Eagles** – bald eagles are on the rise in Schuylkill County and they are to be protected by the Migratory Bird Act. At least one bald eagle nest in Schuylkill County was mapped by Transco within a 0.5 miles of the pipeline route. With blasting planned for much of this CPL South route, it is highly likely this nest would be impacted. Fish and Wildlife Service National Bald Eagle Nest guidelines note distances of: 330 feet if the activity would not be visible from the nest; 660 feet if the activity would be visible from the nest; and **0.5 mile from blasting activities**. This blasting at this area would directly impact Schuylkill County's bald eagle populations that have finally started to recover and call Schuylkill County their home.

- **Steep Slopes – 49.8 miles of the pipelines 197.7 miles are along steep slopes – about 25% of the entire pipeline route!** On CPL South that would run through Schuylkill County— 22.8 miles of steep slopes to be impacted with a total of 35.8 miles of 15-30 % steep slopes to be impacted for the entire AS route. And 14 miles of slopes greater than 30% --- that is a total of 49.8 miles of this pipeline crossing steep slopes (that's --- large

chance of erosion and blowouts and pollution into local streams as have been documented time and time again when forests are cut and soils are eroded during heavy rain storms along similar pipeline construction routes in PA). One company was fined over $300,000 by PA DEP for pollution to nearby waterways (no fines issued by FERC). In this instance the pipeline company had a 92% failure rate! This small fine is a slap on the wrist to these companies with such a gross failure rate and meanwhile the community and local water quality suffers permanent harm.

- **Old Landfill ID'd at MP 66.8** –it was verified under the PADEP landfill database (2015) – old landfill – therefore FERC recommends Transco provides mitigation measures to reduce contamination. In Schuylkill County, there has been much illegal dumping over the decades. What has FERC required of Transco to document similar rural community harms that may be lurking below the surface along the route? These investigations are missing or grossly inadequate from the DEIS.

- **Preserved lands in Schuylkill Co to be cut by Atlantic Sunrise** - 5 eased lands in Schuylkill County are ASA (Ag preserved lands) – encompassing 14.8 acres of this protected ag land. Likely this land was helped to be preserved by taxpayers.....who wanted the land preserved not destroyed by a gas pipeline.

- **Nearby Swatara Creek Water Trail** The Swatara Creek Water Trail is a 42-mile-long segment within Swatara Creek extending from Jonestown (Lebanon County) to the PFBC's Middletown access in Middletown (Dauphin County). The PFBC designates water trails; however, individual trails are created and maintained by volunteers, property owners, and associations (PFBC, 2005). Water trails are boat routes suitable for canoes, kayaks, and small motorized watercraft. Like conventional trails, water trails are recreational corridors between specific locations. Water trails are comprised of access points, boat launches, day use sites, and overnight camping areas (PFBC, 2014). **CPL South would cross Swatara Creek near MP 49.3 on a parcel of land owned by the Commonwealth of Pennsylvania in Lebanon County. The waterbody is about 145 feet wide at the crossing site, which is about 0.5 mile from the nearest access point.**

For all of these reasons we reiterate that we urge FERC reconsider its conclusions and deny the certification of this pipeline project, redo the DEIS to include all of the cumulative harms and complete studies that have been missed, not yet filed or under-represented in the current DEIS and reissue another draft with a longer comment period, or at minimum expand the comment period on this DEIS so a complete review by the public is allowed. Thank you for your time and consideration.

Sincerely,

Leah Zerbe
Schuylkill Pipeline Awareness

Faith Zerbe
Delaware Riverkeeper Network

CO17 – The Accokeek

ORIGINAL

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC	)	**Docket No. CP15-138**

MOTION TO EXTEND PUBLIC COMMENT PERIOD, MOTION TO HOLD ADDITIONAL PUBLIC MEETINGS, AND MOTION TO DENY TRANSCO'S REQUEST TO PLACE CERTAIN INFORMATION IN A PRIVILEGED, NON-PUBLIC FILE

Pursuant to 18 CFR 385.212, The Accokeek, Mattawoman, Piscataway Creeks Communities Council ("AMP Creeks"), by and through undersigned counsel, hereby submits its motion to extend the public comment period in the above-captioned matter. AMP Creeks also moves herein to hold additional public meetings in areas affected by the supplemental information filed by Transcontinental Gas Pipe Line Company, LLC ("Transco") on June 24, 2016 in the above-captioned matter. Finally, AMP Creeks requests that FERC deny Transco's request contained in its supplemental filing to place site-specific information regarding threatened and endangered species in a privileged, non-public file. The public should not be denied the right of meaningful review and comment on the information contained in Transco's supplemental filing.

CO17-1 **I. THE PUBLIC COMMENT PERIOD SHOULD BE EXTENDED BY THIRTY DAYS TO ALLOW THE PUBLIC AND INTERESTED PARTIES TO REVIEW AND COMMENT ON INFORMATION IN TRANSCO'S SUPPLEMENTAL FILING.**

AMP Creeks urges the Commission to extend its public comment period in the above-captioned matter until July 27, 2016 in order to give the public adequate time to review and comment upon Transco's supplemental information. Transco filed its supplemental information

CO17-1 See the response to comment PM1-130.

CO17 – The Accokeek (cont'd)

CO17-1 (cont'd) on Friday afternoon, June 24, 2016. Public comments in this matter close on Monday, June 27, 2016. Transco's filing allows the public and interested parties less than one business day to review and comment on the supplemental information.[1] This time frame is wholly inadequate and frustrates the purpose of the public comment period regarding regulatory action.[2] The failure to extend the public comment period will effectively deny the public a meaningful review of the ASP plan.

CO17-2 **II. ADDITIONAL PUBLIC MEETINGS ARE NECESSARY FOR THE GEOGRAPHIC AREAS AFFECTED BY THE PROPOSED CHANGES TO THE ASP PLAN CONTAINED IN TRANSCO'S SUPPLEMENTAL FILING.**

AMP Creeks requests that FERC announce additional public meetings in geographic areas affected by the proposed ASP changes contained in Transco's supplemental filing. Many members of the public and interested parties have thus far submitted comments raising important issues about the impact of the ASP on human health, local economies, property values, property rights and environmental habitats. Transco's supplemental filing will likely raise new issues, given that the filing contains changes to the ASP plan. These changes include the alteration of the proposed pipeline route which require, at a minimum, additional environmental impact evaluation in the geographic areas impacted by the proposed changes. As such, AMP Creeks also requests new public meetings in the areas identified in Transco's supplemental filing. AMP Creeks hereby incorporates by reference Transco's supplemental filing. Information regarding the specific affected geographic areas is found in the supplemental filing.[3]

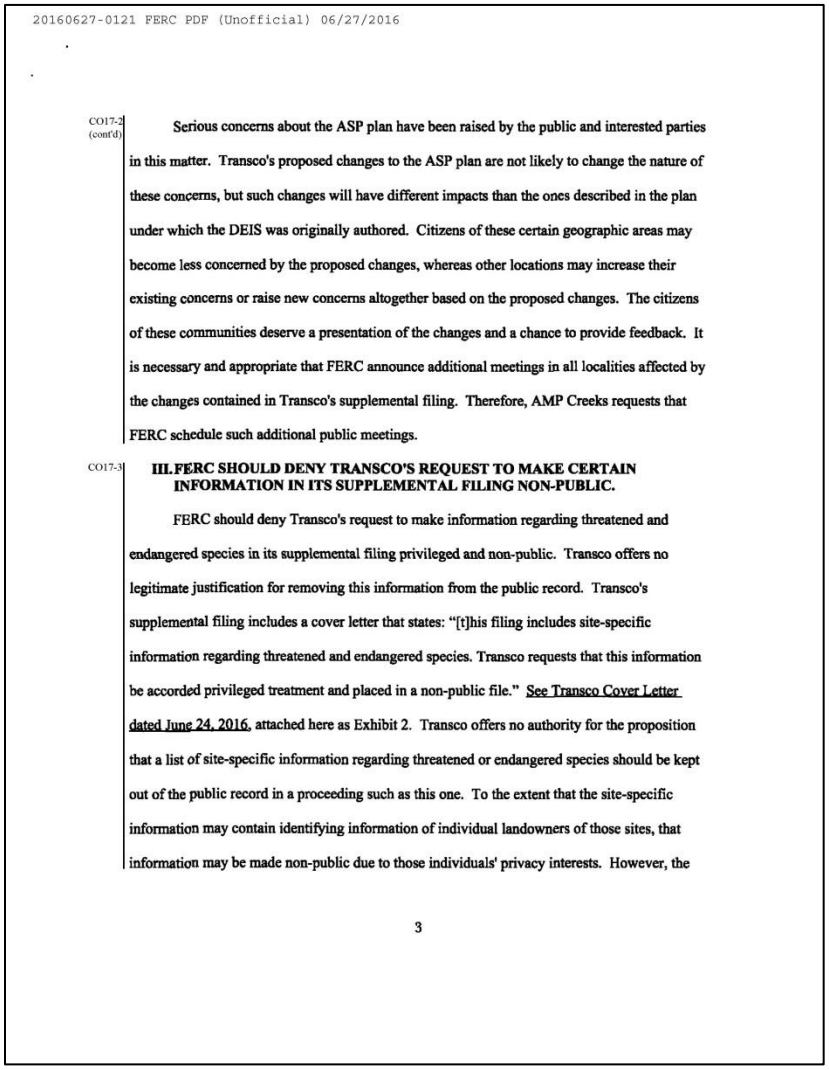
1 AMP Creeks received service of the supplemental information at 5:19 pm on June 24, 2016. See Electronic Service Notification attached here as Exhibit 1.

2 AMP Creeks itself has not been able to review the substance of the supplemental information, including proposed changes to the ASP plan contained therein. AMP Creeks files its public comments on the DEIS concurrently with this motion, though those comments do not include comments on Transco's supplemental filing because parties were not given adequate time to review the supplemental information.

3 Again, AMP Creeks has not been given adequate time to review and specify the geographic areas affected by the supplemental information. As such, it references the supplemental filing itself for the list of these areas.

CO17-2 See the response to comment PM1-130.

CO17 – The Accokeek (cont'd)



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CO17-2 (cont'd) Serious concerns about the ASP plan have been raised by the public and interested parties in this matter. Transco's proposed changes to the ASP plan are not likely to change the nature of these concerns, but such changes will have different impacts than the ones described in the plan under which the DEIS was originally authored. Citizens of these certain geographic areas may become less concerned by the proposed changes, whereas other locations may increase their existing concerns or raise new concerns altogether based on the proposed changes. The citizens of these communities deserve a presentation of the changes and a chance to provide feedback. It is necessary and appropriate that FERC announce additional meetings in all localities affected by the changes contained in Transco's supplemental filing. Therefore, AMP Creeks requests that FERC schedule such additional public meetings.

CO17-3 **III. FERC SHOULD DENY TRANSCO'S REQUEST TO MAKE CERTAIN INFORMATION IN ITS SUPPLEMENTAL FILING NON-PUBLIC.**

FERC should deny Transco's request to make information regarding threatened and endangered species in its supplemental filing privileged and non-public. Transco offers no legitimate justification for removing this information from the public record. Transco's supplemental filing includes a cover letter that states: "[t]his filing includes site-specific information regarding threatened and endangered species. Transco requests that this information be accorded privileged treatment and placed in a non-public file." See Transco Cover Letter dated June 24, 2016, attached here as Exhibit 2. Transco offers no authority for the proposition that a list of site-specific information regarding threatened or endangered species should be kept out of the public record in a proceeding such as this one. To the extent that the site-specific information may contain identifying information of individual landowners of those sites, that information may be made non-public due to those individuals' privacy interests. However, the

3

CO17-3 In accordance with the Commission's regulations at 18 CFR 388.12(f) and 388.112, some sensitive resources information is not disclosed to the public in order protect those resources. Information filed as non-public (i.e., privileged and confidential or critical energy infrastructure information) has been analyzed by, and is on record with the Commission. Any person who is a participant in the proceeding or has filed a motion to intervene or notice of intervention in the proceeding may make a written request to the filer for a copy of the complete, non-public version of the document by following the procedures at 18 CFR 388.112(b)(2).

CO17-3 list of site-specific species that may be adversely impacted is not subject to privacy protections. Moreover, if FERC makes this information non-public, the public will be denied a meaningful review of the potential impact of the ASP on these species. Transco's request to keep this information out of the public record is dubious at best. FERC must deny Transco's request in order to maintain the transparency required by law in regulatory proceedings.

IV. CONCLUSION

For the reasons stated above, AMP Creeks requests that FERC take the following actions:

a. Extend the public comment period in this matter until July 27, 2016;

b. Announce additional public meetings in the geographic areas affected by Transco's proposed changes to the ASP plan as contained in its June 24, 2016 supplemental filing;

c. Deny Transco's request to place information regarding endangered species and threatened species in a privileged, non-public file.

Dated: June 27, 2016

Respectfully submitted,

Joseph Creed Kelly, Esq.
Law Office of Joseph Creed Kelly
1712 Eye Street NW
Suite 915
Washington, DC 20006
Ph/Fx: (202) 540-9021
jck@jcklegal.com

CERTIFICATE OF SERVICE

I certify that on June 27, 2016 a copy of the foregoing notice was served via email on each party noted on the official service list compiled by the Secretary in this proceeding.

Respectfully submitted,

Joseph Creed Kelly, Esq.

CO17 – The Accokeek (cont'd)

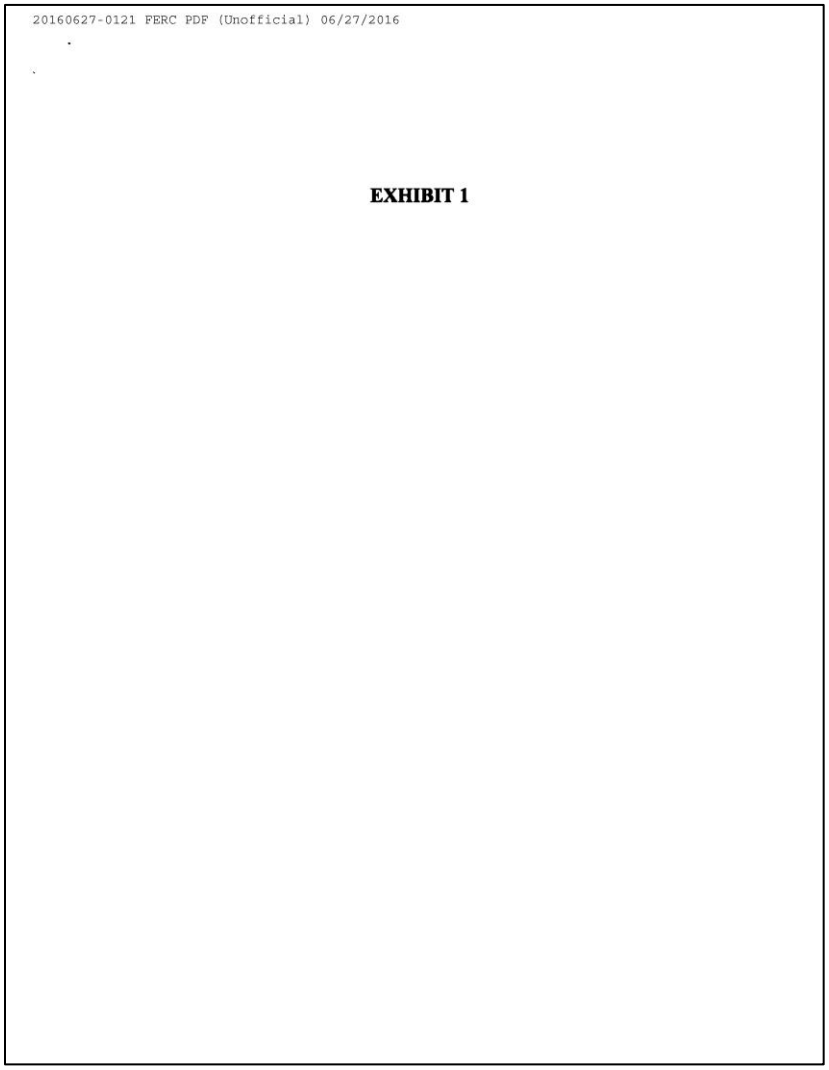
20160627-0121 FERC PDF (Unofficial) 06/27/2016

EXHIBIT 1

Document Service in Docket No. CP15-138-000

Subject: Document Service in Docket No. CP15-138-000
From: Transco Tariff <Transco.Tariff@Williams.com>
Date: Fri, 24 Jun 2016 21:19:07 +0000
To: Transco Tariff <Transco.Tariff@Williams.com>

Transco has eFiled supplemental information regarding the Atlantic Sunrise Project:
http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20160624-5167

-----Original Message-----
From: 'FERC eSubscription' [mailto:eSubscription@ferc.gov]
Sent: Friday, June 24, 2016 2:26 PM
Subject: Supplemental/Additional Information submitted in FERC CP15-138-000 by Transcontinental Gas Pipe Line Company, LLC,et al.

On 6/24/2016, the following Filing was submitted to the Federal Energy Regulatory Commission (FERC), Washington D.C.:

Filer: Transcontinental Gas Pipe Line Company, LLC
No Organization Found (as Agent)

Docket(s): CP15-138-000
Lead Applicant: Transcontinental Gas Pipe Line Company, LLC
Filing Type: Supplemental/Additional Information
Description: Transcontinental Gas Pipe Line Company, LLC submits supplemental information regarding the Atlantic Sunrise Project under CP15-138. (Supplemental Information / Request)

To view the document for this Filing, click here https://urldefense.proofpoint.com/v2/url?u=http-3A__elibrary.FERC.gov_idmws_file-5Flist.asp-3Faccession-5Fnum-3D20160624-2D5167&d=CwICAw&c=-rOy2AiDSjLZM5Ky932q_A&r=2VbPFT3Jwq511oBIeXXlgmUPg2Ioals7L-N86t7Api8&m=Qw4Mg3nIe9bn-rf--AGbb_FxtuvlTIcBb35FPzXbtd8&s=C3L4N8hPEzG0O2609OJWOcem9sFXtiH-HUXGOsiVFKs&e=

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Please do not respond to this email.
Online help is available here:
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.ferc.gov_efiling-2Dhelp.asp&d=CwICAw&c=-rOy2AiDSjLZM5Ky932q_A&r=2VbPFT3Jwq511oBIeXXlgmUPg2Ioals7L-N86t7Api8&m=Qw4Mg3nIe9bn-rf--AGbb_FxtuvlTIcBb35FPzXbtd8&s=NaT-_DnOfE7WYvEG_6GWX6BbkFq3yuOunjRL_lV_hOU&e=
or for phone support, call 866-208-3676.

1 of 1 6/27/16, 12:05 PM

CO17 – The Accokeek (cont'd)

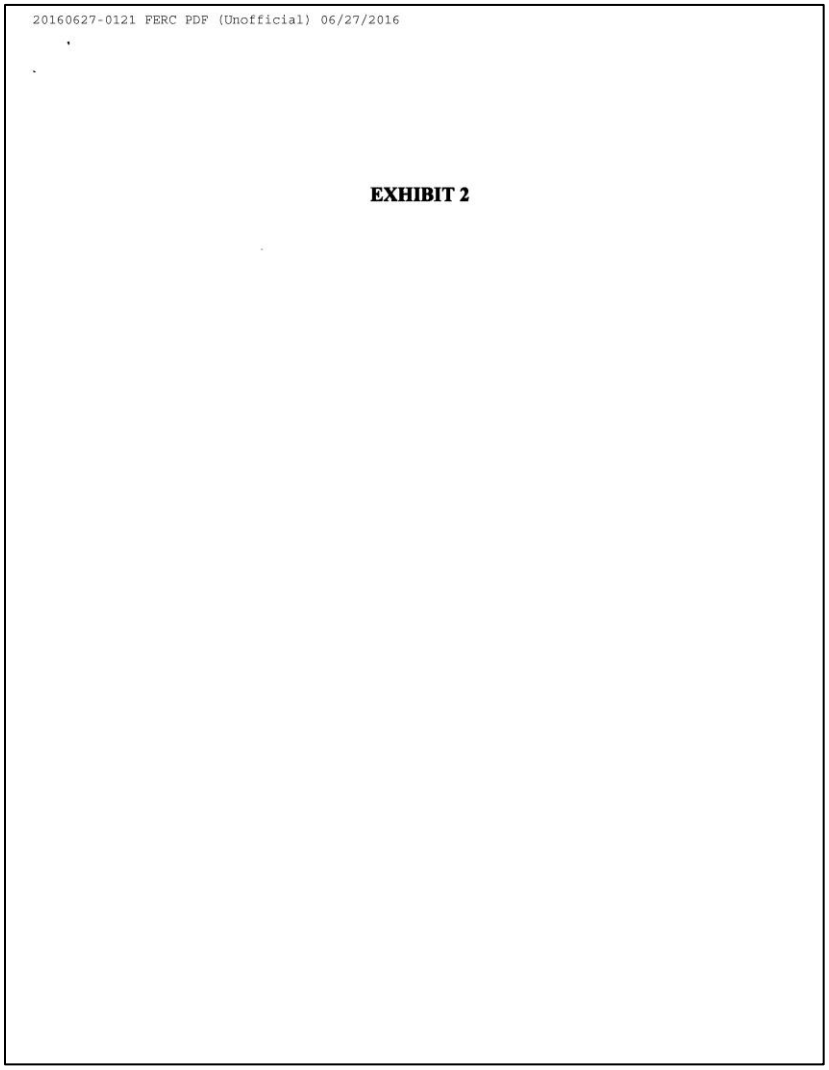
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EXHIBIT 2

CO17 – The Accokeek (cont'd)

Transcontinental Gas Pipe Line Company, LLC
Land, Permits & GIS Department
2800 Post Oak Boulevard (77056)
P.O. Box 1396
Houston, Texas 77251-1396
713/215-2000

June 24, 2016

Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Attention: Kimberly D. Bose, Secretary

Reference: OEP/DG2E/Gas Branch 2
Transcontinental Gas Pipe Line Company, LLC
Atlantic Sunrise Project
Docket No. CP15-138-000
Environmental Report Supplemental Information

Ladies and Gentlemen:

Transcontinental Gas Pipe Line Company, LLC. (Transco) hereby submits the enclosed Supplemental Information Filing regarding the proposed Atlantic Sunrise Project. This submittal includes the following two primary components: 1) responses to recommendations provided by FERC in the Draft Environmental Impact Statement (FERC/EIS-0269D) for the Atlantic Sunrise Project; and 2) an update to information previously submitted in supplemental filings dated June 8, 2015, July 21, 2015, and May 17, 2016.

This filing includes site-specific information regarding threatened and endangered species. Transco requests that this information be accorded privileged treatment and placed in a non-public file. This filing also includes revised landowner line list and mailing lists to reflect the current route and Project workspaces. Transco requests that these lists be accorded privileged treatment pursuant to Exemption 6 of the Freedom of Information Act (5 U.S.C.§552(b)(6)), which exempts from release "files the disclosure of which would constitute a clearly unwarranted invasion of privacy," and that it be placed in a non-public file.

Consistent with § 385.2010 of the Commission's regulations, Transco is serving copies of this filing to each person whose name appears on the official service list for this proceeding.

If you have any questions regarding this filing, please contact Joe Dean at 713-215-3427 or joseph.dean@williams.com.

Respectfully,

Transcontinental Gas Pipe Line Company, LLC.

Joseph Dean
Manager, Environmental Permitting

cc: Commission Staff

CO18 – Marcellus Shale Coalition

MARCELLUS SHALE COALITION™

June 27, 2016

Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Atlantic Sunrise Project – Draft Environmental Impact Statement
Docket #CP15-138-000

To Whom It May Concern:

The Marcellus Shale Coalition (MSC) was formed in 2008 and is comprised of approximately 220 natural gas producer, midstream and supply chain members who are committed to working with local, state and federal government officials, local communities, and other stakeholders to facilitate the development of the natural gas resources in the Marcellus, Utica and related geological formations. Our members represent many of the largest and most active companies in natural gas production, gathering and transmission in the country, as well as the consultants, suppliers and contractors who work with the industry.

CO18-1 The MSC appreciates the opportunity to express its support for the Atlantic Sunrise Project and comment on the Draft Environmental Impact Statement (DEIS). The Marcellus Shale formation has become the most prolific shale gas reserve in the United States, and has elevated Pennsylvania to the second largest natural gas producing state in the nation. This significant increase in production has resulted in a substantial reduction in energy prices, not only across Pennsylvania and the Appalachian region, but across the nation. In Pennsylvania, energy costs have been reduced by over 40% just since 2008, saving residential customers thousands of dollars each year, and commercial and industrial customers significantly more.

To extend and sustain these benefits long-term, it is important that critical infrastructure be developed to transport the available gas resources to residential, commercial and industrial end-users. Additionally, the growing role of natural gas in the nation's electric generation portfolio – a key component of the United States Clean Power Plan – relies upon a stable and predictable infrastructure network to reach high-demand areas. The Federal Energy Regulatory Commission (FERC), in partnership with other federal and state agencies, plays a needed and critical role in the planning, review, construction and oversight of this process.

Economically, the Atlantic Sunrise Project proposes to inject over $1.6 billion into the region's economy, through the planning, design, construction and implementation phases of the project. All told, this economic infusion will help create and support over 8,000 jobs and deliver enough gas to serve the equivalent of 7 million homes.

Additionally, pipelines have been proven to be the safest and most reliable manner in which to deliver energy resources to end-use customers. And the development of this infrastructure is

24 Summit Park Drive • 2nd Fl • Pittsburgh PA 15275 | P 412.706.5160 | F 412.706.5170 | www.marcelluscoalition.org

CO18-1 Comment noted.

CO18 – Marcellus Shale Coalition (cont'd)

CO18-1 (cont'd) essential to furthering the goal of enhancing our nation's energy security, diversifying our energy portfolio, and protecting our environment and natural resources.

The comprehensive DEIS prepared by FERC, in consultation with the United States Army Corps of Engineers, concluded that this project would have a "less-than-significant" environmental impact through the implementation of mitigation measures proposed both by the project sponsor, Transco, and FERC's environmental review staff. This conclusion is supported by several factors, including placement of up to 28% of the proposed pipeline within or adjacent to existing energy corridor rights-of-way.

Additionally, significant steps would be taken to mitigate any impacts to natural, historical and cultural resources, while a robust regulatory oversight regime at the state and federal level will ensure strong compliance with all applicable erosion and sediment control; wetland protection; water and air quality standards.

It is imperative that our nation move forward with the authorization and development of key, critical energy infrastructure. The intensive evaluation of the Atlantic Sunrise Project application, contained in the DEIS, demonstrates that this can be done in an environmentally safe and responsible manner.

The MSC greatly appreciates your consideration of these comments, and looks forward to FERC's issuance of a final Environmental Impact Statement in the near future.

Sincerely,

David J. Spigelmyer, President
Marcellus Shale Coalition

MARCELLUS SHALE COALITION™

CO19 – Physicians for Social Responsibility

PSR® Physicians for Social Responsibility

1985 NOBEL PEACE PRIZE

United States Affiliate of International Physicians for the Prevention of Nuclear War

June 27, 2016

To: Office of Energy Projects at Federal Energy Regulatory Commission (FERC)

RE: Draft Environmental Impact Statement for the Atlantic Sunrise Pipeline Project, Docket No. CP15-138-000

Dear FERC Commissioners,

We submit these comments on behalf of Physicians for Social Responsibility (PSR), a 501 (c) (3) scientific and educational organization with approximately 40,000 members and supporters and with chapters in major cities and medical schools throughout the United States. Our mission is to protect human life from the gravest threats to health and survival. PSR's environment and health program focuses on the threats posed by climate change and environmental toxics, including air toxics. It is in this context that we submit our comments to
CO19-1 the Draft Environmental Impact Statement for the proposed Atlantic Sunrise Pipeline. Given the significant impacts the pipeline will have on public health, we ask the Federal Energy Regulatory Commission (FERC) to deny the Williams/Transco application to install this greenfield pipeline through Pennsylvania.

INTRODUCTION

The oil and gas industry is extracting fossil fuels at a rapid rate. As a result, they are constructing and expanding pipelines and crude oil-by-rail. The Atlantic Sunrise Pipeline Project proposed by Williams Partners would take methane fracked in northeastern Pennsylvania and connect it with markets in the mid-Atlantic and southeastern states – even as far south as
CO19-2 Alabama – with no benefit for Lancaster County. The pipeline, an unprecedented 42" in diameter, would clear-cut a corridor across preserved farms and scenic waterways, permanently fragment woodlands, limit how landowners may use their land, and expose nearby residents to a long-term threat of toxic leaks and explosions. In addition, this expansion project would increase reliance on fracked methane and slow the nation's transition to cleaner, healthier renewable energy. This would endanger the climate for all of us, since methane is a greenhouse gas 86 times more powerful than carbon dioxide.

CO19-3 The project would generate emissions of hazardous air pollutants during construction due to gasoline and diesel-fired earth-moving and combustion equipment. The project would also generate ongoing emissions during operation, including emissions from: two new compressor

CO19-1 Comment noted.

CO19-2 Comment noted. See the response to comment PM1-24.

CO19-3 The construction and operational emissions are detailed in section 4.11.1.3 of the EIS.

CO19-3 (cont'd) stations; "additional ancillary facilities"; two new meter stations, and three new regulator stations in Pennsylvania.

CO19-4 Water quality is also a concern during construction. There will be numerous private wells within one hundred and fifty feet of the construction area in Lancaster County. Several waterbodies will be crossed and aquifers and shallow groundwater could be vulnerable to contamination caused by inadvertent surface spills of hazardous materials used during the building process. Additionally, the potential for construction-related blasting in several areas along the proposed pipeline could affect groundwater quality by temporarily affecting yields of springs and/or wells. Pipeline construction activities could also affect surface waters by: modifying aquatic habitat, increasing runoff and rate of in-stream sediment loading, releasing chemical and nutrient pollutants from sediments, thermal effects, modification of riparian areas, and introduction of chemical contaminants such as fuel and lubricants.

Once built, the pipeline facilities would cross nine watersheds or drainage basins. Its proposed route involves 331 waterbody crossings (311 associated with pipeline, 20 involving access roads), 207 perennial waterbodies, 79 intermittent waterbodies, 39 ephemeral waterbodies, and 6 ponds). In addition, access roads would cross 23 perennial waterbodies, 18 intermittent waterbodies, and 6 ephemeral waterbodies. Four potable surface water intakes within 3 miles downstream of waterbody crossings were also identified.

AIR POLLUTANTS AND HEALTH IMPACTS

CO19-5 Emissions of harmful air pollutants occur at compressor stations and pipelines.[1] Air samples collected around compressor stations and other pipeline-related infrastructure have been reported to have elevated concentrations of formaldehyde, nitrogen oxide (NOx), sulfur dioxide (SO2), particulate matter, and benzene, toluene, ethylbenzene and xylene (BTEX chemicals) and other volatile organic compounds (VOCs).[2, 3] Children are especially vulnerable to these toxic air pollutants, because their lungs are developing and growing, they breathe at a higher rate than adults, and they spend more time playing outdoors, often being very physically active.[4] Specific health impacts of chemicals emitted by pipelines and compressor stations:

- NOx: short-term exposure causes airway inflammation and aggravates asthma. Combines with VOCs to form ozone;[5]
- SO2: short-term exposure to high levels in the air can be life-threatening by causing breathing difficulties and obstructing airways, especially for people with lung disease. Long-

[1] Armendariz. Dept. of Environmental and Civil Engineering Southern Methodist University. Emissions from Natural Gas Production in the Barnett Shale Area and Opportunities for Cost-Effective Improvements; 2009 http://www.edf.org/sites/default/files/9235_Barnett_Shale_Report.pdf
[2] Litovitz et al. 2013. Environ. Res. Lett. 8 (2013) 014017. Estimation of regional air-quality damages from Marcellus Shale natural gas extraction in Pennsylvania http://iopscience.iop.org/article/10.1088/1748-9326/8/1/014017/meta;jsessionid=4B354864F669B5C3200E43C45B84AB70.c2.iopscience.cld.iop.org
[3] The Compendium. Accessed 6/7/16. http://www.psr.org/assets/pdfs/fracking-compendium.pdf
[4] Ritz et al. 2008. "Air Pollution Impacts on Infants and Children." UCLA Institute on the Environment and Sustainability. Accessed on 6.27.16. http://www.environment.ucla.edu/reportcard/article1700.html
[5] EPA, "Nitrogen Dioxide: Health," Feb. 2013.

CO19-4 See the responses to comments PM1-71, PM1-174, and FA1-57.

CO19-5 See the response to comment PM3-12.

CO19 – Physicians for Social Responsibility (cont'd)

CO19-5 (cont'd) term exposure to persistent levels of SO2 can cause chronic bronchitis, emphysema, and respiratory illness. It can also aggravate existing heart disease;[6]

- Particulate matter (PM): high concentrations especially of the fine particles (PM2.5) have been found to present a serious threat to human health if they accumulate in the respiratory system. The fine particles can be inhaled deeply into the lungs, where they remain embedded for long periods of time, or can be absorbed into the bloodstream. Prolonged exposure to fine particulate matter can cause increased respiratory disease, decreased lung function, chronic bronchitis, and even premature death due to respiratory problems.[7] Childhood exposure to particulate matter has been associated with respiratory symptoms, decreased lung function, exacerbation of asthma, and development of chronic bronchitis.[8] Rates of preterm births, low birth weight, and infant mortality are increased in communities with high particulate levels;
- Formaldehyde: carcinogen;
- Benzene: Known carcinogen. May cause anemia; can lessen white blood cell count, weakening the immune system. Prolonged exposure may result in blood disorders like leukemia, reproductive and developmental disorders, and other cancers;
- Ethyl-benzene: Long-term exposure may result in blood disorders;
- Xylenes: Short-term exposure to high levels may cause irritation of the nose and throat, nausea, vomiting, gastric irritation, and neurological effects. Long-term exposure at high levels may damage the nervous system, and
- Toluene: Long-term exposure may affect the nervous system, cause irritation of the skin, eyes, and respiratory tract, and birth defects.

RADON

CO19-6 Radon, the leading cause of lung cancer among non-smokers and the second leading cause among smokers,[9] is extracted from underground with methane and travels with methane through natural gas pipelines. Depending on the travel time, radon and Lead-210 and Polonium-210, its radioactive decay products, can subsequently present when methane is delivered in the home and can then be inhaled. Studies have shown that children are more susceptible to radon exposure than adults.[10] Children have different lung architecture and breathing patterns, resulting in a larger dose of radiation to the respiratory tract. Children also have longer latency periods in which to develop cancer. And, on average, children spend 70% more time in the house than adults. For these reasons, radon exposure for vulnerable populations like children and pregnant women is especially risky.

Lead-210 and Polonium-210, the decay products of radon, can also be found in natural gas pipeline scrapings[11] and in PIGs (Pipeline Inspection or Intervention Gauge/Gizmo/Gadget).

[6] NIH. Accessed on 6/8/16. https://toxtown.nlm.nih.gov/text_version/chemicals.php?id=29
[7] IBID.
[8] Sacks et al. 2010. "Particulate Matter–Induced Health Effects: Who Is Susceptible?" *Environ Health Perspect* 119:446-454 (2011). http://dx.doi.org/10.1289/ehp.1002255 [online 20 October 2010]
[9] EPA. Accessed on 6/8/16. https://www.epa.gov/radon/health-risk-radon
[10] ATSDR. Accessed on 6/8/16. http://www.atsdr.cdc.gov/csem/csem.asp?csem=8&po=7
[11] International Association of Oil & Gas Producers, Guidelines for the management of Naturally Occurring Radioactive Material (NORM) in the oil & gas industry, September 2008 http://www.ogp.org.uk/pubs/412.pdf

CO19-6 Section 4.11.1.4 of the EIS provides information regarding radon. As noted, the downstream use of natural gas, which may result in exposure to radon, is outside the scope of this EIS.

CO19 – Physicians for Social Responsibility (cont'd)

CO19-6 (cont'd) When workers inspect or clean pipelines and PIGs, they can be exposed to these radioactive substances because of the accumulated wastes.

CO19-7 **PIPELINE SAFETY - ACCIDENTS**

Accidents can occur at multiple points of natural gas production, including pipelines. The 2.5 million miles of U.S. pipelines suffer hundreds of leaks and ruptures every year. Since 1986, pipeline accidents have killed more than 500 people, injured over 4,000, and cost nearly seven billion dollars in property damages.[12]

Minimal oversight and old pipes are often the cause of accidents that could have been prevented. Pipelines break for many reasons – from the slow deterioration of corrosion to equipment failures to construction workers hitting pipes with their equipment. Unforeseen natural disasters also lead to dozens of incidents a year. Unlike other industries such as aviation that have strict and consistent regulations and safety protocols, natural gas pipelines lack such a uniform set of standards. The bulk of government monitoring and enforcement falls to a small agency within the Department of Transportation called the Pipeline and Hazardous Materials Safety Administration. The agency only requires that seven percent of natural gas lines and forty-four percent of all hazardous liquid lines be subject to their rigorous inspection criteria and inspected regularly. The rest of the regulated pipelines are still inspected, but less often.

CO19-8 **COMPRESSOR STATION AIR EMISSIONS**

To transport natural gas across the country, industry relies on an extensive network of inter- and intrastate pipelines. A crucial component of this network is the compressor station. As gas is transported, it needs to remain under pressure to ensure consistent movement against the friction and elevation changes it experiences through the pipeline. Compressor stations, located every 40 to 70 miles along the pipeline, are used to increase the gas pressure and to scrub the gas of any liquids or solids that may have accumulated through transport.

Hazardous air emissions from compressor stations are significant. A study done in 2013 of air quality damages in Pennsylvania found that 60–75 percent of the estimated damages (mostly health problems) from all natural gas activities resulted from compressor station activities.[13] In a separate study, the Southwest Pennsylvania Environmental Health Project's Minisink pilot project on compressor stations concluded that families living near the Minisink Compressor station in New York are exposed to elevated levels of PM 2.5, compared to the regional air quality index.[14] And further, the episodic nature of health symptoms reported by residents is likely associated with the episodic high emissions that come from the compressor station. This likely association is supported by the periodically high levels of PM 2.5 recorded by monitors, and the onset of symptoms after the compressor came online.

[12] Propublica. Accessed 6/8/16. https://www.propublica.org/article/pipelines-explained-how-safe-are-americas-2.5-million-miles-of-pipelines

[13] Litovitz et al. 2013. Environmental Research Letters. Estimation of regional air-quality damages from Marcellus Shale natural gas extraction in Pennsylvania. Accessed on 6/9/16. http://iopscience.iop.org/article/10.1088/1748-9326/8/1/014017/meta;jsessionid=0F990AA1F1341ED156077E1ED6F389C7.c5.iopscience.cld.iop.org

[14] Southwest Environmental Health Project-Summary of Minisink Compressor Station Monitoring Results. Accessed on 6/9/16. http://www.environmentalhealthproject.org/researchers/resources

CO19-7 Comment noted.

CO19-8 See the response to comment PM4-61 regarding compressor station emissions. See the responses to comments FA1-138 and CO9-13 regarding fugitive emissions from the Project. See the response to comment PA1-36 regarding methane emissions from natural gas production and use.

CO19-8 (cont'd)

High particulate concentrations are of grave concern because they absorb airborne chemicals in their midst. The more water soluble the chemical, the more likely it is to be absorbed onto a particle. The size of particle is significant because it determines the depth of inhalation into the lung; the smaller the particles, the more readily they reach the deep lung. Particulate matter (PM10, PM2.5 and ultrafine PM), are at the core of concern over potential health effects from pipelines and compressor stations. Larger-sized particles are trapped in the nose and moist upper respiratory tract, thereby blocking or minimizing their absorption into the blood stream. The smaller PM2.5, however, is more readily brought into the deep lung with airborne chemicals and from there into the blood stream. As the particulates reach the deep lung alveoli, the chemicals on their surfaces are released at higher concentrations than they would in the absence of particles. The combination of particles and chemicals serves, in effect, to increase in the dose of the chemical.

