



December 3, 2014

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

**RE: Dominion New Market Project: CP 14-497-000, Scoping Comments**

Dear Secretary Bose:

These comments are submitted on behalf of Otsego 2000, Inc. and the organizational signatories listed below, regarding the application of Dominion Transmission Inc. ("Dominion") for the proposed New Market Project, CP14-497-000 ("the Project").

The Project concerns 200 miles of an existing pipeline network, portions of which are now more than 50 years old. As proposed, it involves construction of two new compressor stations in Chemung and Madison counties, the significant expansion of a compressor station in Montgomery County, and several other equipment modifications to increase capacity by 112,000 Dekatherms per day (DTh/day). The Project is interconnected with the Iroquois pipeline, 24% owned by Dominion, which is slated for the export of methane gas to Canada, as well as numerous other existing and proposed pipeline facilities. The Project is clearly part of a massive pipeline and infrastructure build-out in the northeast United States to transport gas extracted through the process known as horizontal high-volume fracturing ("fracking") from the Marcellus and Utica shales in Pennsylvania, West Virginia, and Ohio.

Otsego 2000, Inc. is an environmental and historic preservation non-profit organization with offices in the Village of Cooperstown, New York, in the County of Otsego, and have worked for more than 30 years to protect the rural, historic, agricultural, and environmental resources in Otsego County, home to Otsego Lake and the Susquehanna headwaters. We are a founding member of Citizens Against Unsafe Drilling, a coalition comprised of more than 30 organizations throughout Otsego County and neighboring counties. These organizations represent thousands of residents opposed to hydraulic fracturing and the infrastructure that transmits fracked gas through our region.

Our region retains the rural, environmental and agricultural character and land use patterns in practice since its early settlement before the American Revolution. Both Otsego and neighboring Montgomery counties are hosts to significant cultural, historic, agricultural, tourist, and recreational attractions. We are home to the Glimmerglass Historic District, Hyde Hall National Landmark, Glimmerglass State Park, Glimmerglass Festival, the National Baseball Hall of Fame and Museum, the New York State Historical Association, the Fenimore Art Museum, and the Farmers' Museum. Montgomery County is part of the Erie Canal National Heritage Corridor listed on both the State and National Registers of Historic Places and has more than 50 historic buildings listed on the National Register of Historic Places.

In addition to our rich history, Otsego and Montgomery counties possess outstanding, natural resources, including rich agricultural land, pristine sources of surface and ground water for drinking and recreational use, and clean air, which together comprise a living environment of unmatched value. Our landscape includes farms, forests, hills, fields, streams, and wetlands that sustain critical habitats and a rich diversity of plant and animal species, including species listed as endangered, threatened, or "of concern." Among these are the short-eared owl, designated as endangered within New York State, as well as at least eight other bird species identified as threatened, and several amphibian and mollusk species.

The region encompasses portions of both the Upper Susquehanna River and the Mohawk River watersheds that support extensive agricultural operations and provide drinking water to more than 600,000 residents and visitors annually. Protection of the Upper Susquehanna and Mohawk River watersheds is crucial to sustain an economy dependent on clean air and water, agriculture, tourism, and outdoor recreation now and for the future. The Susquehanna River is also the northernmost portion of the Chesapeake Bay watershed, a critical watershed.

On behalf of all of the undersigned signatories, we submit the following objections, concerns, and comments to the Federal Energy Regulatory Commission ("FERC") regarding the scope of this Project:

## **I. FERC Must Require A Full Environmental Impact Statement.**

The Project notice states that FERC intends to review impacts of the Project through an abbreviated Environmental Assessment ("EA") rather than a more comprehensive Environmental Impact Statement ("EIS"). This is an error given the scope, complexity, and risks of the Project.

Dominion's proposed Project spans 200 miles of New York, from the Pennsylvania border to Schenectady, with new facilities and modifications in numerous locations. Together, the plans introduce significant, complex, and inter-related impacts including, but not limited to, air quality, public health, greenhouse gas emissions, noise, pipeline integrity, safety, and security in addition to potential upstream and downstream impacts, as discussed more fully below. Further, the additional stress caused by moving increased amounts of gas through Dominion's aging pipeline exacerbates the risk of leakage, rupture, fire, explosion, or other catastrophic incident along the entire 200-mile long corridor. An EIS is required to consider these multiple actions and impacts,

including those that are direct, indirect, and cumulative. (National Environmental Policy Act (“NEPA”), 40 CFR. § 1508.25.)

Regulations implementing NEPA clearly provide that “Depending on the location or scope of the proposed action, or the resources affected, the Commission may in specific circumstances proceed directly to prepare an environmental impact statement.” (18 CFR §380.5(a).) The complex and varied components of this Project clearly warrant such a comprehensive analysis.

Notwithstanding our position that an EIS should have been performed from the outset, FERC clearly has authority to require an EIS after an EA has been initiated. (18 CFR §380.5(a).) No mention of this is provided in the public notices prepared by FERC staff, inappropriately suggesting that an EA in this instance is a foregone conclusion.

We urge FERC to clarify its prior announcements and make clear that it will require a full EIS.

## **II. The Scope of Review Must Be Expanded.**

The application as submitted fails to sufficiently discuss or analyze alternatives and significant direct, indirect, reasonably foreseeable and cumulative impacts as required by NEPA and applicable regulations. We urge FERC to address the following in the scope of environmental review:

### *A. A Full Evaluation of All Possible Alternatives*

FERC must require the evaluation of site-specific alternatives to substantially reduce the amount of emissions projected for the Brookman Corners compressor station. According to the application, Dominion presently proposes to install two Caterpillar G3608 reciprocating compressor units. However this model of compressor is at least 30 years old and produces elevated levels of volatile organic compounds (“VOCs”), nitrogen oxides, carbon monoxide, and formaldehyde—all of which are hazardous to human health. (See discussion, below.) FERC should require that alternative site designs and state-of-the-art technology be evaluated, including less polluting compressors as well as vapor recovery equipment to reduce these emissions. See also information at: <http://www.epa.gov/airquality/oilandgas/pdfs/20140415compressors.pdf> . Electric-powered compressor equipment should also be considered since a large electric transmission line passes through the property.

