



February 17, 2016

Sullivan County Legislature
County Government Center
100 North Street, PO Box 5012
Monticello, NY 12701

Submitted via email: annmarie.martin@co.sullivan.ny.us

Re: Proposed Millennium Pipeline Company Eastern System Upgrade

Dear Sullivan County Legislators,

The Delaware Riverkeeper Network is opposed to the Millennium Pipeline Company's (Millennium) proposed Eastern System Upgrade project. We are concerned about the detrimental environmental, health and economic impacts of the proposal as well as the future expansion of the Millennium pipeline system it may be intended to induce and/or support.

We understand that the Sullivan County Legislators are considering a resolution to oppose the proposed compressor station in the Town of Highland. We write to suggest that the county pass this resolution as the impacts of this proposal, and the potential pipeline expansion it might advance, are regional issues in need of regional opposition.

Compressor stations are known to emit toxic and carcinogenic emissions as part of their normal operations. Known emissions from pipeline compressors include, but certainly are not limited to, volatile organic compounds (VOCs) such as formaldehyde, benzene, and styrene; hazardous air pollutants (HAPs); ultrafine particulate matter (PM); and hydrocarbons. Health effects from these emissions include chronic respiratory issues, cardiovascular issues and heart attacks, neurological issues, cancer, and reproductive and development toxicity. In addition, compressor stations, including those processing Marcellus Shale gas, are known to release radioactive material into the environment, increasing the community's exposure to carcinogens.

Compressor stations also emit noise and vibrations continuously, day and night. The noise emitted is often above allowable standards, especially during regular "blowdowns". Chronic exposure to low frequency noise can lead to Vibroacoustic Disease, which causes a range of serious health impacts including thickening of cardiovascular structures, psychiatric disturbances, and infections. Low frequency noise can travel 5 miles. The health risks that emissions and noise pose are even greater for vulnerable populations, such as children and pregnant women.

The regular intentional emission discharges and uncontrolled leaks from compressor stations pose long-term and short-term health impacts for wildlife and humans alike, including cancer, nervous system damage, and reproductive effects in addition to releasing potent and long-lasting greenhouse gases.

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The environmental damage of the proposed upgrade would come in many forms including damage to the forest in and around the footprint of the compressor and associated roadways, air pollution, impacts to water resources, and habitat harms.

In addition, compressors bring with them the risk of accidents and explosions that, if they happen, can inflict significant damage. In the event of a fire or explosion at the station, impacts to the human community and natural environments could be catastrophic. The mere knowledge of this potential, along with the adverse environmental and community impacts of a compressor, harms peoples sense of safety and well being and adversely impacts their lives.

The Delaware Riverkeeper Network believes the addition of the two compressors and additional pipeline proposed as part of the Eastern System Upgrade may be part of a larger expansion yet to be disclosed. (See attached letter submitted for the FERC pre-filing docket). In addition, any infrastructure that expands the transmission of shale gas increases the pressure for, and the devastation of, shale gas extraction that is being inflicted upon an increasing number of communities and environments.

The damage that Millennium has already inflicted on neighboring communities, including Minisink and Hancock, through smaller compressor stations than what is being proposed in Highland, should serve as more than enough warning.

- In Minisink, families living within a two-mile radius of the compressor station have been experiencing asthma, chronic nose bleeds, headaches, and rashes since the station became active. The community is now the subject of one of the first formal health studies examining the impacts of compressor stations. These negative health impacts have even forced one family to abandon their home.
- In the Town of Hancock, Millennium acquired the property that was eventually used for their compressor station after their pipeline expansion activities damaged the foundation and septic system of the previous owners house.
- The Town of Cocheton, NY accused the pipeline company of leaving behind \$1 million in damages to county roads after their 2008 pipeline expansion project which Millennium denied.

While Millennium is attempting to depict the proposed upgrade as an economic benefit for the community the truth is that compressors bring with them significant economic harm. Property values surrounding compressor stations have been shown to drop, often by as much as 50%. Associated health impacts bring health care costs and even inability to work, putting additional strain on the community and local economy. The possible construction jobs that Millennium would offer the community would be short term and high risk. Heavy truck traffic can also cause millions of dollars in damage to local roads.

For these reasons, we ask that Sullivan County Legislators pass a resolution of opposition to the proposed upgrade as the impacts of this proposal, and the potential pipeline expansion it might advance, are regional issues in need of region-wide opposition.