A study published by Harvard epidemiologist Joel Schwartz and his colleagues identified the dangers of PM 2.5.[15] Each increase of one microgram per cubic meter increases the mortality rate by 1 percent for people over 65, they found. Compression emissions occur during construction and operation, creating the likelihood of PM exposure during both phases.

SOURCES OF EMISSIONS FROM COMPRESSOR STATIONS

Compressor stations can leak due to three phenomena: leaks, blowdowns and incomplete combustion. Incomplete combustion refers to the operation of the compressor station motors. Reciprocal and centrifugal stations are powered by unprocessed natural gas taken directly from the pipeline. This gas can be considered 'dry' or 'wet.' Wet gas, gas that contains a higher composition of C2+ hydrocarbons such as ethane and butane (commonly found in the Marcellus shale), often does not meet the specifications for compressor engines, and thus may cause incomplete combustion of the natural gas and increased emissions of a number of chemicals.

A blowdown is a complete venting of the natural gas within a compressor or pipeline to the atmosphere, to reduce pressure and empty the system. These typically either occur during an emergency shutdown or during routine station maintenance. Leaks and blowdowns typically result in emissions of the pipeline contents, such as methane, while incomplete combustion is associated with increased emissions of NOx, carbon monoxide (CO), PM, and VOCs. A range of other toxic chemicals have also been found nearby compressor stations including carcinogens such as benzene and formaldehyde. These have been found at levels exceeding federal risk levels at distances over 2,500 feet from compressor stations, far greater than currently mandated residential setbacks.[16]

[15] Schwartz et al. EHP 2015. Accessed on 6/9/16. http://ehp.niehs.nih.gov/wp-content/uploads/advpub/2015/6/ehp.1409111.acco.pdf
[16] Macey GP et al. Air concentrations of volatile compounds near oil and gas production: a community-based exploratory study. Environmental Health. 2014, 13; 82

CO19 – Physicians for Social Responsibility (cont'd)

CO19-9 **METHANE AS A GREENHOUSE GAS**

Greenhouse gases, by causing or contributing to climate change, endanger the health and the well-being of current and future generations. PSR holds the health impacts of climate change to constitute one of the gravest threats to human health and survival. The 2014 Intergovernmental Panel on Climate Change (IPCC) warns that impacts of climate-related extremes include alteration of ecosystems, disruption of food production and water supply, damage to homes and infrastructure (which includes health infrastructure), and increases in morbidity and mortality from heat, extreme weather events, infectious diseases, and ground-level ozone, as well as consequences for mental health and human well-being.[17] People who are socially, economically, culturally, politically, institutionally, or otherwise marginalized are especially vulnerable to climate change threats. In the United States, especially vulnerable populations include children, the poor, the elderly, individuals with chronic illnesses, and those with a weak or impaired immune system.

Methane is the second-largest contributor to human-caused climate change, after carbon dioxide. Global atmospheric concentrations of methane have increased about two and a half times from their preindustrial levels (about 715 ppb) to 1,774 ppb in 2005 and 1,803 ppb in 2011.[18] Researchers have calculated that methane contributes 19% of the entire greenhouse gas inventory of the United States, and that methane escaping from natural gas systems alone contributes over 7% of that total.[19]

Not only does methane represent a significant quantity of the greenhouse gases contributing to climate change; in qualitative terms, it is an extremely potent greenhouse gas. The IPCC Fifth Assessment Report estimates that methane is 86 times more potent than CO2 as a greenhouse gas when considered over a 20-year timeframe.[20] Some estimates range even higher; for example, Shindell asserts that methane is about 100 times more potent than carbon dioxide over 20 years.[21]

According to the EPA's own figures, natural gas systems are the single largest source of U.S. anthropogenic methane emissions, representing almost 40% of total methane emissions. A not-insignificant share of that leakage comes from transmission pipelines and related infrastructure during transport, storage and end-use distribution.

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[17] Intergovernmental Panel on Climate Change. *Climate Change 2014: Impacts, Adaptation and Vulnerability*. Accessed on 6.27.16. http://www.ipcc.ch/report/ar5/wg2/

[18] IPCC (2013): Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1–30, doi:10.1017/CBO9781107415324.004.

[19] Howarth et al. (2012): Methane Emissions from Natural Gas Systems Background Paper Prepared for the National Climate Assessment. February 25, 2012. http://www.eeb.cornell.edu/howarth/publications/Howarth_et_al_2012_National_Climate_Assessment.pdf

[20] Myhre et al. (2013): Anthropogenic and Natural Radiative Forcing. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, p. 714. doi:10.1017/ CBO9781107415324.018.

[21] Shindell et al. Improved attribution of climate forcing to emissions. Science. 30 October 2009: Vol. 326 no. 5953 pp. 716-718. DOI: 10.1126/science.1174760. http://www.sciencemag.org/content/326/5953/716.figures-only

CO19-9 See the responses to comments PM1-36 and PM1-53.

CO19 – Physicians for Social Responsibility (cont'd)

CO19-9 (cont'd) **CONCLUSION**

In the interests of human health, wellbeing and survival, the United States and countries around the world must act now to slow and eventually reverse climate change. This means slashing greenhouse gas emissions, shifting to clean renewable energies, and preparing our communities for the degree of climate change that we cannot avoid by improving our public health infrastructure, disease surveillance, and emergency response capabilities.

CO19-10 Doctors are increasingly calling for heightened scrutiny of UNGD and highlighting the health risks associated with these projects. In May 2015, the Medical Society of the State of New York adopted a resolution, "Protecting Public Health from Natural Gas Infrastructure," that recognizes the potential impact to human health and the environment of natural gas pipelines and calls for a governmental assessment of these risks. And in the same year, the American Medical Association (AMA) adopted a resolution, "Protecting Public Health from Natural Gas Infrastructure," that states, "Our AMA recognizes the potential impact on human health associated with natural gas infrastructure and supports legislation that would require a comprehensive Health Impact Assessment regarding the health risks that may be associated with natural gas pipelines."

PSR recently updated its position on fracking and now takes a stronger precautionary approach, calling for a ban.[22] The statement also calls for significant changes to be made to the oil and gas industry as the U.S. makes its transition to cleaner, healthier carbon-free sources of energy.

Given the above evidence that pipelines and the associated infrastructure have been linked to serious health impacts for communities and residents living nearby, Physicians for Social Responsibility asks that FERC deny the proposed Atlantic Sunrise Pipeline.

Sincerely,

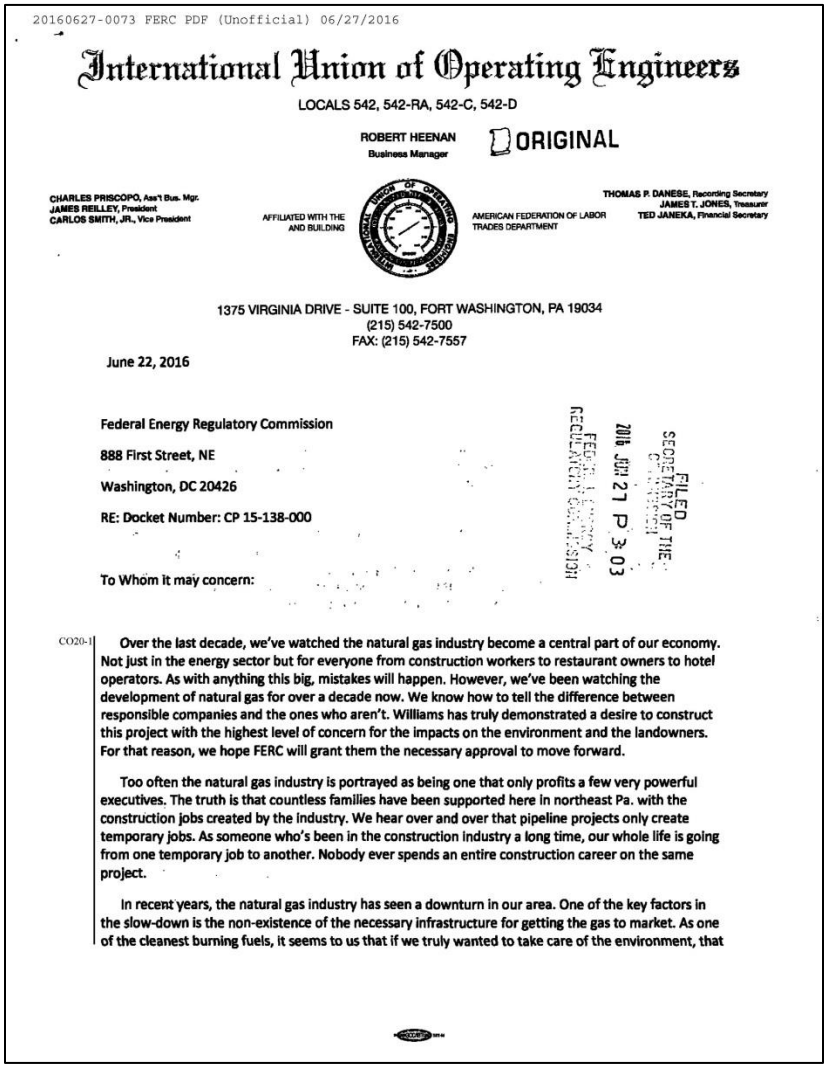
Catherine Thomasson, MD
Executive Director
Physicians for Social Responsibility

[22] PSR's position on fracking. Accessed on 6/9/16. http://www.psr.org/assets/pdfs/psr-fracking-policy.pdf

7

CO19-10 See the responses to comments PM1-6 and PM1-40. Regarding a health assessment, see the response to comment FA1-135.

CO20 – International Union of Operating Engineers



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International Union of Operating Engineers

LOCALS 542, 542-RA, 542-C, 542-D

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June 22, 2016

Federal Energy Regulatory Commission

888 First Street, NE

Washington, DC 20426

RE: Docket Number: CP 15-138-000

FILED
SECRETARY OF THE
COMMISSION
2016 JUN 27 P 3:03
FEDERAL ENERGY
REGULATORY COMMISSION

To Whom it may concern:

CO20-1 Over the last decade, we've watched the natural gas industry become a central part of our economy. Not just in the energy sector but for everyone from construction workers to restaurant owners to hotel operators. As with anything this big, mistakes will happen. However, we've been watching the development of natural gas for over a decade now. We know how to tell the difference between responsible companies and the ones who aren't. Williams has truly demonstrated a desire to construct this project with the highest level of concern for the impacts on the environment and the landowners. For that reason, we hope FERC will grant them the necessary approval to move forward.

Too often the natural gas industry is portrayed as being one that only profits a few very powerful executives. The truth is that countless families have been supported here in northeast Pa. with the construction jobs created by the industry. We hear over and over that pipeline projects only create temporary jobs. As someone who's been in the construction industry a long time, our whole life is going from one temporary job to another. Nobody ever spends an entire construction career on the same project.

In recent years, the natural gas industry has seen a downturn in our area. One of the key factors in the slow-down is the non-existence of the necessary infrastructure for getting the gas to market. As one of the cleanest burning fuels, it seems to us that if we truly wanted to take care of the environment, that

CO20-1 Comment noted.

CO20 – International Union of Operating Engineers (cont'd)

CO20-1 (cont'd) we would want as much natural gas as possible on the market. Clean-burning fuel and family-sustaining jobs seems like a winning combination to me any day of the week.

In conclusion, we appreciate FERC's thorough analysis of the project. The report shows that government can provide reasonable oversight of the private sector without standing in the way of progress.

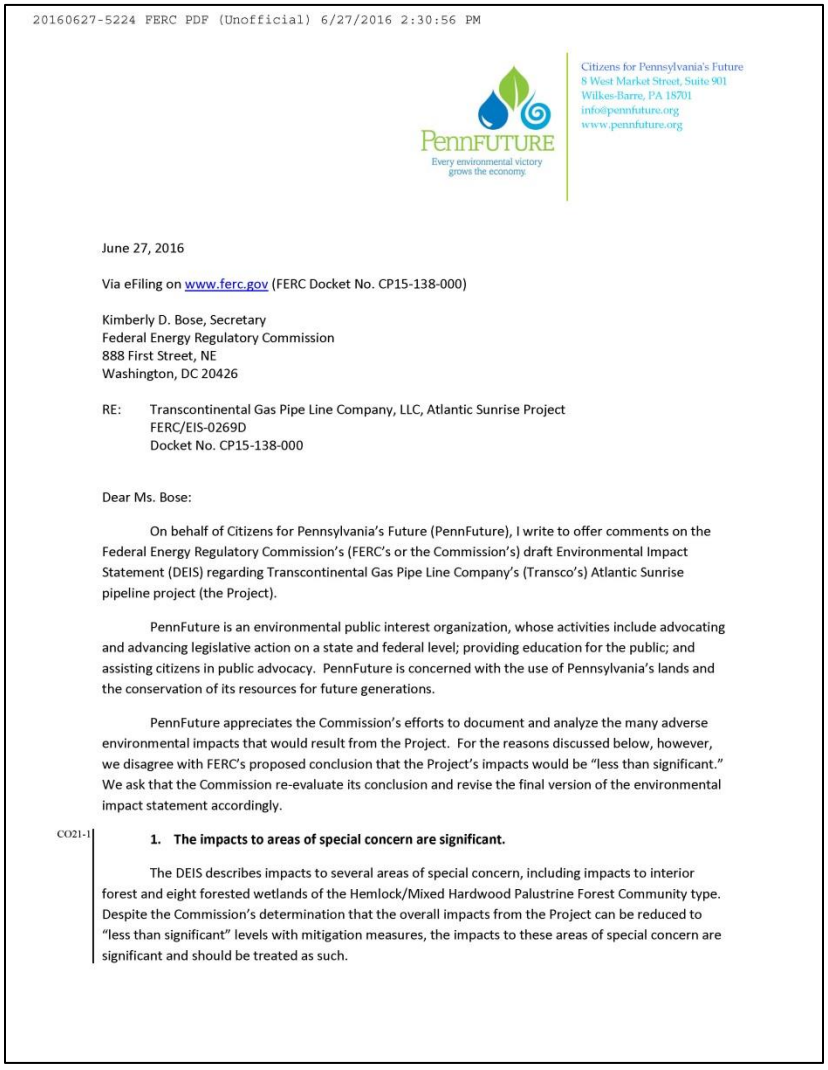
Sincerely,

Ed Gillette

Ed Gillette

Internal Union of Operating Engineers,Local, 542

CO21 – PennFuture



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PennFUTURE
Every environmental victory grows the economy.

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June 27, 2016

Via eFiling on www.ferc.gov (FERC Docket No. CP15-138-000)

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: Transcontinental Gas Pipe Line Company, LLC, Atlantic Sunrise Project
FERC/EIS-0269D
Docket No. CP15-138-000

Dear Ms. Bose:

On behalf of Citizens for Pennsylvania's Future (PennFuture), I write to offer comments on the Federal Energy Regulatory Commission's (FERC's or the Commission's) draft Environmental Impact Statement (DEIS) regarding Transcontinental Gas Pipe Line Company's (Transco's) Atlantic Sunrise pipeline project (the Project).

PennFuture is an environmental public interest organization, whose activities include advocating and advancing legislative action on a state and federal level; providing education for the public; and assisting citizens in public advocacy. PennFuture is concerned with the use of Pennsylvania's lands and the conservation of its resources for future generations.

PennFuture appreciates the Commission's efforts to document and analyze the many adverse environmental impacts that would result from the Project. For the reasons discussed below, however, we disagree with FERC's proposed conclusion that the Project's impacts would be "less than significant." We ask that the Commission re-evaluate its conclusion and revise the final version of the environmental impact statement accordingly.

CO21-1

1. The impacts to areas of special concern are significant.

The DEIS describes impacts to several areas of special concern, including impacts to interior forest and eight forested wetlands of the Hemlock/Mixed Hardwood Palustrine Forest Community type. Despite the Commission's determination that the overall impacts from the Project can be reduced to "less than significant" levels with mitigation measures, the impacts to these areas of special concern are significant and should be treated as such.

CO21-1 We disagree. See the revised text in section 4.5.3 of the EIS. Transco attempted to avoid and minimize effects on interior forest habitat by routing the proposed pipelines adjacent to existing right-of-way corridors when possible. About 43 percent of CPL North would be collocated with existing pipeline and electric transmission line rights-of-way. About 12 percent of CPL South would be collocated with pipeline and electric transmission line rights-of-way, and 100 percent of Chapman and Unity Loops would be collocated with the existing Transco Leidy Line system. Transco is also proposing to reduce the width of the construction right-of-way in some forested wetlands to minimize effects. In addition, Transco incorporated additional minor route variations that reduced impacts on interior forests (see section 3.3 of the EIS). Also see the response to comment PM1-9.

CO21-1 (cont'd)

a. Interior Forests

The Project would also adversely impact 45 different sections of interior forest. The DEIS estimates that 270.4 acres of interior forest area would be directly impacted during construction, and 118.9 of those acres would remain permanently affected during operations. DEIS at ES-6. As the DEIS itself notes, the impact of the Project would go well beyond those direct impacts, however. Because a clearing of land adjacent to interior forest will bring additional light, wind, humidity, and predation to the adjacent areas of the forest, a full 1,993.8 acres of interior forest would be indirectly affected – primarily by being converted to forest edge habitat. DEIS at 4-81.

Interior forest areas are critical habitat for many species. *See* DEIS at 4-80. Many species are dependent on interior forest for their habitat. Pennsylvania Department of Conservation and Natural Resources, "Forest Wildlife Trends" (March 7, 2007) at 1, *available at* http://www.nrc.gov/docs/ML0707/ML070730105.pdf (last accessed: June 27, 2016). Some of those species have experienced significant population declines (on the order of 3% per year) in Pennsylvania in recent years, possibly due to loss of interior forest habitat. *Id.* at 2.

Although the DEIS notes that Transco attempted to minimize disturbance of interior forest by, among other things, co-locating the Project in existing rights-of-way (an effort that PennFuture strongly supports), that effort does not do anything to mitigate over 2,100 acres (118.9 acres of permanent direct impacts and 1,993.8 acres of permanent indirect impacts) of interior forest that will be lost. Instead, the Commission relied in part on the "prevalence of forested habitats within the project area" to determine that impacts on vegetation would be reduced to less than significant levels. DEIS at 4-85.

PennFuture strongly disagrees with the Commission's determination that the loss of a large area of interior forest is consistent with a project that has a "less than significant" overall environmental impact. First, the loss of interior forest can have a significant impact on species' ability to adapt and live in an area. This Project alone would reduce the habitat available to those species by over 2,100 acres. The significance of this impact becomes even more stark when considered in the context of the many other existing and projects – pipelines and otherwise – that reduce the amount of interior forest. (*See* section 2(b) below regarding cumulative impacts to interior forest.) Further, as discussed in greater detail below, the Commission did not attempt to quantify the amount of interior forest habitat in existence, so it is impossible to evaluate the "prevalence" of these interior forest habitats (as opposed to forested habitat in general). Thus, the Commission's reliance on the "prevalence of forested habitats" (DEIS at 4-85) to assuage concerns about the loss of interior forest habitat is misplaced.

The loss of interior forest habitat as a result of the Project must be considered significant. FERC should revise the DEIS accordingly.

CO21-2

b. Hemlock/Mixed Hardwood Palustrine Forest Community Wetlands

The DEIS indicates that there would be eight pipeline crossings of eight forested wetlands of the Hemlock/Mixed Hardwood Palustrine Forest Community type. DEIS at ES-6. There would be 2.4 acres of temporary impacts and 0.6 acres of permanent impacts resulting from these crossings. *Id.* Left

CO21-2 As described in section 4.5.2 of the EIS, Transco conducted surveys for vegetation communities of concern in 2014, 2015, and 2016. Transco determined that there are 16 forested wetlands along the CPL North route and 1 forested wetland community along the CPL South route that potentially qualify as Hemlock/Mixed Hardwood Palustrine Forest Communities; however, final determination of whether these communities meet the definition of a community of concern would be made by the PADCNR. Table 4.5.2-1 lists the location and potential effect on these wetland areas. These areas are also shown on the project alignment sheets. In total, construction would affect about 3.6 acres, and operation would permanently affect 1.8 acres of this community type. To reduce impacts on these communities, Transco proposes to reduce the right-of-way width to 75 feet where practicable. Transco would minimize and compensate for effects on these wetlands in the same manner as for other forested wetlands (see sections 4.4.4 and 4.4.6 of the EIS).

CO21-2 (cont'd) undisturbed, wetlands of this type have been shown to improve groundwater quality. Davis T. 2011. Pennsylvania Natural Heritage Program. Hemlock – Mixed Hardwood Palustrine Forest Factsheet, *available at* http://www.naturalheritage.state.pa.us/community.aspx?=16029 (Last accessed: June 27, 2016). They also host rare plant species, such as the soft-leaved sedge and the log fern. *Id.* These wetlands can serve as a buffer that helps to mitigate the effects of sediment and pollution run-off in stormwater from adjacent tracts of land as well. *Id.* Unfortunately, these areas are likely declining in prevalence due to a number of factors, including parasites to hemlock trees and hydrological alterations. *Id.*

Eastern Hemlocks, like the ones present in wetlands of the Hemlock/Mixed Hardwood Palustrine Forest Community, grow slowly. National Park Service, "Eastern Hemlock," *available at* https://www.nps.gov/shen/learn/nature/eastern_hemlock.htm (last accessed: June 27, 2016). It may take 250-300 years for one of these trees to reach maturity. R. M. Godman and Kenneth Lancaster, "Eastern Hemlock," available at https://www.na.fs.fed.us/spfo/pubs/silvics_manual/Volume_1/tsuga/canadensis.htm (last accessed: June 27, 2016). Eastern Hemlocks are considered a "keystone species" because of the critical role they play in ecosystems where they are present. The Nature Conservancy, "Hemlocks and How to Save Them," *available at* http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/tennessee/explore/hemlock.xml (last accessed: June 27, 2016). They also play a key role in maintaining the hydrologic cycle. Sarah Farmer, Southern Research Station, United States Forest Service, United States Department of Agriculture, "Loss of Eastern Hemlock Will Affect Forest Water Use" (May 21, 2013), *available at* http://www.srs.fs.usda.gov/compass/2013/05/21/loss-of-eastern-hemlock-will-affect-forest-water-use/ (last accessed: June 27, 2016).

Despite the admitted impacts to Hemlock/Mixed Hardwood Palustrine Forest Community wetlands and the permanent conversion of some of these wetlands to emergent wetlands, the Commission determined that Transco's efforts to minimize and mitigate these impacts would result in a less than significant environmental impact. DEIS at 4-75. It is not clear, though, from the descriptions provided whether or how Transco would be able to mitigate the loss of Hemlock/Mixed Hardwood Palustrine Forest Community wetlands of special concern to the Pennsylvania Department of Conservation and Natural Resources. Considering the value of these types of wetlands and their decline generally throughout the state, the loss of any Hemlock/Mixed Hardwood Palustrine Forest Community wetlands should be considered significant. And, given the fact that it may take centuries for hemlock trees to mature, it is unlikely that any form of mitigation can reasonably be expected to compensate for their loss. As a result, the Commission should conclude that these losses (and thus the impacts of the Project as a whole) are significant.

CO21-3 **2. The cumulative adverse environmental impacts of the Project together with other relevant actions will be significant.**

Evaluating cumulative impacts is one of the most challenging aspects of conducting an analysis of environmental impacts; it is also the most important. Nearly two decades ago, the Council on

CO21-3 See the response to comment PM1-6.

CO21-3 (cont'd) Environmental Quality cautioned that, "Evidence is increasing that the most devastating environmental effects may result not from the direct effects of a particular action, but from the combination of individually minor effects of multiple actions over time." Council on Environmental Quality, *Considering Cumulative Effects under the National Environmental Policy Act* (January 1997), p. 1, *available at* http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf (last accessed: June 27, 2016).

Cumulative impacts are defined by regulation as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." *Id.* Essentially, the cumulative impacts analysis focuses on the resources affected rather than the specific effects of a particular project, and is designed to help decision-makers assess the ability of the impacted resources and environmental systems to continue to function properly once all development is taken into account.

The Commission reviewed the cumulative impacts anticipated for several environmental resources. PennFuture does not believe that FERC's overall finding of "less than significant" environmental impact is supported by a proper cumulative impacts analysis. In some cases, FERC's analysis directly demonstrates that the cumulative impacts are significant; in others, FERC's analysis omits important information that, if included, would make apparent the significance of the cumulative impacts. Examples of significant cumulative impacts are discussed below.

CO21-4 *a. Climate Change*

As the Commission notes in the DEIS, the social, public health, and environmental consequences of climate change are severe, and in many cases, they have already started to occur. DEIS at 4-288 to 4-289. It is indisputable that climate change is one of the most significant challenges facing not just the environment, but all of society.

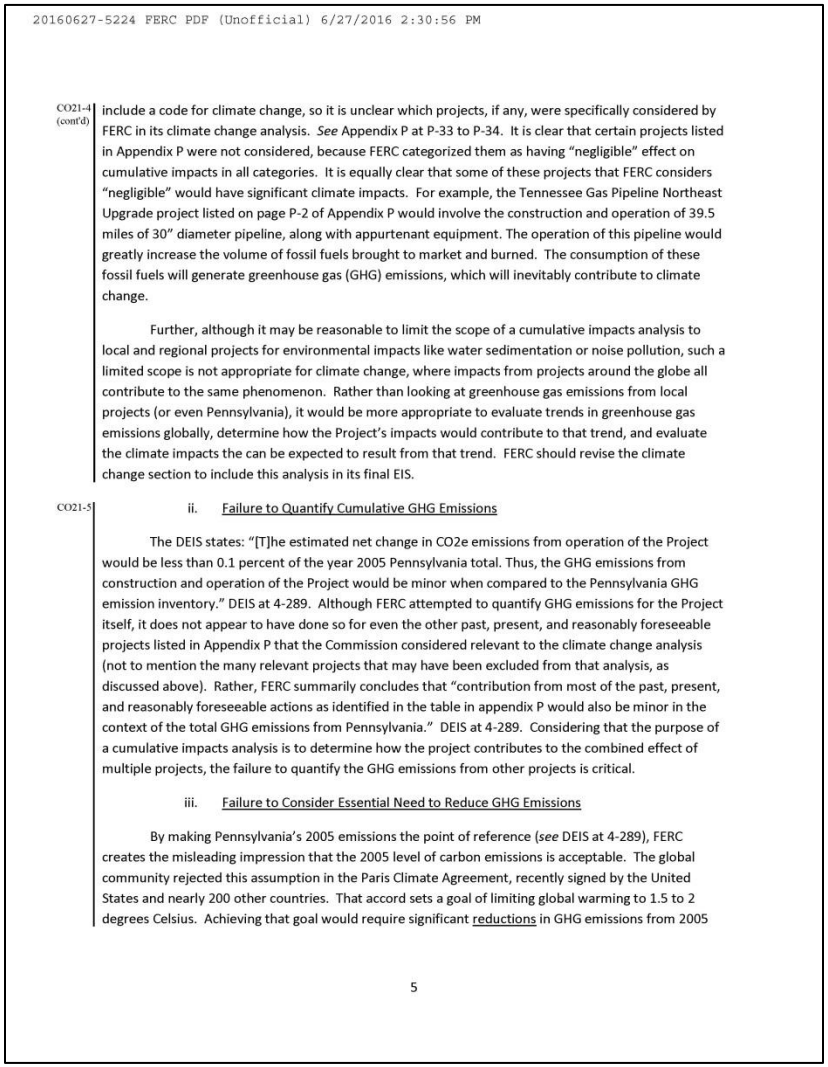
In evaluating cumulative impacts that contribute to climate change, FERC places the Project's expected impact in the context of other local projects and Pennsylvania's overall production of greenhouse gases. FERC concludes that, based on the fact that this Project would represent only 0.1 percent of Pennsylvania's 2005 greenhouse gas emissions, the Project's contribution to climate change would be "minor." This conclusion is flawed because it does not properly account for all activities that can be expected to contribute to climate change and because it does not provide the proper frame of reference that considers the urgent need to decrease greenhouse gas emissions.

i. Projects Evaluated

First, it is unclear which projects FERC evaluated for climate impacts. FERC provides a list of "past, present, and reasonably foreseeable future projects" that it considered for potential cumulative effects in Appendix P to the DEIS. As part of that list, FERC attempted to code each project for the types of environmental resources it would be expected to affect. FERC's coding system, however, did not

CO21-4 Section 4.13.8.10 of the EIS notes that climate change is a global issue and provides a general discussion of primary activities currently contributing to climate change. Section 4.13.8.10 further focused the cumulative impact analysis on potential climate change impacts in the project region. Due to the large region of influence for GHG emissions, we do not believe that a comprehensive listing of specific past, present, and future projects would further inform our analysis; however, we did provide an annual GHG inventory for Pennsylvania, the state in which the majority of the project-related GHG emissions would be generated, and a discussion of general activities contributing to GHG emissions in the project region. Section 4.13.8.10 of the final EIS has been updated to include potential climate change effects on construction and operation of the Project.

CO21 – PennFuture (cont'd)



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CO21-4 (cont'd) include a code for climate change, so it is unclear which projects, if any, were specifically considered by FERC in its climate change analysis. *See* Appendix P at P-33 to P-34. It is clear that certain projects listed in Appendix P were not considered, because FERC categorized them as having "negligible" effect on cumulative impacts in all categories. It is equally clear that some of these projects that FERC considers "negligible" would have significant climate impacts. For example, the Tennessee Gas Pipeline Northeast Upgrade project listed on page P-2 of Appendix P would involve the construction and operation of 39.5 miles of 30" diameter pipeline, along with appurtenant equipment. The operation of this pipeline would greatly increase the volume of fossil fuels brought to market and burned. The consumption of these fossil fuels will generate greenhouse gas (GHG) emissions, which will inevitably contribute to climate change.

Further, although it may be reasonable to limit the scope of a cumulative impacts analysis to local and regional projects for environmental impacts like water sedimentation or noise pollution, such a limited scope is not appropriate for climate change, where impacts from projects around the globe all contribute to the same phenomenon. Rather than looking at greenhouse gas emissions from local projects (or even Pennsylvania), it would be more appropriate to evaluate trends in greenhouse gas emissions globally, determine how the Project's impacts would contribute to that trend, and evaluate the climate impacts the can be expected to result from that trend. FERC should revise the climate change section to include this analysis in its final EIS.

CO21-5 ii. Failure to Quantify Cumulative GHG Emissions

The DEIS states: "[T]he estimated net change in CO2e emissions from operation of the Project would be less than 0.1 percent of the year 2005 Pennsylvania total. Thus, the GHG emissions from construction and operation of the Project would be minor when compared to the Pennsylvania GHG emission inventory." DEIS at 4-289. Although FERC attempted to quantify GHG emissions for the Project itself, it does not appear to have done so for even the other past, present, and reasonably foreseeable projects listed in Appendix P that the Commission considered relevant to the climate change analysis (not to mention the many relevant projects that may have been excluded from that analysis, as discussed above). Rather, FERC summarily concludes that "contribution from most of the past, present, and reasonably foreseeable actions as identified in the table in appendix P would also be minor in the context of the total GHG emissions from Pennsylvania." DEIS at 4-289. Considering that the purpose of a cumulative impacts analysis is to determine how the project contributes to the combined effect of multiple projects, the failure to quantify the GHG emissions from other projects is critical.

iii. Failure to Consider Essential Need to Reduce GHG Emissions

By making Pennsylvania's 2005 emissions the point of reference (*see* DEIS at 4-289), FERC creates the misleading impression that the 2005 level of carbon emissions is acceptable. The global community rejected this assumption in the Paris Climate Agreement, recently signed by the United States and nearly 200 other countries. That accord sets a goal of limiting global warming to 1.5 to 2 degrees Celsius. Achieving that goal would require significant reductions in GHG emissions from 2005

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CO21-5 Section 4.13.8.10 of the EIS provides a quantitative comparison of the Project's GHG emissions to Pennsylvania's state emission totals, which includes past and present actions. Section 4.13.8.10 provides a qualitative comparison including reasonable foreseeable future actions. We believe that this analysis is appropriate for the scale of the Project.

CO21 – PennFuture (cont'd)

CO21-5 (cont'd) levels. This, the relevant question for assessing the significance the impacts is how the cumulative GHG emissions affect the attainment of the necessary emission reductions.

Indeed, in a draft guidance concerning the incorporation of climate change into NEPA analyses, the Council on Environmental Quality urges federal agencies to use "applicable Federal, state, tribal, or local goals for GHG emission reductions to provide a frame of reference." Council on Environmental Quality, *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews* (December 2014), p. 14, *available at* https://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf (emphasis added) (last accessed: June 27, 2016). Thus, rather than comparing the cumulative GHG emissions to Pennsylvania's (excessive) 2005 GHG emission levels, FERC should frame its analysis by reference to the GHG reduction targets associated with the United States' goal of limiting climate change to 1.5 to 2 degrees Celsius.

In this case, when we consider the globally recognized need to reduce GHG emissions, it becomes clear that a project that, on its own, would increase GHG emissions by 0.1 percent of Pennsylvania's 2005 greenhouse gas emissions will have a significant adverse impact on climate. This impact becomes more apparent when we consider the long-term impacts of the Project and put it into context with other projects. The pipeline constructed as part of this Project can be expected to remain in service – transporting fossil fuels that will be burned to generate GHGs – for many decades to come. The same is true for many of the other pipeline and natural gas infrastructure projects listed in Appendix P (and many more similar projects happening around the globe). This Project and others like it will create additional infrastructure that will lock us in to the use of fossil fuels for many years, thus creating an additional obstacle to the United States' urgent efforts to convert to renewable energy sources in an effort to mitigate the effects of climate change.

The impact on climate from this Project and other past, present, and reasonably foreseeable projects is clearly significant, and FERC should consider it as such in its final EIS.

CO21-6 *b. Loss of Interior Forest*

As discussed above in section 1(b) of this letter, interior forest areas are critical habitat for many species that are not adapted to living in other ecosystems, such as forest edge. *See* DEIS at 4-80. The Project alone would result in the loss of over 2,100 acres of interior forest (118.9 acres of permanent direct impacts and 1,993.8 acres of permanent indirect impacts) either through forest clearing or by conversion of interior forest to edge forest. *See*, *supra*, section 1(b).

The DEIS notes the significant deforestation impacts from several other projects in the general vicinity of the Project and from construction of natural gas wells required to supply gas to the Project pipeline. Collectively, these projects account for the clearing of thousands of acres of forest. DEIS at 4-276 to 4-277. In addition, the Nature Conservancy projects that 300,000 acres of Pennsylvania land – a full 1% of all land area in Pennsylvania – will be disturbed for the installation of natural gas gathering lines by 2030. Pennsylvania Department of Environmental Protection, Governor's Pipeline Infrastructure Task Force Report (February 2016) at 20, *available at*

CO21-6 Section 4.11.1.3 of the EIS details the anticipated emissions from the Project. We believe that these emissions are not underestimated. By expressing the greenhouse gas emissions in terms of CO_2e, we can compare the emissions from this Project to other sources regulated under the Clean Air Act.

The CEQ regulations state that an agency's NEPA review must analyze a project's indirect impacts, which are causally connected to the proposed action and occur "later in time or farther removed in distance [than direct impacts], but are still reasonably foreseeable." Indirect impacts may include the impacts of other activities induced by a proposed project, including 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. However, the purpose of the proposed project is to meet market demand for the transportation of natural gas supplies, and economic activity already taking place. Therefore, we do not believe that analyzing the emissions from upstream or downstream activities is within the scope of our review.

We acknowledge that recent studies have questioned the accepted global warming potential of methane. However, we believe that changing the standard global warming potential is an issue that should be handled on a regulatory basis. See the response to comment PM1-74.

CO21 – PennFuture (cont'd)

CO21-6 (cont'd) http://files.dep.state.pa.us/ProgramIntegration/PITF/PITF%20Report%20Final.pdf (last accessed: June 27, 2016). Many of the gathering lines can be expected to be installed in rural portions of northern and western Pennsylvania that remain relatively undeveloped. Those same regions currently contain most of Pennsylvania's interior forest area, so it is likely that there will be a significant loss of interior forest as a result of these activities. FERC concluded that the cumulative impacts on wildlife and vegetation would be "moderate," DEIS at 4-277, an acknowledgement that, by itself, calls into question FERC's finding of "less than significant" overall impacts from the Project.

As it did for GHGs, FERC again failed to quantify the cumulative impacts on interior forest and failed to place those impacts in context. For most of the other projects considered, FERC did not attempt to determine how many acres of interior forest would be lost. Given the data for the Project discussed immediately above, it is reasonable to expect that a substantial portion of the forest loss resulting from these additional projects will be interior forest. Likewise, for each of the additional projects, the amount of interior forest lost indirectly due to proximity to cleared areas can be expected to be significant, and possibly even to exceed the interior forest lost to direct impacts from the projects. Given the importance of interior forest as habitat for many species, these numbers should have been quantified for all relevant projects to evaluate the cumulative impact expected on interior forests in the region.

Further, the DEIS does not contain information about the total area of existing forest in the Project area so that the relative impact of the projects considered could be properly evaluated in context. Although this comparison would be helpful for all types of forest, it is especially important for interior forest, which is in shorter supply and much more vulnerable to loss due to indirect effects of forest clearing in the vicinity. The Commission should calculate the amount of forest and interior forest in the area of the projects enumerated in Appendix P and report that alongside the cumulative area of forest lost to those projects.

CO21-7

3. The Project's anticipated adverse impact on threatened and endangered species belies FERC's contention that adverse impacts from the Project would be reduced to "less-than-significant" levels.

The DEIS recognizes that the Project is likely to have adverse impacts on one endangered species and one threatened species. These impacts are significant impacts that should be acknowledged as such.

a. Northern Long-eared Bat

The northern long-eared bat was listed as a "threatened" species under the Endangered Species Act in 2015, largely as a result of the spread of white-nose syndrome, which is a deadly fungal disease that infects the skin of the muzzle, ears, and wings of hibernating bats. United States Geological Survey, "White-nose Syndrome," *available at* http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/ (last accessed: June 27, 2016). The quick spread of white-nose syndrome from its origin in New York state across the country to Washington state in less than ten years has severely impacted bat populations. "Track White Nose Syndrome through Time", *available at*

CO21-7 Since the issuance of the draft EIS, Transco has provided additional information on the special status species discussed in this comment. The appropriate sections of the EIS have been updated to reflect this new survey data and corresponding agency consultations.

CO21-7 (cont'd) https://www.sciencebase.gov/gisviewer/wns/ (last accessed: June 27, 2016). If it continues to spread as it is expected to, the disease is likely to place further strain on bat species. The impact of white-nose syndrome is exacerbated by human activities, such as contamination, habitat disturbance, and wind energy development. DEIS at 4-107. Thus, it is critically important to avoid placing additional stress on the declining population of northern long-eared bats.

Instead of avoiding further harm, the Project would unnecessarily add stress to bat populations. The Project will come within five miles of five different hibernacula in Pennsylvania; two of those hibernacula are less than a quarter mile of the Project location. DEIS at 4-108. In total, the project would clear 1,063.8 acres of suitable northern long-eared bat habitat, rendering 700.5 acres permanently unavailable to the species. DEIS at 4-111. Transco's attempts at avoiding and mitigating this harm amount to trying to select routes that would not impact bat habitat "where possible" and to the "extent practicable" (DEIS at 4-110) – efforts that were apparently unsuccessful with respect to over 1,000 acres of Project area – and to avoid tree clearing at certain times of the year when bats may be likely to be present. DEIS at 4-110 to 4-111. Transco claims to be working to develop a compensatory mitigation plan with the Fish and Wildlife Service, but that plan was not available to be evaluated as part of the DEIS.

