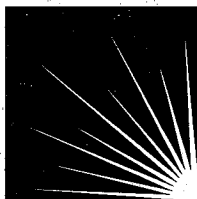


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October 10, 2012

**Via First Class Mail and E-Filing**

Attn: Docket ID No. PF12-9-000  
Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE, Room 1A  
Washington, DC 20426

**Re: Constitution Pipeline Company, LLC; Notice of Intent to Prepare an  
Environmental Impact Statement for the Planned Constitution Pipeline Project,  
Request for Comments on Environmental Issues, and Notice of Public Scoping  
Meetings (PF12-9-000)**

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Dear Secretary Bose,

Clean Air Council (Council) hereby submits the following comments in response to the Federal Energy Regulatory Commission's (FERC or Agency) Notice of Intent to Prepare an Environmental Impact Statement for the Planned Constitution Pipeline Project, published in the *Federal Register*, 77 Fed. Reg. 56,835 (Sept. 14, 2012). After this notice, the comment period was extended to November 9, 2012 to allow for additional comment.<sup>1</sup> These comments are timely submitted. The Council reserves the right to submit additional comments prior to the closing of the scoping period.

Clean Air Council is a non-profit environmental organization headquartered at 135 South 19th Street, Suite 300, Philadelphia, Pennsylvania 19103. For more than 40 years, the Council has fought to improve air quality across Pennsylvania. The Council has members throughout the Commonwealth who support its mission to protect everyone's right to breathe clean air.

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<sup>1</sup> FERC, *Notice of Public Scoping Meeting and Extension of Scoping Period for the Planned Constitution Pipeline Project*, Docket No. PF12-9-000 (Oct. 9, 2012).

## Background

### 1. Background on Pipeline Project

On April 5, 2012, the Constitution Pipeline Company, LLC (Constitution) submitted a request for a pre-filing review of a natural gas pipeline project (Project) intended to transport 650,000 dekatherms of natural gas per day from Susquehanna County, Pennsylvania, to Schoharie County, New York.<sup>2</sup> In New York the pipeline would connect with the Iroquois Transmission Pipeline at the Wright Compressor Station, as well as with the Tennessee Gas Pipeline.<sup>3</sup> The Project would involve the construction of roughly 121 miles of 30-inch pipeline, a 32,000 horsepower, natural gas-fired compressor station, four receipt and delivery meter stations, and “appurtenant underground and aboveground facilities.”<sup>4</sup>

### 2. Background on Emissions from Natural Gas Activities

Natural gas production, processing, transmission, and distribution produce significant effects on air quality. Natural gas operations cause significant quantities of nitrogen oxides (NOx), volatile organic compounds (VOCs), hazardous air pollutants (HAPs), and methane to be emitted into the air.<sup>5</sup> The Project will lead to increases in emissions of these pollutants. Natural gas pipelines produce fugitive emissions of methane and hydrocarbons through “[l]eaks from pipeline networks, from microscopic holes, corrosion, welds and other connections, as well as from compressor intake and outlet seals, compressor rod packing, blow and purge operations, pipeline pigging, and from the large number of pneumatic devices on the pipeline network . . . .”<sup>6</sup> A survey of the emissions from natural gas activities in Texas’s Barnett Shale (Armendariz Report) estimates that fugitive emissions from transmission account for 35% of total fugitive emissions from natural gas activities, or 0.49% of gross production.<sup>7</sup> Compressor stations, one of which is included in the Project and at least one of which will feed into the Constitution Pipeline, generate emissions of VOCs, NOx, HAPs, and methane.<sup>8</sup>

These pollutants affect air quality—and therefore human health—in a variety of ways. NOx is a precursor of, i.e., contributes to the formation of, both ozone and fine particulate matter (PM<sub>2.5</sub>).<sup>9</sup> VOCs are also an ozone precursor.<sup>10</sup> Fine particulate matter is linked to increased heart attacks, aggravated asthma and decreased lung function, and for people with heart or lung diseases, premature death.<sup>11</sup> Ozone exposure can lead to coughing, chest pain, and throat irritation.<sup>12</sup> It also worsens bronchitis, emphysema, and asthma, and can reduce lung function.<sup>13</sup>

<sup>2</sup> Constitution Pipeline Company, LLC, *Request for Pre-Filing Review (Review Request)*, Docket No. PF12-9-000, at 1 (Apr. 5, 2012).