FERC must also require the evaluation of system alternatives that do not require new and expanded compressor stations, and the dangerous emissions that accompany them. Replacement of Dominion’s existing pipeline with larger diameter pipes or additional looping to transport the proposed amount of gas without additional compression should be evaluated. Portions of Dominion’s network are very old, therefore pipeline replacement may also be advisable from a safety, leakage, and reliability standpoint.

As presently proposed, the Project appears to be highly inefficient, requiring an additional 33,000 horsepower (HP) of compression to achieve a modest increase in carrying capacity of

112,000 DTh/day. By comparison, the proposed Constitution Pipeline and Wright compressor station project utilizes a similar amount of horsepower to transport 650,000 DTh/day of gas. This casts doubt upon the ultimate objectives of Dominion and whether the Project is being overbuilt for another purpose in the future. FERC should require that Dominion demonstrate why the proposed amount of compression is necessary to achieve the additional flow rate being sought and evaluate other less polluting alternatives. If Dominion has other plans for the amount of compression proposed, then these must be disclosed and considered as part of the Project to avoid illegal segmentation. (See also discussion of the SoNo project below.)

Finally, FERC must take a hard look at the “no-build” alternative, which is given only cursory attention in Dominion’s application. In recent years, significant advances have been made in renewable energy including wind and solar, such that cost parity with fossil fuels is likely to be achieved soon, potentially rendering pipeline expansions such as those at issue here obsolete. Moreover, the climate crisis requires that fossil fuel use be curtailed, not expanded. As a matter of public policy, alternatives involving investments in renewable energy should be given highest priority. See e.g. *Examining the Feasibility of Converting New York State’s All-Purpose Energy Infrastructure to One Using Wind, Water, and Sunlight*, Jacobson, et al., February 2013. <http://www.stanford.edu/group/efmh/jacobson/Articles/I/NewYorkWWSEnPolicy.pdf> . See also <http://www.nytimes.com/2014/11/24/business/energy-environment/solar-and-wind-energy-start-to-win-on-price-vs-conventional-fuels.html> .

#### *B. Dangerous Levels of Air Emissions at the Brookman Corners Compressor Station*

The most egregious aspect of the proposed compressor station expansion at Brookman Corners is its extremely high air emissions. This threatens to adversely impact air quality in Montgomery, Otsego, Herkimer, and Schoharie counties.

Dominion plans to install centrifugal turbines at the two new compressor stations at Horseheads (Chemung County) and Sheds (Madison County), each to provide approximately 11,000HP of compression. However, at the Brookman Corners site in Montgomery County (just five miles from Otsego County), Dominion proposes to install one 6493HP turbine compressor and two 2370HP reciprocating compressors. This is in addition to a 7410HP turbine already at the site, for a total of 18,643HP. The reason for using reciprocating compressors at Brookman Corners is not explained in the application or resource reports that are publicly available. This should be disclosed and a description provided of how compressors at the site would operate in relation to both the Dominion and Iroquois pipelines.

According to Resource Report #9 of the application, the Caterpillar G3608 reciprocating compressor units that Dominion proposes to use are far more polluting than centrifugal turbines, resulting in projected emissions at Brookman Corners that greatly exceed emissions at either of the two new compressor stations proposed in Chemung or Madison counties. As proposed, total compression capacity provided at Brookman Corners would be approximately 70% greater than at either of the other compressor stations. However the levels of pollutants particularly harmful to human health at Brookman Corners would be much higher, as summarized in the following table.

### Pollutants Projected by Dominion for Brookman Corners Compared to Other Sites

| Pollutant         | Brookman Corners (tons/year) | Sheds (tons/year) | Horseheads (tons/year) | Brookman Corners % of Sheds/Horseheads Pollutants |
|-------------------|------------------------------|-------------------|------------------------|---------------------------------------------------|
| Formaldehyde      | 2.2                          | 0.1               | 0.1                    | 2200 %                                            |
| VOC               | 16.3 *                       | 1.2               | 1.2                    | 1383 %                                            |
| CO                | 33.4                         | 6.6               | 6.6                    | 506 %                                             |
| NO <sub>x</sub>   | 66.3                         | 24.4              | 24.4                   | 272 %                                             |
| PM <sub>10</sub>  | 13.1                         | 6.4               | 6.4                    | 205 %                                             |
| PM <sub>2.5</sub> | 13.1                         | 6.4               | 6.4                    | 205 %                                             |
| SO <sub>2</sub>   | 1.1                          | 0.7               | 0.7                    | 157 %                                             |
| GHG               | 96,683                       | 54,351            | 53,949                 | 178 % & 179 %                                     |

Source: Dominion "New Market Project" Application Resource Report #9, Tables 9.1-3, 9.1-10, 9.1-13, 9.1-16

\* Including rated equipment fugitive emissions, VOC levels for Brookman Corners would be 24.3 tons/year.

As shown above, emission levels of particulate matter would be twice as high, nitrogen oxides levels would be three times higher, carbon monoxide levels would be five times higher, volatile organic compounds levels would be 14 times higher, and levels of formaldehyde would be a staggering 22 times higher at Brookman Corners than at the other two facilities. Fugitive emissions would be significant too, such that the total amount of volatile organic compounds from identified compressor equipment at Brookman Corners could reach 24.3 tons per year according to Dominion. It should also be noted that as the seals on reciprocating piston-style equipment age, even higher leakage rates can be expected.