As the DEIS appears to recognize, the loss of over 1,000 acres of habitat area for a threatened species with declining population certainly appears to be significant. Any reliance on an unavailable mitigation plan to alleviate these harms is inappropriate. Further, because the availability of information related to known northern long-eared bat hibernacula and summer roosting habitat is limited (DEIS at 4-107), FERC should err on the side of caution when evaluating the significance of the loss of over 1000 acres of habitat area for a threatened species. Therefore, the impacts to the northern long-eared bat – and thus the impacts of the Project as a whole – must be deemed significant

b. Northeastern Bulrush

The northeastern bulrush is a member of the sedge family of plants that is listed as an endangered species by the federal government and the states of Pennsylvania and Maryland. The northeastern bulrush lives in wet habitat often characterized by seasonally fluctuating water levels. DEIS at 4-113. The Commission determined that by, among other things, conducting activities within 300 feet of wetlands known to be inhabited by the northern bulrush, the Project may affect local hydrology and/or composition in a manner that could harm the northeastern bulrush.

As a result of these harms, FERC rightly acknowledges that the Project "may affect, and is likely to adversely affect" both the threatened northern long-eared bat and the endangered northeastern bulrush. DEIS at 4-111 and 4-114. Despite that recognition, however, FERC determined that the Project as a whole would have impacts that could be reduced to "less than significant levels" with appropriate mitigation measures. PennFuture strongly disagrees that any project that is expected to have an adverse impact on threatened or endangered species can be said to have impacts that are "less than significant." As a result of these acknowledged impacts, PennFuture requests that FERC revise its overall finding to show that the Project is expected to have significant adverse impacts on the environment.

CO21-8

4. Wet crossings that occur at waterbodies where active flow is present would create significant environmental impacts.

The DEIS indicates that Transco intends to use "wet open-cut crossing" method to install the pipeline across eight water bodies along the pipeline's route. As its name implies, a wet open-cut crossing involves digging a trench directly through the bed of a water body without making any provision for any water present. As a result, if this method is used while water is actively flowing through the waterbody, there will be significant adverse impacts on water quality. Most notably, this method is likely to greatly increase sedimentation, which can adversely impact downstream fish and macroinvertebrate species.

The DEIS indicates that "The wet open-cut crossing method is *typically* used for construction at dry waterbodies or waterbodies with no discernable flow at the time of the crossing." DEIS at 4-58 (emphasis added). Although it may not be inappropriate to employ an open-cut crossing method if the streambed is truly dry at the time of construction and the streambed is restored before flow resumes, the environmental impacts of conducting an open-cut crossing under wet conditions would be significant. FERC should ensure that Transco will not use a wet open-cut crossing if water is present in a water body at the time of construction. If Transco is unwilling to accept this mitigation requirement, FERC must recognize that the wet-crossing method would create significant environmental impacts.

Conclusion

CO21-9

In light of the significant adverse impacts to forests, wildlife, and climate that would result from the Project, PennFuture requests that the Commission revise its draft EIS to categorize the overall environmental impact of the Project as significant. Only then can the Commission properly evaluate environmental harms as it determines whether it is appropriate to issue a Certificate of Public Convenience and Necessity for the Project.

Thank you for your time and consideration.

Sincerely,

Michael Helbing
Staff Attorney

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CO21-8 See the responses to comments PM1-71 and PM2-14.

CO21-9 We disagree. See the responses to CO21-1 through CO21-8.

CO22 – Greater Wilkes-Barre Chamber of Business and Industry

June 22, 2016

Greater Wilkes-Barre CHAMBER of Business and Industry

Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426
RE: Docket Number: CP 15-138-000

To Whom it May Concern:

We here in Northeast PA have had an interesting economic history. The boom of the anthracite coal development brought jobs, revenue, and a diverse business community to our city. However, in 1972, Hurricane Agnes took its toll on our town and our economy was working with one arm behind its back for many years thereafter. In recent years though, we've seen a rebirth, due in large part to the discovery of the Marcellus Shale and the development that has moved our local economy forward.

While many often think of the oil and gas sector as nothing more than a bunch of rich folks from Texas, we've seen the benefits here in Northeast PA. The jobs and revenue that has been generated truly does put our region back on the map. However, one key piece is still missing – it is the infrastructure to get the natural gas to market.

CO22-1 Perhaps the biggest proposed solution to that problem is the Atlantic Sunrise pipeline meant to take gas from Northeast PA to the already existing infrastructure along the eastern seaboard. We've seen the recent Draft Environmental Impact Study and were comforted to see that the FERC review concluded there would be minimal environmental impacts. After living through the coal boom, we know perhaps better than anyone what can happen to the environment when natural resources are harvested. However, it seems to us that supporting a massive industry that is putting our region to work is a good thing – especially when the environmental impacts have been controlled.

With all that said, we want to thank FERC for their review of the project and hope they will allow it to move forward and start getting our gas to market.

Sincerely,

Joseph Boylan
Vice President, Economic Development
Greater Wilkes-Barre Chamber

CO22-1 Comment noted.

CO23 – Lebanon Pipeline Awareness

Lebanon Pipeline Awareness
1594 Cumberland St., Ste. 194
Lebanon, PA 17042-4532

June 28, 2016

Nathaniel J. Davis, Sr.
Deputy Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street NE, Room 1A
Washington, DC 20426
www.ferc.gov

RE: FERC Docket No: CP15-138-000

Dear Mr. Davis:

Transco's proposed Atlantic Sunrise project presents serious and permanent impacts to Lebanon County. Lebanon Pipeline Awareness (LPA), a grassroots non-profit organization based in Lebanon County is opposed to this project and provides the following comments in response to the Draft Environmental Impact Statement issued in May 2016, with the disclaimer that these comments in no way represent the full comment we would like to make, but instead represent what we are able to comment on within the short time period available to review over 1,300 pages of information, not including reports and other information referenced within the DEIS.

CO23-1 As working citizens of Pennsylvania, we feel this short comment period is completely inadequate considering not only the amount of material originally presented, but also because supplemental information relevant to our comments has only been submitted as recently as June 24. This is completely unfair and seems to fully demonstrate that this process is not designed to provide a meaningful comment period for the concerned citizens who this project impacts the most. We therefore ask that you consider our comments with this late filing and also extend the comment period by an additional 90 days.

CO23-2 Cumulative Impacts

The National Environmental Policy Act (NEPA) requires that cumulative impacts be evaluated along with direct and indirect effects. [1] LPA questions FERC's determination that cumulative impacts associated with the Atlantic Sunrise project would be limited. While FERC carefully explains that the natural gas development that this pipeline would support is not subject to their consideration of the project, to completely dismiss the hundreds if not thousands of new unconventional wells required to fill this pipeline is to completely miss the point. The approval of this pipeline insures years of continued natural gas development along with millions of gallons of fracking wastewater, tons of drill cuttings, and the VOC-polluted air that will come with it. To not include those impacts in the consideration of this project flies in the face of common sense, is

[1] https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf

CO23-1 See the response to comment PM1-130.

CO23-2 See the responses to comments PM1-6 and CO13-9.

CO23-2 (cont'd) completely wrong-minded, and provides a convenient loophole for FERC to avoid consideration of the multitude of impacts construction of this pipeline will engender.

As NEPA states:
"Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis. While impacts can be differentiated by direct, indirect, and cumulative, the concept of cumulative impacts takes into account all disturbances since cumulative impacts result in the compounding of the effects of all actions over time. Thus the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal, or private) is taking the actions ." [2]

To not consider seriously the impacts of the proposed construction of the Mariner East 2 project in Lebanon County, which will cross the proposed Atlantic Sunrise project, is absurd. To not consider the future natural gas development this pipeline will unleash, especially when the number of well permits plus a lengthy list of other numerous proposed transmission pipelines for Pennsylvania at this time are included in the DEIS, FERC therefore fails to address cumulative impacts in any serious, meaningful or adequate manner. **In fact, in view of the health issues, water contamination, and other impacts already documented,[3] approval of this pipeline would condemn Pennsylvania's drilling areas to become true sacrifice zones.**

CO23-3 Supplemental Information: Annville Area Proposed Pipeline Route

It impossible to meaningfully comment on an unknown and changing pipeline route. Supplemental information filed only on June 24 indicates that the route through one of the most sensitive bottlenecks in Lebanon County, the area just north and south of Rt. 422 in South and North Annville Townships, is still not decided. Consequently, landowners who think they are currently unaffected may eventually find otherwise and will have missed their opportunity to comment on the DEIS.

This inappropriate bottleneck area involves numerous points of concern: 1.) an area under commercial development including a new gasoline station that will be in close proximity to the pipeline; 2.) an area identified by Transco as high risk karst topography that is well known for persistent sinkholes; 3.) an active railroad line; 4.) an active quarry; 5.) a well-traveled highway; and 5.) the Quittapahilla Creek and adjacent wetlands.

The fact is that there is no good route through this narrow passage hemmed in by the towns of Annville and Palmyra, the extensive quarry property, the Annville Township wastewater treatment plant, and two land parcels under active development. Whatever route is ultimately chosen will be a poor choice for a pipeline and merely the lesser of various evils. **This is no place to put a pipeline.**

[2] https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf
[3] http://concernedhealthny.org/compendium/

CO23-3 We disagree. We have included a recommendation that Transco file with the Secretary the final results of its consultation with the developer of the ELRC commercial and residential development, including any project modifications or mitigation measures Transco would implement to minimize impacts on the ELRC development. See also the response to comment PM2-91.

CO23 – Lebanon Pipeline Awareness (cont'd)

CO23-4 Water Crossings

All Lebanon County streams eventually drain into the Susquehanna River and the Chesapeake Bay beyond, but all but one small unnamed stream will be crossed by open trench methods. Any negative impacts to these streams will eventually be carried downstream to the Chesapeake Bay.

The Quittapahilla Creek has been the focus of dedicated restoration efforts, especially through the work of the Quittapahilla Watershed Association (QWA).[4] Since its founding in 1997, the QWA has successfully garnered numerous state grants to improve the water quality of the creek, which now serves as a popular trout fishing stream. The Quittapahilla Stream Restoration Project is just beginning its second phase, utilizing almost $1 million dollars in grants from state agencies to fund the project.

Ironically, this area of intense restoration work lies just upstream from the proposed Atlantic Sunrise pipeline crossing, which will utilize an open trench dam and pump process to cross the stream while also crossing a wetland-designated area. In addition, it is possible that blasting will be required to open the stream bed for the pipeline trench. When finished, the natural riparian buffer currently in place will be permanently altered, negatively impacting the stream's water quality now so carefully cultivated (by taxpayer dollars) upstream.

The Conewago Creek is another stream under intense restoration efforts located in southern Lebanon County. The Tri-County Conewago Creek Association[5] organized in 2002 to "mak[e] the Conewago Creek and its surrounding area a cleaner, healthier and more enjoyable place to live." Through the Conewago Creek Initiative[6], this group provides valuable effort into restoring the water quality of the Conewago Creek.

With concern for the Conewago, South Londonderry Township sent a letter to Transco's stormwater engineering firm indicating that engineers contracted by the township, Hanover Engineering Associates, Inc., recommended boring under the stream to lessen the impacts of pipeline construction.[7] However, the Conewago Creek is slated for open trench crossing, using either the dam and pump or flume process.

The Swatara Creek is Lebanon County's largest stream, but it, too, will be crossed by an open trench and flume method. In addition, Transco plans to withdraw 10-11 million gallons of water from the creek for hydrostatic testing and has applied[8] to the Susquehanna River Basin Authority (SRBC) to withdraw 2.880 million gallons per day from Swatara Creek. The SRBC permit application has not yet been subject to a public hearing or been approved, though it is very much a part of the pipeline process and should be considered as part of the DEIS.

[4] http://quittapahillawatershedassociation.org/projects.html
[5] http://conewagocreek.org/
[6] http://www.conewagoinitiative.net/
[7] http://docdro.id/RxAuaSU
[8] https://services.srbc.net/SWApp/public_info/loadapplication.aspx?key=7bee9f53-b5cd-444c-9da7-5d1332db2647

CO23-4 In a letter dated January 19, 2016, the FWS indicated that because no wetlands are located within 300 feet of the water withdrawal site and because withdrawals should not affect hydrology in wetlands located greater than 300 feet from the site, the effects of the Project are not likely to adversely affect the bog turtle.

The cultural resource test unit evaluated at Swatara Creek was determined to be an isolated find and not eligible for listing on the NRHP.

The Union Canal (milepost 49.3) is planned for open-cut construction. The field investigation identified a towpath along the in-filled canal. No engineering or architectural features (locks, dams, lock tender houses) were identified within the Project's area of potential effects at the Swatara Creek crossing nor within the indirect (viewshed) area of potential effects. This canal was not recorded as a linear site in the Addendum 3 report nor does is appear to be previously recorded linear site.

Although no SHPO correspondence was included with Supplement 3, Transco notes that, during a conference call on April 11, 2016, the SHPO informally commented that removing and restoring a section of a much larger canal system would not likely constitute an adverse effect. Transco notes that it is continuing to coordinate with the SHPO regarding the Union Canal (presumably because the canal could be eligible due to the presence of the towpath).

A formal comment by the SHPO regarding eligibility and effect is needed in order to determine whether a site-specific treatment plan is warranted for the canal. The treatment could include complete avoidance by bore or HDD; an open cut with restoration to preconstruction contours and compatible revegetation; or construction monitoring, etc., which would be addressed in a memorandum of agreement (if there would be an adverse effect on the canal). Transco must provide evidence that the Project has obtained all the required federal permits and clearances, including any associated with cultural resources. Further, FERC will not authorize construction of the Project until all relevant consultations are complete between FERC and the Pennsylvania SHPO.

Also see the responses to comments PM1-71, PM2-14, and PM2-123

CO23 – Lebanon Pipeline Awareness (cont'd)

CO23-4 (cont'd) According to the SRBC application, the hydrostatic test site is within 10 feet of a "test unit" that contained two prehistoric and a single historic specimen, which were sent to the Pennsylvania Historic Museum Commission (PHMC) in November 2015; PHMC response was still pending at the time of the SRBC application, making it difficult to know whether or not this proposed crossing and water withdrawal is even feasible. (It should also be noted that Transco originally misidentified the owner of the property where the water withdrawal is proposed, causing undue stress for the property owner and creating doubt on Transco's credibility to present accurate information.)

In addition, the former bed of a feeder branch of the historic Union Canal[9] is located along the Swatara Creek at the proposed crossing and water withdrawal site. This 22-mile-long branch of the canal extended to the canal's northern terminus at Pine Grove. The Pine Grove feeder branch provided both water for the historic canal system and served as an important means of transporting coal from Schuylkill County's anthracite fields. The proposed open trench crossing of the Swatara Creek will cut through this piece of Pennsylvania history, leaving behind only a barren pipeline right of way.

The PNDI response included in the SRBC water withdrawal application indicates that the area is subject to bog turtle habitat screening requirements. The U.S. Fish and Wildlife Service's response on the PNDI Environmental Review Receipt lists an avoidance measure stating that the proposed activity should not be conducted within 50 feet of any streams, river, creeks, etc., unless the planned activity has been coordinated with the agency. There is no evidence of this coordination within the SRBC application or in the DEIS, only a letter to U.S. Fish and Wildlife Service stating the following under Species Impacts Assessments:

Swatara Creek Site (Lebanon County) – As discussed above, no wetlands are located within 300 feet of the site. Therefore, Transco does not anticipate any impacts to bog turtles at this site associated with the water withdrawal activities. ***However, due to the nature of the water withdrawal activity, Transco cannot observe the recommend[ed] avoidance measure to conduct the activity at least 50 feet from streams and rivers.*** (Emphasis added by LPA.)[10]

This completely negates the avoidance measure as directed; Transco should not be allowed to circumvent this order simply because their proposed activity does not fit the directive.

CO23-5 Farmland

Lebanon County's fertile soils support many productive farms. Transco's proposed project will cut through both preserved and unpreserved farms in Lebanon County, affecting within one quarter mile of the proposed route 1,829 acres held in agricultural easements, 5, 471 acres held in agricultural security areas, and 9,448 acres held in clean and green programs. In addition, approximately 61 acres of organic farmland will be affected, risking their organic certification.

Approximately seven preserved farms in Lebanon County, plus two forested conserved properties, are in the project's proposed right of way, representing land preserved through a

[9] http://www.livingplaces.com/PA/Schuylkill_County/Pine_Grove_Borough.html
[10] http://docdro.id/9DqHwlE, pg. 25

CO23-5 Mitigation measures to minimize impacts on prime, specialty, and preserved farmlands are described in sections 4.2.2.2, 4.8.4, and 4.8.6.2 of the EIS and are further detailed in the Transco's Agricultural Plan (see attachment 6 of the ECP). Also see the response to comment PM1-179.

CO23-5 (cont'd) combination of private contributions and taxpayer dollars. This land was preserved with the desire and expectation that it would never be developed. It is completely inappropriate that FERC allows Transco to utilize protected lands for its pipeline route, which perversely allows Transco to capitalize on carefully preserved open land and also pay less compensation for these easements due to the devaluation preservation brings when there is no possibility of future commercial development. **FERC should not allow pipeline easements on preserved lands.**

Forest Fragmentation and Wildlife Impacts

CO23-6 The project will fragment forested mountain areas in both the northern and southern portions of Lebanon County allowing for invasive species and increased predation in these areas, which is generally considered to include 300 feet from the right-of-way edge into the forest. Right of ways through forested areas also provide paths for ATV riders and other trespassers, a concern voiced by many people with whom we spoke.

As mentioned, two forested conserved properties in Lebanon County will be crossed, losing permanently a portion of their woods. In all, approximately 45 acres of interior forest land will be impacted during construction, with about 20 interior forest acres permanently clear cut. This fragmentation of mountainside forests will increase erosion into our streams and will also reduce habitat for specialized and sensitive flora and fauna in these areas, including Important Bird Areas (IBA). Lebanon County IBA's include 4.7 miles located in State Game Lands 211 (St. Anthony's Wilderness), and 3.3 miles along the Kittatinny Ridge,[11] a geographic area currently under intense conservation efforts.

While Transco says it will minimize impacts to these impacted migratory bird areas "to the extent possible," they also admit that mortality will take place. According to a June 24 supplemental filing, Transco will provide their mitigation plans in an MOU that is expected to be submitted in August. Consequently, it is impossible to comment on this plan that is not yet available.

This is just one more example of the DEIS's incomplete status; FERC should not enforce a comment deadline nor make a decision until <u>all</u> material is available for review.

CO23-7 Socioeconomics

Lebanon Pipeline Awareness disagrees strongly with some of the conclusions FERC has reached under socioeconomics. FERC concludes that property values will not be reduced by a pipeline easement, but anecdotal evidence, local realtors, and common sense tell us otherwise. FERC cites several reports, two of them gas-industry produced, to support their case. Our research finds flaws in the industry report[12] and provides evidence from both local [13] and more distant

[11] http://kittatinnyridge.org/
[12] http://keylogeconomics.com/wp1/2016/03/29/pipeline-a-threat-to-property-values/

[13] http://www.ldnews.com/story/news/local/2016/01/02/pipelines-could-affect-property-values/77984160/

CO23-6 See the response to comment FA1-88 for information on invasive species management, PM1-71 for waterbody construction and erosion, and CO14-1 and IND114-27 for migratory birds.

CO23-7 See the responses to comments PM1-177 and CO16-6.

CO23 – Lebanon Pipeline Awareness (cont'd)

CO23-7 (cont'd) sources [14] that property values are indeed negatively affected, possibly as much as 30 to 40 percent. In addition, properties along pipeline right of ways may be more difficult to sell at all.

CO23-8 In addition, we personally have heard from landowners who have been told their insurance will either be dropped or changed to commercial status if a pipeline easement is on their property.

CO23-9 The DEIS does find that five of the counties crossed by the proposed project have "poverty rates higher than the respective state level," technically making them environmental justice communities. FERC dismisses the negative economic impacts of the pipeline as negligible and therefore dismisses any environmental injustice, but clearly missing is a discussion of the real impacts felt by landowners along the proposed route.

For example, many rural, older residents or members of religious orders such as the Amish are not online, thereby excluding them from much of the information readily available to others. These citizens most likely received only information material from Transco, which would be terribly one-sided in its viewpoint.

CO23-10 Though FERC cites numerous opportunities for public comment, the legitimate complaint was voiced by several people at the Annville DEIS public hearing that meetings needed to be held closer to their homes. People from Schuylkill County attended both the scoping and DEIS meetings in Annville, making an hour and a half drive or more one way to attend evening meetings held on weeknights—an almost impossible trip for a farmer who has a dairy herd to milk twice a day.

Open houses were equally inconveniently scheduled and were not presented in a format useful to people, where questions and answers could all be heard by everyone at the same time. While this may seem like an insignificant issue, the fact is that answers given individually to people at open houses often conflicted, leaving people wondering what was the actual answer. Lebanon Pipeline Awareness tried diligently to have a public town hall meeting with Transco to give people the opportunity to ask their questions in public, but despite request letters from our County Commissioners and our State Senator, Transco would not agree to such a meeting.

Also not mentioned in the DEIS under economic justice is the stress many people faced when presented with the possibility of a 42-inch, high pressure natural gas transmission pipeline crossing their property, not to mention the real implications of dealing with dishonest and brash land men, trespassing surveyors, and more. Despite the clear need for a knowledgeable attorney to help them through this process, we have learned that most landowners did not know where to find an attorney well-versed in pipeline easement agreements or could not afford to pay attorney fees.

CO23-11 We know many people signed easement agreements because they were told they had no other option; that they would get nothing for their land when it was taken by eminent domain. Many signed because they were sick or overwhelmed by other life circumstances and just couldn't deal with the pipeline issue. We know many affected landowners did not and still do not want to sign an easement agreement because they do not want the pipeline on their land. **In Lebanon**

[14] http://www.forensic-appraisal.com/gas-pipelines

CO23-8 See the response to comment PM1-177.

CO23-9 As described in section 4.9.8, while the Project crosses counties with slightly higher poverty rates than the state, there is no evidence the Project would cause a disproportionate share of adverse environmental or socioeconomic impacts on any racial, ethnic, or socioeconomic group.

In addition to information provided by Transco, all notices of FERC-sponsored public meetings were mailed to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Native American tribes; potentially affected landowners and other interested individuals and groups on the environmental mailing list; newspapers and libraries in the project area; and parties to this proceeding, with at least 2 weeks advance notice. Section 1.3 of the EIS describes the public review and comment process for the Project and has been revised to reflect the outreach activities conducted after issuance of the draft EIS.

CO23-10 See the responses to comments PM1-130 and PM1-152.

CO23-11 See the response to comment PM1-1.

CO23 – Lebanon Pipeline Awareness (cont'd)

CO23-11 (cont'd) **County, approximately 30 property owners have not yet signed and may well go to eminent domain court, if necessary.**

One older farmer told us right from the start that the pipeline was coming through his area because they were poor and couldn't fight back—which was probably true, because hard-working people trying to make ends meet do not have the time or resources to fight multi-billion dollar corporations. **This is truly environmental injustice and it should not be allowed.**

Economics

CO23-12 Last year, Dr. Dennis Witmer, a senior analyst with the Energy Efficiency Evaluations Agency and one of the leading experts on natural gas and energy in the U.S., presented a program on his analysis of the Atlantic Sunrise project.[15] Witmer questioned the actual need for the project, explaining that fully fifty percent of the gas to be shipped through the pipeline has been earmarked for export from Cove Point, an LNG plant in Maryland. In fact, the plans to export LNG through Cove Point are well documented.[16]

Dr. Witmer concluded that there is no shortage of natural gas pipelines in the United States, finding that the transmission pipelines proposed for the eastern U.S. total twice the capacity of gas that is now being produced.

This clearly shows that the Atlantic Sunrise project is not a project designed for public convenience or necessity, but is instead designed for corporate profit and will do so at the expense of private landowners along the pipeline's path. **Transco should not be allowed the privilege of eminent domain to construct a project that is not for the public good.**

For this reason alone, not to mention the numerous reasons provided above, Lebanon Pipeline Awareness insists that FERC does not approve Transco's application for the Atlantic Sunrise project.

Respectfully submitted on behalf of the Board of Directors,

Ann Pinca
President
Lebanon Pipeline Awareness
lebanonpipeline@gmail.com

[15] https://www.youtube.com/watch?v=k9Lzv7oJVcA
[16] http://www.prnewswire.com/news-releases/cabot-oil--gas-corporation-announces-new-agreements-for-long-term-sales-and-pipeline-takeaway-capacity-246409701.html

CO23-12 See the responses to comments PM1-1, PM1-32, PM1-51, and PM1-113.

CO24 – Wyoming County Chamber of Commerce

Wyoming County Chamber of Commerce
79 Warren Street, Tunkhannock, PA 18657
Phone: 570.836.7755 Fax: 570.836.6049
www.wyccc.com

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

RE: Atlantic Sunrise, Docket No. 15-138-000

Good afternoon.

My name is Gina Severcool Suydam. I am the President of the Wyoming County Chamber of Commerce. The first Marcellus Shale well was drilled in our county in 2009, but our county borders several counties where there has been drilling activity prior to our first well. We also sit along Route 6, which is a main east-west corridor, so even when we were not experiencing drilling activity, we were experiencing its impacts.

By way of additional background, we are a small county with a population just over 28,000 people and a workforce of just over 14,000. Our county is home to 1,200 businesses but historically many people in our labor force have worked outside the county and those workers are dependent on other economies. Today, thanks to shale, those dynamics are changing.

Wyoming County is a very different place then it was a decade ago. It's a better place. We still enjoy what we are most known for -- our northern tier's natural abundance, and our rural way of life -- but we do so now with more economic security then we have had in several decades. The natural gas companies operating here, such as Southwestern Energy, Cabot Oil & Gas Corp., Range Resources, Warren Resources, aren't just investing in well-pads and bringing in out-of-state operators. They are investing in our local service companies, suppliers, and vendors. We have also seen them take a stake in our community.

CO24-1 The Atlantic Sunrise pipeline will be part of Wyoming County's evolving, positive relationship with the energy industry. The planning for this pipeline has included: open communication, earnest negotiation, and when necessary, fair compromise. Make no mistake we are just as interested in preserving Wyoming County's quality of life as we are in developing our future. The communities concerns regarding construction, environmental impacts and long-term safety have been heard and responded to.

I don't need to tell you that we need this pipeline to ensure the shale industry will continue to develop within Pennsylvania. That is why so much care has been taken in the Impact Study you are considering. Everyone at the table recognizes that with shale's continued development, our county will also continue to grow into a place where our children are working both within the industry and as part of its downstream economy; that projects such as improvements to our 911 center and trails, parks and flood plain improvements will continue to take place thanks to the Impact Fee, and that it will cost less to heat our homes, fuel our vehicles all while achieving energy independence because of natural gas extraction and conversions.

CO24-1 Comment noted.

CO24 – Wyoming County Chamber of Commerce (cont'd)

CO24-1 (cont'd) Throughout all of this, we have experienced an industry that is interested not only in corporate constructs of developing our Shale fields, but also in the well-being of our workers, land and community. I am pleased to report to you that the same can be said for our interactions with the Atlantic Sunrise Pipeline and its development. For that reason, I am confident in my assessment that this project can be done with good stewardship and limited environmental impact. And in doing so, the Atlantic Sunrise Pipeline will offer long-term benefits that have the potential to be limitless.

Resources:

http://www.cbprogress.org/wp-content/uploads/2015/09/Economic-Impacts-in-Wyoming-County-2010_5.pdf

http://energyindepth.org/marcellus/marcellus-shale-exceeds-economic-expectations/

http://energyindepth.org/marcellus/study-marcellus-shale-frackinga-strong-engine-of-job-growth/

http://energyindepth.org/marcellus/shale-supply-chain-stimulates-pennsylvanias-economy/

http://www.wycopa.org/Documents/Act%2013%20for%202014.pdf

Sincerely,

Gina Suydam

Gina Severcool Suydam
President

CO25 – Wild Virginia and Friends of Nelson

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Pipe Line Company, LLC **Docket No. CP15-138-000**

COMMENTS OF WILD VIRGINIA AND FRIENDS OF NELSON, INTERVENORS, ON DEIS FOR ATLANTIC SUNRISE PROJECT

The following comments are provided on behalf of Wild Virginia and Friends of Nelson regarding the Federal Energy Regulatory Commission's ("FERC") draft environmental impact statement ("DEIS") for Transcontinental Pipe Line Company's ("Transco") proposed Atlantic Sunrise Project ("Atlantic Sunrise" or "Project"). Transco proposes to (i) construct 183.7 miles of 30- and 42-inch-diameter greenfield known as the Central Penn Line ("CPL") North and CPL South in Pennsylvania; (ii) construct 11.5 miles of new 36- and 42-inch diameter loops known as Chapman and Unity Loops in Pennsylvania; (iii) replace 2.5 miles of 30-inch pipeline in Virginia; (iv) construct two new compressor stations ("CS") in Pennsylvania; (v) increase compression at three existing CSs in Pennsylvania and Maryland; (vi) construct two new meter stations and three new regulator stations in Pennsylvania; and (vii) modify existing aboveground facilities in Pennsylvania, Virginia, North Carolina, and South Carolina to allow for bi-directional flow and the installation of supplemental deodorization, odor detection, and/or odor masking/deodorization equipment.

Friends of Nelson is a non-for-profit membership corporation, incorporated in the Commonwealth of Virginia with the mission to protect property rights, property values, rural heritage and the environment for all the citizens of Nelson County, Virginia. Because the project serves a similar purpose and need as does the Atlantic Coast Pipeline (ACP) (Docket#CP15-554

et.al.) these projects are inextractably linked. The ACP is proposed to cross through Nelson County and would have significant environmental, social and economic impacts to members of Friends of Nelson. Friends of Nelson is an intervenor in Docket#CP-554. Because any decision to issue a Certificate of Convenience and Necessity on the ASP would directly affect the purpose and need for the ACP, Friends of Nelson and its membership would be directly impacted by such a decision.

Wild Virginia is a non-profit corporation, incorporated in the Commonwealth of Virginia, whose mission is to protect and defend the wild forest ecosystems of Virginia. Wild Virginia's members have an interest in any federal actions that might impact or influence management of the George Washington and Jefferson National Forests. Because the project serves a similar purpose and need as both the proposed Atlantic Coast Pipeline (ACP) (Docket#CP15-554 et.al.) and the proposed Mountain Valley Pipeline (MVP) (Docket#CP16-10) these projects are inextractably linked. Both the proposed ACP and MVP projects would cross land under the jurisdiction of the United States Forest Service and National Park Service in Virginia which would result in significant environmental impacts to these public lands. A FERC decision to grant a certificate to construct the Atlantic Sunrise Project would directly influence and affect the purpose and need of both the ACP and MVP. Wild Virginia is in intervenor in Dockets#CP15-554 et.al. and #CP16-10 and Wild Virginia and its membership would be, therefore, directly impacted by a decision to issue a Certificate of Convenience and Necessity on the ASP.

COMMENTS

A FERC decision to grant a certificate to construct the Atlantic Sunrise Project would constitute a "major Federal action" within the meaning of the National Environmental Policy Act

CO25 – Wild Virginia and Friends of Nelson (cont'd)

(NEPA), and it must, therefore, be preceded by the preparation of an Environmental Impact Statement (EIS). (42 U.S.C. § 4332). FERC's EIS must address:

> (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between the local short-term uses of the project as compared to the long term use of the land, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. (42 U.S.C. § 4332).

Under NEPA, "agencies [must] take a 'hard look' at the environmental effects of their planned action." (*Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374, 1989). Pursuant to the Administrative Procedure Act (APA), reviewing courts are to set aside as arbitrary and capricious any major Federal action that is taken without the requisite "hard look" at the relevant factors in an EIS. (5 U.S.C. § 706(2)(A)). FERC's analysis in the DEIS for the Atlantic Sunrise Project fails to meet NEPA's requirements for the following reasons: CO25-1

I. Failure to address the purpose and need of the project

The Council on Environmental Quality's ("CEQ") regulations implementing NEPA require FERC to "specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." (40 C.F.R. § 1502.13). Yet the DEIS states that "[w]hile this EIS briefly describes Transco's stated purpose, it will not determine whether the need for the Project exists, because this will later be determined by the Commission." DEIS at 1-2. This is in direct violation of the plain language of the CEQ regulation, which requires FERC to "specify the underlying purpose *and need*" for the project in the EIS. (40 C.F.R. § 1502.13, emphasis added).

CO25-1 See the response to comment PM1-113.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-1 (cont'd)

It is arbitrary and capricious for FERC to refuse to analyze the purpose and need for the project in the DEIS. In fact, any environmental impacts are predicated on the basic necessity, redundancy or frivolous nature of the project.

The absence of any purpose and need analysis also precludes any analysis of whether existing infrastructure could, in fact, fulfill the proposed purpose and need. Indeed, if existing infrastructure could fully meet the needs of the shippers that propose to use the capacity created by the Atlantic Sunrise Project, then FERC could not possibly conclude that the project serves the "public convenience and necessity," as is required to grant a certificate under the Natural Gas Act.

II. Failure to analyze the purpose and need for the project

There is no independent analysis in the DEIS on the purpose and need for the project. Without performing an assessment of the need for the project, FERC cannot determine the reasonable range of alternatives that must be analyzed in the DEIS. In particular, without determining the need for the project, FERC cannot reasonably assess the desirability of the required "no action" alternative.

It is reported that FERC and the gas industry are engaged in a rapid overbuilding of infrastructure in the Appalachian basin. (Institute for Energy Economics and Financial Analysis, Risks Associated With Natural Gas Pipeline Expansion in Appalachia, p. 4 (Apr. 2016) ("IEEFA Report"), *available at* http://ieefa.org/wp-content/uploads/2016/05/Risks-Associated-With-Natural-Gas-Pipeline-Expansion-in-Appalachia-_April-2016.2.pdf.) In considering the impact of new construction projects, FERC's policy considers, among other factors, the possibility of overbuilding natural gas infrastructure. (*Certification of New Interstate Natural Gas Pipeline*

4

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-1 (cont'd) *Facilities*, 88 FERC ¶ 61,227, p. 2 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) ("Certificate Policy Statement"). FERC must consider and address the potential for overbuilding before it may issue a certificate for the Atlantic Sunrise Project.

FERC has set precedent for undertaking this analysis as FERC has recently notified affiliates of Energy Transfer Partners LP and Columbia Pipeline Group Inc. that two major Appalachian pipeline projects cannot be approved until an overlapping 13-mile section of the proposed routes in Monroe and Noble counties, OH, is redesigned. This letter is clear evidence of FERC having analyzed and considered the purpose and need of these projects. However, this analysis belongs in the DEIS for these projects so that the public will have access to this information and can submit substantive comments on the environmental effects of duplicative projects with a similar purpose and need of if they contain elements that are duplicative. It is a violation of NEPA to withhold such evidence from the DEIS.

III. Failure to provide sufficient and complete information for substantive public comment

FERC's decision not to undertake and include analysis of purpose and need in the DEIS denies the public its right to be fully informed on all aspects of the DEIS, and therefore, has restricted the ability and the right of the public to formulate and file informed comments on the purpose and need for the project.

CO25-2 **IV. Failure to expand analysis beyond the applicant's stated objectives for the project**

CO25-2 See the response to comment PM1-113.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-2 (cont'd)

Not only did FERC completely fail to provide a statement of need for the Project, but it also framed its statement of purpose far too narrowly. FERC primarily relies on "Transco's stated objectives for the Project" which are to:

- Provide an incremental 1.7 MMDth/d of year-round firm transportation capacity from the Marcellus Shale production area in northern Pennsylvania to its existing market areas, extending as far south as its Station 85 Pooling Point in Choctaw County, Alabama; and
- Provide its customers and the markets that they serve with greatly enhanced access to Marcellus Shale supplies, including new north-to-south delivery capability.

DEIS at 3-1. By relying almost exclusively on Transco's ambitions for the project to frame its statement of purpose, FERC impermissibly "restrict[ed] its analysis to just those 'alternative means by which a particular applicant can reach his goals.'" (*Simmons*, 120 F.3d at 669, *quoting Citizens Against Burlington*, 938 F.2d at 209; *see also Nat'l Parks & Cons. Ass'n*, 606 F.3d at 1072.)

Courts have found that the FERC "cannot restrict its analysis to those 'alternative means by which a particular applicant can reach his goals.'" (*Id.*, *quoting Van Abbema v. Fornell*, 807 F.2d 633, 638, 7th Cir. 1986; *see also Nat'l Parks & Cons. Ass'n v. Bureau of Land Mgmt.*, 606 F.3d 1058, 1072, 9th Cir. 2009 - finding a purpose and need statement that included the agency's goal to address long-term landfill demand, and the applicant's three private goals was too narrowly drawn and constrained the possible range of alternatives in violation of NEPA).

CO25-3

IV. Failure to analyze reasonable alternatives

The DEIS states that "because the purpose of the Project is to transport natural gas," the consideration of alternatives that do not transport natural gas "are not considered or evaluated further in this analysis." (DEIS at 3-2). As a result, FERC excluded consideration of meeting

CO25-3 See the response to comment PM1-183.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-3 (cont'd) any of the Project's purpose from "the generation of electricity from renewable energy sources or the gains realized from increased energy efficiency and conservation." (*Id.*) Not only did FERC limit consideration of alternatives that do not involve transporting natural gas, FERC refused to consider alternatives that did not involve transportation of natural gas from the Marcellus Shale region, explaining that alternatives that do not "provide enhanced access to Marcellus Shale gas supplies . . . would not fulfill the purpose and need of the project" (DEIS at 3-2).

FERC's categorical refusal to consider alternative energy and increased energy efficiency alternatives is at odds with other recent statements. For example, in the Constitution Pipeline DEIS, FERC considered energy conservation/efficiency and renewable energy alternatives. (*See* Constitution Pipeline DEIS at 3-3 – 3-12, Docket CP13-499-000). While FERC ultimately decided against considering these alternatives in greater detail, it at least considered them in some detail. That is in stark contrast to the Atlantic Sunrise DEIS where alternatives that would not "provide enhanced access to Marcellus Shale gas supplies" were excluded from any analysis. FERC's narrowing of the range of alternatives to just those alternatives that would "provide enhanced access" to a particular shale basin means that energy conservation and renewable energy alternatives will never be considered, even if they are economically and technologically feasible and serve the broader public interest.

Therefore, FERC must prepare a DEIS that includes an independent assessment of both "purpose and need", taking into account not only the applicant's stated purpose but also the broader public purpose and need, and put the complete DEIS out for public comment.

CO25-4 **V. Failure to provide sufficient and complete information from the applicant in the DEIS**

CO25-4 See the response to comment PM1-70.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-4 (cont'd)

Throughout the DEIS, FERC indicates that information provided by Transco is incomplete. This incomplete information forms the basis for many of the proposed conditions that FERC staff recommends be attached to any certificate authorizing the Atlantic Sunrise Project. (DEIS at 5-21 – 5-32). Much of this information should have been included in the DEIS so that the public had an opportunity to review it and provide comments.

The NEPA EIS requirement "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." (*Department of Transportation v. Public Citizen*, 541 U.S. 752, 768, 2004). This "informational role" assures the public that the agency has considered environmental concerns in the decisionmaking process and provided a "springboard for public comment" in that decisionmaking process. (*Id.*) "The purpose here is to ensure that the 'larger audience[ ]' . . . can provide input as necessary to the agency making the relevant decisions." (*Id.*) Courts have held that "informed public participation in reviewing environmental impacts is essential to the proper functioning of NEPA"*(League of Wilderness Defenders v. Connaughton*, 752 F.3d 755, 761, 9th Cir. 2014).

In reviewing an EIS, courts look at "whether the EIS's form, content and preparation foster both informed decisionmaking and informed public participation." (*California v. Block*, 690 F.2d 753, 761, 9th Cir. 1982). Here, FERC decided to publish a DEIS knowing that it lacked information that is critical for public review and comment.

For example, regarding Transco's proposed additional temporary workspace ("ATWS") within 50 feet of waterbodies and wetlands, FERC asks Transco to submit "additional justification" for dozens of locations identified in bold in Table K-5 of Appendix K (waterbodies) and in Table L-2 of Appendix L (wetlands). (*See* DEIS at 5-27.) Appendix K

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-4 (cont'd)

identifies at least 58 instances in which FERC is requesting "additional justification" for ATWS within 50 feet of waterbodies. (*See* DEIS, App. K, Table K-5.) Appendix L identifies at least 36 instances in which FERC is requesting "additional justification" for ATWS within 50 feet of wetlands. (*See* DEIS, App. L, Table L-2.) In numerous instances, FERC says that it needs "additional site-specific information and mitigation measures" to justify ATWS in wetlands, including exceptional value wetlands. (*See* DEIS, App. L at L-11-15, 18, 31-32, 34, 39-43.)