<sup>3</sup> *Id.*

<sup>4</sup> *Id.* at 1, 3.

<sup>5</sup> Al Armendariz, *Emissions from Natural Gas Production in the Barnett Shale Area and Opportunities for Cost-Effective Improvements (Armendariz Report)*, at 24 (2009).

<sup>6</sup> *Id.* at 7.

<sup>7</sup> *Id.* at 20.

<sup>8</sup> *Id.* at 21.

<sup>9</sup> U.S. EPA, *Nitrogen Dioxide*, available at <http://www.epa.gov/air/nitrogenoxides/> (last visited Sept. 20, 2012).

<sup>10</sup> U.S. EPA, *Ozone – Good Up High Bad Nearby*, available at <http://www.epa.gov/oar/oaqps/gooduphigh/bad.html> (last visited Sept. 20, 2012).

<sup>11</sup> U.S. EPA, *Particulate Matter (PM)*, available at <http://www.epa.gov/pm/health.html> (last visited Sept. 20, 2012).

<sup>12</sup> U.S. EPA, *Ozone – Good Up High Bad Nearby*.

The most common HAPs associated with natural gas are n-hexane and the “BTEX compounds” benzene, toluene, ethylbenzene, and xylenes.<sup>14</sup> Benzene is a known human carcinogen, and formaldehyde, which is also emitted from natural gas operations, is a probable human carcinogen.<sup>15</sup> Methane is a potent greenhouse gas (GHG), which EPA estimates to have 20 times the global warming potential (GWP) of carbon dioxide (CO<sub>2</sub>).<sup>16</sup> Other estimates place the impact significantly higher. A 2011 study placed the GWP at between 33 and 105 times higher than CO<sub>2</sub>, depending on the time-frame studied.<sup>17</sup>

The Armendariz Report gives a sense of the sheer volume of air pollutants that are generated by natural gas activities. The survey found that total emissions of the ozone precursors NO<sub>x</sub> and VOC that resulted from natural gas activities in the five-county region surrounding Dallas-Fort Worth likely exceeded the emissions of those pollutants from motor vehicles.<sup>18</sup> Similarly, emissions of GHGs, primarily CO<sub>2</sub> and methane, were equivalent to those of two 750 MW coal-fired power plants.<sup>19</sup> Although the Barnett Shale represents approximately six percent of technically recoverable natural gas in the United States, the Marcellus Shale, representing 55 percent, dwarfs it.<sup>20</sup> Thus, the air quality impact of natural gas operations in the Marcellus Shale is potentially enormous.

### Summary of Comments

The EIS must consider the cumulative impacts of this action, which include not only impacts that are caused by the Project itself, but the impacts of the Project in conjunction with other impacts occurring within the same geographic and temporal window, and which need not result from the project. This analysis must consider the effects of emissions from natural gas activities in the Marcellus Shale in general, as well as from both of the receipt points that will feed into the pipeline. Additionally, the scope must include the indirect impacts that the Project will have on natural gas production, in particular on the likely clustering of new wells near the Constitution Pipeline. Finally, the alternatives analysis must include consideration of renewable energy sources and energy conservation.

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<sup>13</sup> *Id.*

<sup>14</sup> 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).

<sup>15</sup> *Id.* at 52,791.

<sup>16</sup> U.S. EPA, *Methane Emissions*, available at <http://epa.gov/climatechange/ghgemissions/gases/ch4.html> (last visited Sept. 20, 2012).

<sup>17</sup> Robert W. Howarth, Renee Santoro, Anthony Ingraffea, “Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations”, *Climatic Change* DOI 10.1007/s10584-011-0061-5, at 7 (2011), available at <http://www.sustainablefuture.cornell.edu/news/attachments/Howarth-EtAl-2011.pdf> (last visited Sept. 20, 2012).

<sup>18</sup> Armendariz Report, *supra* note 5, at 1.