It is readily apparent that the two reciprocating compressor units proposed at Brookman Corners would be responsible for much higher levels of pollutants harmful to human health than either of the sites in Chemung or Madison counties, where only centrifugal turbines are proposed. This is unacceptable. As stated above, Dominion must consider alternative designs, including replacement of the proposed Caterpillar G3608 reciprocating units with less polluting turbines or other low-emission compressors. Additional measures to avoid, reduce and/or recapture compressor emissions must also be considered.

Furthermore, it appears that the aforementioned figures only consider projected exhaust emissions from the two turbines, two reciprocating engines, and a standby generator proposed at the Brookman Corners compressor station. Blowdown events, which are a routine aspect of facility maintenance, and other emission sources have been inappropriately ignored by Dominion in its analysis. All projected actual emissions, including those associated operations, leakage, maintenance, startup, and shutdown, must be accounted for pursuant to federal and state requirements.

With respect to total greenhouse gas emissions, Dominion predicts that the Brookman Corners compressor station will generate 96,683 tons of CO<sub>2</sub> equivalent emissions per year. This is only slightly under the 100,000-ton threshold for a "major source" requiring Title V review under the Clean Air Act. Again, taking into account routine blowdown events, fugitive emissions, and other factors, the Brookman Corners site would certainly exceed this threshold.

FERC should require an analysis of all greenhouse gas sources, taking into account not only the emission specifications from compressor engines, but also fugitive emissions from other equipment, pipeline leakage, blowdowns, flaring if applicable, and increased leakage that can be anticipated as compressor engines and other equipment age. Accordingly, for the purposes of compliance with the Clean Air Act, the Brookman Corners compressor station should be considered a major source.

### *C. Public Health Impacts and Required Action to Limit Exposure*

It is well documented that compressor station emissions have caused significant acute and chronic health problems for people living or working near them. Health impacts of exposure to volatile organic compounds, nitrogen oxide, carbon monoxide, formaldehyde, ground-level ozone, particulate matter and other hazardous air pollutants include, but are not limited to, cardiovascular, respiratory and neurological damage; birth defects; cancer; leukemia; infertility; burning of lungs, eyes, and throat; muscle pain; mental impairment, headaches, and a host of other ailments. An analysis of these impacts is contained in a report by Thimble Creek Research, prepared for the Madison County Department of Health and submitted in this proceeding, [http://www.madisoncounty.ny.gov/sites/default/files/publicinformation/madison\\_county\\_doh\\_comments\\_-\\_docket\\_no.\\_cp14-497-000.pdf](http://www.madisoncounty.ny.gov/sites/default/files/publicinformation/madison_county_doh_comments_-_docket_no._cp14-497-000.pdf) (“Thimble Creek report”).

The Thimble Creek report provides a substantive account of potential health impacts from compressor stations generally, as well as for the proposed Sheds facility in Madison County. We note, however, that the levels of all emissions—particularly volatile organic compounds, nitrogen oxides, carbon monoxide, and formaldehyde—are projected to be much higher at the Brookman Corners site in Montgomery County. For these reasons, the potential adverse health impacts of emissions, and the severity of those impacts to residents in and around Brookman Corners can be expected to be much greater than at either the Sheds or Horseheads facility. The Thimble Creek Report cites research showing that up to 90% of individuals living or working in close proximity to compressor stations experience odors and/or health impacts. Considering the disproportionately higher level of dangerous emissions projected at the Brookman Corners facility, and the related greater geographic reach of those emissions, neighboring communities including those in Otsego, Herkimer, and Schoharie counties have substantial reason for concern.

A growing body of research shows that federal air quality regulations pertaining to gas development, and the method by which permits are granted, do not sufficiently protect public health. For example, a recent report published in the journal *Environmental Health* found that 38% of gas infrastructure sites, including compressor stations and gas production sites, generate concentrations of volatile compounds that greatly exceed health-based risk levels. Macey et al., *Air Concentrations of Volatile Compounds Near Oil and Gas Production: A Community-Based Exploratory Study*, *Environmental Health* 2014, <http://www.ehjournal.net/content/pdf/1476-069X-13-82.pdf>; and Breech et al., *Warning Signs: Toxic Air Pollution Identified at Oil and Gas Development Sites*, <http://comingcleaninc.org/assets/media/images/Reports/cc-rpt-fracking%2010.14.pdf>. See also comments filed in this proceeding by Dr. Larysa Dyrszka, October 20, 2014. All of this information should be considered as part of a full EIS and, as discussed above, alternatives must be identified to substantially reduce public exposure to

elevated levels of emissions—including projected emissions of VOCs, NO<sub>x</sub>, CO, and formaldehyde at Brookman Corners.

In order to adequately assess potential health impacts, it is also necessary to fully consider the dispersion and settling of emissions from a site. The Brookman Corners compressor station is located in an area of varied terrain including areas of higher and lower elevation relative to smoke stacks that would be present at the site. In fact the site appears to be in a valley relative to some of its immediate surroundings. Therefore depending on the season, weather conditions, and wind patterns, it is possible that emissions will settle near the ground rather than dispersing. This too should be evaluated. Furthermore, Dominion's application does not contain adequate wind data for the vicinity of Brookman Corners. The nearest wind data provided is for Rome, NY (Fig 9.1c) and Albany, NY (Fig 9.1d) which are both 50 miles away Brookman Corners. This also casts doubt upon the air quality impact analysis using the EPA AERMOD dispersion model discussed in Resource Report #9 for the Brookman Corners compressor station. FERC should require a better analysis of wind patterns and dispersion.