This lack of information is pervasive throughout the DEIS. For example, FERC requests that Transco provide:

- An updated list of water wells and springs within 150 feet of construction workspaces based on completed surveys and indicating any water wells and springs that are within areas of known karst. (DEIS at 4-41).
- Any updates to Transco's Abandoned Mine Investigation and Mitigation Plan regarding proposed mitigation measures to manage and dispose of contaminated groundwater. (DEIS at 4-47).
- Proposed mitigation measures that Transco would implement to protect all Zone A source water protection areas. (DEIS at 4-51).
- All outstanding geotechnical feasibility studies for HDD crossing locations and the mitigation measures that Transco would implement to minimize drilling risks. (DEIS at 4-66).
- The locations where Transco proposes to use biocides, the name of the specific biocide(s) to be used, material safety data sheets for each biocide, copies of relevant permits, and a description of the measures that would be taken to neutralize the effects of the biocides upon discharge of the test water. (DEIS at 4-67).
- A final copy of the PRM Plan, including any comments and required approvals from the USACE and PADEP. (DEIS at 4-75).
- Complete results of noxious weed surveys and the final Management Plan. (DEIS at 4-83).
- All documentation of Transco's correspondence with the PGC and the PADCNR and any avoidance or mitigation measures developed with these agencies regarding the SGL and Sproul State Forest crossings. (DEIS at 4-88).
- Any updated consultations with the FWS regarding migratory birds and a revised Migratory Bird Plan incorporating any additional avoidance or mitigation measures. (DEIS at 4-94).
- All fall 2015 hibernacula survey results for the Indiana bat, and any avoidance and mitigation measures developed based on the results. (DEIS at 4-107).
- All fall 2015 hibernacula survey results for the northern long-eared bat, and any avoidance and mitigation measures developed based on the results. (DEIS at 4-108).

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CO25-4 (cont'd)

- All survey results for the bog turtle, including any FWS comments on the surveys and their conclusions. (DEIS at 4-112).
- All survey results for the northeastern bulrush, including any FWS comments on the surveys and their conclusions, and proposed mitigation that would substantially minimize or avoid the potential impacts. (DEIS at 4-114).
- All survey results for the Allegheny woodrat, permit requirements, agency correspondence, and avoidance or mitigation measures developed in consultation with the PGC. (DEIS at 4-119).
- All documentation of Transco's correspondence with the PGC and any avoidance or mitigation measures developed with the agency regarding the eastern small-footed bat. (DEIS at 4-120).
- All survey results for timber rattlesnake, permit requirements, agency correspondence, and avoidance or mitigation measures developed in consultation with the PFBC. (DEIS at 4-121 – 4-122).
- The results of any mussel surveys conducted within the Susquehanna River and any additional avoidance or mitigation measures included in Transco's site-specific HDD contingency crossing plans. (DEIS at 4-123).
- All documentation of Transco's correspondence with the VDGIF and any avoidance or mitigation measures developed with this agency regarding state-listed mussels in Virginia. (DEIS at 4-123).
- Revised site-specific residential plans for all residences located within 10 feet of the construction work area. (DEIS at 4-134).
- An update of the status of the development of the site-specific crossing plans for each of the recreation and special interest areas listed as being crossed or otherwise affected in table 4.8.6-1. (DEIS at 4-152).
- Updated information regarding the identified landfill adjacent to the CPL South right-of-way near MP 66.8, including any mitigation measures that Transco would implement to avoid the landfill site or address any contamination that is encountered. (DEIS at 4-159).

This information is relevant to FERC's evaluation of "reasonably foreseeable significant adverse effects" and it should have been included in the DEIS. (40 C.F.R. § 1502.22). The sheer volume of incomplete information indicates that FERC issued a legally deficient DEIS. By publishing the DEIS without the required information, FERC denied the public an opportunity to participate in the decisionmaking process (*Public Citizen*, 541 U.S. at 768; *League of Wilderness Defenders*, 752 F.3d at 761).

CO25-5 **VI. Failure to consider and evaluate the direct and indirect effects of the Atlantic Sunrise Project**

CO25-5 See the response to comment PM1-6.

CO25-5 (cont'd)

FERC must take a "hard look" at the direct and indirect effects of the Atlantic Sunrise Project. (*Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 1989). Direct effects are "caused by the action and occur at the same time and place." (40 C.F.R. § 1508.8(a)). Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." (40 C.F.R. § 1508.8(b)).

Indirect effects would include the environmental impacts of related projects in time and in physical proximity and those with similar or interrelated purpose and need. The proposed Atlantic Coast Pipeline and the Mountain Valley Pipelines are just such related projects. All three of these projects are primarily vehicles for transporting large volumes of natural gas from the Appalachian Basin of Ohio, West Virginia and Pennsylvania to the Williams Transco Main Line. Since the permitting (or denial of such permit) of any one of these projects would directly affect the likelihood, analysis and environmental impacts of the others, these projects need to be considered linked in any environmental analysis.

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 - *Balt. Gas & Elec. Co.*, 462 U.S. 87, 98, 1983). The DEIS for the Atlantic Sunrise Project fails to provide the requisite "hard look" at both the direct and indirect effects of the proposal.

CO25-6

VII. Failure to consider the indirect effects of shale gas development that is both causally related to, and a reasonably foreseeable consequence of, the Atlantic Sunrise Project

In analyzing the potential impacts of its approval of the Atlantic Sunrise project, FERC must consider the indirect effects of shale gas development. Indirect effects are "caused by the

CO25-6 See the responses to comments PM1-24 and CO13-9.

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CO25-6 (cont'd)

action and are later in time or farther removed in distance, but are still reasonably foreseeable." (40 C.F.R. § 1508.8(b)). "Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use . . . and related effects on air and water and other natural systems, including ecosystems." (*Id.*)

The Atlantic Sunrise Project would induce further shale gas development, the impacts of which must be considered in FERC's indirect effects analysis for the Project. The mere presence of the pipeline would influence the supply that producers and extractors would be able to get to market. This would put pressure on producers to extract more and more natural gas. It would increase the likelihood that more sites be developed and eventually that less productive sites would be developed.

Courts have 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). It cannot be disputed that gas development and infrastructure that transports that gas are "two links of a single chain." FERC has admitted as much in the liquefied natural gas (LNG) context, where it stated that "it is axiomatic that natural gas exports require natural gas supplies." (*See Dominion Cove Point LNG, LP*, 148 FERC ¶ 61,244, at P 231, 2014). Similarly, it is axiomatic that the proposed Atlantic Sunrise Project requires natural gas supplies – otherwise, it would be irrational to construct nearly 200 miles of new, large-diameter pipeline, two new compressor stations, and reverse the flow of the Transco longhaul pipeline.

Transco's own filings reveal the close causal relationship between the Atlantic Sunrise Project and shale gas drilling. For example, Transco says that the Atlantic Sunrise Project, if

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CO25-6 (cont'd) constructed, will "provide [its] customers and the markets they serve with *greatly enhanced access* to Marcellus Shale supplies." (Resource Report 1 at 1-2, emphasis added).)

It is duly noted that the corollary to "more pipelines will lead to more drilling" is that fewer pipelines may lead to less drilling.

CO25-7 **VIII. Failure to consider and evaluate the cumulative environmental impacts, including those impacts associated with gas development and the use/burning of this gas**

A cumulative impact is the:

> Impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 C.F.R. § 1508.7).

FERC's cumulative impact analysis in the DEIS is impermissibly restrictive and does not satisfy NEPA's "hard look" standard.

FERC's cumulative impacts analysis is fatally flawed because it substantially limited the analysis area. For example, FERC states that "[f]or the most part, the area of potential cumulative impact is limited to the area *directly affected by the Project* and, depending on the resources, in the *adjacent areas*." *Id.* (emphasis added). Based on this limited analysis area, FERC concluded that, "as a whole, minimal cumulative effects are anticipated when the impacts of the [Atlantic Sunrise] Project are added to the identified ongoing actions *in the immediate area*." (*Id.* at 4-290, emphasis added). Such a limited cumulative impacts analysis is plainly inconsistent with both the Council on Environmental Quality's ("CEQ") and Environmental Protection Agency's ("EPA") guidance on cumulative impacts.

CO25-7 See the responses to comments PM1-6, PM1-24, FA1-25, and C013-9.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-7 (cont'd)

The CEQ guidance recommends significantly expanding the cumulative impacts analysis area beyond the "immediate area of the proposed action" that is often used for the "project-specific analysis" related to direct and indirect effects:

> 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).

EPA's guidance states that "[s]patial and temporal boundaries should not be overly restrictive in cumulative impact analysis." (EPA, Consideration of Cumulative Impacts in EPA Review of NEPA Documents, p. 8 ,1999). EPA specifically cautions agencies to not "limit the scope of their analyses to those areas over which they have direct authority or to the boundary of the relevant management area or project area." *Id.* Rather, agencies "should delineate appropriate geographic areas including *natural ecological boundaries*" such as ecoregions or watersheds. (*Id* ,emphasis added). Therefore, FERC's assertion that, "for the most part, the area of potential cumulative impact is *limited to the area directly affected by the Project* and, depending on the resources, in the *adjacent areas*," is plainly inconsistent with CEQ's and EPA's guidance on cumulative impacts. As a result, the cumulative impacts analysis is fatally flawed and cannot support FERC's conclusion that there will be "minimal cumulative effects" upon construction and operation of the Atlantic Sunrise Project.

FERC did expand the region of influence ("ROI") to analyze cumulative impacts for certain "major actions," such as large commercial, industrial, transportation and energy development projects, including "natural gas well permitting and development projects." (DEIS

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-7 (cont'd) at 4-259). However, FERC only expanded the ROI for such actions to "within 10 miles of the Atlantic Sunrise Project." (*Id.*) FERC provides no explanation for selecting such a restrictive analysis area which not only had the effect of excluding thousands of existing shale gas wells from the cumulative impacts analysis but also hundreds, if not thousands, of reasonably foreseeable future shale gas wells. Thus, FERC's selection of the 10-mile ROI for the above-referenced projects was arbitrary and capricious and renders the DEIS deficient.

Moreover, FERC is required to consider the cumulative impacts of "past, present, and reasonably foreseeable future actions." (40 C.F.R. § 1508.7). By only considering "ongoing Marcellus shale development," FERC necessarily excluded past actions from consideration. These restrictive parameters obfuscate the significant and long-term land use impacts that have already occurred and may continue to occur in this region, especially if FERC continues authorizing pipeline projects without ever taking a comprehensive region-wide analysis.

FERC's approval of the Project would expand the capacity of Transco's Leidy Line. A likely consequence of that decision would be increased shale gas drilling on nearby state forest lands, threatening significant damage to their wild character.

CO25-8 **VIII. FERC must prepare a programmatic EIS for infrastructure projects related to increasing takeaway capacity from the Appalachian Basin**

A programmatic EIS ("PEIS") is sometimes required for "broad Federal actions." (40 C.F.R. § 1502.4(b)). The Supreme Court has recognized that NEPA requires a PEIS "in certain situations where several proposed actions are pending at the same time." (*Kleppe v. Sierra Club*, 427 U.S. 390, 409, 1976). The Court explained that:

> when several proposals . . . that will have cumulative or synergistic environmental impacts upon a region are pending concurrently before an agency, their environmental

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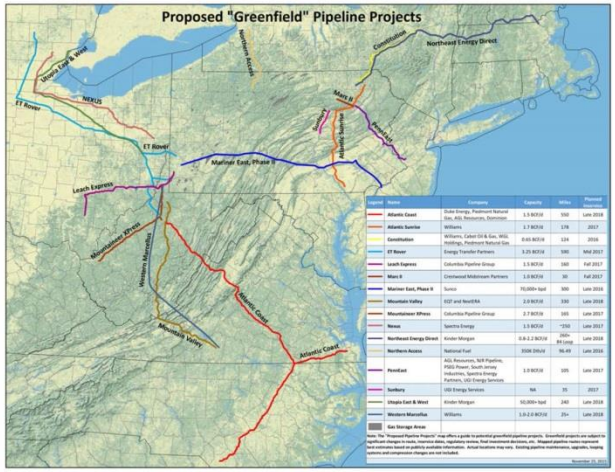
CO25-8 See the response to comment CO13-21.

CO25-8 (con'td)

impacts must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action. (*Id.* at 410).

Here, FERC is well aware that there are more than "several proposed actions are pending at the same time . . . that will have cumulative or synergistic environmental impacts upon a region." Figure 3 below identifies current proposed "greenfield" pipeline projects impacting the Appalachian basin.

Figure 3: Proposed "Greenfield" Pipeline Projects Impacting the Appalachian Basin.



Source: Penn State – Marcellus Center for Outreach and Research, Nov. 25, 2015. (Attachment). *See also* Attachment , which is the same map as Figure 3 but with gas wells.

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CO25-8 (cont'd) As Figure 3 shows, there are at least nine greenfield pipeline projects totaling over 2,500 miles targeting shale gas supplies in the OH-PA-WV tri-state area. This would expand gas capacity out of this region by 13.45 Bcf/d and NGL capacity by 120,000 bpd. This clearly indicates that there are "several proposed actions are pending at the same time . . . that will have cumulative or synergistic environmental impacts upon a region." (*Kleppe*, 427 U.S. at 409-410). FERC cannot stick its head in the sand and ignore the cumulative impacts of these projects while it incrementally authorizes this massive infrastructure build-out.

In December 2014, CEQ published guidance for when agencies should prepare a PEIS. According to this guidance, "[a] well-crafted programmatic NEPA review" provides a basis for "identifying broad mitigation and conservation measures that can be applied to subsequently tiered reviews." (CEQ, *Effective Use of Programmatic NEPA Reviews*, p. 10 (2014), available https://www.whitehouse.gov/sites/default/files/docs/effective_use_of_programmatic_nepa_at reviews_18dec2014.pdf.) 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-related infrastructure projects may not be certain does not mean that FERC cannot "establish parameters for subsequent analyses." In fact, this may assist FERC (and the public) in understanding the broader reasonably foreseeable consequences of jurisdictional and non-jurisdictional natural gas infrastructure projects in the Appalachian Basin.

The 2014 guidance recommends preparing a PEIS when "several energy development programs proposed in the same region of the country [have] similar proposed methods of

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-8 (cont'd) 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 PEIS 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).

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 PEIS for gas-related infrastructure projects in the Appalachian Basin so that the public has a chance to see the big picture.

In July 2012, the Department of Energy ("DOE") and Bureau of Land Management ("BLM") published a final PEIS for Solar Development in southwestern United States. (*See* BLM, Final PEIS for Solar Energy Development in Six Southwestern States, *available at*

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CO25-8 (cont'd) http://solareis.anl.gov/documents/fpeis/index.cfm.) DOE and BLM prepared the EIS as co-lead agencies in consultation with cooperating agencies. (*See id.* at Exec. Summ., Cover Page, *available at* http://solareis.anl.gov/documents/fpeis/Solar_FPEIS_ExecutiveSummary.pdf.) 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, emphasis added).

This is precisely what FERC should be doing for gas-related infrastructure that is intended to connect Appalachian Basin shale gas to market areas. As Figure 3 shows, there are "several proposals . . . that will have cumulative or synergistic environmental impacts upon [the Appalachian] region [and they] are pending concurrently before [FERC]," (*Kleppe*, 427 U.S. at 410.), including the Atlantic Coast Pipeline, the Mountain Valley Pipeline, the WB Express and the Appalachian Connector. Therefore, "their environmental impacts must be considered together" in a comprehensive PEIS. *Id.* By preparing a PEIS, FERC could employ a more "thoughtful and broad-based approach to planning for future development" and "maximize the mitigation of associated environmental impacts" on a multitude of resources, including waterbodies and wetlands, forests, wildlife habitat, threatened and endangered species, public lands, air quality and noise.

CO25-9 **IX. Failure to analyze and consider the direct and indirect effects of the project on climate change**

The courts have held that there is a "pressing need" for agencies to account for climate change in performing their duties under NEPA. (*Conservation Nw. v. Rey*, 674 F. Supp. 2d 1232, 1253, W.D. Wash. 2009). As a result, it has become relatively routine practice to account

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CO25-9 As previously noted, the CEQ regulations state that an agency's NEPA review must analyze a project's indirect impacts, which are causally connected to the proposed action and occur "later in time or farther removed in distance [than direct impacts], but are still reasonably foreseeable." The environmental effects resulting from natural gas production are generally neither caused by a proposed pipeline (or other natural gas infrastructure) project nor are they reasonably foreseeable consequences of our approval of an infrastructure project, as contemplated by CEQ regulations. A causal relationship sufficient to warrant Commission analysis of the non-pipeline activity as an indirect impact would only exist if the proposed pipeline would transport new production from a specified production area and that production would not occur in the absence of the proposed pipeline (i.e., there will be no other way to move the gas). Such a causal relationship does not exist for the Project. We believe, therefore, that analyzing the impacts associated with natural gas production and transport are not within the scope of our review for the Project.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-9 (cont'd) for indirect greenhouse gas (GHG) emissions from proposed federal actions. FERC, however, concludes "that neither construction nor operation of the Project would significantly contribute to GHG cumulative effects or climate change." The analysis falls short in at least three ways.

First, FERC's quantification of the direct GHG emissions from the Project, (DEIS at 4-196), have been underestimated. The DEIS understates the Project's direct GHG emissions, by understating the impact of methane emissions. The primary component of natural gas is methane, and methane is also a potent GHG. The DEIS does not identify the Project's methane emissions. Instead, it reports GHG emissions in terms of carbon dioxide equivalents ("CO_2e"). This does not represent best available science since the timeframe that methane operates as a potent greenhouse gas is much different than CO_2.

Moreover, The Commission's assessment of indirect GHG emissions is limited to the combustion of the natural gas. FERC cannot ignore the effects on the climate from production and transport.

Indirect effects "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." (40 C.F.R. § 1508.8). In draft guidance, CEQ, the agency charged with overseeing NEPA, has asked FERC to assess both "downstream" and "upstream" emissions. CEQ's draft guidance states:

When assessing direct and indirect climate change effects, agencies should take account of emissions from activities that have a reasonably close causal relationship to the Federal action, such as those that may occur as a predicate for the agency action (often referred to as upstream emissions) and as a consequence of the agency action (often referred to as downstream emissions) should be accounted for in the NEPA analysis. (CEQ Guidance at 11)

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CO25-9 (cont'd)

Note that the EPA has asked the Commission to discuss "emissions associated with the production, transport, and combustion of the natural gas." (EPA, Comments on the Draft Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, Jan. 19, 2016). Natural gas production, processing, and transmission are a significant source of GHGs, particularly methane. Methane is the primary component of natural gas. Methane can be directly vented into the atmosphere or can escape from the wells, the gathering pipelines at the well pads and the larger pipelines in the distribution system, and the compressor stations that shuttle the gas through the distribution system. Estimates vary about the quantities of methane leaked into the atmosphere during the natural gas lifecycle, but some estimates range from 1.4 to over 15 percent of the total produced gas. EPA has identified natural gas systems as the "single largest contributor to United States anthropogenic methane emissions," with emissions from the oil and gas industry amounting to over 40 percent of total methane emissions. (EPA, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 76 Fed. Reg. 52,738, 52,792, Aug. 23, 2011).

Even when using an estimate of total methane emissions that many recent studies have criticized as too low, and a GWP that has been superseded by recent higher estimates, EPA concluded that methane emissions from the oil and gas industry constituted five percent of all CO_2e emissions in the country (*Id.* at 52,791–92).

As discussed above, the climate change impacts of methane are of particular concern because methane has 86 times the GWP of CO_2 over 20 years, when considering the potential for positive climate carbon feedbacks. The latest IPCC Report also found that methane has 70 times the global temperature change potential, the change in global mean surface temperature resulting

CO25 – Wild Virginia and Friends of Nelson (cont'd)

CO25-9 (cont'd) from emissions, of CO_2. (PCC AR5 at 714) Emissions of methane therefore will have a greater and more immediate effect on the climate than emissions of CO_2.

FERC's analysis, therefore, underestimates the emissions from the transport of the gas and upstream production. It further completely fails to quantify the emissions from upstream production and transportation, giving the public and decision makers no information with which to form a decision.

FERC failed entirely to quantify emissions from upstream production and transport. That is because, according to FERC, upstream production activities are not under FERC's jurisdiction. The DEIS states that "FERC's authority under the NGA review requirements relate only to natural gas facilities that are involved in interstate commerce. Thus, the facilities associated with the production of natural gas are not under FERC jurisdiction." (DEIS at 4-263.) However, just because upstream production is not under FERC's jurisdiction does not mean that it can avoid considering these impacts as part of the cumulative impacts analysis in the DEIS. (40 C.F.R. § 1508.7). Consequently, FERC's conclusion that "neither construction nor operation of the Project would significantly contribute to GHG cumulative effects or climate change" is not based on a hard look at the lifecycle GHG emissions from this Project.

CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of FERC's Rules of Practice and Procedure, 18 C.F.R. § 385.2010, I, Ernest Reed, 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.

CO25 – Wild Virginia and Friends of Nelson (cont'd)

Dated: June 27, 2016

Respectfully submitted,

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CO26 – Inflection Energy LLC

UNITED STATES OF AMERICA
Before The
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC	))	**Docket No. CP15-138-000**

COMMENTS OF INFLECTION ENERGY LLC
IN SUPPORT OF DRAFT ENVIRONMENTAL IMPACT STATEMENT

Pursuant to Notice of Draft Environmental Impact Statement ("EIS") published by the
CO26-1 Commission on May 5, 2016, Inflection Energy LLC ("Inflection"), an Intervenor in the captioned proceeding, files these Comments in support of the Draft EIS.

The Draft EIS published by Commission Staff concludes that approval of the Atlantic Sunrise Project would result in some adverse environmental impacts. However, the Draft EIS also concludes that most of those impacts would be reduced to less-than-significant levels with the implementation of mitigation measures proposed by the Applicant and the additional measures recommended in the Draft EIS. Inflection concurs in this assessment.

Further, Inflection notes that the environmental review process envisioned by the National Environmental Policy Act ("NEPA") does not preclude approval of a project merely because it may have ***some*** unmitigated adverse environmental impacts. Rather, in such circumstances, NEPA contemplates a balancing of those consequences with other considerations as part of the public interest determination applicable under Section 7(c) of the Natural Gas Act.

Here the Application itself, the additional evidence supplied by the Applicant, and the Comments filed in support of the Application contain substantial evidence that supports such a conclusion in this case. When complete, the Atlantic Sunrise Project will enhance the interstate natural gas pipeline infrastructure to facilitate connecting secure domestic supplies of clean burning natural gas with existing natural gas markets and with expanded LNG export markets. The result should be more robust, less volatile markets for domestic natural gas, especially from

CO26-1 Comment noted.

CO26-1 (cont'd) the Marcellus Shale, and enhanced competition. More stable market pricing for natural gas will contribute to and foster continued development of Marcellus Shale natural gas reserves and deliverability, which already provide significant benefits to domestic consumers through enhancing the adequacy of domestic supplies of natural gas.

For the reasons stated above, Inflection respectfully requests the Commission to adopt the Draft EIS as a Final EIS, and to expeditiously issue a certificate of public convenience and necessity authorizing construction and operation of the Atlantic Sunrise Project.

Respectfully submitted,

INFLECTION ENERGY LLC

HUSCH BLACKWELL LLP
William F. Demarest, Jr.
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Washington, D.C. 20006-4656

Attorneys for Inflection Energy LLC

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in these proceedings.

Dated at Washington, D.C., this 27th day of June 2016.

/s/ Chris Rul
Chris Rul

CO27 – The Rebel Newspaper

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The Rebel board, Holtwood, PA.

CO27-1 As the editor-in-chief of The Rebel newspaper, I feel obligated to speak out against the Atlantic Sunrise Pipeline for the sake of my readers and contributors. The entire Rebel board is strongly opposed to this project and find it unconstitutional of you to say that the impacts of this project are less than significant. Though The Rebel is a political paper, I feel that the protection of the environment is a political responsibility the and should be treated as such. I have decided to point out the several flaws in your Direct Environmental Impact Statement. I have been in contact with Jay Parrish, the former state geologist. He was kind enough to look

CO27-2 through the DEIS and pointed out some very helpful things. First, the maps that you use are very outdated and, therefore, that information is inaccurate and shouldn't be used for a project like this that has the

CO27-3 potential to take lives if anything goes wrong. Also, the seismic activity in several townships in Lancaster will make this project nearly impossible. There is a fault line that this pipe would come very close to, if not cross it even. You can't say that this doesn't prove to be a significant environmental impact. Please reconsider your statement, repeated over and over in the DEIS, that the Atlantic Sunrise has no significant environmental impact. Lastly, this pipeline brings the

CO27-4 constituents affected no economic benefits other than the petty change Williams offers landowners. Please keep this in consideration.

CO27-5 We all know that you will approve this project anyway. You will put earth below corporate benefits. FERC, you are a disgrace to America and if you do approve this project, there will be an article in The Rebel paper about your screwed agency. If you deny this project, there will be an article about how you saved the people of PA from one pipeline, but then it will proceed to point out every other pipeline you have wrongly given permission for. If you change your ways and see the dead end that natural gas, oil, and every other fossil fuel is leading us to, then I can safely write an article that will explain how FERC has finally caught up with the American people and is denying Corporate America the unlawful profits that it has been stealing from the poor and middle class families. FERC, I'm asking that say no to the Atlantic Sunrise pipeline, for the sake of America as a whole.

CO27-1 See the response to comment PM1-9.

CO27-2 Comment noted.

CO27-3 We disagree. We do not believe that the Project would be adversely affected by seismic activity due to the low probability and low incidence/susceptibility of significant magnitude earthquakes within the project area. The pipeline and associated facilities would be designed and constructed in accordance with applicable DOT regulations (49 CFR 192) and applicable federal and state standards and design requirements, which would allow the project facilities to withstand probable seismic risks based on the risk zones crossed.

CO27-4 Economic impacts are described in section 4.9.7 of the EIS.

CO27-5 We are still conducting our review of the Project. The Commission will determine whether or not to approve the Project following the issuance of the final EIS. See the response to PM1-51.

CO28 – Appalachian Trail Conservancy

APPALACHIAN TRAIL CONSERVANCY®

June 27, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Re: Transcontinental Gas Pipe Line Company, LLC
Docket CP15-138-000
DEIS for the Atlantic Sunrise Proposed Natural Gas Pipeline

Dear Ms. Bose,

I am writing on behalf of the Appalachian Trail Conservancy with regard to the above-mentioned project and its proposed crossing of the Appalachian National Scenic Trail. The Appalachian Trail Conservancy (ATC) is a private nonprofit organization whose mission is to manage and protect the Appalachian National Scenic Trail (ANST, A.T., Trail) and its associated resources. We accomplish this through a unique management relationship between our 31 volunteer Trail-maintaining clubs and our local, state and federal agency partners, including the Pennsylvania State Game Commission (PGC) and National Park Service (NPS).

The A.T. was first conceived by regional planner Benton MacKaye in 1921 as a way to preserve the crest line of the Appalachian Mountains and provide a wilderness retreat from life in the increasingly urbanized eastern United States. It was later established as a unit of the National Park System when it was designated one of the first national scenic trails and has since become a world premier recreational and hiking resource attracting approximately 2 million visitors each year. The Trail extends over 2,180 miles through 14 states from Georgia to Maine and since its protection by Congress under the National Trails System Act in 1968, approximately 270,000 acres have been acquired or designated through management agreements as a protective corridor for the Trail. This corridor of land is home to a wealth of natural, cultural and scenic resources.

As described in the May 2016 *Draft EIS for the Atlantic Sunrise Project*, Transcontinental Gas Pipe Line Company, LLC (Transco) proposes to construct, operate and maintain expansions of its existing interstate natural gas pipeline system in Pennsylvania, Maryland, Virginia, North Carolina, and South Carolina, referred to as the Atlantic Sunrise Project (Project). The Project would consist of approximately 197.9 miles of pipeline, including 183.7 miles of new 30- and 42-inch-diameter greenfield pipeline referred to as Central Penn Line (CPL) North and CPL South in PA. The CPL South segment of the Project would cross the Appalachian National Scenic Trail within an upland forest on PA State Gamelands #211 in Lebanon County, PA.

Per the Memorandum of Agreement between the Commonwealth of Pennsylvania, ATC, NPS and the 11 volunteer Trail-maintaining clubs, the A.T. management corridor (corridor) on PGC and other state lands consists of a 400 foot-wide primary management zone or "corridor" (200' on either side of the footpath). Within this corridor, Commonwealth agencies agree to preserve and enhance the land in accordance with their missions and to preserve Trail values. On PGC land, new rights-of-way, including utilities, are to be avoided within the corridor except under certain conditions. Where they can't be avoided, impacts to the Trail should be mitigated to the greatest extent possible.

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CO28 – Appalachian Trail Conservancy (cont'd)

CO28-1 Further, ATC's *Policy on Pipeline Crossings of the Appalachian Trail*, states that ATC will oppose pipeline crossings of Appalachian Trail corridor and other lands unless the proposed utility project meets all of the following criteria:

1. The proposed pipeline is demonstrated to be the only prudent and feasible alternative to meet an overriding public need, based on a thorough and detailed analysis of alternatives,
2. The proposed pipeline crosses the A.T. landscape at a point already subject to significant impact,
3. The pipeline proposal includes use of best practices to minimize its impact on the A.T.,
4. The proposed pipeline does not cross an area unsuitable for such development (including unbroken blocks of forest),
5. Pipeline authorizations include mitigation for any loss of the natural, cultural, scenic, and recreational values of the A.T. (ATC's goal is to ensure that there is no net loss of these values),
6. Pipeline authorizations include using best practices to reduce the impacts of maintenance on the aesthetic values of the A.T.,
7. Pipeline authorizations clearly acknowledge the pipeline owner and operator's affirmative duty to protect the environment and ensure the health and safety of A.T. users and the communities in the vicinity of the Trail, and
8. All pipeline authorizations include best practices for minimizing methane emission that can contribute to climate change.

Per the MOU with the Commonwealth and our policy, ATC provides the following comments regarding the Atlantic Sunrise Project and the various alternatives outlined in the DEIS.

CO28-2 Atlantic Sunrise Project (Primary Alternative)

This alignment would cross the A.T. and associated corridor within a "greenfield" or unbroken block of forest that is not subject to impact from pipelines or other utility infrastructure. As such, it is in direct conflict with ATC's policy and therefore we oppose it.

Transco, in coordination with our partners at the PGC, has proposed some actions to minimize impacts to the A.T., including a conventional horizontal bore installation of the pipeline for a distance of approximately 200 ft. (100 ft. on each side of the footpath) which will preserve approximately half of the forested A.T. corridor. We understand that the PGC will require Transco to implement a revegetation plan on the remaining 200 ft. of A.T. corridor to include planting of native tree and other species. As it will take many years or decades for the planting to reach maturity, the loss of forest within the A.T. corridor will be long term. The planting will also have to be managed to ensure its long term viability and to control non-native invasive plant species, which often proliferate in areas of habitat disturbance.

CO28-3 System Alternatives

Proposed PennEast Pipeline -- The PennEast pipeline as currently proposed would cross the A.T. on PA State Game Lands #211 near the Carbon and Northampton County lines east of Little Gap along the Kittatinny Ridge. As stated in the DEIS, this alternative if modified, could provide additional volumes of natural gas into Transco's mainline system near Pennington, New Jersey. As we understand it, this proposal would result in one less pipeline crossing of the Trail and greatly reduce impacts to the A.T. and other resources. However, the DEIS states that this alternative would have *greater* impact to various resources overall and therefore is not preferable to the Project.

According to Section 3.3.2 of the Atlantic Sunrise DEIS, the PennEast project "*proposes to construct about 114 miles of 36-inch-diameter pipeline from Luzerne County, Pennsylvania, to Mercer County, New Jersey where it would interconnect with Transco's mainline pipeline system. The PennEast Project would not have the capacity to transport the volume of natural gas required by Transco's shippers. To meet the objectives of the Project, the PennEast Project would need to be expanded to provide additional capacity*

CO28-1 Comment noted.

CO28-2 Comment noted.

CO28-3 See the revised text in section 3.3.2 of the EIS for our evaluation of the PennEast System Alternative. Our evaluations of CPL South Alternative 1 and CPL South Alternative 16 are provided in section 3.3.2 of the EIS. CPL South Alternative 14 was incorporated into the proposed route and is included in our analysis of the Project in section 4.0 of the EIS.

CO28 – Appalachian Trail Conservancy (cont'd)

CO28-3 (cont'd)

and reach the delivery points required by project shippers. This would require constructing at least 80 miles of additional pipeline, which would result in much greater environmental impact than the Project. Therefore, the PennEast Project would not be preferable or provide an environmental advantage over the Project."

ATC requests clarification of the above statements. How much additional capacity would be needed? Would it require that 80 miles be added to a combined Atlantic Sunrise -- PennEast line, making the total mileage 194 miles long (proposed 114 mile-long PennEast line plus 80 additional miles to accommodate the needed Atlantic Sunrise capacity)? If so, it would seem that an extended 194 mile combined PennEast -- Atlantic Sunrise pipeline would still be much less impact overall than having two separate pipelines totaling 391 miles in length.

Additionally, how can it be stated that the PennEast Alternative would have much greater environmental impact than the Atlantic Sunrise Project? Has a thorough and detailed assessment of this "combined" alternative been conducted? We have not been able to locate such analysis in the Atlantic Sunrise DEIS in order to adequately evaluate this alternative.

The DEIS goes on to state that the "PennEast Project would not be preferable or provide an environmental advantage over the Project." ATC feels that such a determination can not be made without a full review and analysis of the proposal. We request that a programmatic EIS be conducted for the combined PennEast and Atlantic Sunrise projects.

The **CPL South Alternative 1 and CPL South Alternative 14** were listed in Table 3.3.2-1 however we could find no further information about them. They were suggested as alternative crossings of the A.T., but were not incorporated into the proposed Project route. We request that additional information regarding these alternatives, their locations and reason for dismissal be provided to ATC, so that we can evaluate their merits.

CPL South Alternative 16 was suggested to avoid crossing state game lands #211. It would bisect the Trail within forested area of Swatara State Park. We do not see that this proposal would have any reduction of impacts to the Trail.

The **Western CPLS Alternative** would cross the A.T. near DeHart Reservoir, but has been dismissed. We were unable to find much detail about this proposal, so it is difficult assess impacts. However, it appears that this alternative would cross the A.T. in a forested area and would not have any less impact on the A.T. than the proposed route.

Other Alternatives Not Considered in the DEIS

Open Field Alternative – West of Swatara State Park and Greenpoint School Road, the A.T. crosses through NPS tract 352-05. A large portion of the tract has been maintained as an open field. Immediately adjacent to this parcel is NPS tract 352-06, which is primarily wooded and also part of the A.T. corridor. We request that a pipeline crossing of the A.T. through these tracts be analyzed as an alternative. We specifically request that horizontal directional drilling, horizontal conventional bore or a combination of open trench (though the field portion of the tract) and conventional bore (crossing the forested sections of the NPS land) be assessed.

ATC understands that at this time the law (30 U.S.C. Section 185) specifically excludes units of the National Park System to issue rights-of-way for petroleum product pipelines and associated facilities and that specific park-by-park legislation from Congress is required to allow the NPS to consider granting a right-of-way. The legislative history of the 1973 amendments to the Mineral Leasing Act demonstrates that Congress clearly intended that National Park System units be exempt from a general grant of

CO28 – Appalachian Trail Conservancy (cont'd)

CO28-3 (cont'd) authority to issue oil and gas pipeline rights-of-way. However, if FERC issues a certificate of public convenience and necessity for this pipeline, ATC believes that all possible alternatives that would avoid, minimize or mitigate adverse impacts to the Appalachian National Scenic Trail should be evaluated.

No Action Alternative

ATC has requested that the PennEast Alternative undergo further analysis and review. We have also requested that a new alternative crossing of the Trail, the "Open Field Alternative" be assessed. We have also concluded through our review of the other build and system alternatives that they do not meet the objectives of our pipeline policy. Barring further review and consideration of the PennEast and Open Field alternatives, ATC will choose to support the No-Action Alternative.

CO28-4 Other Comments

NHPA Section 106 Consultation and Compliance -- The Appalachian Trail Conservancy (ATC) requests to become a "consulting party" for the purposes of the Section 106 review under 36 CFR 800.2(c)(5).

The ANST has been determined to be eligible for the National Historic Register. ATC is best positioned to provide additional information concerning the important historic resources of the trail. Guided by the values and principles of the National Trails System Act and the ANST Comprehensive Plan, the ATC and its volunteer leaders and federal agency partners have developed numerous policies and programs to guide Trail management and protection to ensure that the scenic, natural, and cultural values of the Trail are preserved and that each Trail visitor enjoys a safe and high quality recreational experience. Those policies are developed in conjunction with the Appalachian Trail National Park Service office in Harpers Ferry, West Virginia, and are congruent with National Park Service or other hosting public-agency directives and policies.

The ATC aims to reduce the impacts to the A.T. by working cooperatively with local jurisdictions to ensure that natural and cultural resources associated with the A.T. corridor are considered and protected as new development, such as natural gas pipelines, are proposed. ATC has been engaged as a consulting party for Section 106 reviews many times, and has provided important data and context to ensure that new development is compatible with the National Trails System Act and the A.T. Comprehensive Plan. ATC meets the regulatory requirements to become a consulting party of a demonstrated interest and has a legal and economic relationship with the potentially impacted resources.

To date, we have not been invited to consult in this project's Section 106 review.

CO28-5 **Detailed Crossing Plans** -- Per ES-10 of the DEIS, FERC recommends that Transco file an update on the status of the site-specific crossing plans for each of the recreation areas listed as being affected by the project, including site-specific timing restrictions, proposed closure details and notifications, specific safety measures, and other mitigation to be implemented. While PGC has shared preliminary engineering plans for the Project, we request that additional details regarding timing restrictions, proposed closure details and notifications, specific safety measures, and other mitigation be worked out and shared with ATC prior to completion of the final EIS.

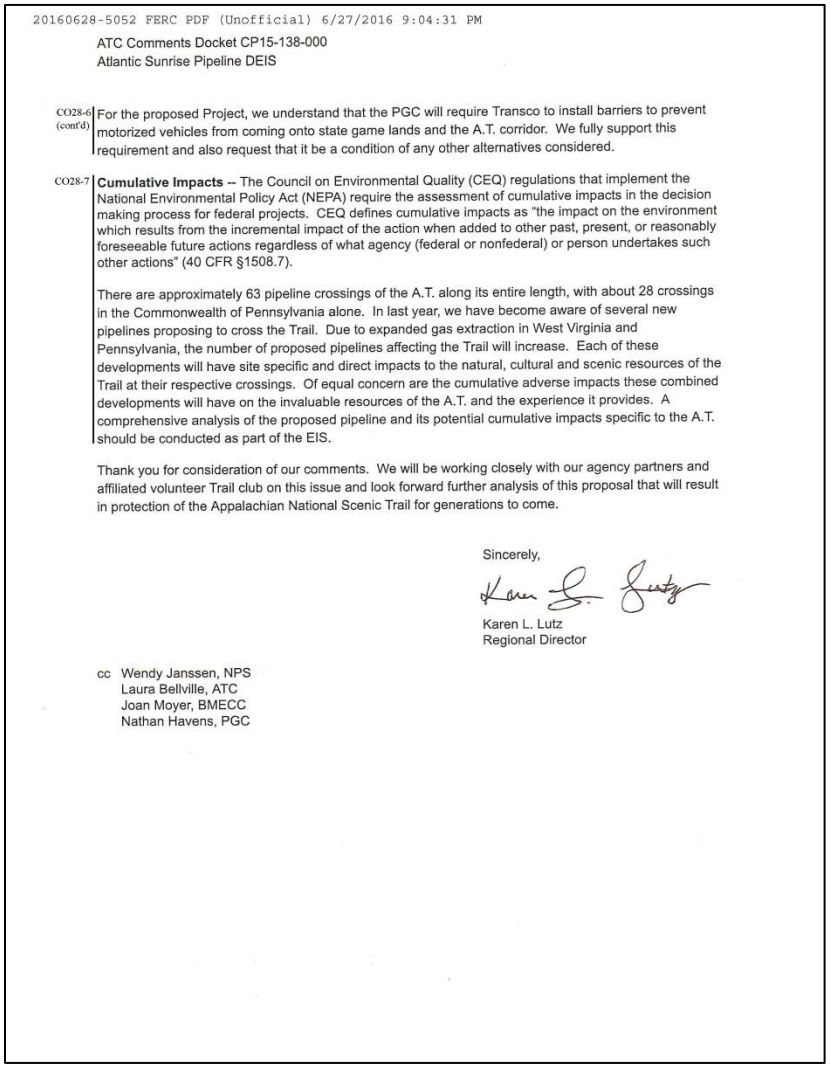
CO28-6 **Illegal Access to PGC and A.T. Lands by Motorized Vehicles** -- Unauthorized access by ATVs and other motorized vehicles is a significant issue along the A.T., causing problems with soil erosion, damage to vegetation, noise and air pollution and impacts to wildlife. It is of particular concern along utility rights-of-way which often act as conduits for this type of activity.