<sup>19</sup> *Id.*

<sup>20</sup> U.S. EIA, *Review of Emerging Resources: U.S. Shale Gas and Shale Oil Plays*, at 4 (July 2011), available at <ftp://ftp.eia.doe.gov/natgas/usshaleplays.pdf>.

## Comments

### 1. Cumulative Impacts

#### *a. Background on Cumulative Impacts*

An EIS must consider cumulative impacts associated with a federal action.<sup>21</sup> Cumulative impacts are distinct from direct and indirect impacts, which must be caused by the project.<sup>22</sup> A cumulative impact on the environment

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.<sup>23</sup>

A cumulative impacts analysis should not be limited to the effects of the project in question; it specifically encompasses impacts stemming from independent projects, including those without any causal link to the project being evaluated.<sup>24</sup> This much is evident from the fact that in addition to future actions, cumulative impacts include past and present actions, neither of which could possibly be characterized as being caused by the action at issue.<sup>25</sup> The only limitation that the cumulative impact regulation places on the consideration of future actions that it does not place on past or present actions is that they be “reasonably foreseeable.”<sup>26</sup> Plainly, whether an effect is reasonably foreseeable and whether it will result from a particular action are distinct questions.

Furthermore, a causation requirement makes the consideration of cumulative impacts redundant in light of the requirement that the scope of an EIS include both direct and indirect impacts.<sup>27</sup> Since direct and indirect impacts are those which are caused by the action at issue, it is unclear what the consideration of cumulative impacts would add to the scoping process if cumulative impacts must also be causally linked to the action.<sup>28</sup>

Recent FERC decisions, however, indicate that the Agency has imposed a requirement that only impacts caused by the action in question may be included in a cumulative impact analysis of that action. This additional requirement illegally cabins the scope of the cumulative impact analysis and has no support in the regulation or in case law.

In the most recent case, the Agency considered whether the EIS for a project to transport natural gas to New York and New Jersey was required to consider the “cumulative impacts of

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<sup>21</sup> 40 C.F.R. § 1508.25(c)(3).

<sup>22</sup> *Id.* § 1508.8.

<sup>23</sup> *Id.* § 1508.7.

<sup>24</sup> 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 . . .”).

<sup>25</sup> See 40 C.F.R. § 1508.7.

<sup>26</sup> *Id.*

<sup>27</sup> *Id.* § 1508.25(c).

<sup>28</sup> *Id.* § 1508.8.

developing shale reserves.”<sup>29</sup> In rejecting this argument, the Agency observed that “the development of shale gas resources is not dependent on this proposed project” and that similarly, “this project is not dependent on the development of shale gas resources to achieve its stated goals.”<sup>30</sup> The Agency then concluded that “activities related to gas production from shale formations are not causally related” to the project.<sup>31</sup>

The Agency based this erroneous conclusion on *Sierra Club v. Clinton*, which addressed whether the transboundary effects of the increased exploitation of Canadian tar sands should be considered in an EIS for a pipeline transporting crude oil produced from those tar sands.<sup>32</sup> The *Clinton* court embarked on its analysis by observing that a “reasonably close causal relationship” was required before an agency could be responsible for a particular effect under NEPA.<sup>33</sup> It ultimately found such a relationship lacking, having determined that the tar sands were being “developed independently from” the pipeline project, that the proposed pipeline would not be the only means for transporting crude from the tar sands, and that the crude would be transported “with or without” the pipeline.<sup>34</sup>

The Supreme Court, however, has rejected the proposition that cumulative impacts are limited to those caused by the project at issue. Ironically, the Court did this in the case from which the *Clinton* court drew its “reasonably close causal relationship” test. That case, *U.S. Department of Transportation v. Public Citizen*, concerned 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.<sup>35</sup> However, the Court only considered whether those truck operations would be an “effect” of the regulation.<sup>36</sup> It determined that they would not be, because the agency had no ability to overrule a Presidential decision to overturn the moratorium that was preventing Mexican trucks from entering the United States.<sup>37</sup>