In addition, the Dominion pipeline and compressor stations that are part of the proposed Project would transport shale gas and trace liquids from the Marcellus shale formation, which is known to contain high levels of naturally occurring radiation. As a result, radioactive particles can be expected to accumulate within pipelines, and cling to equipment at compressor stations and other facilities, creating a risk of exposure to workers and neighboring residents. An environmental review of the impacts of exposure to these radioactive materials must be conducted.

Finally, noise pollution from compressor stations can negatively affect public health, physically and mentally. While Dominion's application (Resource Report #9) projects noise levels measured in decibels at various locations from each compressor station, it does not adequately analyze human sensitivity to noise as a function of type, frequency, or duration. The reciprocating compressors proposed for the Brookman Corners site may also produce a sound that is characteristically different from or more disturbing than conventional turbines. The start-up, repetitive, or cyclic nature of noise associated with the operation of reciprocating compressors must also be addressed. These issues must be thoroughly evaluated.

For both air emissions and noise, a comprehensive health impact assessment should be performed to evaluate the negative effects, short and long-term, to people and animals living near and at various distances from each of the proposed compressor stations, including specifically Brookman Corners. This assessment should include a thorough review of records and reports on the health impacts of compressor and pipeline emissions, including the information above, as well as the projected costs of health care, lost wages, and human suffering that affected persons and taxpayers will have to bear if such projects are permitted.

#### *D. Comprehensive Analysis of Pipeline Integrity and Risks of Failure*

This Project contemplates significantly increasing the carrying capacity on a pipeline that spans 200 miles, and contains segments that are more than 50 years old. The increased risk of pipeline failure caused by carrying an additional 112,000 DTh/day of gas must be fully analyzed in light of pipeline degradation that has undoubtedly occurred over decades.

As part of this evaluation, FERC must require a thorough analysis of pipeline integrity, in addition to pipeline pressure, velocity, and other relevant operating parameters. The pipeline's current carrying capacity in dekatherms per day should also be disclosed. Tests must be conducted and analyses performed to determine how transporting more gas could impact the structural integrity of Dominion's pipeline, and how the risk of leakage or pipeline failure may change with increased compression. FERC must also require the re-evaluation of maximum allowable operating pressure ("MAOP") for all segments and loops based on a comprehensive inspection of the entire pipeline, including an interior and exterior analysis of corrosion, the integrity of welds, and other stresses. The result of such findings and subsequent analysis must be fully documented and publicly disclosed as part of a comprehensive EIS.

The application submitted by Dominion in June of this year contains no description of the Project's current carrying capacity or operating parameters. However a vague discussion of MAOP appears on Dominion's website for the Project ([www.dom.com](http://www.dom.com), accessed on November 10, 2014.) Under "Frequently Asked Questions," Dominion states that the current MAOP is 900 psig and that "typical" pressure is between 525 and 900 psig. Dominion also states, despite the omission of such a statement in its application, that the Project will not increase MAOP. This is not a reliable indicator of how pipeline stress may be affected. For example, depending on the time of year, average pressure might be 700 psig with only occasional peaks that approach 900 psig. However with the proposed Project, average operating pressure might become 800 psig and much more frequently approach the stated MAOP of 900 psig. Consequently the amount of physical stress on the pipeline network would increase.

A vague description of "typical" pressure is non-responsive to safety concerns and provides no useful information regarding the degree to which the risk of leaks, rupture, or a more catastrophic event such as a fire or explosion will change if the Project is approved. Clearly, increasing the amount of gas carried within Dominion's pipeline network by 112,000 DTh/day would result in a different pressure/velocity profile, so it is disingenuous for Dominion to suggest that simply maintaining current MAOP will ensure that the public is protected. As part of a full EIS, FERC should require a thorough statistical analysis of these issues and a comprehensive inspection of the entire 200-mile pipeline. Furthermore, MAOP must be reevaluated and, if necessary, reduced as the result of this analysis. With respect to the above, we also note that FERC staff, in its public notice for the Scoping Meeting for November 20, states that Dominion does not propose to increase MAOP of the pipeline. This selective statement, lacking any documented commitment from Dominion or clarification about greater pipeline stress that will certainly occur, is extremely misleading.

Significantly, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) recently issued an advisory bulletin titled "*Guidance for Pipeline Flow Reversals, Product Changes and Conversion to Service.*" (Billing Code 4910-60-W, Docket No. PHMSA-2014-0040).

[http://www.pipelinelaw.com/files/2014/09/Advisory\\_re\\_Flow\\_Reversals.pdf](http://www.pipelinelaw.com/files/2014/09/Advisory_re_Flow_Reversals.pdf). Referencing recent pipeline failures, the alert warns of dangers relating to flow modifications, calls on operators to submit comprehensive plans to PHMSA, and addresses issues affecting integrity management, emergency planning, and various forms of testing (including, for example,

hydrostatic, spike, and destructive tests.) The alert also urges caution with respect to older pipelines that may have been subjected to cracking, corrosion, outdated welding techniques (like inferior low frequency-electrical resistance welding, a known cause of pipeline failure), and other defects. In particular, the advisory states: “Facilities built under older versions of the code may need additional assessment to determine whether they remain safe to operate under these changed conditions.”

In pursuing an “abbreviated” review and Environmental Assessment, Dominion and FERC so far do not appear to be heeding these concerns. The application provides virtually no information relating to what type of inspection or testing, if any, will be performed on sections of the Dominion pipeline that are located between facilities along the 200-mile pipeline corridor. For example, hydrostatic testing is mentioned only with respect to above-ground facilities (Resource Report #2).