CO28-4 Comment noted. See the response to comment FA2-9.

CO28-5 Transco filed several of the site-specific crossing plans with its supplemental filing on June 24, 2016. The remaining site-specific crossing plans would be filed with Transco's Implementation Plan for the Project, after consultations with appropriate permitting agencies are complete and any associated mitigation measures are finalized.

CO28-6 As described in section 4.8.3.1 of the EIS, Transco committed to working with individual landowners to determine appropriate measures to discourage the use of all-terrain vehicles along the rights-of-way as needed. In coordination with applicable landowners, these measures could include installation of fences, gates, boulders, or bollards across the right-of-way and placement of "no trespassing" signs. In addition, Transco's ECP and Plan contain measures to minimize access by unauthorized vehicles. We conclude these measures would be sufficient to reduce or minimize access by unauthorized vehicles.

CO28 – Appalachian Trail Conservancy (cont'd)



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ATC Comments Docket CP15-138-000
Atlantic Sunrise Pipeline DEIS

CO28-6 (cont'd) For the proposed Project, we understand that the PGC will require Transco to install barriers to prevent motorized vehicles from coming onto state game lands and the A.T. corridor. We fully support this requirement and also request that it be a condition of any other alternatives considered.

CO28-7 **Cumulative Impacts** -- The Council on Environmental Quality (CEQ) regulations that implement the National Environmental Policy Act (NEPA) require the assessment of cumulative impacts in the decision making process for federal projects. CEQ defines cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions" (40 CFR §1508.7).

There are approximately 63 pipeline crossings of the A.T. along its entire length, with about 28 crossings in the Commonwealth of Pennsylvania alone. In last year, we have become aware of several new pipelines proposing to cross the Trail. Due to expanded gas extraction in West Virginia and Pennsylvania, the number of proposed pipelines affecting the Trail will increase. Each of these developments will have site specific and direct impacts to the natural, cultural and scenic resources of the Trail at their respective crossings. Of equal concern are the cumulative adverse impacts these combined developments will have on the invaluable resources of the A.T. and the experience it provides. A comprehensive analysis of the proposed pipeline and its potential cumulative impacts specific to the A.T. should be conducted as part of the EIS.

Thank you for consideration of our comments. We will be working closely with our agency partners and affiliated volunteer Trail club on this issue and look forward further analysis of this proposal that will result in protection of the Appalachian National Scenic Trail for generations to come.

Sincerely,

Karen L. Lutz
Regional Director

cc Wendy Janssen, NPS
Laura Bellville, ATC
Joan Moyer, BMECC
Nathan Havens, PGC

CO28-7 See the response to comment FA2-5.

CO29 – Lancaster Farmland Trust

COMMENTS TO THE FEDERAL ENERGY REGULATORY COMMISSION
on the
Draft Environmental Impact Statement for the Atlantic Sunrise Pipeline
Docket # PF 14-8-000

Submitted by: Lancaster Farmland Trust

Lancaster County is known for many things – beautiful landscapes, a thriving economy, one of the largest populations of Amish in the country, and an exceptional quality of life. Lancaster County is also known as the leader in farmland preservation. More acres of farmland have been permanently protected in Lancaster County, Pennsylvania than anywhere else in the country. Currently, 25 percent of all acreage zoned for agriculture – or approximately 106,000 acres of prime agriculture land -- have been permanently protected. This amounts to more than 1,300 farm families who have made the commitment to permanently restrict their land from industrial, commercial or residential development.

Lancaster County is home to the most productive, non-irrigated soils in the United States. Our community has made the preservation of this valuable natural resource a priority for more than 35 years, establishing the first farmland preservation program in the state and one of the first in the nation. More than $250 million in federal, state, county and private funds has been invested in permanently protecting the county's prime farmland. Additionally, landowners who have preserved their farms have contributed $80 million in easement value. At a minimum, therefore, the easements on farms in Lancaster County represent $330 million in invested and donated value without accounting for any growth in value since the easements were originally executed.

Agriculture provides the foundation for Lancaster County's economy. Lancaster County farmers contribute $6.9 billion – 18 percent of the total Gross Regional Product - to the economy annually.[1] The rich farmland of Lancaster County produces food and fiber for 30 million people

[1] "The Environmental Benefits of Agriculture in Lancaster County, Pennsylvania", page 4; Earth Economics, 2014.

CO29 – Lancaster Farmland Trust (cont'd)

each year. In addition, the beautiful landscape and unique cultures of the county draw seven million tourists annually contributing an additional $1.6 billion to the local economy.

Farming is Lancaster County's heritage. It is the engine that drives today's economy. And, hopefully, it will be able to survive and thrive in the future. It is the reason this community has invested so substantially in protecting its most valuable natural resource … its farmland.

Lancaster Farmland Trust is designated by the Internal Revenue Service as a 501(c)3 organization with the mission to preserve and steward the beautiful, productive farmland of Lancaster County. We do this by working with farm families to place conservation easements on their properties that restricts future development. As a qualified land trust, the IRS requires Lancaster Farmland Trust to uphold and enforce the easements on the farms we have preserved. The primary purpose of the easement is to protect the conservation value of the eased land.

All landscapes and habitats possess an inherent conservation value. This includes landscapes that are harvested to provide food and fiber. The conservation value of Lancaster County's agricultural lands includes the benefits the land provides to the ecosystem. These benefits were evaluated in a study commissioned by the Lancaster County Agricultural Council in 2014. "The Environmental Benefits of Agricultural Lands in Lancaster County, Pennsylvania", conducted by Earth Economics, found that Lancaster County's agricultural lands provide $483 million in annual ecosystem service benefits. The study, which was previously submitted to FERC, further analyzed the ecosystem benefits provided by preserved farmland and found that between $33 million and $231 million in benefits to the environment come from agricultural lands that have been permanently protected.[2]

Lancaster Farmland Trust is charged with protecting this conservation value when it places a
CO29-1 conservation easement on a property. The draft environmental impact statement fails to

[2] Ibid, p. 20

CO29-1 Section 4.8.6.2 of the EIS has been revised to include updated information regarding the conservation easements crossed by the Project. Also see the responses to comments FA1-22, PM1-118, PM1-179, and PM2-111.

CO29 – Lancaster Farmland Trust (cont'd)

CO29-1 (cont'd) address the loss of conservation value on agricultural lands permanently protected by conservation easements and subject to the pipeline route.

Section 4.8.6.2 of the draft EIS titled "Conservation Programs", refers to various state and federal programs designed to protect natural resources. Although Lancaster County leads the nation in farmland preservation – and this community has invested more than $330 million in protecting its valuable farmland – agricultural preservation is not listed as one of the programs that would be impacted by the Atlantic Sunrise pipeline. In fact, the only mention of agricultural easements is three sentences buried in a paragraph about agricultural security areas on page 4-155.

In addition to only a brief mention, the information about agricultural easements that is contained in the DEIS is inaccurate. The DEIS states on page 4-155, paragraph 3:

An agricultural conservation easement is a protection placed on a land that provides the landowner the right to prevent development or, improvement of a tract for any purpose outside of agricultural production. For a parcel to qualify for an agricultural conservation easement, it must first be designated as an ASA (agricultural security area), after which the owner may apply for the purchase of an agricultural conservation easement to receive preferential zoning treatment. In addition the existence of utility facilities does not prevent land from being designated as an ASA or agricultural conservation easement.

An easement does **NOT** grant the landowner the "right to prevent development" as stated in the DEIS. If a farm is permanently protected by a conservation easement; commercial, industrial and residential uses are **prohibited** on that parcel. The easement is executed and held by a third party. That third party **MUST** ensure the conditions of the easement are upheld – regardless of the wishes of the landowner. Further, the easement applies to current landowners as well as all successive landowners in perpetuity.

The DEIS states that a parcel must be "designated as an ASA" in order to "qualify for an agricultural conservation easement". This is also **NOT** accurate. While properties preserved by the Lancaster County Agricultural Preserve Board may be required to be located within an ASA, it is not the case for properties preserved by private organizations. Additionally, no

CO29 – Lancaster Farmland Trust (cont'd)

CO29-1 (cont'd) "preferential zoning" is granted either by a conservation easement or a designation as an agricultural security area. In fact, preferential zoning is prohibited in Pennsylvania.

Further, as noted above, the DEIS states that the "existence of a utility does not prevent land from being designated as an agricultural security area or agricultural conservation easement". While that may be true of easements held by some organizations, it absolutely does **NOT** pertain to all agricultural easements held by all organizations.

Lancaster Farmland Trust is the largest private farmland preservation organization in the state – and one of the largest in the nation. Although the draft EIS mentions easements held by the Lancaster County Agricultural Preserve Board and the Lancaster County Conservancy, it fails to mention Lancaster Farmland Trust – even though it holds many easements over which the Atlantic Sunrise pipeline will travel.

Table 4.8.6.3 purports to contain a list of conservation easements that will be crossed by the Atlantic Sunrise project; however, there are at least 10 properties with conservation easements that are missing from the list. Considering the time that was spent on compiling the draft EIS, it is hard to imagine that accurate information about conservation easements – all of which are filed in the Lancaster County Recorder of Deeds office – could not be attained.

Each of the protected properties that will be crossed by the pipeline has a conservation value that must be protected. However, there is no mention of a mitigation strategy to protect the conservation value that this community has spent so much money and effort preserving and that each easement requires.

CO29-2 It is the opinion of Lancaster Farmland Trust – and the opinion of many in this community – that the route selected for the Atlantic Sunrise pipeline was chosen specifically to take advantage of the number of farms subject to conservation and agricultural preservation easements because the very easement intended to protect the land also lowers the fair market value of the

CO29-2 Comment noted. Route alternatives/deviations were analyzed for potential impacts on multiple factors (e.g., length of pipeline, collocation with existing rights-of-way, environmental resources crossed). We believe that the measures contained in Transco's Draft Agricultural Plan would minimize impacts on preserved agricultural land. Also see the response to comment PM1-179.

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CO29-2 (cont'd) property. Evidence of this can be seen in the route changes that have been submitted by Transco that have pushed the pipeline on to more and more preserved farms. In fact, a proposed route change currently being considered by FERC would move the pipeline off a farm without a conservation easement and on to a preserved farm even though it would have to cross a road twice and endanger multiple springs on the preserved farm.

By selecting a route through dozens of preserved farms, Transco gets the benefit of reduced compensation payments AND reduced long-term maintenance costs because the properties will never be developed. And, even though Transco will realize enormous financial benefit by traversing protected land, FERC does not require a mitigation strategy for the loss of conservation value on these preserved lands.

CO29-3 Since this project was first proposed, Transco has refused to acknowledge the interest Lancaster Farmland Trust has on those properties protected by conservation easements held by the Trust. Efforts by Lancaster Farmland Trust to discuss the restrictions of the easements and the need to protect the conservation values of those easements, have not only fallen on the deaf ears of Transco, but have been met with threats to our landowners and our organization.

Land conservation is a part of the fabric of this county and this country. Landowners – many of them hard-working farm families – are willing to give up millions of dollars in financial gain to protect the land they love.

FERC and Transco have failed to acknowledge our community's commitment to land conservation and environmental protection in the draft Environmental Impact Statement. Both entities have ignored the conservation value protected by the easements on properties transected by the Atlantic Sunrise pipeline. FERC has failed to require a mitigation strategy to uphold the conservation value protected by dozens of easements on agricultural lands in the path of the proposed pipeline. These failures are disrespectful to our community and endanger

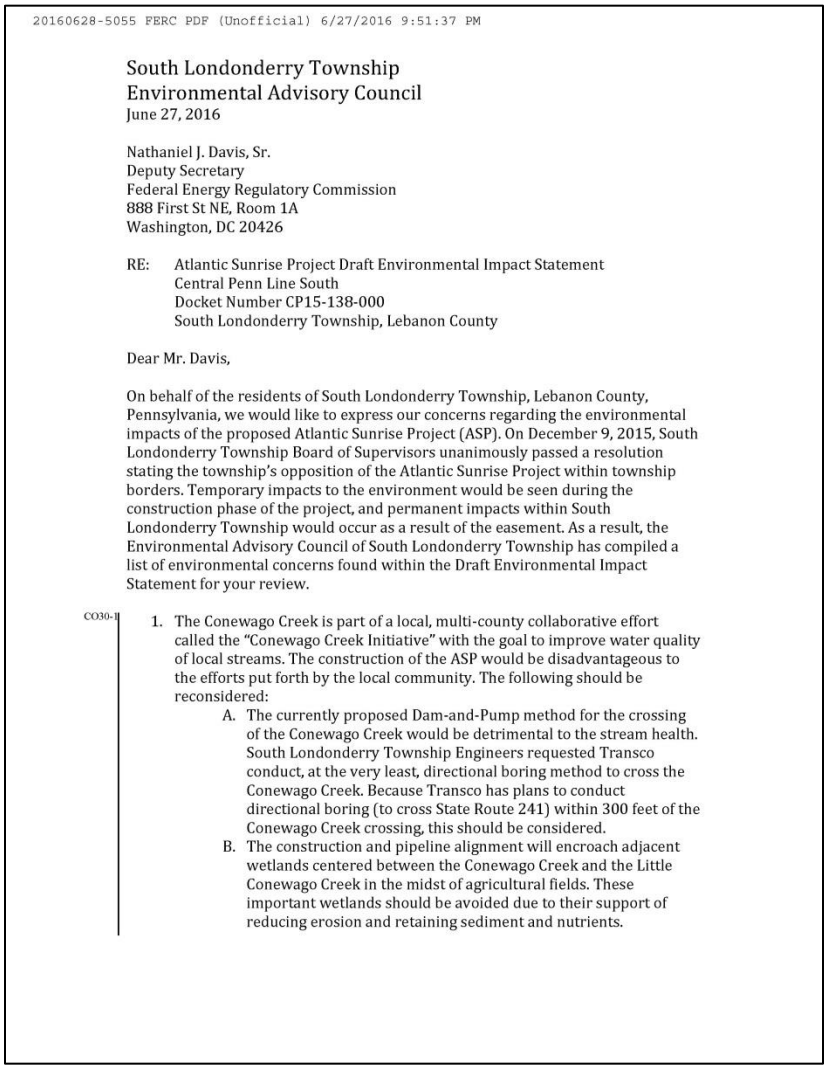
CO29-3 See the responses to comments PM1-179 and CO29-1.

CO29 – Lancaster Farmland Trust (cont'd)

CO29-3 (cont'd) the natural resources the community has so tirelessly and generously invested their money to protect.

Lancaster Farmland Trust calls on FERC to require Transco to submit a mitigation strategy to protect the conservation value of all protected land in Lancaster County and to examine scrupulously how the proposed Atlantic Sunrise project will impact permanently protected farmland and the natural resources the easements on those properties are intended to protect.

CO30 – South Londonderry Township Environmental Advisory Council



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South Londonderry Township
Environmental Advisory Council
June 27, 2016

Nathaniel J. Davis, Sr.
Deputy Secretary
Federal Energy Regulatory Commission
888 First St NE, Room 1A
Washington, DC 20426

RE: Atlantic Sunrise Project Draft Environmental Impact Statement
Central Penn Line South
Docket Number CP15-138-000
South Londonderry Township, Lebanon County

Dear Mr. Davis,

On behalf of the residents of South Londonderry Township, Lebanon County, Pennsylvania, we would like to express our concerns regarding the environmental impacts of the proposed Atlantic Sunrise Project (ASP). On December 9, 2015, South Londonderry Township Board of Supervisors unanimously passed a resolution stating the township's opposition of the Atlantic Sunrise Project within township borders. Temporary impacts to the environment would be seen during the construction phase of the project, and permanent impacts within South Londonderry Township would occur as a result of the easement. As a result, the Environmental Advisory Council of South Londonderry Township has compiled a list of environmental concerns found within the Draft Environmental Impact Statement for your review.

CO30-1

1. The Conewago Creek is part of a local, multi-county collaborative effort called the "Conewago Creek Initiative" with the goal to improve water quality of local streams. The construction of the ASP would be disadvantageous to the efforts put forth by the local community. The following should be reconsidered:
   A. The currently proposed Dam-and-Pump method for the crossing of the Conewago Creek would be detrimental to the stream health. South Londonderry Township Engineers requested Transco conduct, at the very least, directional boring method to cross the Conewago Creek. Because Transco has plans to conduct directional boring (to cross State Route 241) within 300 feet of the Conewago Creek crossing, this should be considered.
   B. The construction and pipeline alignment will encroach adjacent wetlands centered between the Conewago Creek and the Little Conewago Creek in the midst of agricultural fields. These important wetlands should be avoided due to their support of reducing erosion and retaining sediment and nutrients.

CO30-1 See the responses to comments PM1-71, PM2-14, and PM2-123. Transco proposes to cross Conewago Creek using the dam-and-pump crossing method. Section 2.3.2.2 provides a description of this waterbody crossing method and the sediment and erosion control methods to be implemented.

CO30 – South Londonderry Township Environmental Advisory Council (cont'd)

CO30-1 (cont'd)

C. South Londonderry Township engineers requested of Transco on March 24, 2016 a Riparian Corridor Easement for all stream crossings in South Londonderry Township to remain in accordance with our Stormwater Management Ordinance. Existing native vegetation shall be protected and/or plantings of native plant materials should be conducted within the easement.

CO30-2

2. Between Milepost 41.0 and 41.2 is an area of environmental concern. Within roughly 600ft, the proposed project would cross wetlands, two streams and the existing Sunoco Mariner East Pipelines. The streams (WW-T13-4005 and WW-T13-4002) are tributaries to the Little Conewago Creek, a tributary of the Conewago Creek. This is also an area of increased slope, whereas the clear-cutting of the easement could produce erosion or issues in this sensitive area.

CO30-3

3. The proposed Contractor Staging Area (CS-CSA-LE-2-009) along State Route 241 is projected to be a 15.2-acre temporary staging area in an agricultural field. This specific field has required the construction of swales to reduce run-off per state regulations. Section 314.B.8 of the South Londonderry Township Stormwater Management Ordinance states "All impervious area runoff shall be directed to BMP's. There are currently no BMP facilities proposed at Contractor Staging Area CS-CSA-LE-2-009.

CO30-4

South Londonderry Township Environmental Advisory Council would like to reiterate that the township does not approve of this proposed project. As supplemental information continues to be submitted by Transco to this docket, we cannot fully grasp the environmental impacts at this moment, nor can we comment in due time (Transco submitted Supplemental Information on Friday, June 24 2016 to Docket CP15-138-000) as the allotted comment period is inadequate. An extension of the comment period would be a benefit to the public. Thank you for your time and considerations.

Sincerely,
Megan Detter
Environmental Advisory Council
South Londonderry Township
Lebanon County, Pennsylvania

CO30-2 Comment noted. See the responses to comments PM1-60 and PM1-71.

CO30-3 Transco would implement the BMPs contained in its ECP to minimize erosion and sedimentation. In addition, Transco would obtain Chapter 102 permits from the PADEP, which would include requirements for BMPs to minimize erosion and sedimentation.

CO30-4 See the responses to comments PM1-70 and PM1-130.

CO31 – Lancaster Against Pipelines

Response to the Federal Energy Regulatory Commission's
Draft Environmental Impact Statement:
Atlantic Sunrise Project (CP15-138)

by

Lancaster Against Pipelines

Lancaster Against Pipelines (LAP), Inc. is a federal non-profit organization (501c3) committed to: [1] educating Pennsylvania residents about the impacts associated with the rapid expansion of natural gas pipeline infrastructure projects in eastern PA, and [2] working to protect Lancaster County, and the surrounding region, from the serious risks and harms that accompany these projects. Our grassroots organization, with nearly 200 active members, stands unequivocally opposed to the Atlantic Sunrise greenfield pipeline project for the massive risks and unavoidable harms it promises to bring to our local communities and natural environments.

Based on the following objections to the Federal Energy Regulatory Commission's DEIS on the Atlantic Sunrise Project, LAP urges FERC to deny Williams/Transco's application for installation of the ASP (CP15-138).

CO31-1 **• Objection #1: The meaning of the word "significant"**

FERC's preliminary approval of the ASP as expressed in the DEIS hinges on the definition of the indeterminate word "significant." In the opening statement of the DEIS, we read: "The FERC staff concludes that approval of the project would result in some adverse environmental impacts; however, most of these impacts would be reduced to less-than-significant levels…" (1). No where, however, does FERC offer a definition of the term "significant," nor does FERC ever delineate what kind of an impact would constitute a "significant" level of harm for any aspect of its environmental analysis. What would constitute a "significant" level of harm with respect to stream crossings? What would a "significant" harm to wildlife look like? No definition, or method of measurement, is provided anywhere in the document. Given this omission, FERC has effectively offered a conclusion that lies safely beyond the threat of verifiable objections. Perhaps that's the point. If FERC's final determination is to mean anything at all, the standard by which adverse impacts are deemed "significant" must actually be *measurable*.

Even more troubling than the indeterminacy of the term, is the fact that FERC's conclusion follows a litany of what can only be described as highly significant adverse impacts on the people and landscapes of Pennsylvania. The briefest of

CO31-1 See the response to comment PM1-9.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-I (cont'd) summaries serves the point here: 331 waterbodies would be crossed, of which 41 are classified as "sensitive" and 40 are listed as "impaired"; 251 wetlands would be violated by the ASP, of which 51 are classified as "exceptional value"; 31 archaeological sites would be disturbed, of which 6 are pre-historic sites; one of the most celebrated Native American heritage sites in the state (Conestoga Indiantown) is bisected by the proposed line; 410 architectural resources stand in the construction zone, 47 of which are either NRHP eligible or recommended for eligibility by Pennsylvania's SHPO; more than 12 miles of the proposed line are in areas with moderate to high risk due to unstable karst topography; the pipeline would cross 45 interior forests, permanently fragmenting all of them; construction would involve "cutting, clearing, and/or removing 2,688.8 acres of existing vegetation, of which 949.7 acres would be upland forest"; scores of agricultural preservation easements would be violated, including no less than 41 preserved farms in Lancaster County alone.

After all this, and so much more, FERC inexplicably concludes the adverse effects to be "less-than-significant." How many waterbodies would a proposed pipeline have to cross before FERC regarded its adverse impacts as "significant"? If 331 waterbody crossings (12% of which are protected, with 171 containing sensitive fisheries) represents a "less-than-significant" impact, would *332* put it over the top? Would 13% of those bodies—rather than merely 12%—have to fall under "protected" status before breaching the threshold of significance? Is 172 (rather than 171) the magic number of sensitive fisheries that would trigger an application denial? In the case of wetlands, would *252* violations—as opposed to 251—represent a "significant" impact? These are honest questions, and the public deserves straightforward answers. Those answers can only be provided through an objective and transparent system for assessing "significance"—a system that is absent from the DEIS.

Put plainly, the term "significant," as used in the DEIS, functions as an utterly arbitrary, endlessly elastic standard, applied to mask the fact that FERC has already pre-determined approval for this project, regardless of the findings documented in this report.

Although the DEIS offers no guidance on what "significant" may or may not mean, a vague definition of the term can be found in the "Electronic Code of Federal Regulations" as outlined by the National Environmental Policy Act (NEPA). According to NEPA's criteria by which "the significance of an action" is evaluated (see §1508.27), the impacts from the ASP, as documented in the DIES, would easily qualify. Three aspects of the definition are particularly relevant here: [1] "in the case of site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole"; [2] special consideration is given to "unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas"; and, [3] particular attention must be given to "the degree

CO31-1 (cont'd) to which the effects on the quality of the human environment are likely to be highly controversial."

Each of these criterion carries special applicability to the ASP's likely impacts on Lancaster County, as described in the DEIS itself. [1] First: in the DEIS, FERC violates NEPA's first principle of "significance" by clearly privileging highly suspect national (and even *international*, per export) economic considerations of a private corporation over the mountain of verifiable harms that local communities & the natural environment would suffer as a direct impact of this project. [2] Second: FERC's claim that the ASP would bring "less-than-significant" impacts violates NEPA's directive to give special consideration to an affected region's "unique characteristics," precisely like those being threatened by the ASP in Lancaster County: historic and cultural heritage (e.g. Amish, Native American, agricultural); prime farmland (widely recognized as the richest non-irrigated farmland in the nation); and scenic waterways (including several "exceptional value" waterways). [3] Third: NEPA requires that particular attention be paid to actions deemed "highly controversial" when determining "significance" in relation to federally regulated actions. Given that Lancaster County residents submitted roughly 1,500 letters to FERC regarding the ASP in the lead-up to the DEIS, with 98.4% of those letters expressing opposition to the project, we can safely label the ASP a "highly controversial" project. FERC representatives have told members of LAP that Lancaster's opposition to the ASP is "unprecedented," with Commissioner Cheryl LaFleur stating of recent gas pipeline opposition—very much including vocal opposition to the ASP—"We have a situation here."

And yet, despite all evidence to the contrary, FERC offers its absurd "less-than-significant" conclusion on the ASP. If violation of "protected" streams, "protected" wetlands, "protected" farms, and "protected" Native American heritage sites does not warrant the designation of "significant," what possible meaning could the term have? FERC's conclusion, if it stands, demonstrates that the gas industry operates beyond accountability, and that FERC is actively complicit in the industry's assault on our local communities and natural environments.

CO31-2 **• Objection #2: DEIS reliance on incomplete, outdated, or missing data**

Throughout the DEIS, the authors acknowledge, time after time, that FERC's assessment of the pipeline's risks, dangers, and likely impacts are based on incomplete or missing studies. This is despite the fact that FERC has required these studies precisely for the purpose of determining the nature and extent of likely impacts. This fact, alone, renders the study illegitimate.

Below, we cite merely a few examples, among many others, to demonstrate a broad and disturbing pattern of omissions and carelessness, rendering a fatally flawed report:

CO31-2 See the response to comment PM1-70.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-3 • Cultural Resources: "In Pennsylvania, the cultural resources survey is about 60 percent complete for archaeological resources, with approximately 3,543 acres remaining, and 90 percent complete for architectural resources" (4-186).

How does FERC justify issuing its DEIS for a project based on cultural resources surveys that are so utterly incomplete? Most striking, of course, is the archaeological resource survey, which is only 60% complete. Why the rush to "less-than-significant" judgment on the part of FERC, when 40% of the archaeological survey has not even been reported to the Commission?

• Archaeological & Architectural Resources: "Compliance with section 106 of the NHPA *has not been completed* for the Project. Cultural resources surveys of portions of the Project and consultation with the Pennsylvania SHPO and other parties *has not been completed*. Additionally, two archaeological sites in Pennsylvania *require avoidance or additional testing* to determine eligibility for listing on the NRHP, and the Pennsylvania SHPO *has not provided comments* on the NRHP eligibility of three archaeological sites" (4-191).

FERC appears to anticipate the incredulity of readers by adding, after these rather embarrassing admissions, "we recommend that" Transco complete such-and-such studies before commencing construction But here's the thing: since FERC appears willing to declare the project's adverse impacts negligible without ever seeing the completed surveys (upon which its ruling is supposedly based), construction will very likely be permitted by the final EIS without these "required" surveys ever being submitted. At that point, "recommendations" such as these will have no practical bearing on the project. Put simply, FERC's anemic "recommendations" that "Transco should not begin construction" until surveys are completed are worse than meaningless; they are, it seems, boldly misleading.

CO31-4 • Wetlands: "Transco identified and delineated wetlands along the proposed pipeline route during field surveys in 2014." However, "For areas where Transco was unable to complete surveys in the 2014 and 2015 field seasons, remote-sensing resources were used to approximate the locations and boundaries of wetlands within the project area" (4-69).

Why didn't FERC wait to issue its DEIS until these required surveys were completed? Why not require Transco to complete the survey in the 2016 field season? Why was FERC comfortable issuing its wetlands analysis for the ASP based on a research methodology of remote-sensing resources and approximation?

CO31-5 • Air Quality: "While this analysis shows that the proposed modifications to Compressor Stations 517 and 520 would not result in significant impacts on air quality, Compressor Stations 517 and 520 *were not operating at the full station loads during air quality monitoring.* Therefore, *the potential exists for higher impacts* from existing sources when Compressor Stations 517 and 520 are operating at full load. Additionally, the modeled impacts for Compressor Station 190 did not include

CO31-3 FERC's issuance of the Notice to Proceed with construction would require that Transco file a final detailed Implementation Plan identifying how it will comply with all proposed construction and mitigation measures and the requirements of the FERC Certificate. Additionally, Transco must provide evidence that the Project has obtained all the required federal permits and clearances, including any associated with cultural resources. Further, FERC will not authorize construction of the Project until all relevant consultations are complete between the FERC and the Pennsylvania SHPO.

CO31-4 See the response to comment PM2-102.

CO31-5 We requested that Transco provide the additional emissions information before issuance of the final EIS. Section 4.11.1.3 of the final EIS has been updated to reflect the additional emissions information provided by Transco. Transco would be required to operate the existing air quality monitors at Compressor Stations 190, 571, and 520 for a period of 3 years after the newly modified facilities begin operation and to file the results with FERC. Additionally, Transco would notify the state air quality agency if the monitors indicate a violation of the NAAQS.

CO31-5 (cont'd) existing sources because *Compressor Station 190 was not running during the time of monitoring*. Therefore, a similar analysis can not be completed for Compressor Station 190. While the EPA's background ambient air quality data used in the modeling analysis was collected when Compressor Station 190 was operating, the *EPA's air monitoring station is located approximately 15 miles from Compressor Station 190*, and the potential exists for higher localized impacts in proximity to the station" (4-213/4).

Once again, insufficient/incomplete data renders FERC's assessment of ASP's environmental impact premature. Since FERC is "requesting" that Transco submits the requisite data "prior to the issuance of the final EIS," why not wait for this critical information *before* issuing the draft EIS? Furthermore, have provisions been made to ensure that Transco, at some point, submits air quality data based on full station loads? How will these reports be shared with the public? If, under those conditions, FERC determines that proposed modifications would push air pollution levels beyond acceptable levels, will FERC retroactively deny the project and/or halt construction?

CO31-6 • Blasting: There are 55 waterbody crossings that may require blasting. The DEIS states: "If blasting is required in or near a stream, Transco would develop a detailed, site-specific blasting plan for that location" (4-101).

Given the high probability of blasting across numerous waterways, why would FERC not require Transco to submit their waterbody-blasting protocols *before* issuing the DEIS, the primary purpose of which is to assess likely and potential impacts on the environment? FERC can not legitimately rule on the likely impacts of waterbody blasting when they haven't even seen the protocols that Transco intends to use for the process.

CO31-7 • Geology: Dr. Jay Parrish, State Geologist of Pennsylvania from 2001-2010, has publicly expressed serious concerns about the inadequacy of Williams—and FERC's—risk assessments in relation to the DEIS's geological analysis of the ASP. In short, he notes FERC's failure to incorporate a critical 2009 seismic reflection survey coinciding with the proposed ASP routes in Lancaster and Lebanon Counties, even after he brought the study to FERC's attention at a public meeting. "This leads me to believe that their assessment was perfunctory and far from complete."

With regard to karst assessment, Dr. Parrish once again notes a glaring failure of both FERC and Williams to utilize critical infrared data sets that show potential and existing sinkholes in Lancaster County. Parrish notes: "To not have used this data set is irresponsible," adding: "Once again, I publicly informed you (and therefore Williams) of the existence and importance of this data." After noting yet another critical oversight on the part of Williams in their karst analysis, Parrish concludes: "the petitioners appear to have done a perfunctory assessment and ignored geologically important datasets which were freely available to them, and made known to them. This indicates a less than adequate effort for a potentially

CO31-6 The information in Transco's Blasting Plan (attachment 10 of Transco's ECP) provides a reasonable basis for an assessment of resources and potential impacts from blasting. If the Project is certified by the Commission, Transco would develop site-specific blasting plans for locations where blasting is required in or near a stream. Each site-specific blasting plan would include protocols for the protection of fisheries and aquatic resources and would be approved by the appropriate agencies prior to construction.

CO31-7 In response to our September 7, 2016 environmental data request, Transco indicated that review of the data suggests that these sources were included in the USGS 2014 National Seismic Hazard Map that was evaluated to assess seismic risk in the project area. Transco indicated that additional consultation with the USGS is being completed to confirm that the sources were included. We are including a recommendation in section 4.1.7 of the EIS requesting that Transco incorporate the most recent color infrared imagery and LiDAR data sets into its final *Karst Investigation Mitigation Plan*.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-7 (cont'd) dangerous infrastructure. As the former State Geologist…I am very disappointed in the gaps in research." (Atlantic Sunrise DEIS Comments by Jay Parrish, Docket CP15-138, 27 June 2016).

CO31-8 • Farmland Preservation: FERC's omissions with regard to ASP impacts on preserved farmland is of particular concern to LAP given Lancaster County's world-renown agricultural heritage. Lancaster is home to the richest non-irrigated farmland in the nation. More than $250 million has been invested in preserving our county's precious farms. The purpose of preserving farmland via easements is to protect the conservation value of prime agricultural land against the encroaching threat of development, industrial or otherwise—threats precisely like the one posed by Transco's ASP. As a testimony to the value Lancaster County places on its farming heritage, 25% of all agriculturally zoned land in the county is permanently protected by preservation easements.

And yet, the current proposed route of the ASP violates at least 41 preserved farms in Lancaster County alone—31 of which are listed in Table 4.8.6-3 of the DEIS, and 10 of which are inexplicably omitted from that table. Many of these farms are owned and operated by farming families belonging to the county's Amish community. Transco's proposed pipeline route represents an assault on Lancaster's economy, agricultural legacy, religious heritage, and social values.

During FERC's public hearing in Lancaster County on 13 June 2015, Karen Martynick, Executive Director of Lancaster Farmland Trust, the largest private farmland preservation organization in the state of Pennsylvania, expressed her frustration with the willful disregard that both Williams & FERC have demonstrated for Lancaster's preservation efforts, stating: "It is our opinion—and the opinion of many in this community—that the route selected for the Atlantic Sunrise pipeline was chosen specifically to take advantage of the number of farms subject to conservation and agricultural preservation easements because the very easement intended to protect the land also lowers the fair market value of the property. By selecting a route through dozens of preserved farms, Transco gets the benefit of reduced compensation payments AND reduced long-term maintenance costs because the properties will never be developed. And, yet, they provide no mitigation strategy for the loss of conservation value – even though they benefit from its loss."

Her scathing criticism went even farther, when she added: "Since this project was first proposed, Transco has refused to acknowledge the interest Lancaster Farmland Trust has on those properties protected by conservation easements held by the Trust. Efforts by Lancaster Farmland Trust to discuss the restrictions of the easements and the need to protect the conservation values of those easements have not only fallen on the deaf ears of Transco, but have been met with threats to our landowners and our organization."

CO31-9 • Endangered Species: "…the bog turtle tracking survey results are incomplete…" (4-112)—and the list goes on, and on.

CO31-8 See the responses to comments PM1-179 and CO29-1.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-9 (cont'd) By any reasonable standard, this DEIS is premature given the numerous incomplete studies upon which its assessments are based. This pattern of guesswork based on non-existent data render the report's findings invalid. FERC should withdraw the current DEIS, await the submission of all requisite survey results, and then resubmit its DEIS after carefully analyzing the data produced by those essential studies—rather than guessing what the yet-to-be-generated survey results might be, and basing conclusions on that non-existent data.

CO31-10 **• Objection #3: Failure to address industry plans to export ASP gas overseas, and the importance of those plans on the legitimacy of eminent domain**

Of all the reasons that local communities are outraged over the proposed ASP, the fact that Williams/Transco's primary goal is to move ASP gas to export facilities easily ranks among the top three. However, the term "export" never appears in reference to the Atlantic Sunrise Project at any point throughout FERC's 472-page analysis of this project. The section titled "Project Purpose and Need" (1-2), the same section that lists the companies contracted to buy ASP gas, makes no mention of the fact that much of this gas—at least half, and likely more—is intended for foreign markets.

From the start, Williams executives have made no secret of this fact. As early as 2014, Williams CEO Alan Armstrong was publicly touting the critical role the Atlantic Sunrise Project would play in "future LNG export facilities at Cove Point and Sabine Pass" (2014 1st Quarter Financial Report). Furthermore, as the DEIS notes in Table 1.1-1, nearly half the gas that would flow through ASP is already contracted by Cabot Oil—and Cabot has publicly announced where its share of that gas is going: 350,000 DTh/day to Sumitomo Corporation in Japan via Cove Point, and the remaining 500,000 DTh/day to WGL Holdings, all of which is also slated for Cove Point. These statistics, besides being publicly available, have all been confirmed by energy analyst Dr. Dennis Witmer, in lectures delivered at Millersville University (PA) and Franklin & Marshall College (PA) in November 2015.

FERC's unwillingness to address the ASP's export implications is all the more puzzling considering that FERC's brief (one-paragraph) reference to Sunoco's Mariner East 2 Pipeline Project, a statement presumably including only the most essential details, notes that natural gas liquids slated to flow through its pipes would be "exported to international customers" (4-269). If FERC deems the end-user of a pipeline's product to be an essential consideration when assessing a project receiving barely one paragraph of analysis, why did they choose to withhold ASP's export intentions through nearly 500-pages of analysis dedicated to the project's impacts?

Inextricably related to the issue of export is the issue of eminent domain. FERC seems almost as reluctant to discuss this topic as it is to address the export of ASP gas to foreign markets. On eminent domain, an issue of paramount importance to

CO31-9 Since the issuance of the draft EIS, Transco has submitted additional bog turtle survey results. Section 4.7.2.3 of the EIS has been updated accordingly. If the Project is certificated by the Commission, it conveys the right of eminent domain, including access for field surveys. Transco must complete all remaining bog turtle surveys for agency permitting prior to FERC consideration of authorizing construction. Typically, 100 percent complete survey access is not obtained prior to certification for linear projects of this magnitude. Further, FERC will not authorize construction of the Project until all relevant consultations are complete between the FERC and the FWS regarding the bog turtle and other federally listed species that may be affected by the Project.

CO31-10 See the responses to comments PM1-32, PM1-51, and PM1-143.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-10 (cont'd) every landowner LAP has consulted along the proposed ASP line, the DEIS devotes exactly 4 sentences. That's four sentences, out of 472-pages, dedicated to the process by which resistant landowners would have their property condemned, against their will, so that Williams/Transco can run a pipeline through their land to export PA gas overseas.

The most substantive reference states: "If an easement cannot be negotiated with a landowner and if the Project is approved by the Commission, Transco may use the right of eminent domain to acquire the property necessary to construct and operate the Project" (4-131). At no point does FERC explain which federal body will actually determine whether the project qualifies for the application of eminent domain; nor does the document cite any criteria by which this determination would be made.