It is clear that this discussion—the discussion cited in *Clinton*—did not touch on cumulative impacts because the Court then went on to observe that consideration of cumulative impacts “does not change this analysis.”<sup>38</sup> It noted that the cumulative impact regulation “required” the agency to consider the incremental impact of the regulations themselves “in the context of the President’s lifting of the moratorium,” which the agency had already done.<sup>39</sup> The Court noted that a cumulative impact analysis did not require it to treat the increase in Mexican traffic as a result of the agency’s promulgation of its safety rules.<sup>40</sup> Thus, in establishing that an agency’s cumulative impacts analysis must include the effects of actions explicitly found *not* to have a reasonably close causal relationship with the action, *Public Citizen* rejected the very proposition

<sup>29</sup> *Texas Eastern Transmission, LP*, 139 F.E.R.C. P61,138, at 3, 54 (2012).

<sup>30</sup> *Id.* at 56.

<sup>31</sup> *Id.*

<sup>32</sup> 746 F. Supp. 2d 1025, 1028, 1043 (D. Minn. 2010).

<sup>33</sup> *Id.* at 1043.

<sup>34</sup> *Id.* at 1043-46.

<sup>35</sup> 541 U.S. 752, 756 (2004).

<sup>36</sup> *See id.* at 764.

<sup>37</sup> *Id.* at 766.

<sup>38</sup> *Id.* at 769.

<sup>39</sup> *Id.* at 769-70.

<sup>40</sup> *Id.* at 770.

for which the *Clinton* court cited it. *Clinton*'s misreading of *Public Citizen* is reason enough to discount its persuasive power. The fact that *Clinton* has only been cited once, by the Agency, in the two years since it was decided is another.

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 the construction of an airport near a national park.<sup>41</sup> 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.<sup>42</sup> The court similarly faulted the FAA for failing to consider the cumulative impacts of the planned expansions of other regional airports.<sup>43</sup> *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.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup> FERC's tortured reading of *Grand Canyon Trust* is little more than an attempt to dodge the requirements of NEPA.

*b. The Cumulative Impacts Analysis Must Include Impacts from Natural Gas Development in the Marcellus Shale*

The Agency already plans to include effects "on the local air quality and noise environment from construction and operation of the proposed facilities" in the scope of the EIS.<sup>47</sup> This air quality analysis must be expanded to include the cumulative effects of the Project in conjunction with those from natural gas operations in the Marcellus Shale.

As described above, natural gas development, such as that occurring in the Marcellus Shale, has enormous impacts on local and downwind air quality—specifically, on ozone and PM2.5 levels—by virtue of the high levels of VOCs, an ozone precursor, and NOx, an ozone and PM2.5 precursor, it generates. It also contributes significantly to global warming because of the CO2 from combustion and methane released as fugitive emissions.

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<sup>41</sup> 290 F.3d at 340.

<sup>42</sup> *Id.* at 346.

<sup>43</sup> *Id.*

<sup>44</sup> *Cent. N.Y. Oil & Gas Co., LLC*, 138 F.E.R.C. P61,104, at 30 (2012) (Order on Rehearing, Clarification and Stay).

<sup>45</sup> See 40 C.F.R. § 1508.7.

<sup>46</sup> 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.").

<sup>47</sup> 77 Fed. Reg. at 56,836.

The impacts of the Project on air quality and global warming will be cumulative with those from other natural gas operations in the Marcellus Shale. The pipeline can be expected to have fugitive emissions of methane and VOCs, and the compressor station will emit NO<sub>x</sub>, CO<sub>2</sub>, VOCs, and methane.

In analyzing the impacts of future natural gas activity in the Marcellus Shale, FERC must engage in “reasonable forecasting.”<sup>48</sup> Projects “need not be finalized before they are reasonably foreseeable.”<sup>49</sup> Thus, the fact that the precise locations and volumes of natural gas operations cannot yet be identified does not excuse FERC from this obligation. Accordingly, the Agency must make a reasonable forecast of the likely development of natural gas operations in the Marcellus Shale region and analyze their impacts in conjunction with the impacts of the Project. Estimates prepared by other governmental entities may inform these forecasts.<sup>50</sup> New York State’s Revised Draft Supplemental Generic Environmental Impact Statement (NYS SGEIS), for instance, provides scenarios with varying estimates of the number of wells likely to be drilled over 30 years of development.<sup>51</sup> This and other available reports should be incorporated into the analysis in order to arrive at an estimate of the air quality effects likely to cause cumulative impacts with the Project.