It is also widely known that plans exist to reverse the flow of the Iroquois pipeline which connects with the Dominion pipeline at Brookman Corners. (See discussion of “SoNo” project, below.) Yet Dominion’s application contains no mention of this whatsoever and lacks any analysis of the impacts associated with flow reversal on pipeline safety where the two systems converge. Flow reversal has been the cause of several recent pipeline ruptures and was a principle reason for the PHMSA alert.

It is of great concern that Dominion has failed to provide any meaningful analysis of these issues in its application, or the publicly available portions thereof. These matters render the application insufficient on its face, mandate a deceleration of the anticipated review timeframe, and clearly demand an EIS.

#### *E. Emergency Response Preparedness*

FERC must require full evaluation of emergency response capabilities. According to the U.S. DOT Pipeline and Hazardous Materials Safety Administration, an emergency plan is required that establishes procedures for handling emergency events such as gas leaks, fires, and explosions, and that establishes protocols for communication and coordination with local fire, police, and public officials. Despite this requirement, Dominion appears to have taken very little action with respect to emergency response in any of the areas where new facilities are proposed.

Furthermore, little action appears to have been taken by Dominion to work with local emergency responders in evaluating current deficiencies or additional needs that would result from the extensive expansions proposed at Brookman Corners. Clearly, adding three gas-fired compressor units to the one presently onsite, along with other modifications, could increase the relative danger and magnitude of accidents, including fire or explosion, the frequency of blowdowns (accidental or planned), spills, gas leaks, and other incidents. Expanding the Brookman Corners facility to become the largest compressor station within Dominion’s Project with a co-located and substantially enhanced interconnection to the Iroquois pipeline could also increase the risk of the site becoming a target for terrorism. This clearly requires involvement by the Department of Homeland Security. Given significant changes proposed at the site and the heightened awareness of energy infrastructure vulnerability in the wake of 9/11, it is unacceptable that Dominion has

not made meaningful effort or rendered plans to improve the preparedness and competency of responders.

Most of the communities along the corridor of Dominion's aging pipeline network are served by volunteer firemen and emergency responders, courageous in and dedicated to protecting their communities, but lacking necessary personnel, training, equipment and knowledge necessary to appropriately respond to pipeline ruptures, explosions, accidental blowdowns, or other serious incidents that can occur with pipelines and compressor stations. It is unfair and unjust to require that people who are so dedicated risk their own lives without adequate support. This concern is not limited to the Brookman Corners facility, however the risks of inadequate preparation at this site may be most severe. It is essential that procedures be updated as necessary, and that training and emergency response planning occur in coordination with local first responders. Specialized equipment must also be obtained for those who do not have it. FERC should expand its review to address these overlooked but extremely critical needs.

In addition, FERC must require a thorough analysis of risks associated with catastrophic failure along the entire corridor. This includes ruptures, fire, explosion and terrorism at each location where new facilities or modifications are proposed, as well as along the entire pipeline since the Project would increase carrying capacity and stress throughout the network. Significant land use changes have occurred around the Dominion pipeline since it was installed decades ago, including the development of new residential, business, industrial, and agricultural uses. It is therefore critical that FERC require a comprehensive assessment of how increasing compression within Dominion's aging pipeline will increase risks to adjacent uses along the 200-mile corridor. Evidence has shown that damage caused by fire and explosion can extend well over 1000 ft. from a ruptured pipeline; however FERC routinely focuses on impacts with a much shorter 660 ft. radius, thus underestimating the size of potentially impacted areas, including the presence of High Consequence Areas, around pipeline corridors.

#### *F. Improper Segmentation of Related Projects*

FERC must avoid impermissible segmentation of related projects. This issue was recently addressed in *Delaware Riverkeeper et al. v. FERC et al.* (DC Cir. Docket Number 1496336, June 6, 2014). Tennessee Gas had urged FERC to review piecemeal its applications for various expansions and upgrades to its 200-mile long pipeline. However the DC Circuit rejected this approach, holding that FERC is "obliged to consider the other connected, closely related, and interdependent projects...FERC impermissibly segmented the environmental review in violation of NEPA." To avoid the same result with the Dominion, FERC must require a full EIS addressing all related and connected projects in the current proceeding.

As part of this Project, Dominion proposes additional compression and other modifications at the Brookman Corners compressor station for interconnection with the Iroquois pipeline. However, in December 2013, Iroquois Gas Transmission System announced the commencement of open season bidding for its "South-to-North" ("SoNo") project to reverse the flow of the Iroquois pipeline to carry gas out of the United States to Canada. The Dominion pipeline would therefore clearly become a conduit for exporting gas, facilitated in particular by new compression and interconnect modifications proposed at the Brookman Corners site. Significantly, Dominion also

owns a 24% interest in the Iroquois pipeline. It is improper segmentation to consider the Dominion New Market Project without regard to all of the economic, environmental, and safety issues associated with natural gas exports and flow reversal of the Iroquois. FERC must analyze Dominion's project in light of the related and jointly owned Iroquois pipeline and the SoNo project as part of a single comprehensive EIS.

In addition, on the same day that Dominion filed its application for the New Market Project, it filed another application for the Clarington project involving pipeline upgrades and new compressor stations in West Virginia and Ohio. See comments filed in this proceeding by the Allegheny Defense Project, October 22, 2014. We concur with Allegheny Defense Project that the New Market and Clarington projects are similar, cumulative, and related actions that should be reviewed comprehensively as a single EIS.

It is improper for FERC to accept the premise that these projects are independent. FERC needs look no further than the marketing plans of Dominion and its partners to know that what is contemplated is an interrelated network to transport, distribute, and export gas extracted from the Marcellus and Utica shale formations. FERC must perform a comprehensive analysis of these pipeline and compressor facilities as one interrelated project, as required by NEPA and the regulations thereunder.