FERC's silence on this issue represents an unacceptable display of evasion, an evasion that clearly favors the industry by ignoring one of the most pressing concerns expressed by affected landowners. Conversations that LAP has initiated with FERC representatives on this question, both in person and by phone, have yielded equally unsatisfactory non-answers. We've simply been told that a FERC approval of the ASP would *trigger* the application of eminent domain, but that FERC is not responsible for determining whether the project itself *qualifies* for eminent domain. When pressed to explain how—or by whom—this determination *will* be made, FERC refused to answer.

LAP, on behalf of the landowners we represent, continues to await a response.

• Objection #4: A pattern of accommodation, deferral, and pro-industry bias

CO31-11 One of the most striking features of the DEIS is its clear pro-industry bias.

From beginning to end, FERC's environmental assessments are based on data generated by Williams-contracted research. This data is then self-reported to FERC by Transco. Where is the place for independent research in this process, and who holds Transco accountable for the data being reported by the industry itself?

Beyond this compromised foundation, LAP holds a host of grave concerns about the ways in which this DEIS favors the industry. We see this demonstrated in the following ways:

CO31-12 • "Practicable": Perhaps the clearest example is FERC's deference to Williams is their use of the term "practicable." We find the first appearance of that word on the very first page of FERC's Executive Summary: "The purpose of this environmental impact statement (EIS) is to inform FERC decision-makers, the public, and the permitting agencies about the potential adverse and beneficial environmental impacts of the Project and its alternatives, and recommend mitigation measures that would reduce adverse impacts to the extent *practicable*" (ES-1). "Practicable" for whom? Who determines which mitigation and safety measures are "practicable," and which are

CO31-11 See the response to comment PM1-188.

CO31-12 Comment noted. The EIS makes recommendations to mitigate the impacts of a project or action. If the project is subsequently approved by the Commission, the recommendations are included in and become requirements of the Order. Section 2.5 of the EIS discusses how Transco's adherence to the mitigation measures identified in the Commission's order; the permit applications and additional requirements of federal, state, and local agencies; other authorizations; and landowner requests would be monitored/enforced during and after construction of the Project. Use of "practicable" is based on years of industry and environmental oversight experience, development of BMPs, and various federal regulations. We (or another agency) cannot require impracticable measures that would render the project impossible to construct. For example, constructing with 5 feet of cover when only 3 feet is required is a practicable solution; however, requiring 20 feet of cover because a resident feels safer is not a practicable solution. See also the response to comment PM2-117.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-12 (cont'd) not? Which criteria are being used to make this crucial determination? Since no explanation of such a body—or of such criteria—is offered, we can only assume that the decision is based on whether Transco deems the (merely recommended) mitigation measure "practicable," or not—which is hardly reassuring to those of us standing in the pipeline's path. A more honest rendering of the DEIS would simply replace every occurrence of the word "practicable" with the phrase, "convenient for Transco."

The term is used liberally throughout the DEIS, painting a most unsettling portrait of an industry that gets to choose which FERC recommendations it'll agree to, and which it won't—simply because it's "not practicable" for them. Examples abound: "Transco would avoid mortalities or injuries to breeding birds and their eggs or young by conducting vegetation clearing and maintenance outside the breeding season *to the extent practicable*" (ES-7); reductions in the construction right-of-ways have been reduced *"where practicable"* (2-15); "grading would be limited in wetland areas *to the extent practicable"* (2-23); "special care would be taken when residential areas are adjacent to construction activities to minimize neighborhood and traffic disruption and to control noise and dust *to the extent practicable"* (2-32); Transco attempted to collocate the ASP along existing right-of-ways *"where practicable"* (3-15); in karst terrain, Transco is encouraged to minimize the time and extent of open-cut trench excavations *"to the extent practicable"* (4-25); after construction, Transco would "return surface contours and drainage patterns to as close to original conditions *as practicable"* (4-31); *"to the extent practicable"* Transco will avoid construction during heavy rainfalls (4-33); Transco will attempt to reduce adverse impacts of heavy excavation by utilizing "specialized excavation methods *where practicable"* (4-46); Transco will attempt to locate the right-of-way "as far from the interior portion of the forest *as practicable"* (4-110); "Transco would avoid impacts on the northern long-eared bat *to the extent practicable"* (4-111)—and the list goes on. In every case, no criteria are given for assessing what is—or is not—practicable, so that Transco stands safely outside the bounds of accountability.

• "Necessary": Similar questions attend the well-worn DEIS phrase "necessary." According to the DEIS, an enormous catalog of harms to wildlife, forests, wetlands, and landowners are permitted should Transco deem certain actions "necessary." For example: "No chemicals or additives would be added to the water [during hydrostatic testing] except where necessary…" (ES-8), and "overnight construction, if necessary, is not expected to create significant impacts" on affected communities (ES-13). LAP gets the clear impression that Transco—rather than local communities—gets to decide if around-the-clock construction is "necessary" in our neighborhoods. This same rule-of-thumb is applied to the deafening noise levels associated with HDD (horizontal directional drilling), which may also take place around-the-clock if Transco deems it "necessary" (4-234). "Necessary" to save Transco time and money, perhaps? In such cases, Transco would provide "temporary housing or equivalent monetary compensation" for residents forced out of their homes, against their will, for unsafe noise levels around the clock (4-234).

CO31 – Lancaster Against Pipelines (cont'd)

CO31-12 (cont'd) That's a hefty price for affected residents to pay for Transco's "necessary" cost-cutting measures.

• "Recommendations": And how are readers to understand FERC's use of the equally soft term "recommendations"? The DEIS makes reference to hundreds of recommendations issued to Transco by all sorts of bodies—most of all, FERC. The vast majority of these recommendations are in reference to mitigation measures, safety standards, and other safeguards of the communities and natural resources affected by this project. A "recommendation" is not a requirement, and LAP has profound concerns over the apparent lack of enforceable weight that these recommendations carry. No where do we learn what happens if Transco fails to meet these recommendations? What will FERC do in such cases?

CO31-13 • Accommodations: LAP is also concerned about FERC's willingness to accommodate Transco when it seeks exceptions, or exemptions, when asked to supply information it seems unwilling to provide. Here's one example (of many we could have chosen) that demonstrates this point. When FERC "requested that Transco complete an air quality impact" analysis, Transco, in turn, "indicated its preference" to produce monitoring data of its own, rather than relying on EPA's widely used AERSCREEN or AERMOD results, for fear that these tools "may overestimate impacts associated with certain pollutants" (4-210). FERC is willing to grant Transco's self-serving requests, even while acknowledging that such accommodations were being requested to protect Transco from potentially unfriendly data.

After reviewing the specific accommodations requested by Transco in this case, it appears that FERC allowed Transco to choose when & how they would—and would not—gather air quality monitoring data at a compressor station, in an attempt to selectively produce results more amenable to their purposes. For example, in order to avoid documenting air pollution associated with their own construction activities at Compressor Station 517, Transco was allowed to suspend monitoring—apparently until a more fitting time of their own choosing (4-210). Additionally, when FERC offered Transco "the option" (again, who's in charge?) of monitoring air quality for 1 year in the vicinity of the compressor station to establish an air quality baseline, Transco—at the time the DEIS was issued—had only submitted "about 6 months of air quality monitoring" (4-210). In summary: Transco seeks a conspicuously self-serving accommodation; FERC grants it. Transco fails to supply essential data (less than half); FERC issues its pro-Transco DEIS conclusion anyway.

CO13-14 • Abuse of interstate designation: Finally, it is apparent to many that the ASP is a Pennsylvania tragedy, onto which Williams has tacked superfluous, allegedly related mini-projects in Maryland, Virginia, North Carolina, and South Carolina—all in an effort to push the ASP under the jurisdiction of FERC, where almost certain federal approval would pre-empt state and local opposition. Who determined that the ASP proposal was actually—rather than superficially—an interstate project? Why wouldn't FERC call Transco's bluff on this stunt, and refuse to participate in this pre-emptive racquet?

CO31-13 As detailed in section 4.11.1.3 of the EIS, we gave Transco the option to monitor instead of model because monitoring can accurately provide the needed data for the air quality impact analysis. Additionally, air quality modeling and air monitoring are used to analyze operational air quality impact analysis, not construction emissions. Including construction emissions in the monitoring data would have resulted in an inaccurate operational air quality impact analysis. For this reason, we allowed Transco to temporarily suspend monitoring. See the response to comment FA1-150 regarding the air quality impact analysis completed for the Project and our recommendation regarding ongoing air quality monitoring.

CO31-14 Transco operates a pipeline system engaged in interstate commerce associated with the transportation of natural gas. As such Transco's system falls under FERC's jurisdiction pursuant to the NGA. Any modifications or additions to Transco's system are also subject to FERC's jurisdiction regardless of whether the proposed addition or modification or combination of proposed additions and modifications physically crosses state boundaries.

CO31 – Lancaster Against Pipelines (cont'd)

CO13-15 In short, the DEIS makes abundantly clear who's in charge of the ASP review process, and it's certainly not FERC. Instead, it's the very industry seeking to inflict the myriad harms to be produced by the project under review. This is unacceptable to the local communities bearing the brunt of these impacts.

• Objection #5: A demonstrated disregard for local, affected communities

CO3-16 During the two years in which FERC invited public comments on the ASP (from Pre-Filing to DEIS), more than 6000 public comments were formally submitted. Of those 6,000 comments, 96.9% expressed opposition to the ASP. We know, because we read and catalogued every one of them. That analysis was submitted to the ASP docket earlier this year. Recurring concerns included: contamination and degradation of natural resources, violations of preserved land, safety issues (often citing Williams' troubling safety record), lack of local benefits, health impacts, diminished use of affected properties (for both personal and business use), and the line's disturbing proximity to residences and schools. That FERC would so easily sweep aside thousands of objections in their DEIS, dismissing all of these potential impacts as "less-than-significant," demonstrates a brazen contempt for community input—input which FERC, itself, requested.

CO3-17 To further accentuate this point, we note that FERC has yet to address the pattern of bullying, intimidation, trespassing, and misinformation as documented in scores of public comments made to FERC—both in writing, and at public hearings. Landowners in the proposed right-of-way have repeatedly appealed to FERC to acknowledge and address the myriad of ways that Williams' land agents have harassed them, violated clear directives to stay off their property, and systematically fed them a steady diet of patently false information—all to coerce a lease signature from unwilling hands. LAP can find no where in the DEIS where FERC responds to these well-documented accusations.

CO3-18 As FERC's prescribed 45-day review period for the ASP DEIS comes to an end today, LAP notes yet another expression of disdain for community concerns. For it appears the Commission is poised to deny extending the comment period, despite considerable public pressure to do so. FERC's decision to refuse even a 30-day extension to the people most at risk from this project stands in striking contrast to the Commission's willingness to accommodate Williams' requests for extensions & adjustments to survey protocols, as well as flat-out refusals to provide required data—a pattern detailed above.

CO31-19 The DEIS reflects a particular bias against rural communities. This holds special concern for LAP, since most of the land here in Lancaster County sitting in Williams' sights is rural. Most startling in this regard is Williams' willingness (with FERC's permission) to use a cheaper, lower grade of pipeline in rural areas compared to the thicker-walled pipelines required in more densely populated areas. FERC might excuse Lancaster's horror at learning that cost-saving, thinner-walled pipelines will

CO31-15 See the response to comment CO31-14.

CO31-16 See the response to comment PM1-44.

CO31-17 Complaints regarding Williams/Transco's treatment of stakeholders can be referred to the Commission's Dispute Resolution Division. This division works to promote the timely and high quality resolution of disputes through consensus decision-making processes such as mediation. Stakeholders who believe they have not been fairly treated by Williams/Transco are encouraged to use this service but also have the right to pursue other means of resolution including the courts. Also see the response to comment PM1-22.

CO31-18 See the response to comment PM1-130.

CO31-19 See the response to comment PM1-25.

CO31 – Lancaster Against Pipelines (cont'd)

CO31-19 (cont'd) be used along 75% of the Central Penn Line South (4-245), including 34 of the 36 miles proposed for Lancaster County (Table 4.12.1-1).

Based on Williams' self-congratulatory tone in the DEIS, the company acts like we owe them our deepest gratitude for voluntarily agreeing to use Class 2 pipe in all Class 1 areas. They'll be waiting a long time for our thanks. Where Williams claims magnanimity, we see a cheap PR stunt that still ends up running the second-thinnest pipeline next to our homes, beside our schools, and across our roads. Why is the same pipeline quality required of densely populated areas not *also* required in medium- to low-density areas? This is surely a case of corporate cost-cutting measures, wed to liability concerns, trumping community safety. It's a macabre arithmetic, where rural lives are more expendable than urban lives, simply because there are fewer of us to compensate when catastrophe strikes.

CO31-20 Yet another example of flagrant bias against rural community's is the gas industry's practice of adding the potentially life-saving chemical odorant known as mercaptan to natural gas supplies *only* in higher-density population areas (4-243). In the starkest terms: Williams needn't waste such costly safety measures on mere country bumpkins.

CO31-21 FERC's public hearings on the DEIS round out their disregard for local communities. The setting can only be described as dark comedy. FERC representatives visit affected counties, inviting "public comment." In return, these representatives sit impassively before us, high on auditorium stages, uttering nary a response, as deeply concerned residents, for hours on end, approach the sterile microphone to cram a future-lifetime's worth of anxiety into tightly regulated 3-minute sound bites—being reminded, at 2:30, that time's about up. Young mothers, with infants cradled in their arms, shed rage-tinted tears of helplessness against a system heaping unbearable risks on their children's backs. Fourth-generation farmers cry foul over swindling land agents & the violation of preservation easements, all amid the promise of lost crop yields for decades to come. High-school students vent feelings of betrayal at the grownups in the room, grownups who are trading away a future that doesn't even belong to them to fill—still further—the pockets of fossil fuel executives, pockets that happen to hold the FERC Commissioners themselves.

We hope FERC is paying close attention to the crescendo of outrage expressed at each of the DEIS hearings on the ASP, a growing furor over a regulatory system that shows no intention of protecting local communities against a predatory gas industry. Nor should FERC be tempted to dismiss the rising tide of irrepressible outrage, captured in the deafening jeers and boos triggered by the contemptuous comments of out-of-town industry shills reading the same tired script, at hearing after hearing. These voices are harbingers of a sea change for the gas industry, an era where affected community members no longer tolerate a permissive and ineffectual regulatory system. If FERC fails to offer protection against an industry they're sworn to regulate, local communities themselves will be forced to keep

CO31-20 As stated in section 4.12 of the EIS, Transco's use of mercaptan would be in accordance with the DOT's regulations in 49 CFR 192.625.

CO31-21 Comment noted. The purpose of the draft EIS comment meetings was to give interested groups and individuals the opportunity to present oral comments on the draft EIS for consideration in the final EIS. The meetings were not intended to serve as an interactive question and answer session.

CO31-21 (cont'd) unwanted pipelines off their farms, away from their streams, and out of their neighborhoods.

Conclusions:

[1] LAP requests a formal extension for the DEIS review period

CO31-22 It appears that FERC intends to begin moving forward on a final EIS for the Atlantic Sunrise Project following a scant 45-day period for public comments to be filed in response to the DEIS. A mere 45 days for non-specialists to carefully review 1,342 pages of jargon-laden environmental, socio-economic, and technical assessments and analyses is altogether inadequate. Williams/Transco has spent two years and employed a small army of specialists in an effort to generate data favorable to their plans for the ASP, amassing thousands of pages of materials based on hundreds of studies, most of which are, so some extent, addressed in the DEIS.

Landowners being threatened with condemnation, other concerned residents living in and near the blast zone, and a host of community non-profits and environmental groups can hardly be expected, in six weeks, to read, evaluate, and offer thoughtful responses to 1,342 pages (DEIS = 472 pages + Appendices = 870 pages) of technical language spanning a dizzying range of specialized fields.

We urgently request that FERC postpone work on the final EIS until an additional 60-day comment period has come to an end in order to allow local communities, and other interested parties, to more adequately respond to the onerous DEIS issued in May 2016.

[2] LAP requests that FERC issue a revised DEIS, denying Transco's application

CO31-23 For all the reasons catalogued above, the Board of Lancaster Against Pipelines—on behalf of the local communities we represent, communities that have expressed unprecedented grassroots opposition to this project, often at great personal sacrifice—urges FERC to issue a revised DEIS *denying* Transco's application for the Atlantic Sunrise Project for the *significant adverse impacts* it would bring to Pennsylvania.

Submitted by the Board of Directors
Lancaster Against Pipelines, Inc.
June 27, 2016

CO31-22 See the response to comment PM1-130.

CO31-23 See the response to comment PM1-70. We believe the analysis in the draft EIS and the revised analysis in the final EIS are appropriate and do not warrant the need for a supplemental draft EIS.

CO32 – MFS, Inc. d/b/a Eastern Land & Resources Company

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC **Docket No. CP15-138-000**

REPLY OF MFS, INC. d/b/a EASTERN LAND & RESOURCES COMPANY TO THE RESPONSE OF TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TO RECOMMENDATION NUMBER 44 OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND REQUEST FOR EXTENSION OF TIME TO FURTHER RESPOND

MFS, Inc., d/b/a Eastern Land & Resources Company ("EL&RC"), by and through its undersigned attorney, submits this Reply to the Response of Transcontinental Gas Pipe Line Company, LLC ("Transco") to Recommendation Number 44 of the Draft Environmental Impact Statement ("Draft EIS") issued by the Federal Energy Regulatory Commission ("FERC") for the Atlantic Sunrise Project (the "Pipeline Project"), Docket No. CP-15-138-000, and Request for Extension of Time to Further Respond.

I. BACKGROUND

Previously, on April 24, 2015, pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of FERC, and in accordance with the April 8, 2015 Notice of Application for Transco's Pipeline Project, EL&RC timely submitted its Motion to Intervene in opposition to the application filed by Transco. On July 8, 2015, EL&RC renewed its objection and filed a Supplemental Opposition. On September 10, 2015, EL&RC filed a further Supplemental Opposition to the Pipeline Project. On June 2,

CO32 – MFS, Inc. D/B/A Eastern Land & Resources Company (cont'd)

2016, EL&RC filed Preliminary Comments to the Draft EIS and a Request for Extension of Time to Respond More Fully.

As with EL&RC's prior filings, the focus of this filing is on a portion of Transco's Pipeline Project, referred to as the 42" Central Penn Line South, that is proposed to be constructed in Lebanon County, Pennsylvania. One of the townships in Lebanon County through which Transco's 42" Central Penn Line South is proposed to be constructed is South Annville Township. EL&RC owns a 536.55 +/- acre parcel in South Annville Township that has long been planned and zoned for mixed use development ("EL&RC's Property"), the construction of which commenced in 2008 and is currently on-going.

II. REPLY TO RESPONSE OF TRANSCO TO FERC RECOMMENDATION NUMBER 44 OF THE DRAFT EIS

CO32-1

Transco's Response to FERC Recommendation Number 44 of the Draft EIS, the same as other filings made by Transco, is false and misleading. Whether Transco is intentionally lying or is terribly mistaken, the effect is the same: it is difficult for EL&RC to have any trust in any representations made to it by Transco regarding the Pipeline Project. FERC should have similar cause for concern about Transco's representations.

For example, in Transco's Response to FERC Recommendation Number 44, Transco states falsely that it initiated contact with EL&RC (MFS) in March 2014 "*to discuss concerns related to the proposed pipeline route and planned development*" and that "*contact efforts were unsuccessful until October 2015*" (emphasis added). These statements by Transco are false.

CO32-1 See the responses to comments PM1-22 and CO14-33.

CO32 – MFS, Inc. D/B/A Eastern Land & Resources Company (cont'd)

CO32-1 (cont'd)

As discussed at length in EL&RC's Reply in Opposition filed with FERC on September 10, 2015, which is incorporated herein by reference, Transco made no effort to meet with EL&RC regarding EL&RC's concerns about the proposed pipeline route until after EL&RC filed its initial objections to the pipeline project on August 18, 2014. Moreover, EL&RC did not refuse to meet with Transco until October 2015 but, rather, EL&RC met with Transco for the first time more than a year earlier on September 24, 2014 to discuss its development project and its objections to the proposed pipeline route.

At the meeting on September 24, 2014, moreover, Transco's representative said that Transco thought EL&RC's property was farm land and that Transco did not know it was zoned for development or was actually being developed until EL&RC filed its objection on August 18, 2014. (Had Transco conducted the least bit of due diligence prior to submitting its application, it would have known those facts). Additionally at that meeting on September 24, 2014, Transco's representative said Transco would work on an alternative route to avoid impacting EL&RC's development project and would get back in touch with EL&RC about it. EL&RC did not receive any of the purported route alternatives from Transco until March and June of 2016—18 to 21 months after that September 24, 2014 meeting.

However, what Transco did do after the meeting with EL&RC on September 24, 2014, was to submit an alternative route to FERC on March 31, 2015, that actually *increased* the adverse impact to EL&RC's project. See, EL&RC's Reply in Opposition, dated September 10, 2015. Moreover, Transco submitted that new pipeline route in March 2015 without any further consultation with EL&RC. Thus, contrary to the

CO32 – MFS, Inc. D/B/A Eastern Land & Resources Company (cont'd)

CO32-1 (cont'd) representations made to EL&RC at the September 24, 2014 meeting, Transco once again did not confer further with EL&RC and did nothing to address EL&RC's concerns about the pipeline route.

The above examples are just a few examples of the false and misleading statements from Transco's Response to FERC Recommendation Number 44. In light of such statements, how is EL&RC to have any confidence or trust in any statements made to it by Transco? After all, if Transco is not hesitant to make such false statements to FERC, will it not also continue to make false statements to EL&RC?

For the above reasons, EL&RC has been pushing to get additional information from Transco regarding the purported alternative routes submitted by Transco to EL&RC in March and June of 2016. But, Transco has been largely unresponsive to EL&RC's requests for clarification and supplemental information. On June 16, 2016, EL&RC was advised that additional clarification and information would be forthcoming but EL&RC still has not received any additional information from Transco. Instead, Transco filed its Response to FERC Recommendation Number 44 containing the false statements identified above.

What EL&RC can say at this time regarding the three purported alternative pipeline routes received in March and June of 2016, without the additional information it has requested but has not received from Transco, is the following. Transco knew (or should have known) from the discussion at the meeting on February 25, 2016 with EL&RC that the two purported alternative routes submitted in March do nothing to lessen the impact to EL&RC's development project and, therefore, would not be acceptable to

CO32 – MFS, Inc. D/B/A Eastern Land & Resources Company (cont'd)

CO32-1 (cont'd) EL&RC. The alternative route submitted to EL&RC in June of 2016, which finally appears to show the proposed pipeline route in the western right-of-way of newly constructed and realigned Killinger Road to EL&RC's rear property boundary, could be a step in the right direction. However, to be certain and in light of the prior misrepresentations made to EL&RC by Transco, EL&RC has requested additional clarification from Transco. Based on that clarifying information, there are additional matters that will still need to be discussed in connection with the proposed pipeline route. EL&RC has proposed a meeting with Transco after EL&RC is provided with the additional information it has requested. But since no clarifying information has been provided by Transco, no other meeting has occurred as of the filing of this Reply.

CO32-2 **III. REQUEST FOR EXTENSION OF TIME**

EL&RC is again requesting that the public comment period, which is currently set to expire on June 27, 2016, be extended for an additional ninety (90) days to allow sufficient time to obtain and review the additional information it has requested but has not received from Transco. This will also allow EL&RC the time necessary to engage in subsequent discussions with Transco in the hope of resolving this matter.

IV. INCORPORATION OF PRIOR FILINGS BY EL&RC

EL&RC incorporates herein, as if set forth in full, each of the following prior submissions by EL&RC: (i) Objection, dated August 18, 2014; (ii) Renewed Objection, dated February 4, 2015; (iii) Motion to Intervene, dated April 24, 2015; (iv) Supplemental Opposition, dated July 8, 2015; (v) Reply in Opposition, dated September

CO32-2 See the response to comment PM1-130.

10, 2015; and (vi) Preliminary Comments to the Draft Environmental Impact Statement and Request for Extension of Time, dated June 2, 2016.

V. CONCLUSION

CO32-3 WHEREFORE, EL&RC respectfully requests that FERC (i) require Transco to re-route the pipeline to avoid impacting EL&RC's project or (ii) if Transco continues to fail to do so, that FERC deny Transco's request for the Pipeline Project in its entirety. EL&RC also respectfully requests that, for the reasons set forth above, its Request for Extension of Time be granted.

Respectfully Submitted,

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CO32-3 See the responses to comments CO14-33 and PM1-130.

CO32 – MFS, Inc. D/B/A Eastern Land & Resources Company (cont'd)

CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of FERC's Rules of Practice and Procedure, 18 C.F.R. § 385.2010 (2014), I hereby certify that the Reply of MFS, Inc., d/b/a Eastern Land & Resources Company to the Response of Transcontinental Gas Pipe Line Company LLC to Recommendation Number 44 of the Draft Environmental Impact Statement and Request for Extension of Time to Further Respond has been filed through FERC's eLibrary system and that, as such, it is being served simultaneously on each person designated on the official service list compiled by the Secretary in this proceeding via FERC's eLibrary system.

Dated this 27th day of June 2016

Respectfully Submitted,

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CO33 – Clean Air Council

CLEAN AIR COUNCIL

April 21, 2016

Via First Class Mail and E-Filing

Honorable Norman C. Bay, Chairman
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Attn: Kimberly D. Bose, Secretary

Re: Comment on Atlantic Sunrise Project,
Transcontinental Gas Pipe Line Company, LLC, Docket CP15-138-000

Dear Chairman Bay,

Intervenor Clean Air Council (the "Council") hereby submits the following supplemental comment to the Federal Energy Regulatory Commission ("FERC") regarding compressor station air quality monitoring and modeling for Transcontinental Gas Pipe Line Company, LLC's ("Williams" or "Transco") proposed Atlantic Sunrise natural gas pipeline project ("Atlantic Sunrise" or the "Project"). There have now been a series of docket submissions by FERC, Williams, and the Council on this topic. This letter incorporates by reference the earlier comments on this subject and responds to Williams's April 15, 2016 air quality comment ("April Comment").

Williams's April Comment retreads ground that is now familiar. Williams defends its monitoring program and its AERSCREEN modeling while claiming AERMOD is not appropriate for modeling its compressor station emissions. Williams grounds much of its argument in the claim that because it has presented conservative data and its compressor station emissions are generally not problematic as shown by existing data—assertions Clean Air Council disputes—FERC should feel comfortable moving ahead with the knowledge that it can always act on whatever new data comes in from ongoing monitoring.

While Williams cannot be blamed for presenting its air quality case in the best light, this is nonetheless a one-sided presentation that glosses over **certain key points**:

CO33-1 **First**, for every measurement or model industry claims is too conservative, there is one the public recognizes as too lax. For example, the methane fugitive emissions factors for piping components and compressor stations such as those Williams would use for Atlantic Sunrise are

CO33-1 In development of the EIS for the Project, FERC staff evaluated the information provided by Transco, which included the information needs outlined in 18 CFR 380, appendix A, as well as additional information requested through data requests to allow for an evaluation and disclosure of potential impacts associated with the Project for the draft EIS. Where necessary, we requested additional information from Transco to further evaluate all potential operating scenarios for Compressor Stations 517, 520, and 190. See the response to comment FA1-150 regarding the air quality impact analysis completed for the Project and our recommendation regarding ongoing air quality monitoring.

CO33-1 (cont'd) believed by many to be significantly outdated and underestimated.[1] Williams seeks special dispensation from FERC to pick and choose which factors and models (or monitoring) would minimize its projected air quality impacts. Williams cannot have it both ways. If Williams wants FERC to re-evaluate the validity of AERMOD when estimating Atlantic Sunrise's impact, then FERC should re-evaluate the assumptions state environmental agencies used in permitting the compressor stations used in the Project, as those assumptions are subject to criticism too.

Second, NEPA is an independent statute with independent force. It is not made redundant by other environmental statutes. If all NEPA required of a lead agency was for the agency to see whether the project otherwise complied with environmental laws, the NEPA statute would be pointless. Efforts to collapse NEPA into those other laws, such as the Clean Air Act, must fail. Regardless, as Williams acknowledges, it has violated the Clean Air Act at one of the compressor stations to be used for Atlantic Sunrise—what then should the standard be for demonstrating no significant impact? Only a certain number of environmental statute violations?

Third, Williams defends not publishing AERMOD modeling results and not taking certain air quality measurements at Station 517 on the ground that the data revealed would be flawed. However, Williams submits to FERC data with acknowledged shortcomings (such as regarding reduced compressor operational levels and malfunctioning sample canes) when that data helps Williams build the argument that it has done enough at this point for FERC to move ahead. Williams's selectivity is self-interested. If flawed data is appropriate for FERC to use in its discretion—or not—then that should be the case across the board, not only where it helps Williams.

Fourth, it is Williams's burden to provide what FERC needs to make its determination. Right now, Williams is arguing in the abstract that it cannot provide modeling data FERC needs because the data does not fairly represent likely air impacts. FERC and the public can evaluate the data after Williams publishes it. Williams will have every opportunity it needs to explain why Williams believes it is not accurate.

And **finally**, perhaps the most important point to emphasize is that Williams's monitoring program has only produced a few months of data, and that does not provide a large enough set of data to properly evaluate the actual air quality conditions. As Williams itself said, "[t]he January on-site air quality measurements are indeed different than those measured over the September – December 2015 time period. And they will be different in February—that is the nature of the

[1] Compare, for example, EPA's AP 42, using data from the last millennium, *see* https://www3.epa.gov/ttn/chief/ap42/ch03/index.html, with a report from four years ago commissioned by EPA showing how most emissions factors understate methane emissions, *see* Natural Gas Industry Methane Emission Factor Improvement Study, Final Report, Cooperative Agreement No. XA-83376101, December 2011, available at http://dept.ceer.utexas.edu/ceer/GHG/files/FReports/XA_83376101_Final_Report.pdf. This type of underestimation explains in part why direct measurements of methane in gas production and processing areas reveal much higher levels of fugitive methane than is expected based on inventories. *See* Steven Hamburg, "New Research Finds Higher Methane Emissions, Reduction Opportunities in Texas' Barnett Shale Region," July 7, 2015, available at blogs.edf.org/energyexchange/2015/07/07/new-research-finds-higher-methane-emissions-reduction-opportunities-in-texas-barnett-shale-region/.

CO33-1 (cont'd) atmosphere." (April Comment at 14). This is why it is critical that if FERC accepts Williams's monitoring protocol in place of the proper modeling that FERC has requested, an environmental impact statement only be drafted after at least a full year of monitoring for all sites and all NAAQS pollutants has been done and the data published.

In addition to these broad key points, there are also a few, more **minor points** Clean Air Council would like to address. The first few deal with misunderstandings by Williams of Clean Air Council positions.

Williams states that "[t]hough CAC questions (without cause, as explained below) the quality of such [ambient air quality monitoring] data, it does not contest that actual air quality data will provide FERC the information it requires to assess the air quality impacts of [Atlantic Sunrise]." (April Comment at 6). To the extent Williams is suggesting that the Council does not contest that Williams's monitoring data will give FERC enough information for its NEPA analysis, Williams is mistaken. If Williams conducted its monitoring program over an adequate period of time, without choosing to not monitor for some pollutants at some stations, making sure to monitor its compressor stations with higher volumes of gas moving through them, etc., it might provide FERC enough quality data to do its NEPA analysis. That is not the situation here.

In another factual error, Williams states that Clean Air Council "*mistakenly* alleges that Transco assumed zero background concentrations" for NO_2 in parts of its air monitoring. (April Comment at 3, italics added). Williams says that it did not so assume, it just noted that the data was not available.[2] This is quite untrue, as FERC can see for itself. In Resource Report No. 9 at 9-48 and 9-49, Williams submits tables (Tables 9.2-22 to -24) where the modeled pollutant concentration is added to the ambient background concentrations using simple addition to result in the total pollutant concentration. Where the data was not available, Williams set the total concentration equal to the modeled concentration, meaning ambient background concentrations were considered to be zero. Williams explicitly admits that it just assumed that since the modeled concentrations were relatively low, the NAAQS would not be exceeded. This is yet another instance of Williams asking FERC to accept guesswork and assumptions over data.

Williams also says that Clean Air Council "lacks the technical understanding" to interpret its data, as evidenced by our "suggestion of a linear relationship between air emissions and station utilization." (April Comment at 11). Williams then states that the two do not have a linear relationship in an attempt to rebut the Council's showing that if the compressor stations were running at full capacity, air quality measurements would be significantly worse that Williams's data reveals. (*See* Clean Air Council March 21, 2016 comment at 4). There are two problems with this argument: (1) Clean Air Council expressly acknowledged in its earlier comment that the linearity assumption "may not be accurate," and (2) Williams *completely fails to address* the main point of the Council's argument: that as station utilization increases, so do emissions. If Williams does not have recent data for all compressor station emissions at full loads, it needs to

[2] If data were not available from certain EPA monitoring stations, data could have been used from the next-nearest reasonably similar stations. Williams acknowledges that Station 190 is in a county in severe nonattainment for ozone, of which NO_x is a precursor, so a small increase in NO_2 concentrations might indeed violate the NAAQS.

3

CO33 – Clean Air Council (cont'd)

CO33-1 (cont'd) credibly and convincingly show FERC what should be expected under those circumstances. For some reason it has chosen not to do so.

CO33-2 Besides distorting Clean Air Council's positions, Williams also argues that the facts of its Clean Air Act violation at Station 517 (currently not being monitored for all criteria pollutants) "show[] that violations of the C[lean]A[ir]A[ct] are quickly discovered, corrected, and, as appropriate, penalized to provide a deterrent to similar violations." (April Comment at 7). As recently explained on the docket by John and Sandra Walker, concerned citizens living along the proposed Atlantic Sunrise route, Williams's record of violations suggests that, if anything, Williams has not been deterred enough.[3] Of particular note are a series of explosions at Williams compressor stations in the region: one in 2012[4] and two in 2013.[5] [6] Two of these three compressor station explosions took place in Susquehanna County, the proposed location of the northernmost portion of the Atlantic Sunrise pipeline, and the third took place on the Transco pipeline in New Jersey. The Pipeline and Hazardous Materials Safety Administration investigated the New Jersey explosion and determined that Williams Transco, despite having just experienced two compressor station explosions nearby, "failed to take steps to minimize the danger of accidental ignition of gas," including by failing "to adequately monitor for a combustible atmosphere" in the right location.[7]

CO33-3 More recently still, on June 9, 2015, a segment of Transco pipeline between Station 505 (the New Jersey compressor station that exploded in 2013) and Station 517 (where DEP issued a violation just two months ago) had a massive, 34-foot rupture, requiring the evacuation of 150 people and releasing over 190 million cubic feet of pipeline gas.[8] Williams had just inspected the line four years prior. Each of these incidents—particularly the last—unquestionably caused air quality impacts not accounted for in state permits, but Williams would have FERC confine its air quality analysis to the issued permits.

[3] *See* Accession No. 20160412-0015 on docket no. CP15-138.

[4] *See* Laura Legere, "Explosion rocks natural gas compressor station," *The Times Tribune* http://thetimes-tribune.com/news/explosion-rocks-natural-gas-compressor-station-1.1292502

[5] *See* Joseph Kohut, "Fire, possible explosion at Susquehanna gas compressor station thought to be accidental," *The Times Tribune*, May 16, 2013, available at http://thetimes-tribune.com/news/fire-possible-explosion-at-susquehanna-gas-compressor-station-thought-to-be-accidental-1.1489789

[6] The compressor station in question is Williams Transco Station 505. *See* Walter O'Brien, "Multiple injuries reported at Branchburg gas pipeline facility flash fire," *NJ.com*, May 31, 2013, available at http://www.nj.com/somerset/index.ssf/2013/05/multiple_injuries_reported_at.html

[7] PHMSA Notice of Probable Violation and Proposed Civil Penalty, CPF 1-2014-1002, March 6, 2014, available at https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120141002/120141002_NOPV_PCP_03062014.pdf

[8] *See* PHMSA Corrective Action Order, No. 1-2015-1013H, June 12, 2015, available at https://primis.phmsa.dot.gov/comm/reports/enforce/documents/120151013H/120151013H_Corrective%20Action%20Order_06122015.pdf

CO33-2 The referenced facilities are not the subject of this certificate proceeding. See the response to comment PM1-13 regarding pipeline safety regulations.

CO33-3 Section 4.11.1.3 has been updated to include estimates of pipeline blowdown emissions, which includes an estimate of blowdown emissions from routine maintenance as well as emergency blowdowns.

Conclusion

It is Williams's burden to prove that its compressor stations will not cause significant air quality impacts, but it continues to urge FERC to act based on assumptions and iffy and incomplete data. This is not enough.

Sincerely,

Joseph Otis Minott
Executive Director & Chief Counsel

Alexander G. Bomstein
Senior Litigation Attorney

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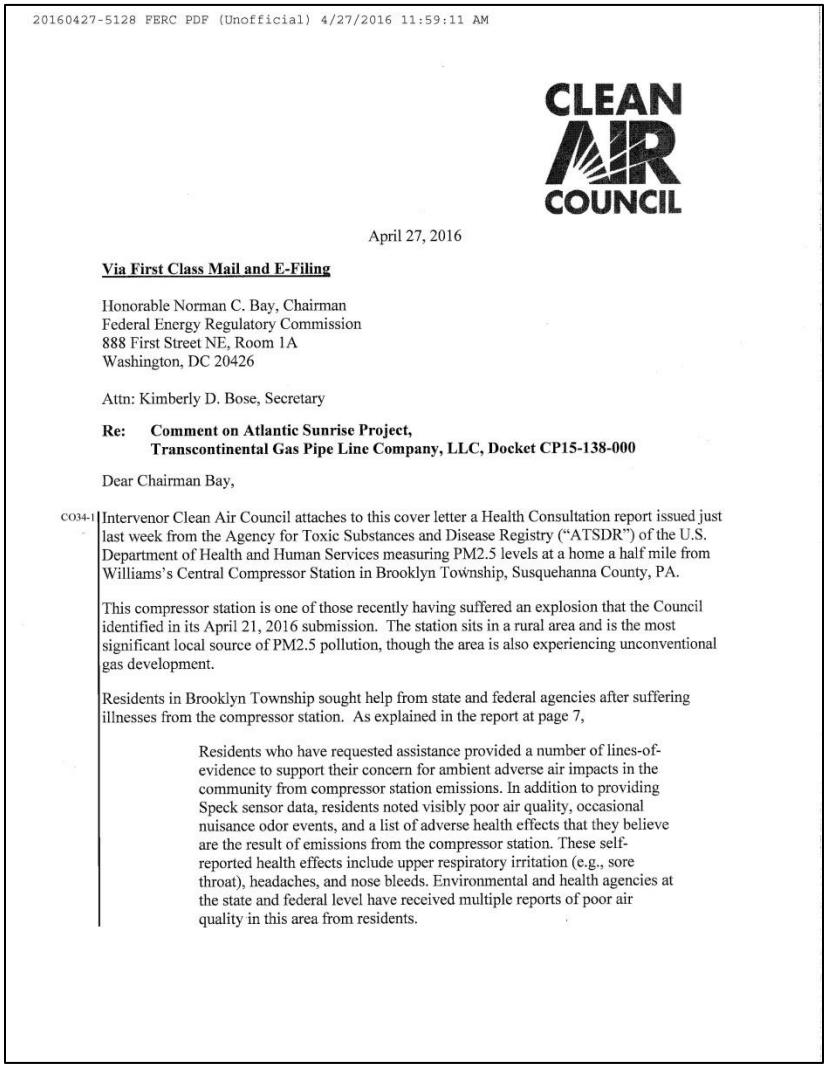
CO34 – Clean Air Council



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CLEAN AIR COUNCIL

April 27, 2016

Via First Class Mail and E-Filing

Honorable Norman C. Bay, Chairman
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Attn: Kimberly D. Bose, Secretary

Re: Comment on Atlantic Sunrise Project,
Transcontinental Gas Pipe Line Company, LLC, Docket CP15-138-000

Dear Chairman Bay,

CO34-1 Intervenor Clean Air Council attaches to this cover letter a Health Consultation report issued just last week from the Agency for Toxic Substances and Disease Registry ("ATSDR") of the U.S. Department of Health and Human Services measuring PM2.5 levels at a home a half mile from Williams's Central Compressor Station in Brooklyn Township, Susquehanna County, PA.