## **2. The Scope Must Include the Central Compressor Station and the Other Receipt Point**

Constitution has indicated that natural gas feeding into the pipeline would come from Williams Field Services Company’s, LLC (Williams) Central Compressor Station (Central), located in Susquehanna County, Pennsylvania, as well as from another receipt point in the same county.<sup>52</sup> Williams recently submitted a plan approval application for Central.<sup>53</sup> The Pennsylvania Department of Environmental Protection’s review memo of that application confirms that “[o]nce the Constitution pipeline is complete, Williams expects that the Central station will discharge to the Constitution to serve additional markets.”<sup>54</sup>

As a compressor station, Central will emit NO<sub>x</sub>, CO<sub>2</sub>, VOCs, HAPs, and methane, which will affect air quality and global warming. These impacts will occur in conjunction with the impacts of the Project, as well as the impacts of all other natural gas activities in the Marcellus Shale. Central must accordingly be included in the cumulative impacts analysis. The other receipt point should likewise be included in the analysis.

<sup>48</sup> *N. Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1079 (9th Cir. 2011) (quoting *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944, 962 (9th Cir. 2003)).

<sup>49</sup> *Id.* at 1078.

<sup>50</sup> *See id.* at 1079 (Surface Transportation Board could have based its forecasts on programmatic EIS prepared by state).

<sup>51</sup> New York State Department of Environmental Conservation, *Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program* (“NYS SGEIS”), at 6-208 (Sept. 2011), available at <http://www.dec.ny.gov/energy/75370.html> (last visited Sept. 24, 2012).

<sup>52</sup> *Review Request*, *supra* note 2, at 3.

<sup>53</sup> Plan Approvals, 42 Pa. B. 4,724 (July 28, 2012).

<sup>54</sup> Pa. Dep’t of Env’tl. Protection, *Permit Review for Plan Approval 58-399-029*, at 2 (date unknown).

### **3. The Scope Must Include the Project's Indirect Effects on Natural Gas Activity Near the Pipeline**

An EIS is required consider the indirect effects of the action, which are those “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”<sup>55</sup> Indirect effects can include growth inducing effects and “other effects related to induced changes in the pattern of land use . . . .”<sup>56</sup>

The Constitution Pipeline is likely to induce growth in natural gas development in its immediate vicinity. This is because New York State has indicated that it will likely try to mitigate methane leakage from well completions by requiring that completed wells flow directly into a sales pipeline.<sup>57</sup> This sensible mitigation measure will cause well development in New York to be concentrated near pipelines, such as the Constitution. Indeed, such pipelines may prove to be a necessary predicate condition for natural gas drilling in New York.

### **4. The Alternatives Analysis Must Consider Energy Conservation and Use of Renewables**

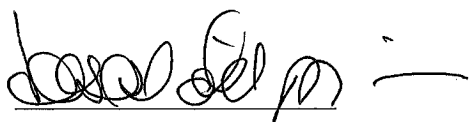
An EIS must consider alternatives to the proposed action, which includes “[o]ther reasonable courses of action” and the alternative of no action.<sup>58</sup> The alternatives analysis is the “heart” of NEPA and is necessary to provide the decisionmaker and the public with a “clear basis for choice” among the options.<sup>59</sup>

The alternatives analysis should discuss other means for supplying 650,000 dekatherms per day of energy, including the addition of capacity in alternative fuel sources, such as wind and solar. It should also consider whether it is possible to eliminate demand for this additional capacity by promoting energy efficiency measures.

### **Conclusion**

For the foregoing reasons, the scope of the EIS for the Constitution Pipeline Project should be broadened to reflect the above concerns.

Sincerely,



Joseph Otis Minott  
Executive Director

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<sup>55</sup> 40 C.F.R. § 1508.8(b).

<sup>56</sup> *Id.*

<sup>57</sup> *NYS SGEIS* at 7-113.

<sup>58</sup> 40 C.F.R. § 1508.25(b).

<sup>59</sup> *Id.* § 1502.14.



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