#### *G. Cumulative "Upstream" and "Downstream" Impacts*

Dominion's Project is intended to transport additional quantities of methane gas extracted from the Marcellus and Utica shale regions of Pennsylvania, Ohio, West Virginia and potentially New York to new markets in the northeast and for export to Canada. Thus, expanding the carrying capacity of Dominion's pipeline would increase demand for extraction operations "upstream" of the Project and result in a foreseeable increase in drilling and fracking in Pennsylvania, Ohio, and West Virginia. Indeed, Dominion states that the Project is designed to create new markets for "Natural gas produced from the Marcellus and Utica shales in the Appalachian region of West Virginia and Ohio...DTI's natural gas pipeline system is uniquely positioned to transport Appalachian production, as its pipelines traverse the areas of significant supply growth." (CP14-497-000 Application, June 2, 2014, p.4.)

With respect to New York, the Department of Environmental Conservation has issued a Revised Draft Supplemental Generic Environmental Impact Statement (rDSGEIS) for Oil, Gas and Solution Mining, which recommends that high-volume horizontal fracturing be permitted, and Governor Cuomo has suggested that by the end of this calendar year, a final SGEIS will be complete. Accordingly, it is reasonably foreseeable that added pipeline capacity of the Project will lead to increased fracking in neighboring states, and potentially in New York.

The environmental impacts of this Project cannot be cumulatively analyzed, as required by NEPA, without considering all reasonably foreseeable impacts, including the potential impacts of increased gas extraction and high-volume hydraulic fracturing. These impacts include the installation of gas well pads, drilling rigs, gathering lines, processing plants, and other activities. Accordingly, FERC should include a comprehensive assessment of safety, health, environmental and climate impacts associated with a build-out of extraction facilities and related infrastructure

to supply shale gas to the Project. See also comments filed in this proceeding by the Allegheny Defense Project, October 22, 2014.

A comprehensive build-out analysis of potential “downstream” negative impacts resulting from the increased use of fracked gas in the “new markets” contemplated by Dominion and its partners should also be required. These include, but are not limited to, the likelihood of future power plants, storage facilities, distribution networks and other types of gas infrastructure. For example, the Dominion pipeline connects with the 16-inch Seneca West pipeline. The Seneca West pipeline feeds a methane gas storage facility, recently approved by FERC, in salt caverns at Seneca Lake that threaten the water supply and economy of residents, wineries and other agricultural producers in the Seneca Lake region.

FERC is now considering numerous pipeline and infrastructure projects for the northeast region of the United States. See for example “Report on the Need for the Proposed Constitution Pipeline submitted by Ann Marie Garti,” which summarizes the projects being considered by FERC as of April 7, 2014, [http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20140407-5237](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20140407-5237). All of these gas transport, storage, and distribution projects are interrelated and must be reviewed based on their cumulative impacts on the region, the environment, and climate change.

#### *H. Industrialization Impacts on Agricultural Land and Historic Sites and Inconsistency with Local Zoning*

Vast portions of the 200-mile Project length are located on land surrounded by agricultural fields, historic sites, and communities where people have established homes and made a living precisely so that their families would be safe from industrialization, pollution and security risks. This is particularly apparent in and around Brookman Corners. The expansion of the Brookman Corners facility is extremely troubling to neighbors located adjacent to the Project and in the vicinity whose property values will plummet and quality of life will be harmed by increased air, noise, and light pollution if the Project as proposed is approved.

Furthermore, many property owners in the vicinity of Brookman Corners are farmers who rely on clean air, water, and soil for their livelihood, and care about the quality of food they produce. This includes a vibrant Amish community that is inextricably connected to the land they cultivate, as well as several landowners—including immediately adjacent to or near the Brookman Corners compressor station—who have certified organic farming operations with plans for growth. Pollutants from the proposed compressor station expansion threaten the quality of crops and the health of livestock that these farmers produce. The value of historic sites, including Slate Creek Farm, a farmstead established on Otsquago Creek by John Smith in 1834 and located directly adjacent to the compressor station, would also be adversely impacted. Additionally, the region’s reliance on recreational land uses, agri-tourism, and heritage tourism would be damaged by the facility’s contemplated expansion.

The Brookman Corners facility is located in an Agriculture District and is subject to local zoning laws which allow public utility stations only by special permit. Such uses require site plan approval, and include a prohibition of industrial equipment visible from surrounding property. It is not possible for the municipality to adequately complete the required zoning review without a

reliable site plan, which has not been disclosed by the applicant. Before changes are imposed on the community, FERC should require compliance with local zoning and critically evaluate alternatives and public need.

### *I. Ecological Impacts at the Brookman Corners Site*

The property surrounding the Brookman Corners compressor station contains significant natural resources that would be negatively impacted by the proposed Project and expansion of the existing facility. FERC's scope of review must be expanded to address each of the following issues.

Several bird species classified as endangered, threatened, or "of special concern" frequent the Brookman Corners site and adjacent areas. None of these are identified in Resource Report #3 submitted by Dominion. Most notably, members of the local Audubon chapter have observed the short-eared owl, identified as a NYS endangered species, at the site during winter months. They have also observed the northern harrier, identified as a NYS threatened species, which is present throughout the year and nests in the vicinity. Both of these raptor species have been observed at Brookman Corners over several years during the Fort Plain Christmas Bird Count, as documented by the NYS Department of Environmental Conservation and the NYS Natural Heritage Program. In addition, the NYS Breeding Bird Atlas states that three NYS threatened species, the northern harrier, upland sandpiper, and Henslow's sparrow, are present in the area. The horned lark and vesper sparrow, both species "of special concern," are also present according to the Atlas. Together these rare species qualify the area for designation as a Grassland Focus Area within New York. The failure by Dominion to identify any of these protected species in its application is a serious error that must be corrected.