This compressor station is one of those recently having suffered an explosion that the Council identified in its April 21, 2016 submission. The station sits in a rural area and is the most significant local source of PM2.5 pollution, though the area is also experiencing unconventional gas development.

Residents in Brooklyn Township sought help from state and federal agencies after suffering illnesses from the compressor station. As explained in the report at page 7,

> Residents who have requested assistance provided a number of lines-of-evidence to support their concern for ambient adverse air impacts in the community from compressor station emissions. In addition to providing Speck sensor data, residents noted visibly poor air quality, occasional nuisance odor events, and a list of adverse health effects that they believe are the result of emissions from the compressor station. These self-reported health effects include upper respiratory irritation (e.g., sore throat), headaches, and nose bleeds. Environmental and health agencies at the state and federal level have received multiple reports of poor air quality in this area from residents.

CO34-1 The referenced facility is not the subject of this Certificate proceeding. FERC staff notes that the Brooklyn Township $PM_{2.5}$ Report was prepared in reference to a particular compressor station located in Brooklyn Township, Pennsylvania and that the report states that conclusions drawn in the report "should not be generalized to all natural gas compressor stations." Section 4.11.1.3 of the final EIS includes a recommendation that would require Transco to continue background air monitoring at Compressor Stations 517, 520, and 190 for 3 years after the newly modified facilities begin operation.

CO34-1 (cont'd) The U.S. Environmental Protection Agency conducted the air quality monitoring at the Brooklyn Township site. The report explained the limitations of the monitoring, which was short-term and at only one location. Notably, the monitoring site, a half mile from the compressor station in a rural area, experienced levels of PM2.5 significantly higher than those at the nearest EPA air quality monitoring station in Scranton. Despite its limitations, ATSDR came to some conclusions, including that "The estimated annual average PM2.5 concentration of 15 to 16 µg/m3 may be harmful to the general population and sensitive subpopulations, including the elderly, children, and those with respiratory or heart disease."

ATSDR also recommended, among other things, (1) "that the Pennsylvania Department of Environmental Protection (PADEP), working with permitted sources in the area, consider steps to reduce their emissions of PM and PM precursor chemicals," and (2) "more robust assessment of air quality (including seasonal sampling to include winter) near this natural gas compressor station and other similar air permitted sources."

Clean Air Council respectfully requests that the Federal Energy Regulatory Commission heed its sister agency ATSDR's recommendations and pay attention to its findings in considering the air quality around the compressor stations Williams would modify for its Atlantic Sunrise pipeline project.

Sincerely,

Joseph Otis Minott
Executive Director & Chief Counsel

Alexander G. Bomstein
Senior Litigation Attorney

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The attachments to this letter are too voluminous to include in this environmental impact statement. They are available for viewing on the Federal Energy Regulatory Commission's (FERC) website at http://www.ferc.gov. Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket No." excluding the last three digits (i.e., CP15-138, PF14-8), and follow the instructions. For assistance please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, contact 202-502-8659. The Category/Accession number for this submittal is 20160427-5128.

CO35 – Oil Change International

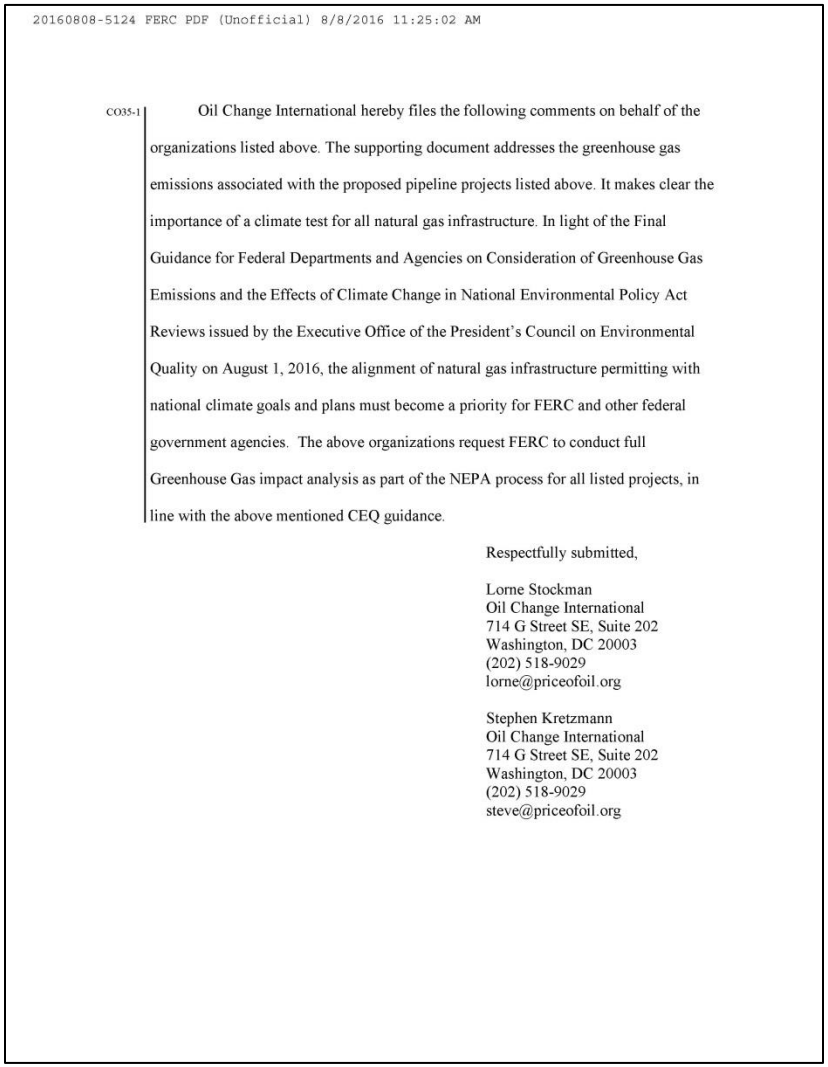
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION
August 08, 2016

In the Matter of

ATLANTIC COAST PIPELINE, LLC	CP15-554-000
	CP15-554-001
NATIONAL FUEL GAS SUPPLY CORP/EMPIRE PIPELINE,	CP15-115-000
INC. NORTHERN ACCESS 2016 PROJECT	CP15-115-001
TRANSCONTINENTAL GAS PIPE LINE CO., LLC	CP15-138-000
ATLANTIC SUNRISE PROJECT	
TEXAS EASTERN TRANSMISSION, LP	CP16-3-000
ACCESS SOUTH/ADAIR SOUTHWEST/LEBANON	CP16-3-001
EXTENSION	
TENNESSEE GAS PIPELINE COMPANY, L.L.C.	CP15-77-000
BROAD RUN EXPANSION PROJECT	
COLUMBIA GAS TRANSMISSION, LLC	CP16-38-000
WB XPRESS PROJECT	
COLUMBIA GAS TRANSMISSION, LLC	CP15-514-000
LEACH XPRESS PROJECT	
ROVER PIPELINE LLC	CP15-93-000
ROVER PIPELINE PROJECT	
PENNEAST PIPELINE COMPANY, LLC	CP15-558-000
PENNEAST PIPELINE PROJECT	
NEXUS GAS TRANSMISSION, LLC	CP16-22-000
NEXUS GAS TRANSMISSION PROJECT (NGT)	
MOUNTAIN VALLEY PIPELINE, LLC	CP16-10-000
MVP PROJECT (SEE EQUITRANS/CP16-13)	

COMMENTS OF OIL CHANGE INTERNATIONAL ON GREENHOUSE GAS EMISSIONS FROM NATURAL GAS PIPELINES, ON BEHALF OF OIL CHANGE INTERNATIONAL, SIERRA CLUB, EARTHWORKS, APPALACHIAN VOICES, CHESAPEAKE CLIMATE ACTION, 350.0RG, BOLD ALLIANCE, ENVIRONMENTAL ACTION, BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, PROTECT OUR WATER, HERITAGE AND RIGHTS (VIRGINIA & WEST VIRGINIA), FRIENDS OF WATER, MOUNTAIN LAKES PRESERVATION ALLIANCE, SIERRA CLUB WEST VIRGINIA, SIERRA CLUB VIRGINIA.

CO35 – Oil Change International (cont'd)



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CO35-1 Oil Change International hereby files the following comments on behalf of the organizations listed above. The supporting document addresses the greenhouse gas emissions associated with the proposed pipeline projects listed above. It makes clear the importance of a climate test for all natural gas infrastructure. In light of the Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews issued by the Executive Office of the President's Council on Environmental Quality on August 1, 2016, the alignment of natural gas infrastructure permitting with national climate goals and plans must become a priority for FERC and other federal government agencies. The above organizations request FERC to conduct full Greenhouse Gas impact analysis as part of the NEPA process for all listed projects, in line with the above mentioned CEQ guidance.

Respectfully submitted,

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CO35-1 The comment and report provide no specific information about the Project. Accordingly, this material does not assist us in our analysis of the Project. The EIS analyzed greenhouse gas impacts of the proposed Project. FERC staff notes that the CEQ's Final Guidance for Federal Departments and Agencies on Consideration of GHG Emission and the Effects of Climate Change in NEPA Review was published on August 1, 2016, following the publication of the draft EIS. Broadly, the August 1st CEQ guidance recommends that agencies preparing a NEPA analysis a) "quantify GHG emissions as a proxy for assessing potential climate change effects," and b) "examine whether future climate change in the project area will exacerbate any other environmental impacts from the project." Section 4.11.1.3 of the EIS provides a quantification of project GHG emissions, and section 4.13.8.10 of the EIS discusses potential cumulative impacts of the project GHG emissions on climate change. See the response to comment CO13-12 regarding analysis of downstream emission impacts, and the response to comment CO25-9 regarding analysis of upstream production emission impacts. Section 4.13.8.10 has been updated to provide additional information regarding cumulative impacts of methane releases from the natural gas production and delivery system and potential mitigation measures.

Regarding the suggestion that a "climate test" be applied to the Project as a condition of project approval, neither CEQ nor any other government agency has, to our knowledge, proposed a particular "climate test" to be used in evaluating natural gas infrastructure projects. We examine the impacts of the projects before us, including impacts on climate change, using the best available facts and science, and will continue to do so. FERC is responsible for reviewing natural gas transmission infrastructure projects to ensure that they are in the public interest and need. A portion of that responsibility is to complete a NEPA analysis to disclose potential impacts associated with a project, analyze reasonable alternatives that would meet the project need, and propose reasonable mitigation measures to minimize potential impacts. We believe that our analysis of the Project has adequately disclosed potential impacts associated with climate change, analyzed reasonable alternatives that would meet the project need, and proposed mitigation measures to minimize impacts.

CO35 – Oil Change International (cont'd)

The attachments to this letter are too voluminous to include in this environmental impact statement. They are available for viewing on the Federal Energy Regulatory Commission's (FERC) website at http://www.ferc.gov. Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket No." excluding the last three digits (i.e., CP15-138, PF14-8), and follow the instructions. For assistance please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, contact 202-502-8659. The Category/Accession number for this submittal is 20160808-5124.

CO36 – Clean Air Council

CLEAN AIR COUNCIL

September 1, 2016

Via First Class Mail and E-Filing

Honorable Norman C. Bay, Chairman
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Attn: Kimberly D. Bose, Secretary

Re: Comment on Atlantic Sunrise Project,
Transcontinental Gas Pipe Line Company, LLC, Docket CP15-138-000

Dear Chairman Bay,

Intervenor Clean Air Council (the "Council") hereby submits the following supplemental comment to the Federal Energy Regulatory Commission ("FERC") regarding compressor station air quality monitoring and modeling for Transcontinental Gas Pipe Line Company, LLC's ("Williams" or "Transco") proposed Atlantic Sunrise natural gas pipeline project ("Atlantic Sunrise" or the "Project"). In 2016, there have been a series of docket submissions by FERC, Williams, and the Council on this topic, including portions of the draft environmental impact statement ("DEIS") and comments made about the DEIS. This letter incorporates by reference the earlier comments on this subject and responds to Williams's August 2016 Supplemental Information Filing made in response to direction from FERC in the DEIS ("Supplement").

CO36-1 The Council first notes that Williams has failed to follow a number of FERC's DEIS recommendations, including numbers 17 (not incorporating recommended alternative route), 44 (no correspondence attached, no mitigation planned), 52 (see below), and 53 (see below).[1]

Regarding specifically recommendations 52 and 53, FERC in the DEIS requested that:

[1] Williams also addressed the mine fire issue that Clean Air Council raised in its comments on the DEIS. Williams wrote in its Supplement "Transco is currently conducting a more detailed investigation of the status, extent, path, progress, and containment of the mine fires." The Council commends Williams for undertaking this needed more-detailed investigation. Williams wrote, "Transco will file their findings and report any mitigation needed in the Implementation Plan." It is not clear whether these finding and report will be filed so as to be publicly available. The Council urges that these findings and report be publicly available, and specifically distributed to residents and emergency responders living along the proposed path of the Atlantic Sunrise pipeline where it would pass through areas of abandoned mine fires.

CO36-1 See the response to comment FA1-150 for further information regarding Transco's response to our recommendations in the draft EIS and the air quality impact analysis.

CO36-1 (cont'd)

52. No later than 60 days prior to the scheduled issuance of the final EIS, Transco shall file with the Secretary the following for Compressor Stations 190, 517, and 520:

a. revised existing monitoring data (September 2015 through January 2016), and new monitoring data (February through July 2016) for Compressor Stations 517 and 520 that scale the measured ambient data from September 2015 through July 2016 at full load/maximum emissions; and

b. if Compressor Station 190 is in operation for a substantial time during the monitoring period between February and July 2016, provide monitoring data for Compressor Station 190 that scale the measured ambient data to full load/maximum emissions.

Include supporting calculations and provide a narrative explaining the justification for the methodology. *(Section 4.11.1.3)*

53. Prior to the end of the draft EIS comment period, Transco shall file with the Secretary the results of an air quality screening (AERSCREEN) or refined modeling analysis (AERMOD or EPA-approved alternative) for all of the emission-generating equipment (including existing equipment) at Compressor Station 190, if Compressor Station 190 is not in operation for a substantial time during the monitoring period between February and July 2016. The results shall indicate the local modeled ambient emissions, plus the modeled incremental increase in emissions of criteria pollutants from the modifications. Transco shall include supporting calculations and provide a narrative explaining the justification for the modeling methodology. *(Section 4.11.1.3)*

DEIS, pages 5-30 and 5-31. These recommendations are dramatically scaled back from what FERC had originally asked of Williams. *See* FERC's requests nos. 11-17 under Resource Report 9 in Accession No. 20141229-3016 to the PF14-8 docket.

Nonetheless, Williams has not complied with these recommendations, frustrating FERC's efforts to draft a complete final environmental impact statement. *See* DEIS, page 5-21.

Williams Has Not Satisfied FERC's Recommendations for Compressor Station 190

CO36-2 With respect to Compressor Station 190, FERC recommended one of two courses: (1) If the station were *not* "in operation during a substantial time during the monitoring period between February and July 2016," then modeling for existing and new emission-generating equipment, including modeled ambient emissions and incremental emissions are recommended; (2) if the

CO36-2 See the response to comment FA1-150 for further information regarding Transco's response to our recommendations in the draft EIS and the air quality impact analysis.

CO36-2 (cont'd) station *were* "in operation during a substantial time during the monitoring period between February and July 2016," scaled monitoring data during that time period is recommended.

Williams did a scaling analysis per recommendation 52 for Station 190, but wrote in its Supplement:

> Since Compressor Station 190 has been primarily off-line for installation of an efficiency project, station utilization, to date, has been low, resulting in a small number of hours that met the wind direction and station utilization criteria for the scaling analysis. As more engines come on line and the air monitoring database grows, the number of qualifying events will increase and the scaling results are expected to become more stable.

Supplement at II to III. In other words, the Station was not online enough to do a proper scaling analysis. In fact, the data Williams submitted shows that only *seventeen hours of data* was used to do the scaling evaluation for Station 190, all from late June or July. Supplement at 13.

Under FERC's recommendations, the proper course was thus to do modeling per recommendation 53. Williams refused, writing in response to that recommendation, "Compressor Station 190 commenced operation during the monitoring period, which allowed Transco to gather ambient air quality data for use in the scaling report; therefore, dispersion modeling is not necessary." Clearly, "primarily off-line" and only creating seventeen usable hours of data is not the same as "in operation for a substantial time." Williams simply chose not to follow FERC's recommendations, so it could again avoid producing modeling of compressor station emissions. It is also notable that while FERC asked for this modeling "[p]rior to the end of the draft EIS comment period," Williams did not even respond until nearly two months after the close of that period.

Williams's Scaling Methodology Is Flawed and Does Not Satisfy Recommendation 52

The scaling analysis Williams did, in turn, suffers from severe methodological flaws, and fails to satisfy recommendation 52.

Most importantly, Williams has invented a new methodology here for no apparent reason. All Williams needs to have done is multiplied the air quality impacts that it has already measured by the appropriate scale, per its Equation 3-1, and per recommendation 52. By creating this new methodology which conveniently does not work to quantify air impacts for most pollutants, at most times, and analyzed in relation to most of the NAAQS, Williams has submitted to FERC a fairly meaningless evaluation that does not satisfy the basic purpose of the recommendation. As a reminder, the recommendation was issued to compensate for the fact that Williams's air quality monitoring data is based on compressor stations that have been largely not operating or operating on highly reduced loads compared to their projected loads if Atlantic Sunrise moves ahead. This evaluation does not meet that goal.

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CO36-2 (cont'd) Some of the deficiencies include the improper focus on two NAAQS when quantifying air quality impacts. Williams long ago determined that it would only provide air quality information regarding NAAQS criteria pollutants. This is itself problematic, as the Council has explained in other comments, because some of the most dangerous pollution from compressor stations is in the form of hazardous air pollutants emitted in acute episodes. FERC, however, appears to accept Williams's reduced scope of air quality evaluation to just the criteria pollutants. It is likely that FERC meant those pollutants when it referred to emissions and monitoring data in recommendation 52.

Even that narrow scope of evaluation, however, is broader that what Williams did here. There are eleven separate NAAQS, spanning six criteria pollutants. Williams only looked at *two* NAAQS: the NO_2 primary 1-hour standard and the CO primary 1-hour standard. Williams gave excuses for why it failed to evaluate the other NAAQS, but they do not withstand scrutiny.[2] Williams implied that it could not evaluate compliance with NAAQS averaged over a period of greater than one hour because the wind does not hold steady for that long. *See* Submission at 6. This is unexplained and illogical. Williams did not have any such requirement for the air quality monitoring data it submitted to FERC before. There is no rational basis for applying that requirement now for this scaling evaluation. If Williams could produce air quality monitoring data for other NAAQS for these stations, regardless of which way the wind blows, it can scale those values for FERC now.

On that same point, if wind direction is important in measuring air quality impacts now, why has Williams not factored that into its earlier NAAQS compliance evaluations?

Williams also said that SO_2 and PM should not be issues if NO_2 and CO are not. Supplement at 1. This may sometimes be the case; but then again, the compressor stations have had SO_2 emissions problems before, and may have them again. Williams reported on July 6, 2016, that at Station 190, "Five instances of higher than expected SO_2 concentrations were observed during the months of March and April."[3] Indeed, Station 190 exceeded the SO_2 one-hour NAAQS in those months.[4] More to the point, Williams should evaluate its scaled compressor station emission for all NAAQS; if there truly are no problems with other pollutants, it has nothing to be afraid of in making those evaluations public. FERC did not request scaled data for only some emissions, it requested the data for all emissions.

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[2] Williams does not even give an excuse for its failure to evaluate lead emissions. Presumably, however, it is because lead is not a pollutant of significant concern from compressor station emissions, with which the Council agrees. Williams's failure to evaluate volatile organic compound emissions, or explain why it was not considering them, is more concerning. Natural gas infrastructure, especially compressor stations, produce significant volatile organic compound emissions through fugitive emissions and irregular events such as blowdowns. Volatile organic compounds are ozone precursors, and some are hazardous air pollutants.

[3] Page 3 of Williams Transco Pipeline – Atlantic Sunrise Ambient Air Monitoring Report, February 1, 2016 – April 30, 2016, Docket CP15-138, Accession No. 20160706-5104.

[4] *Id.* at Table 26 and Table 27.

CO36 – Clean Air Council (cont'd)

CO36-2 (cont'd) Williams's methodology also only looks at instances in which the wind is blowing "towards" the monitors, as discussed above (without defining what arc of the compass would be considered "towards"), and when the stations were being used at greater than 15% of their capacity. It makes sense that the data would be more stable, as Williams argued, when considering only times when the compressor stations are operating at higher loads. The data derived from low operating loads would be noisier, and when scaling the data, the noise would be magnified. If the stations were operating at high loads much of the time, an argument could be made for excluding the low-load data points as lower-quality data. But Williams's methodology here cuts out so many data points that, at least regarding stations 520 (27 data points considered, Supplement at Appendix A-3) and 190 (17 data points considered, Supplement at Appendix A-1), the results are not meaningful. Again, this fails to be a scaling of the monitored air quality impacts, being instead a highly selective look at a few hours of data. Williams wrote, "Once extreme values (those with low station utilization) are filtered out, the scaling approach detailed in Section 3, above, yields a reasonable estimate of the likely total impact of the compressor station's ambient air quality impact." Supplement at 11. To the contrary, any reliance on results from this seriously flawed methodology would be unreasonable.

One further problem in Williams's methodology is in its derivation of the compressor stations' air quality impacts. It measures air quality impact by simply subtracting background concentration levels measured at other locales from on-site concentration levels. Supplement at 6. This may give some rough-and-ready guesses for air quality impact, but it is not very accurate. A much better procedure would be to use upwind and downwind monitors, and take simultaneous measurements. The variability of background concentrations is evident from the negative numbers Williams has presented as air quality impacts of various pollutants. Obviously, those indicate that the background concentration measuring sites have significantly different background levels of pollutants, as the emission of pollutants necessarily increases background levels of those pollutants, it never decreases them.

These flaws in Williams's methodology point to the more serious problem of its reliance on air quality monitoring data when the data that FERC would need to do a proper evaluation simply are not available. This is why Williams needs to submit to FERC proper air quality modeling, as FERC has requested, and as the Council has emphasized.

The Results of Williams's Evaluation Are Based on Data Williams Has Not Provided

Williams's results as presented in its Supplement do not match the data it includes in the appendices. The Council can only guess that Williams is basing its conclusions on the full set of data it has, but has not submitted to FERC. FERC should ask Williams for the data it uses to derive its results.

Williams wrote, on page 11:

> Once extreme values (those with low station utilization) are filtered out, the scaling approach detailed in Section 3, above, yields a reasonable estimate of the likely total impact of the

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CO36-2 (cont'd)

compressor station's ambient air quality impact. Based on this approach, Compressor Station 190, Compressor Station 517, and Compressor Station 520 impacts have been demonstrated to result in total ambient air quality concentrations that are within the NAAQS.

The maximum scaled CO station impacts, plus background, yielded ambient concentrations ranging from 8 to 24 percent of the applicable 1-hour standard. For NO2, the maximum scaled impacts resulted in total ambient concentrations that ranged from 18 to 51 percent of the one-hour standard.

Williams was discussing the results as presented in its Table 4-1, reproduced below for convenience of reference.

Table 4-1. Scaling Analysis Results Summary

Station	Ambient Air Concentration (background plus station impact scaled up to 100% utilization)							
	Carbon Monoxide (parts per million; 1-hour avg.)			Number of Hours Meeting Wind Direction and Station Utilization Criteria	Nitrogen Dioxide (parts per billion; 1-hour avg.)			Number of Hours Meeting Wind Direction and Station Utilization Criteria
	Minimum	Maximum	Second Highest		Minimum	Maximum	98th Percentile Daily Highest	
190	0.0	3.0	**3.0**	17	0.0	75.0	**29.1**	16
517	-1.5	9.5	**8.3**	368	-43.0	86.3	**51.2**	346
520	-0.6	3.2	**2.8**	25	-21.4	144.5	**18.0**	27
National Ambient Air Quality Standard	*35 ppm 1-hour average, not to be exceeded more than once per year*				*100 ppb 1-hour average, 98th percentile, averaged over 3 years*			

The Council has checked those numbers, and they do not accurately reflect the "Detailed Scaling Results" in the appendices. Williams has presented FERC and the public with the results of an air emissions and air quality scaling evaluation for its compressor stations while withholding the numbers from which the results and conclusions are derived. As a consequence, the results of the scaling exercise are unverifiable.

6

Conclusion

Williams has not followed FERC's recommendations relating to air quality impacted by its compressor stations. The Council respectfully submits that Williams should fully comply with FERC's recommendations, and FERC should follow up with Williams to ensure that it does.

Sincerely,

Joseph Otis Minott
Executive Director & Chief Counsel

Alexander G. Bomstein
Senior Litigation Attorney

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CO37 – Allegheny Defense Project, et al.

October 10, 2016

Nathaniel J. Davis, Sr.
Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Revised or Supplemental Draft Environmental Impact Statement for the Atlantic Sunrise Pipeline Project (Docket No. CP15-138-000)

Deputy Secretary Davis:

CO37-1 On behalf of Allegheny Defense Project, Appalachian Mountain Advocates, Citizens for Pennsylvania's Future, Clean Air Council, Concerned Citizens of Lebanon County, Damascus Citizens for Sustainability, Eastern PA Coalition for Abandoned Mine Reclamation, Friends of Nelson, Heartwood, Lancaster Against Pipelines, Lebanon Pipeline Awareness, Lower Susquehanna Riverkeeper, Middle Susquehanna Riverkeeper, Shalefield Organizing Committee, Sierra Club, Waterkeepers Chesapeake, and Wild Virginia, we submit the following comments regarding the need for a Revised or Supplemental Draft Environmental Impact Statement for the proposed Atlantic Sunrise Pipeline Project (hereinafter "Atlantic Sunrise," the "Pipeline," or the "Project"). The Environmental Protection Agency ("EPA"), Department of Interior ("DOI"), and the environmental community submitted comments noting numerous defects in the Draft Environmental Impact Statement ("DEIS").

In the comments below, we outline many of the substantial defects in the DEIS that must be corrected in a Revised or Supplemental DEIS – including, but not limited to, substantial concerns regarding deficiencies in the DEIS outlined in comment letters submitted by EPA and DOI. Correcting these deficiencies will require significant new analysis and the incorporation of high quality and accurate information regarding the Project's impacts. Public scrutiny of environmental decisionmaking, informed by high quality and accurate information, is essential to the purposes of the National Environmental Policy Act ("NEPA"). 40 CFR § 1500.1(b). The Commission must allow public scrutiny of these substantial changes in a Revised or Supplemental DEIS.

We also identify significant new information associated with the Project that has come to light after the public comment period on the DEIS closed in June 2016. Additional information necessary for a fully informed evaluation of potential impacts remains undisclosed.

In light of these circumstances, we urge FERC to issue a Revised or Supplemental DEIS for Atlantic Sunrise, and provide sufficient opportunity for public comment. FERC must supply information and analysis regarding the Project in a manner that facilitates meaningful analysis and public participation. The Commission should use this as an opportunity to correct the substantial deficiencies in the DEIS, thereby furthering the purposes of NEPA.

CO37-1 See the response to comment PM1-70.

I. Legal Requirements for a Revised or Supplemental Environmental Impact Statement

The National Environmental Policy Act EIS requirement "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). Information must be provided in a timely manner to ensure that the public can meaningfully participate in the decisionmaking process. *League of Wilderness Defenders Blue Mountain Biodiversity Project v. Connaughton*, 752 F.3d 755, 761 (9th Cir. 2014) ("Informed public participation in reviewing environmental impacts is essential to the proper functioning of NEPA."). An agency must "not act on incomplete information, only to regret its decision after it is too late to correct." *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989).

When an agency publishes a draft EIS, it "must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act." 40 C.F.R. § 1502.9(a). "If a draft statement is so inadequate as to preclude meaningful analysis, the agency *shall* prepare and circulate a revised draft of the appropriate portion." *Id.* (emphasis added). "The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action." *Id.* An EIS that fails to provide the public a meaningful opportunity to review and understand the agency's proposal, methodology, and analysis of potential environmental impacts violates NEPA. *See e.g., California ex rel. Lockyer v. U.S. Forest Service*, 465 F. Supp. 2d 942, 948-50 (N.D. Cal. 2006); *see also Idaho ex rel. Kempthorne v. U.S. Forest Service*, 142 F.Supp.2d 1248, 1261 (D. Idaho 2001) ("NEPA requires full disclosure of all relevant information before there is meaningful public debate and oversight.").

Furthermore, NEPA requires a supplement to an EIS when significant new information or changes in a project implicate significant changes in the environmental analysis. The NEPA regulations require that:

> (1) [Agencies] . . . [s]hall prepare supplements to either draft or final environmental impact statements if: (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.
> (2) [Agencies] may also prepare supplements when the agency determines that the purposes of the Act will be furthered by doing so.

40 C.F.R. § 1502.9(c). The use of the word "shall" is mandatory; it creates a duty on the part of the agency to prepare a supplemental EIS if substantial changes are made or if there is significant new information relevant to environmental concerns. *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 372 (1989) (recognizing the duty where there are significant new circumstances or information); *see also Dubois v. U.S. Dep't. of Agric.*, 102 F.3d 1273, 1292 (1st Cir. 1996).

When determining if new circumstances or new information require an agency to issue a supplemental EIS, the following factors should be considered: (a) the environmental significance

of the new information; (b) its probable accuracy; (c) the degree to which the agency considered the new information and considered its impact; and (d) the degree to which the agency supported its decision not to supplement its impact statement with explanation or additional data. *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1025 (9th Cir. 1980); *Commonwealth of Massachusetts v. Watt*, 716 F.2d 946 (1st Cir. 1983).

II. The Commission Must Prepare a Revised or Supplemental Draft Environmental Impact Statement for the Atlantic Sunrise Project

A. FERC must prepare a Revised DEIS due to the substantial lack of information in the DEIS regarding the scope of Atlantic Sunrise and its environmental impacts.

1. Scope

CO37-2 The Commission must prepare a Revised DEIS for the Project to address the significant lack of information in the DEIS concerning the scope of Atlantic Sunrise and related pipeline projects that will utilize Atlantic Sunrise facilities to transport natural gas to the southeastern United States. These projects are part of a coordinated effort by the gas industry and the federal government, including FERC, to connect Marcellus and Utica shale gas to downstream markets. These projects should have been comprehensively analyzed as connected, cumulative, and similar actions in a single EIS to properly account for the direct, indirect, and cumulative impacts that will likely result, and to consider a broad range of alternatives. *See* 40 C.F.R. § 1508.25. Instead of preparing that comprehensive analysis, FERC presented the public with a fractured review that isolated various components of this larger project, thus frustrating the public disclosure and participation requirements of NEPA and its implementing regulations.

Atlantic Sunrise is but one step in a larger effort to transport Marcellus and Utica shale gas from northern Pennsylvania to the southeastern United States. According to Transcontinental Pipe Line Company's ("Transco") application, the Atlantic Sunrise Project will "provide 1,700,002 dt/day of incremental firm transportation capacity *from northern Pennsylvania in Transco's Zone 6 to Transco's Station 85 in Alabama*," where it "interconnects with existing pipelines serving the Florida market." Atlantic Sunrise Application at 3 (Mar. 31, 2015) (emphasis added). This would be accomplished by constructing nearly 200 miles of new pipeline in Pennsylvania to connect shale gas supplies to Transco's existing mainline and modifying that mainline for bi-directional flow capabilities so that shale gas can be transported in a north-to-south direction to Transco's Station 85 in Alabama. *See id.* at 5-6.

In its application for Atlantic Sunrise, Transco claimed that it was "not aware of any other application to supplement or effectuate its proposals set forth herein which must be or is to be filed by Transco, any of Transco's customers, or any other person with any other Federal, state or other regulatory body." *Id.* at 21. However, on November 14, 2014, just a few months before Transco filed its application for Atlantic Sunrise, it filed an application for the Hillabee

CO37-2 See the responses to comments PM1-70, PM1-130, and PM3-102

CO37-2 (cont'd)

Expansion Project in Docket No. CP15-16-000.[1] *See Florida Southeast Connection, LLC, et al.*, 154 FERC ¶ 61,080, at P 2 (Feb. 2, 2016) ("FSC Order"). According to Transco:

> The [Hillabee Expansion] Project will include construction of approximately 43.5 miles of pipeline looping facilities and 88,500 horsepower of compression at new or existing compressor stations, all in Alabama. These facilities will provide Sabal Trail with 1,131,730 dt/day of incremental firm capacity *from certain receipt points located at Transco's Station 85* in Choctaw County, Alabama to a proposed point of interconnection between Transco and Sabal Trail in Tallapoosa County, Alabama.

Hillabee Expansion Application at 3 (emphasis added). The interrelatedness of Transco's Atlantic Sunrise and Hillabee Expansion projects is evident to gas industry analysts. For example, according to RBN Energy:

> . . . Williams' Atlantic Sunrise . . . by the second half of 2017, will allow up to 1.7 Bcf/d to flow south on Transco to Station 85 in Choctaw County, AL. Atlantic Sunrise will consist of 178 miles of greenfield pipeline, two pipeline loops (new lines paralleling existing pipes) totaling 15 miles, and new compressor stations and other enhancements. Receipt points for the Marcellus/Utica gas delivered via Atlantic Sunrise will be along a prime stretch of Marcellus activity: Transco's Leidy Line between the existing Grugan interconnect in Clinton County, PA, and Transco's Station 515 in Luzerne County, PA. The gas will run to Transco's mainline, which, with the Atlantic Sunrise Project's improvements, will make the mainline bi-directional through Transco zones 4, 5 and 6 – that is, all the way to the Mississippi-Louisiana border.
>
> *A couple of other projects will then help move the gas further south. From Transco's Station 85* . . . [Transco's] 818-MMcf/d *Hillabee Expansion . . . will provide the needed physical connection in Tallapoosa County, AL, to the northwest terminus of planned Sabal Trail Pipeline* . . . The Sabal Trail Pipeline, whose ultimate capacity will be about 1.1 Bcf/d, will run 515 miles from Tallapoosa County (AL) to near Orlando, FL[.] . . [T]he *Atlantic Sunrise-Hillabee-Sabal Trail combo* will put Marcellus/Utica supply in direct competition with Gulf Coast and Midcontinent gas supply for the Florida market.

Sheetal Nasta, "Too Much Pipe On My Hands? – Marcellus/Utica Takeaway Capacity To The Southeast," RBN Energy (Aug. 15, 2016) (emphasis added), *available at* https://rbnenergy.com/too-much-pipe-on-our-hands-marcellus-utica-takeaway-capacity-to-midwest. According to another RBN Energy article, "Williams (the owner of Transco . . .), is helping [Marcellus producers] by developing the Atlantic Sunrise project (*and the related Hillabee Expansion – a Station 85-to-Sabal-Trail connector* . . .) to help make Marcellus gas deliveries to the southeastern US possible." Housley Carr, "Miami 2017 – Marcellus Gas Heading To Florida," RBN Energy (Jan. 16, 2014) (emphasis added), *available at*

[1] The Hillabee Expansion and two other projects, Sabal Pipeline and Florida Southeast Connection, are part of the "Southeast Market Pipelines Project." *See* FSC Order at P 226. Collectively, the three projects would involve the construction of over 685 miles of pipeline and 339,400 hp of compression in Alabama, Georgia, and Florida. *Id.* at PP 1-4.

CO37-2 (cont'd)

https://rbnenergy.com/miami-2017-marcellus-gas-heading-to-florida. Despite the fact that industry analysts clearly view the Atlantic Sunrise, Hillabee Expansion, and Sabal Trail projects as a three-step "combo" to transport Marcellus/Utica shale gas to the Southeast, Transco presented its Atlantic Sunrise Project to FERC as if it was completely unrelated to the Hillabee Expansion. This resulted in a substantially flawed review of the direct, indirect, and cumulative effects of the "Atlantic Sunrise-Hillabee-Sabal Trail combo."

For example, the FEIS that FERC published for the Sabal Trail, Hillabee Expansion, and Florida Southeast Connection projects made no mention of the Atlantic Sunrise Project. Similarly, the DEIS that FERC published for the Atlantic Sunrise Project made no mention of the Sabal Trail, Hillabee Expansion, or Florida Southeast Connection projects.

Nevertheless, FERC should have been aware of the relatedness of these projects. The two foundation shippers for the Sabal Pipeline are Florida Power & Light Company ("FPL") and Duke Energy Florida, Inc. ("DEF"). *See* Sabal Pipeline Application at 2-3 (Docket No. CP15-17-000, Accession No. 20141121-5032). Both FPL and DEF filed motions to intervene in the Hillabee Expansion Project. *See* Docket No. CP15-16-000, Accession Nos. 20141222-5173 *and* 20141208-5245. Both companies also filed motions to intervene in the Atlantic Sunrise Project. *See* Docket No. CP15-138-000, Accession Nos. 20150429-5379 *and* 20150429-5499. The fact that two Florida utilities that are foundation shippers for Sabal Pipeline also sought to intervene in both the Hillabee Expansion and Atlantic Sunrise Projects should have alerted FERC to the interrelatedness of these projects.

In a proceeding before the Florida Public Service Commission, both FPL and DEF were asked to "identify and discuss any existing or planned natural gas pipeline expansion project, including new pipelines and those outside of the State of Florida, that would affect the Company for the period 2016 through 2025." Florida Public Service Commission, Review of the 2015 Ten-Year Site Plans for Florida's Electric Utilities – Supplemental Data Request #1, Request 67 (Attachment 1). In response, both companies identified Atlantic Sunrise. *See* DEF and FPL Responses to Request 67 (Attachment 2). DEF said that Atlantic Sunrise will "displace[ ] traditional Gulf Coast-to-Northeast flows" and that it "may benefit from incremental Marcellus shale gas supply that could be available at Transco Station 85 where DEP could access this supply to transport into Florida on downstream capacity on Sabal Trail[.]" *Id.* FPL said that Atlantic Sunrise will allow gas transport "from the prolific Marcellus and Utica shale regions of Pennsylvania and Ohio to the Southeast." *Id.*

The Atlantic Sunrise proposal must also be considered in conjunction with the Magnolia Extension proposal, another part of the larger effort to transport Marcellus and Utica shale gas to the southeastern United States. The Magnolia Extension would allow for 500,000 Dth/d of natural gas to be transported from the Marcellus shale fields to the Southeast Market Pipelines Project. An industry publication for the Marcellus shale field recently made public American Midstream Partners' plans to extend its Magnolia Intrastate pipeline and connect it to the portion of the Transco pipeline in Alabama that is a critical part of the Southeast Market Pipelines Project. *See* "Marcellus/Utica Gas May Head to GA & FL via Alabama Pipeline," Marcellus Drilling News (Feb. 2016), *available at* http://marcellusdrilling.com/2016/02/marcellusutica-gas-may-head-to-ga-fl-via-alabama-pipeline (noting that announcement from American Midstream

CO37-2 (cont'd) states that the proposed Magnolia Extension "is intended to offer supply diversity to growing demand areas in the Southeast market, and specifically, address infrastructure constraints associated with the rapid development of natural gas from the Marcellus and Utica Shale formations in the Appalachian Basin"). These pipeline projects are connected actions, and the full scope of their environmental effects must be considered together.

Thus, despite the fact that Transco's Atlantic Sunrise Project is clearly "related" to and part of a "combo" with the Hillabee Expansion, Sabal Trail, and Florida Southeast Connection projects, FERC impermissibly segmented its review of Atlantic Sunrise and, consequently, presented the public with an incomplete and inaccurate assessment of direct, indirect and cumulative effects. 40 C.F.R. § 1508.25(a); *see also Delaware Riverkeeper Network*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) ("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.").

"NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989). Here, the DEIS precludes meaningful analysis because it "fails to address the true scope and impact of the activities that should be under consideration." 40 C.F.R. §§ 1502.9(a), 1508.25(a); *Delaware Riverkeeper Network*, 753 F.3d 1304, 1313. FERC should remedy this failure by preparing a Revised DEIS for Atlantic Sunrise that, at a minimum, discloses and analyzes the impacts of the Hillabee Expansion, Sabal Trail, and Florida Southeast Connection projects in the cumulative impacts section.

2. Lack of Relevant Environmental Information

CO37-3 In addition to FERC's failure to properly disclose and consider the true scope of Atlantic Sunrise and related pipeline projects, the DEIS lacked sufficient information about the Atlantic Sunrise Project and its potential environmental impacts on a wide variety of resources. The DEIS recommends that some of this missing information be supplied by Transco either by the end of the DEIS comment period or before construction begins. *See* DEIS at 5-25 – 5-32. That means the public will not have an opportunity to meaningfully review and comment on this information, which should have been included in the DEIS.

Only the issuance of a revised or supplemental DEIS that thoroughly analyzes this missing information will satisfy NEPA's public comment procedures, which "[encourage] public participation in the development of information during the decision making process." *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 508 (9th Cir. 1988). Simply adding this missing information in the FEIS is insufficient, as it does not allow the same degree of meaningful public participation. *Id.* (*citing California v. Block*, 690 F.2d 753, 770-71 (9th Cir. 1982) ("It is only at the stage when the draft EIS is circulated that the public and outside agencies have the opportunity to evaluate and comment on the proposal.... No such right exists upon issuance of a final EIS."); 40 CFR § 1500.1(b).

CO37-4 Furthermore, the EPA and DOI identified significant deficiencies in the DEIS. For example, EPA expressed concern that "project need will not be vetted in the EIS, but outside of

CO37-3 See the responses to comments PM1-70 and PM1-130.

CO37-4 See the responses to comments PM1-70 and PM1-113.

CO37 – Allegheny Defense Project, et al. (cont'd)

CO37-4 (cont'd) the NEPA process by FERC." EPA, *Comments on the Atlantic Sunrise DEIS – Cover Letter*, at 2 (June 27, 2016) ("EPA DEIS Comments") (Attachment 3). Without assessing the need for the project in the DEIS, FERC undermines the development of alternatives, a "critical component of the NEPA process." *Id.* EPA stated that without this information in the DEIS, FERC failed to "provide transparency in the decision-making process," thereby frustrating the public's "opportunity to provide comment" on the DEIS. *Id.*

In addition to the lack of a statement of need, EPA said it was "concerned about the amount of detailed information that has yet to be filed and is not evaluated in the DEIS." *Id.* This includes:

> surveys for land, rare, species, historic resources, water supplies, air modeling, mitigation measures to manage and dispose of contaminated groundwater, proposed mitigation measures for source water protection areas, geotechnical feasibility studies for HDD crossing locations and mitigation measures to minimize drilling risks, and a detailed aquatic resource compensatory mitigation plan.

Id. EPA explained that this information is both "relevant and critical to evaluation of potential impacts" and that "a fully informed decision may not be made without this information." *Id.* EPA also stressed that this missing information needs to be "disseminated and appropriately evaluated with the resource agencies and public stakeholder participation prior to the issuance of any certificates by FERC." *Id.* EPA specifically recommends that FERC do this "through the use of a revised DEIS." *Id.*

CO37-5 The EPA's comments on the Atlantic Sunrise DEIS echo comments it has submitted on other draft EISs that FERC has prepared for large natural gas pipeline projects. For example, in comments on the DEIS for the Sabal Pipeline, EPA said it had "very significant concerns over the FERC's process and full and objective compliance with the NEPA regulations at 40 CFR Part 1500." EPA, *Comments on the Southeast Market Pipeline Project DEIS*, at 1 (Oct. 26, 2015) (Docket No. CP15-17-000, Accession No. 20151102-0219). EPA even suggested that FERC "appear[ed] to be justifying decisions made prior to implementing the NEPA process." *Id.* at 9. In comments on the DEIS for the PennEast Pipeline, EPA said it had "significant concerns regarding the alternatives analysis, a number of important topics for which *information is incomplete*, and the direct, indirect and cumulative impacts of the proposed action on the environment and public health, including impacts to terrestrial resources, including interior forests, aquatic resources, and rare, threatened and endangered species." EPA, *Comments on the PennEast Pipeline DEIS*, at 1 (September 16, 2016) (Docket No. CP15-558-000, Accession No. 20160916-0013) (emphasis added). EPA emphasized that "[a] significant amount of information is omitted from the DEIS and is proposed to be filed by the project proponent at a future date." *Id.* at 3. "Failing to consider this information in the DEIS leads to gaps in the data and lack of potentially important information for the decision maker." *Id.* Like it did in comments on the Atlantic Sunrise DEIS, EPA specifically requested that FERC prepare a "revised DEIS" for the PennEast Pipeline to account for these significant deficiencies.

CO37-6 DOI was similarly critical of the Atlantic Sunrise DEIS for its lack of information and meaningful analysis. DOI said the cumulative impacts analysis should be "significantly revised" to disclose impacts on the Appalachian National Scenic Trail and Captain John Smith

CO37-5 See the response to comment PM1-70.

CO37-6 See the responses to comments PM1-6 and FA2-1 through FA2-10.

CO37-6 (cont'd) Chesapeake National Historic Trail. DOI, *Draft Environmental Impact Statement (DEIS) for the Proposed Atlantic Sunrise Project*, at 6 (July 8, 2016) (Attachment 4). DOI explained that both trails "contain significant cultural resources and viewsheds that could be impacted by the Atlantic Sunrise Project and the myriad other past, present, and reasonably foreseeable projects, starting with those listed in Appendix P." *Id.* Despite the cultural and scenic significance of these trails, the DEIS only looks at the "effects to single resources within historic districts and along discrete segments of the trails." *Id.* DOI stressed that the cumulative impacts analysis "must be considered in the sense of the trails and their cultural resource properties *as a whole*[.]" *Id.* (emphasis added). This is critical since trails like the Captain John Smith Chesapeake National Historic Trail are located in an area in Pennsylvania that is "experiencing multiple pipeline projects." *Id.* at 4.

DOI expressed further concerns that information regarding route deviations was omitted from the DEIS. *Id.* at 2-3. This information is needed "in order to give reviewers an opportunity to be *fully informed* regarding what is proposed and the impact analyses conducted." *Id.* (emphasis added). DOI specifically "request[s] release of a supplemental EIS and opportunity for public review and comment once this additional information is available and incorporated." *Id.*

Like the EPA and DOI, the environmental community submitted comments regarding the numerous defects in the Atlantic Sunrise DEIS. *See e.g.*, June 27, 2016 DEIS Comments at 5-8. Based on the analysis outlined in these comment, a Revised or Supplemental Draft EIS should, at a minimum, correct the following deficiencies:

CO37-7
- **FERC's purpose and need statement and range of alternatives are inadequate.** According to FERC, "[w]hile this EIS briefly describes Transco's stated purpose, it will not determine whether the need for the Project exists, because this will later be determined by the Commission." DEIS at 1-2. This directly violates the plain language of the Council on Environmental Quality (CEQ) regulation requiring the Commission to "specify the underlying purpose and need" for the project in the EIS. 40 C.F.R. § 1502.13. Without performing an independent assessment of the need for the Project, FERC cannot determine the reasonable range of alternatives that must be analyzed in the DEIS.

CO37-8
- **The lack of complete information in the DEIS renders it legally deficient.** Throughout the DEIS, FERC indicates that information provided by Transco is incomplete. This incomplete information forms the basis for many of the proposed conditions that Commission staff recommends be attached to any certificate authorizing the Project. *See* DEIS at 5-21 – 5-32. These information gaps are detailed further in our June 27, 2016 comment letter. FERC requests that Transco provide information concerning impacts to, among other things, waterbodies and wetlands, drinking water supplies, threatened and endangered species, and other public resources. This information is relevant to FERC's evaluation of "reasonably foreseeable significant adverse effects," and it should have been included in the DEIS so that the public had an opportunity to review it and provide comments. 40 C.F.R. § 1502.22.

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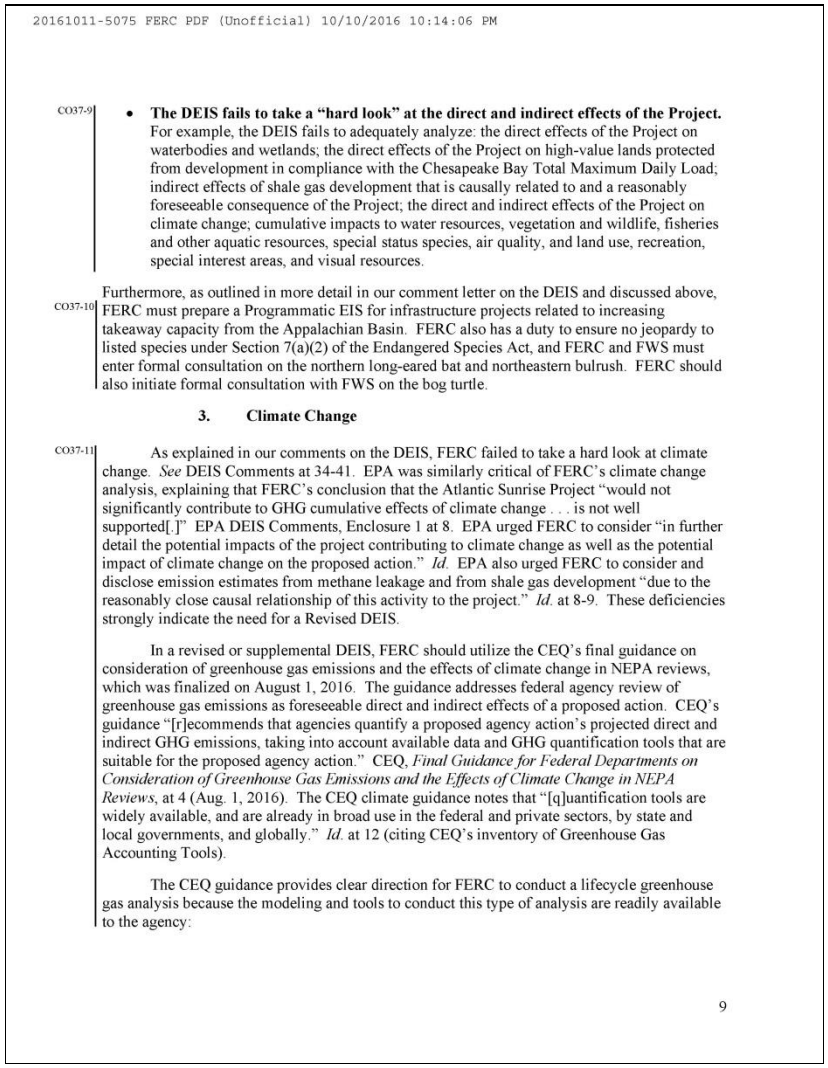
CO37-7 See the response to comment PM1-113.

CO37-8 See the response to comment PM1-70.



CO37-9

- **The DEIS fails to take a "hard look" at the direct and indirect effects of the Project.** For example, the DEIS fails to adequately analyze: the direct effects of the Project on waterbodies and wetlands; the direct effects of the Project on high-value lands protected from development in compliance with the Chesapeake Bay Total Maximum Daily Load; indirect effects of shale gas development that is causally related to and a reasonably foreseeable consequence of the Project; the direct and indirect effects of the Project on climate change; cumulative impacts to water resources, vegetation and wildlife, fisheries and other aquatic resources, special status species, air quality, and land use, recreation, special interest areas, and visual resources.

CO37-10 Furthermore, as outlined in more detail in our comment letter on the DEIS and discussed above, FERC must prepare a Programmatic EIS for infrastructure projects related to increasing takeaway capacity from the Appalachian Basin. FERC also has a duty to ensure no jeopardy to listed species under Section 7(a)(2) of the Endangered Species Act, and FERC and FWS must enter formal consultation on the northern long-eared bat and northeastern bulrush. FERC should also initiate formal consultation with FWS on the bog turtle.

3. Climate Change

CO37-11 As explained in our comments on the DEIS, FERC failed to take a hard look at climate change. *See* DEIS Comments at 34-41. EPA was similarly critical of FERC's climate change analysis, explaining that FERC's conclusion that the Atlantic Sunrise Project "would not significantly contribute to GHG cumulative effects of climate change . . . is not well supported[.]" EPA DEIS Comments, Enclosure 1 at 8. EPA urged FERC to consider "in further detail the potential impacts of the project contributing to climate change as well as the potential impact of climate change on the proposed action." *Id.* EPA also urged FERC to consider and disclose emission estimates from methane leakage and from shale gas development "due to the reasonably close causal relationship of this activity to the project." *Id.* at 8-9. These deficiencies strongly indicate the need for a Revised DEIS.

In a revised or supplemental DEIS, FERC should utilize the CEQ's final guidance on consideration of greenhouse gas emissions and the effects of climate change in NEPA reviews, which was finalized on August 1, 2016. The guidance addresses federal agency review of greenhouse gas emissions as foreseeable direct and indirect effects of a proposed action. CEQ's guidance "[r]ecommends that agencies quantify a proposed agency action's projected direct and indirect GHG emissions, taking into account available data and GHG quantification tools that are suitable for the proposed agency action." CEQ, *Final Guidance for Federal Departments on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, at 4 (Aug. 1, 2016). The CEQ climate guidance notes that "[q]uantification tools are widely available, and are already in broad use in the federal and private sectors, by state and local governments, and globally." *Id.* at 12 (citing CEQ's inventory of Greenhouse Gas Accounting Tools).

The CEQ guidance provides clear direction for FERC to conduct a lifecycle greenhouse gas analysis because the modeling and tools to conduct this type of analysis are readily available to the agency:

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CO37-9 We disagree. The draft EIS appropriately evaluates the resources and direct and indirect effects reasonably anticipated to be caused by the Project. Regarding the Chesapeake Bay, see the response to comment PM1-92. See also the responses to comments PM1-6 and PM1-75.

CO37-10 See the response to comment CO13-21. We have determined that the Project may affect but is not likely to adversely affect the northern long-eared bat, bog turtle, and northeastern bulrush (see section 4.7.2.1 of the EIS). We would complete the process of complying with Section 7 of the Endangered Species Act prior to construction.

CO37-11 See the response to comment FA1-27.

CO37-11 (cont'd)

> If the direct and indirect GHG emissions can be quantified based on available information, including reasonable projections and assumptions, agencies should consider and disclose the reasonably foreseeable direct and indirect emissions when analyzing the direct and indirect effects of the proposed action. Agencies should disclose the information and any assumptions used in the analysis and explain any uncertainties. To compare a project's estimated direct and indirect emissions with GHG emissions from the no-action alternative, agencies should draw on existing, timely, objective, and authoritative analyses, such as those by the Energy Information Administration, the Federal Energy Management Program, or Office of Fossil Energy of the Department of Energy. In the absence of such analyses, agencies should use other available information.

Id. at 16 (citations omitted). FERC should correct deficiencies in its greenhouse gas analysis by implementing this guidance in a Supplemental or Revised DEIS. This guidance served to clarify the obligations that NEPA already imposed on agencies; consequently, the fact that the finalized version had not been published when FERC released the DEIS does not relieve FERC of its obligation to conduct a thorough climate analysis.

CO37-12

In addition to violating NEPA, FERC's disregard of the climate impacts of natural gas infrastructure projects such as the Atlantic Sunrise Project is at odds with the nation's climate goals, including commitments in the Paris Agreement. *See, e.g.*, Oil Change Int'l *et al.*, A Bridge Too Far: How Appalachian Basin Gas Pipeline Expansion Will Undermine U.S. Climate Goals (July 2016), *available at* http://priceofoil.org/content/uploads/2016/08/bridge_too_far_report_v6.3.pdf. In December 2015, 197 nation-state and supra-national organization parties met in Paris at the 2015 United Nations Framework Convention on Climate Change Conference of the Parties and consented to an agreement ("Paris Agreement") committing its parties to take action so as to avoid dangerous climate change. United Nations Framework Convention on Climate Change, Adoption of the Paris Agreement, Proposal by the President, Draft decision -/CP.21 (2015) at Art. 2.

The Paris Agreement commits the United States, which signed the treaty on April 22, 2016, to critical goals that mandate bold action on domestic policy to reduce greenhouse gas emissions. The Paris Agreement commits signatories to an articulated target to hold the long-term global average temperature "to *well below 2°C* above pre-industrial levels and to *pursue efforts to limit the temperature increase to 1.5°C* above pre-industrial levels." *Id.* (emphasis added). The Paris consensus on a 1.5°C warming goal reflects the findings of the IPCC and numerous scientific studies that indicate that 2°C warming would exceed thresholds for severe, extremely dangerous, and potentially irreversible impacts.[2] Immediate and aggressive

[2] *See* Paris Agreement, Art. 2(1)(a); U); United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technical Advice, Report on the structured expert dialogue on the 2013-15 review, No. FCCC/SB/2015/INF.1 at 15-16 (June 2015); Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change at 64 & Table 2.2 [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)] ("IPCC AR5 Synthesis Report") at 65 & Box 2.4.

CO37-12 The purpose of this EIS is to analyze potential impacts associated with the proposed Project. See the response to comment FA1-27 regarding potential impacts of the Project on climate change. FERC is responsible for determining the purpose and need of the Project and other natural gas transmission infrastructure projects. An analysis of domestic energy policy is outside of the scope of this EIS.

CO37-12 (cont'd) greenhouse gas emissions reductions are necessary to keep warming below a 1.5° or 2°C rise above pre-industrial levels. In recognition of established climate science, and global carbon budgeting, FERC cannot ignore the consequences that projects such as Atlantic Sunrise Pipeline will have on the nation's climate goals and commitments. These issues should be thoroughly considered in a Revised or Supplemental DEIS.

* * *

CO37-13 Correcting these deficiencies in the DEIS, including defects in the assessment of the need for the Project, will require significant new analysis and the incorporation of high quality and accurate information regarding the Project and its impacts. FERC should work closely with EPA and DOI in the preparation of a Revised or Supplemental Draft EIS.

B. Alternatively, FERC must prepare a Supplemental DEIS.

CO37-14 As explained above, the DEIS is inadequate due to the substantial amount of incomplete information and analysis, which precludes meaningful review. 40 C.F.R. § 1502.9(a). Thus, FERC must prepare a Revised DEIS. Alternatively, due to the amount of information that Transco is required to submit after the close of the DEIS comment period, this information constitutes significant new information for which a Supplemental EIS "shall" be prepared. 40 C.F.R. § 1502.9(c)(1). This information is also likely to result in substantial changes to the proposed action. *Id.* At the very least, preparing a Supplemental DEIS that considers this new information will further the purposes of NEPA. *Id.* § 1502.9(c)(2).

Significant new information for which a Supplemental DEIS must be prepared has already come to light since the close of the DEIS comment period. On September 20, 2016, Transco submitted hundreds of pages of new information that should have been included in the DEIS. Also, new information from one of the project shippers demonstrates the need to consider the indirect effects of shale gas development. In addition, the Susquehanna River Basin Commission ("SRBC") published applications for all of the water withdrawals associated with Atlantic Sunrise. Finally, the Pennsylvania Department of Environmental Protection ("DEP") designated parts of the Susquehanna River and its tributaries as impaired under Section 303(d) of the Clean Water Act. This information must be considered in a Revised or Supplemental DEIS.

1. Significant New Information Provided by Transco After the Close of the DEIS Comment Period Requires FERC to Prepare a Supplemental DEIS.

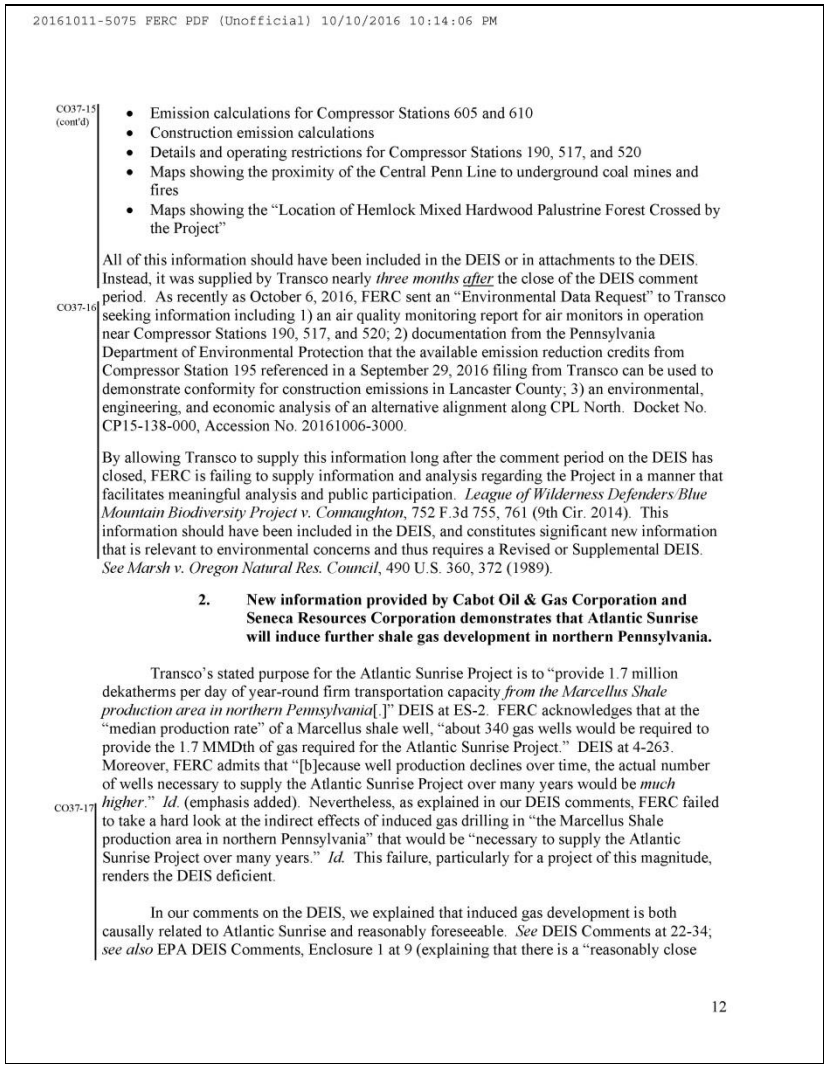
CO37-15 On September 20, 2016, Transco submitted significant new information in response to a request for data and supplemental information regarding the Project. *See* Docket No. CP15-138-000, Accession No. 20160920-5019. This information includes the following:

- A "complete set of alignment sheets for all facilities"
- A 93-page "Historical Cultural Landscape Viewshed Analysis of the Proposed Atlantic Sunrise Natural Gas Pipeline in Relation to the Captain John Smith Chesapeake National Historic Trail"
- A 108-page "Migratory Bird Plan"

CO37-13 See the responses to comments PM1-70 and PM1-113.

CO37-14 See the responses to comments PM1-24, PM1-70, and PM1-130. The *2016 Pennsylvania Integrated Water Quality Monitoring and Assessment Report* is currently in draft form and has not been approved by the EPA.

CO37-15 See the response to comment PM1-70.



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CO37-15 (cont'd)

- Emission calculations for Compressor Stations 605 and 610
- Construction emission calculations
- Details and operating restrictions for Compressor Stations 190, 517, and 520
- Maps showing the proximity of the Central Penn Line to underground coal mines and fires
- Maps showing the "Location of Hemlock Mixed Hardwood Palustrine Forest Crossed by the Project"

CO37-16

All of this information should have been included in the DEIS or in attachments to the DEIS. Instead, it was supplied by Transco nearly *three months after* the close of the DEIS comment period. As recently as October 6, 2016, FERC sent an "Environmental Data Request" to Transco seeking information including 1) an air quality monitoring report for air monitors in operation near Compressor Stations 190, 517, and 520; 2) documentation from the Pennsylvania Department of Environmental Protection that the available emission reduction credits from Compressor Station 195 referenced in a September 29, 2016 filing from Transco can be used to demonstrate conformity for construction emissions in Lancaster County; 3) an environmental, engineering, and economic analysis of an alternative alignment along CPL North. Docket No. CP15-138-000, Accession No. 20161006-3000.

By allowing Transco to supply this information long after the comment period on the DEIS has closed, FERC is failing to supply information and analysis regarding the Project in a manner that facilitates meaningful analysis and public participation. *League of Wilderness Defenders/Blue Mountain Biodiversity Project v. Connaughton*, 752 F.3d 755, 761 (9th Cir. 2014). This information should have been included in the DEIS, and constitutes significant new information that is relevant to environmental concerns and thus requires a Revised or Supplemental DEIS. *See Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 372 (1989).

2. New information provided by Cabot Oil & Gas Corporation and Seneca Resources Corporation demonstrates that Atlantic Sunrise will induce further shale gas development in northern Pennsylvania.

CO37-17

Transco's stated purpose for the Atlantic Sunrise Project is to "provide 1.7 million dekatherms per day of year-round firm transportation capacity *from the Marcellus Shale production area in northern Pennsylvania*[.]" DEIS at ES-2. FERC acknowledges that at the "median production rate" of a Marcellus shale well, "about 340 gas wells would be required to provide the 1.7 MMDth of gas required for the Atlantic Sunrise Project." DEIS at 4-263. Moreover, FERC admits that "[b]ecause well production declines over time, the actual number of wells necessary to supply the Atlantic Sunrise Project over many years would be *much higher*." *Id.* (emphasis added). Nevertheless, as explained in our DEIS comments, FERC failed to take a hard look at the indirect effects of induced gas drilling in "the Marcellus Shale production area in northern Pennsylvania" that would be "necessary to supply the Atlantic Sunrise Project over many years." *Id.* This failure, particularly for a project of this magnitude, renders the DEIS deficient.

In our comments on the DEIS, we explained that induced gas development is both causally related to Atlantic Sunrise and reasonably foreseeable. *See* DEIS Comments at 22-34; *see also* EPA DEIS Comments, Enclosure 1 at 9 (explaining that there is a "reasonably close

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CO37-16 The Environmental Data Request dated October 6, 2016 relates to ongoing air quality data monitoring being completed by Transco, which was summarized in the draft EIS. Information regarding Emission Reduction Credits relates to the *General Conformity Determination*, which was placed on public notice on November 3, 2016. With respect to the CPL North and South alternatives, FERC issued a scoping notice on October 13, 2016 allowing the public to comment on these alternatives. See the response to comment CO37-15.

CO37-17 See the response to comment CO13-9.

CO37-17 (cont'd) causal relationship" between shale gas development and Atlantic Sunrise). In particular, we provided information about three gas producers who are shippers for Atlantic Sunrise. *See* DEIS Comments at 24-27. One of these companies, Cabot Oil & Gas Corporation ("Cabot"), has subscribed to half of the capacity that would be created if FERC authorizes Atlantic Sunrise. *See* DEIS at 1-2.

In a September 2016 presentation, Cabot included a chart showing its capacity subscriptions on multiple jurisdictional and non-jurisdictional projects. *See* Cabot, *Barclays CEO Energy-Power Conference*, at 22 (Sept. 8, 2016) (Attachment 5). The chart reveals that "Cabot has the ability to *double* its Marcellus production over time based on its previously announced firm transport and firm sales additions." *Id.* (emphasis added). One of those "previously announced firm transport" additions is Atlantic Sunrise, which accounts for nearly 42% of Cabot's capacity subscriptions. *Id.* The Atlantic Sunrise Project, if approved, will be a driving force in Cabot's "ability to double its Marcellus production." There is absolutely no analysis in the DEIS about this induced gas development.

CO37-18 Another company, Seneca Resources Corporation ("Seneca"), has specifically told its investors that it has limited its development activities on leases in north-central Pennsylvania "until firm transportation on Atlantic Sunrise (190 Mdth/d) is available in late 2017." *Id.* at 25. Since the close of the DEIS comment period, more information has come to light about how Atlantic Sunrise will induce further development of Seneca's leases in north-central Pennsylvania.

In an August 2016 presentation, Seneca's parent company, National Fuel Gas Company ("National Fuel"), discussed Seneca's shale gas development activities in its so-called Eastern Development Area ("EDA") in Potter, Tioga, and Lycoming Counties. *See* National Fuel, *EnerCom The Oil & Gas Conference*, at 16 (Aug. 16, 2016) (Attachment 6), *available at* http://www.theoilandgasconference.com/downloads_TOGC_2016/National-Fuel-Gas.pdf. The presentation shows two of Seneca's leased tracts in Lycoming County, the "DCNR Tract 100" and "Gamble" leases, connected to Transco's Leidy Line[3] via National Fuel's Trout Run Gathering System. *Id.* National Fuel explains that one of Seneca's drilling rigs will be returning to its DCNR Tract 100 and Gamble leases "in Q3 FY17 to drill 13 wells on 3 pads" as it "prepare[s] for Atlantic Sunrise capacity[.]" This is persuasive evidence that Atlantic Sunrise will induce further shale gas development.

Despite the close proximity and physical connectivity of Seneca's leases to Transco's Leidy Line, there is no discussion in the DEIS about shale gas development in this area, either as an indirect effect or a cumulative effect. This is a major oversight, especially considering that one of the leases, DCNR Tract 100, is on public land in Loyalsock State Forest. According to DCNR, this lease allows Seneca to construct up to 35 shale gas well pads. *See* DEIS Comments, Attachment 4, at 1. As of August 26, 2014, Seneca had constructed 10 well pads and 4

[3] Transco's Leidy Line is proposed for expansion as part of Atlantic Sunrise. *See* DEIS at 2-7.

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CO37-18 See the response to comment CO13-9.

CO37-18 (cont'd) freshwater impoundments. *Id*; *see also* Attachment 7 to these comments.[4] Now, National Fuel has expressly stated that it is planning to drill 13 wells on 3 pads in "prepar[ation] for Atlantic Sunrise capacity."

As Attachment 7 to these comments shows, Seneca has already impacted this part of Loyalsock State Forest with new road and well pad construction. Attachments 8-10 show how this once unfragmented tract of public forestland has been rapidly transformed into a fragmented, industrialized landscape.[5] In 2008, prior to Seneca's lease, this area was a large, intact part of Loyalsock State Forest. *See* Attachment 8. There were no gas wells, access roads, or freshwater impoundments. In 2010, Seneca constructed its first access road for Well Pad M and an associated freshwater impoundment. *See* Attachment 9. By 2013, several more access roads for additional well pads were constructed. *See* Attachment 10. This "before and after" shows how shale gas development is quickly degrading the wild character of Pennsylvania's state forests.

To date, Seneca has constructed approximately 10 of its permitted 35 well pads on DCNR Tract 100. If Seneca constructs the remaining 25 well pads that it is permitted to on this lease, this part of Loyalsock State Forest will be further converted to an industrialized landscape for decades. The capacity created on Atlantic Sunrise will provide Seneca the opportunity to do just that. There is absolutely no analysis of such impacts in the DEIS. Therefore, FERC must prepare a Revised or Supplemental DEIS to account for this induced shale gas development.

3. SRBC published water withdrawal applications for Atlantic Sunrise after the close of the DEIS comment period.

CO37-19 As explained in comments to the Susquehanna River Basin Commission ("SRBC"), that agency should have been a cooperating agency from the beginning of the EIS process. *See* Aug. 16, 2016 Comments (Cross-filed in Docket No. CP15-138-000, Accession No. 20160816-5149). One of the purposes of NEPA is to "emphasize agency cooperation." 40 C.F.R. § 1501.6. Agencies should be included in the NEPA process if they have "special expertise with respect to any environmental issue." *Id.*

Despite the SRBC's "expertise" in issues related to water quantity and quality within the Susquehanna River Basin, there appears to be little coordination between FERC and SRBC. For example, SRBC published the applications for all of the Atlantic Sunrise water withdrawals *after* the close of the DEIS comment period. *See* 81 Fed. Reg. 44,207, 44,407-44,408 (July 7, 2016). Only then did the public have an opportunity to review the environmental information regarding extensive water withdrawals for Atlantic Sunrise. This information should have been publicly disclosed before the beginning of the DEIS comment period, not after the comment period closed.

[4] This is a map showing Seneca's DCNR Tract 100 lease in Loyalsock State Forest. The large blue area is the leased acreage on Tract 100. The red rectangles are the shale gas wells that Seneca has already constructed.

[5] These images were created using Google Earth and edited to show the location of DCNR Tract 100 in Loyalsock State Forest and Seneca's shale gas development infrastructure (roads, well pads, freshwater impoundments).

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CO37-19 The Susquehanna River Basin Commission is responsible for issuing water allocation permits and overseeing the conservation, development, and administration of the Susquehanna River Basin. Transco would be required to adhere to any avoidance and minimization measures included in the permits issued by the Susquehanna River Basin Commission even though it is not participating as a cooperating agency. The EIS incorporates by reference all of the material filed in support of the permits and other regulatory clearances required to construct the facilities, should the Commission issue a Certificate for the Project.

CO37-20 EPA highlighted concerns related to water withdrawals associated with the Atlantic Sunrise Project. According to EPA:

> Water withdrawal can affect recreational and biological uses, stream flow, and result in impacts to stream and wetland habitat. EPA recommends that FERC conduct further detailed analysis of specific streams and wetlands of concern or high sensitivity and work with the resource agencies to determine if additional avoidance and minimization efforts may be necessary to reduce impacts to these important resources.

EPA DEIS Comments, Enclosure 1, p. 3. EPA further stated that it was concerned that FERC's cumulative impacts analysis does not adequately consider the proposed Atlantic Sunrise water withdrawals in combination with other past, present, and reasonably foreseeable actions "at the watershed scale." *Id.* at 7.

CO37-21 The failure of FERC to properly coordinate with SRBC undermined the public's ability to meaningfully participate and comment on this important environmental issue during the DEIS comment period. While we submitted comments to SRBC and cross-filed those comments in the FERC docket for this proceeding, those comments will not be part of the record for the DEIS. FERC must prepare a Revised or Supplemental DEIS.

4. DEP designated parts of the Susquehanna River and some of its tributaries as impaired after the close of the DEIS comment period.

CO37-22 In August 2016, the Pennsylvania Department of Environmental Protection ("DEP") designated parts of the Susquehanna and its tributaries as impaired under Section 303(d) of the Clean Water Act. *See* DEP, 2016 Draft Pennsylvania Integrated Water Quality Monitoring and Assessment Report (Aug. 1, 2016) ("DEP Report"), *available at* http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-113834/2016_Draft_Pennsylvania_Integrated_Water_Quality_Monitoring_and_Assessment_Report_Updated_07-28-2016.pdf. Section 303(d) waters are those "waters that are too polluted or otherwise degraded to meet water quality standards." EPA, Implementing Clean Water Act Section 303(d): Impaired Waters and Total Maximum Daily Loads (TMDLs), *available at* https://www.epa.gov/tmdl.

In Transco's application for the Swatara Creek water withdrawal, it lists the creek as "attaining." The DEP's report now lists Swatara Creek as "impaired." DEP Report, at 35. This demonstrates that Transco's proposed pipeline is located in an area that is already environmentally stressed. The construction and operation of a major new 42-inch-diamater natural gas pipeline will compound that stress, not remedy it. This is significant new information that, combined with the lack of information about Transco's water withdrawals, requires the preparation of a Revised or Supplemental DEIS.

CO37-23 **C. A Supplemental DEIS should be prepared to address the inadequacies of the DEIS in furtherance of the purposes of NEPA.**

CO37-20 See the response to comment FA1-15.

CO37-21 We disagree. See the responses to comments PM1-70, FA1-15, and CO37-19.

CO37-22 Comment noted. The *2016 Pennsylvania Integrated Water Quality Monitoring and Assessment Report* is currently in draft form and has not been approved by the EPA. Also see the responses to comments PM1-70 and PM1-130.

CO37-23 We disagree. See the response to comment PM1-70.

CO37-23 (cont'd) As explained above, FERC must prepare a Revised DEIS due to the substantial amount of information that was omitted from the DEIS. 40 C.F.R. § 1502.9(a). Alternatively, the submission of this missing information, in addition to other information that has come to light since the close of the DEIS comment period, constitutes significant new information for which a Supplemental DEIS "shall" be prepared. 40 C.F.R. § 1502.9(c)(1)(ii). Furthermore, in light of the substantial deficiencies of the DEIS, FERC should prepare a Supplemental DEIS because "the purposes of [NEPA] will be furthered by doing so." 40 C.F.R. § 1502.9(c)(2).

CO37-24 **D. The issuance of a Final EIS with a comment period is inconsistent with the requirements and purpose of NEPA**

Issuance of a Final EIS ("FEIS") with a comment period, in lieu of a Revised or Supplemental DEIS, would not satisfy the requirements and purpose of NEPA. NEPA was enacted to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 CFR § 1500.1(b). It is essential that that environmental information is high quality and based upon "accurate scientific analysis, expert agency comments and public scrutiny." *Id.* Furthermore, part of the NEPA process includes the public's opportunity to understand the agency's response to these comments. Even with a comment period, an FEIS will not allow informed public scrutiny of and input into the decision making process before a "decision is made and before actions are taken." *Id.* For the reasons outlined in this letter, FERC must prepare a Supplemental or Revised DEIS that corrects the significant deficiencies in the DEIS that have been identified above.

III. Conclusion

CO37-25 For the reasons outlined above, a Revised or Supplemental DEIS is required to address substantial deficiencies in the DEIS, as well as new information and circumstances which have arisen subsequent to the close of the DEIS comment period. In such circumstances, NEPA regulations require the issuance of a Revised or Supplemental DEIS. 40 CFR § 1502.9. Issuing a Revised or Supplemental DEIS will also further the intent and purposes of NEPA, which is to ensure that high quality, accurate environmental information is available to public officials and citizens before actions are taken. 40 CFR § 1500.1(b).

Thank you for taking these concerns into consideration. If you have any questions about these comments, please contact us.

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CO37-24 We disagree. See the responses to comments PM1-70 and PM1-130.

CO37-25 We disagree. See the responses to comments PM1-70 and PM1-130.

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CO37-26 **DUKE Response to Request 67**
Transco - **Atlantic Sunrise Project**
Status: Projected In-Service in 2017
The Atlantic Sunrise Project will provide an incremental 1,700,000 MMBtu/day of capacity from Transco's Leidy Line Receipts in Northeast Pennsylvania to points south and east. 850,000 MMBtu/day of this volume could deliver as far south as Transco's mainline Station 85 Zone 4 Pooling Point. The Atlantic Sunrise Project moves Marcellus shale gas production north-to-south to various markets on the Transco mainline. This project displaces traditional Gulf Coast-to-Northeast flows. DEF is not a shipper in this project, but may benefit from incremental Marcellus shale gas supply that could be available at Transco Station 85 where DEF could access this supply to transport into Florida on downstream capacity on Sabal Trail and/or Transco's Mobile Bay South Lateral.

CO37-27 **FPL** Response to Request 67
Atlantic Sunrise Project RESPONSE:
The proposed Sabal Trail Transmission, LLC, and Florida Southeast Connection, LLC, pipelines have a scheduled in-service date of May 1, 2017. These pipelines will transport gas from Transcontinental Gas Pipeline's ("Transco") Station 85 located in western Alabama to markets in Florida, including a hub in central Florida with interconnections to Florida Gas Transmission ("FGT") and Gulfstream Natural Gas System, LLC ("Gulfstream"). In addition, several pipelines that have traditionally transported gas from the Gulf of Mexico to the Northeast have announced projects, such as the Transco Atlantic Sunrise Project, which will allow their existing pipeline facilities to deliver gas from the prolific Marcellus and Utica shale regions of Pennsylvania and Ohio to the Southeast. FPL continues to explore opportunities to access these growing supply sources.

CO37-26 Comment noted. See the response to comment PM3-102.

CO37-27 Comment noted. See the response to comment PM3-102.

The attachments to this letter have been removed from this environmental impact statement. They are available for viewing on the Federal Energy Regulatory Commission's (FERC) website at http://www.ferc.gov. Using the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket No." excluding the last three digits (i.e., CP15-138, PF14-8), and follow the instructions. For assistance please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll free at 1-866-208-3676, or for TTY, contact 202-502-8659. The Category/Accession number for this submittal is 20161011-5075.