Yours sincerely,



Maya K. van Rossum
the Delaware Riverkeeper



February 3, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: Millennium Eastern System Upgrade Project, PF16-3

Dear Ms. Bose,

The Delaware Riverkeeper Network writes to alert the Federal Energy Regulatory Commission (FERC) that we believe Millennium is attempting to advance the Eastern System Upgrade Project without including consideration of all connected, contemporaneous, closely related, and interdependent projects. The failure of Millennium and FERC to include in its National Environmental Policy Act (NEPA) Review of the Eastern System Upgrade Project all past, present and reasonably foreseeable connected, contemporaneous, closely related, and interdependent projects that are, or will be, before FERC for consideration would be a violation of the prohibition against segmentation and would result in FERC failing to consider the cumulative impacts of the project as mandated by NEPA.

A review of data from top natural gas pipeline industry organizations and companies shows very little variation in the actual or suggested distances between compressor stations, with all ranges reviewed falling within 40-100 miles. While sources note that the distance between compressor stations can vary depending on factors such as the size of the pipeline, the compressor horsepower, and the desired capacity, *none* of the literature sites compressor station intervals *shorter than 40 miles*¹. Based on the industry's best practices, the size of the existing pipeline, and the proximity of the existing compressor

¹ Based on a review of: (1) Folga, S.M. 2012. "Natural Gas Pipeline Technology Overview," Argonne National Laboratory.; (2) Tobin, James. 1996. "Natural Gas Compressor Stations on the Interstate Pipeline Network: Developments Since 1996," Energy Information Administration.; (3) Interstate Natural Gas Association of America. 2010. "Interstate Natural Gas Pipeline Efficiency.;" (4) Spectra Energy. 2013. "Inside a Natural Gas Compressor Station.;" (5) Eagle Pipeline LLC. 2012. "Station Pipeline." Retrieved from: <http://www.eaglepipelinellc.com/station-work.html>; (6) Naturalgas.org. 2013. "Transportation of Natural Gas." Retrieved from: <http://naturalgas.org/naturalgas/transport/>; (7) Nexus Gas Transmission. 2015. "Compressor Stations." Retrieved from: <http://www.nexusgastransmission.com/about/compressor-stations>; (8) Circor Energy. 2016. "Compressor Stations." Retrieved from: <http://www.circorenergy.com/applications/compressor-stations.php>

stations, it appears unusual and unnecessary for Millennium to add new compressors and pipeline to meet their stated capacity need.

This leads the Delaware Riverkeeper Network to the very reasonable belief that the proposed addition of two new compressors so close to the recently constructed, and closely located, Minisink and Hancock 1 Compressors is obviously intended to serve some additional, planned for, and reasonably foreseeable expansion of the Millennium Pipeline. Typically pipelines locate compressor stations every 40 to 50 miles along the length of their route – the installation of a new compressor at Hancock as well as one in Highland, approximately 25 miles away, seems obviously intended to serve a planned future expansion of Millennium.

Furthermore, in August 2015, Linden Energy Services began pursuing right of way access to property owned by Preston and Buckingham Townships in Wayne County, PA for the purpose of constructing two 16" gas transmission lines to take gas from the TGP 300 line to the Millennium Pipeline with hook up to Millennium in Hancock, NY. It seems clear and obvious that this new Linden midstream line that will increase the volume of gas transported to and through the Millennium pipeline, starting at the interconnect in Hancock, is directly related to the proposals for new compression in Hancock and Highland.

When the Minisink Compressor and Hancock Compressor projects were advanced as part of the Millennium pipeline project, both Millennium and FERC could and should have anticipated the near-future need for the elements proposed in the Eastern Upgrade Project, including the two new compressors in Hancock and Highland, NY. To suggest that this additional compression so quickly on the heels of the construction of the Minisink Compressor and Hancock Compressor 1 was unforeseen or unforeseeable is unlikely and disingenuous to say the least. In fact, the Minisink docket included comments about new compression at Hancock and asserted the need for its consideration and review as part of the Minisink docket CP 11-5151. The comments were dismissed by FERC at the time with a statement that should a compressor in Hancock be proposed in the future that at that time consideration of the Minisink Compressor impacts should and would be considered – clearly the time is here as a second compressor is now being planned for Hancock.

The Delaware Riverkeeper Network is alerting FERC that Millennium is seeking to advance a segmented project in such a way as to avoid full NEPA review, including full review of the cumulative impacts of all past, present and reasonably foreseeable project segments.

With regards,



Maya K. van Rossum
the Delaware Riverkeeper.