Each of these species would be negatively impacted by increased emissions, effluent noise, and light generated by the Brookman Corners compressor station. Higher levels of noise and light due to the proposed expansion are likely to interfere with the nocturnal hunting behavior of the two raptors, and also interfere with the ability for songbirds to communicate and protect their territories. Furthermore the Project, as proposed, would require that three additional compressor units be installed at the site, increasing the number of smokestacks from one to four. Exposure to emissions from the proposed Project, particularly high levels of hazardous pollutants including VOCs, NO<sub>x</sub>, CO, and formaldehyde, could be a significant threat to area wildlife. Likewise, the quality of surrounding grassland habitat would be adversely impacted. Inasmuch as Dominion neglects to acknowledge the presence of any protected bird species on or around the Brookman Corners site, it also fails to address any of these concerns. To reduce wildlife impacts and protect "dark skies," full cut-off light fixtures should be required. Again, these are significant defects in the application, further demonstrating that an EIS is needed.

In addition, the Brookman Corners compressor station property abuts Otsquago Creek, which is protected as a New York State registered trout stream and connects with wetlands that extend onto the property. Otsquago Creek is also a receiving water of the nearby Van Hornesville Fish Hatchery, designated and managed by the New York State Department of Environmental Conservation (NYSDEC). See <http://www.dec.ny.gov/outdoor/21668.html> and <http://newyorktraveler.net/the-fish-hatchery-in-van-hornesville-ny/>. The application fails to identify this important state resource in Resource Reports #2 or #3. Deposition of emissions from the Project may negatively impact fish and other aquatic or wetland species, including,

especially, amphibians and fish that are particularly sensitive to changes in water quality. The application fails to address these concerns. The application also fails to identify effluent that may be produced at the site and how containment or disposal will occur to ensure that soils, wetlands, and waters are not adversely affected.

Finally, insufficient information is provided in the application to ensure that ecological impacts are minimized during construction. For example, FERC requires that applicants “identify all sources of hydrostatic test water, the quantity of water required, methods for withdrawal, and treatment of discharge, and any waste products generated.” Instead of providing this information, however, Dominion states in Resource Report #2 that these issues will be addressed later, vaguely indicating that an unspecified amount of water will be obtained from an unspecified source, retained for an unspecified time, and discharged to an unspecified location, which may in fact be a wetland or water body.

This is non-responsive to application content requirements stipulated by FERC, and offers no assurance that adjacent waters, including Otsquago Creek located near the Brookman Corners compressor station, will be protected. As such, it is also not possible for Dominion to definitively say that the Project will not disturb a Class C (trout) stream or that a NYSDEC permit under Article 14 (Protection of Waters) will not be required. In addition, Dominion proposes to bisect wetlands or floodplains contiguous with Otsquago Creek during construction, but has not provided any details regarding measures to ensure that this registered trout stream will be protected. Finally, the application fails to address impacts on wildlife and natural resources due to emissions, effluent, noise, and light pollution during construction. Steps should be required to limit the impact of activities and operations, such as curtailing construction during sensitive nesting or migrating periods.

#### *J. Impacts of Greenhouse Gas Emissions on Climate Change*

FERC should require a comprehensive inventory of greenhouse gas emissions attributable to the Project. This should include not only emissions resulting from combustion at compressor stations and other facilities, but also methane leakage from Dominion’s pipeline and various components within the network, as well as emissions associated with maintenance and operation, such as blowdowns. This inventory should also include a lifecycle analysis of emissions corresponding to the additional 112,000 DTh/day of gas being transported. Greenhouse gas emissions associated with extraction, distribution, and use of methane that will be transported in the pipeline should also be addressed.

According to the Intergovernmental Panel on Climate Change (“IPCC”), methane is 86 times more potent than carbon dioxide as a greenhouse gas over twenty years, the most critical timeframe with respect to limiting the impacts of climate change globally. A global warming potential (GWP) of 86 should therefore be used in all inventory assessments. Furthermore, a growing body of evidence suggests the EPA has grossly underestimated methane leakage from gas development, and that actual leakage rates are likely between 3% and 7%, or higher, rendering natural gas even worse than coal as a driver of climate change. These findings should be considered in addressing alternatives that would more effectively reduce or eliminate Project emissions.

### *K. Public Convenience and Necessity Has Not Been Demonstrated*

In conclusory terms, Dominion asserts that it has met its burden to establish public convenience by stating that the convenience of its customers and profit motives “outweigh any adverse impacts on affected landowners.” (CP14-497 Application, June 2, 2014, p. 8.) We submit that such a conclusion cannot be reached on the basis of the abbreviated environmental review submitted by Dominion. FERC has a duty to consider the public interest more fully.

Public convenience and necessity must be judged against the risk that environmental degradation, loss of property value, and the unfunded costs of increased health care, environmental remediation and damage to existing economies, will damage taxpayers and citizens for the ultimate benefit of private profit and foreign consumers. The future export of gas from the Project to Canada due to planned reversal of the Iroquois pipeline must also be analyzed with respect to a finding of public need, since this provides no domestic benefit to consumers of gas within the United States. Natural Gas Act, 15 U.S.C. Sec. 717f(e).

In addition, Dominion must be required to show that the environmental and economic degradation of historic and agricultural lands is necessary in light of evidence that existing shale reserves in the extraction zones may have been severely overstated. The Project may well reflect overbuild or attempts to sustain stock price without regard to true necessity. See e.g. J. David Hughes, *Drilling Deeper: A Reality Check on U.S. Government Forecasts*, Post Carbon Institute, <http://shalebubble.org/drilling-deeper/>; Deborah Lawrence (formerly Deborah Rogers), *Shale v. Solar: An Investment Perspective*, Energy Policy Forum, <http://energypolicyforum.org/2014/07/25/shales-vs-solar-an-investment-perspective>; Elizabeth Rosenthal, *Life After Oil and Gas*, New York Times, March 23, 2013; Tom Zeller, Jr., *Is the U.S. Shale Boom Going Bust?*, Bloomberg News, <http://www.bloombergview.com/articles/2014-04-22/is-the-u-s-shale-boom-going-bust>.

The installation and expansion of permanent, environmentally degrading facilities for gas transmission and related infrastructure, do not, on this record, support a finding of public necessity.

## **III. Meaningful Opportunity for Public Comment Must Be Provided.**

### *A. Additional Public Scoping Meetings Must be Scheduled*

Initially, FERC scheduled only a single public scoping meeting on October 8, 2014, in Madison County. This meeting was poorly noticed, improperly conducted, and incorrectly listed on FERC’s website. People who inquired by phone were even mistakenly told by FERC staff that no meeting was scheduled. Although the chosen venue was far too small to accommodate those in attendance, FERC staff insisted that the meeting proceed in violation of posted maximum occupancy limits and fire safety requirements. The meeting lacked security, adequate seating, and amplification—making it impossible for people to hear testimony or information provided. As a result, many wishing to participate and give testimony were unable to do so.

Since then, many requests have been made by individuals, organizations, and elected officials for FERC to schedule additional scoping meetings in other areas affected by the proposed Project—particularly near Brookman Corners, where the most significant modifications, largest amount of compression capacity, and by far the highest emissions of the entire project are proposed. To date, this has not happened. A second scoping meeting was held on November 20, again in Madison County, however this was only convenient for persons living near the Sheds compressor station or its alternative sites. The hour and half driving time and inclement weather made it impossible for many to attend from Brookman Corners. Many people, especially the elderly who have difficulty driving at night, are unable to travel long distances, and the conditions on November 20 were particularly challenging.

It is also extremely relevant that a large portion of the population in the area around Brookman Corners (65 or more families) are Amish and thus unable to travel long distances on their own or access the FERC website by computer. By horse-and-buggy, the journey from Brookman Corners to the scoping meeting in Madison County would take a day or more. On the evening of November 20 it would have been impossible given the freezing rain and snow. Failure to hold a scoping meeting in the Brookman Corners area clearly imposes an undue burden on this religious group.

To date, five town boards (Springfield, Cherry Valley, Roseboom, Middlefield, and Otsego) and the Village board of Sharon Springs—all in proximity to Brookman Corners—have requested that a scoping meeting be held convenient to their communities. It is unacceptable that two scoping meetings have occurred near the compressor station proposed in Sheds, but none elsewhere. This omission must be corrected by scheduling scoping meetings in other areas, and at least one near Brookman Corners.

#### *B. The Deadline for Scoping Comments Must Be Extended*

The announced December 5, 2014 deadline for submitting scoping comments is entirely inadequate for local governments, agencies, organizations, affected persons, and the general public to provide input. With publication of the November 4<sup>th</sup> public notice, FERC announced the consideration of two alternative locations to the proposed compressor station in Madison County, which require that notice be provided to additional landowners and communities that had not previously received notice. It is entirely unacceptable that these newly impacted landowners and communities be forced to prepare a response within only 30 days. FERC should extend the official scoping comment period by at least 60 days from the date of the final public scoping meeting.

#### *C. The Process Must Be Reopened to Intervenor*

FERC prematurely closed the time for intervention as a matter of right in July 2014. This occurred just one month after the application was filed and three months before the first scoping meeting, before adequate notice of the Project was given to affected residents and communities. It is an undue burden to require that interested parties file motions seeking leave to intervene “out of time” under such circumstances. Furthermore, with publication of the November 4<sup>th</sup>

public notice, FERC announced the consideration of two alternative locations to the proposed compressor station in Madison County, which required that notice be provided to additional communities. Affected persons, including people living within the one-half mile of these areas have been afforded no opportunity whatsoever to intervene by right, and would instead be forced to request intervening party status through the cumbersome “out-of-time” process. This violates due process. FERC should reopen the period for all interested parties to file as intervenors without the need to file an “out of time” motion until at least 30 days after the close of the scoping comment period.

*D. Over-Designation of Information as Confidential Violates Due Process*

FERC has allowed applicants to make unilateral determinations with respect to designation of materials as confidential. Once so designated, access to the materials is limited to attorneys, experts and designated representatives of corporate entities, effectively depriving ordinary citizens and their government representatives access. This severely limits access by the public and undermines their ability to make substantive comments. As a result, information as basic as site plans is routinely withheld from the public. This is a violation of due process. FERC should not allow designation of materials as confidential without a hearing on such designations at which the public is represented. In addition, expedited procedures for access to confidential materials and to challenge confidentiality designations should be provided.

We appreciate the opportunity to submit these objections, concerns, and comments.

Respectfully submitted,



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CC:

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The Honorable Kirsten Gillibrand  
The Honorable Chris Gibson  
The Honorable Richard Hanna  
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Community Environmental Defense Council, Inc., David Slottje, Executive Director  
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Concerned Citizens of Otego, Stuart Anderson, Founder  
Friends of Butternuts, Carol Ralbag, Founder  
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Middlefield Neighbors, Kelly Branigan, Member  
Milford Doers, Otto Butz, Organizer  
Mohawk Valley Keeper, John Valentine  
New Lisbon Neighbors, Nancy Moen, Organizer  
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