July 20, 2016 Pamela Monroe, Administrator NH Site Evaluation Committee 21 South Fruit St. Suite 10 Concord NH 03301

Response to Request for Advance Public Comment on Rules Related to Certificates of Site and Facility, Site 300

Dear Administrator Monroe,

Thank you for the opportunity to comment on the SEC's New Rules for high pressure gas pipelines. They will strengthen and modernize the ability of NH to respond clearly and appropriately to applications for siting HV/HF gas pipelines within the state.

NH has the opportunity to lead the way for NE and other states dealing with creating New Rules for this totally new type of gas infrastructure. High pressure, high volume/hydraulic fracturing (HV/HF) gas pipelines present many new challenges and entirely different issues never before experienced with the conventional gas industry of the past. For instance:

- <u>The health and safety issues</u> which accompany the new high pressure (HV/HF) gas industry and its infrastructure are far more hazardous and problematic. Due to the numerous chemical pollutants used in the process of hydraulic fracturing itself, as well as substances such as Radium 226 and 228 which get drawn in from the matrix of the rock at the Marcellus shale plays, there are extremely harmful pollutants which cling to the methane and get released into the atmosphere surrounding compressor stations and metering stations during intentional blow-downs and fugitive emission events, according to extensive documentation by many toxicologists, chemists, universities and research groups.
- The size of the transmission pipelines for the HV/HF gas are usually much larger than the
 previously installed distribution pipelines for conventional gas—30-36" wide instead of 10-12".
 The pipes have to be laid deeper to have sufficient covering soil. Therefore, there are greater risks
 for water and soil contamination from the amount of drilling and blasting down through NH's
 radon and arsenic-laden granite (2 types of arsenic) during construction, potentially resulting in
 unsafe drinking water from contaminated aquifers and wells.
- The increasingly well-documented <u>toxic and carcinogenic emissions from natural gas compressor</u> <u>and metering stations create potential health impacts</u> for citizens living, working, farming or going to school within a 3 mile+ radius surrounding a 12,000 HP compressor station (further out for larger ones). These are <u>public health threats requiring impeccable solutions.</u> (See the attached PowerPt and its references).
- <u>And the safety issues</u> are potential nightmares for our rural towns with volunteer FDs, lack of municipal water systems and insufficient hydrants for protecting homes and forests from a volatile pipeline or compressor station gas fire or explosion. When Kinder Morgan's pipeline was still being proposed they instructed our FDs that they were not allowed to assist in quelling pipeline fires, but must wait for the company's experienced crews to come (from miles away) to

shut down the valves. Our FDs were only allowed to evacuate and rescue residents and deal with burning houses and resulting forest fires.

When natural gas lobbyists state that safety fears are unfounded, a brief examination of the safety record of the company we are most familiar with at this point, Kinder Morgan, instead shows an <u>abysmal record which only adds to concerns. A report from 2015 indicates that KM had</u> "180 incidents of leaks, fires, explosions, injuries and fatalities since 2003". And KM's and Tennessee Gas Co's <u>maintenance records have been</u> the subject of derision and scorn from PHMSA, making it imperative to <u>establish Rules that would require explicit and extraordinary mitigation measures for their construction, operational and maintenance processes as well as information regarding their equipment purchases.</u>

Unfortunately, the <u>pipelines constructed since 2010 have the same dismal accident record as the</u> <u>oldest pipes still in the ground! So the newer equipment is not the answer to our safety concerns.</u> Causes for the newly constructed failures cover a wide range from lower quality equipment to improper installation and faulty welding, from insufficient quality control over construction to lax and inadequate maintenance. Summed up, there are problems resulting from the rush to export natural gas– to get pipelines in the ground and export LNG. For that reason alone, strong and well thought out Rules for their siting are necessary.

Considering each and all of those issues, I strongly support the SEC's New Rules for High Pressure Gas Pipelines, particularly:

- a) The requirement of <u>a Comprehensive Health Impact Assessment (CHIA)</u> for NH_to be paid for by the applicant and conducted by strictly independent public health professionals. (See attached White Paper on Need for a CHIA)
- b) <u>The requirement for the siting of pipelines to be over 1,000 ft. away from electric</u> <u>transmission lines for the safety of the public, the electric lines, and the integrity of the</u> <u>pipeline, itself.</u>
- c) <u>The requirement for proof of an applicant's bond to secure their ability to pay and their</u> <u>agreement to pay the total costs for the</u> decommissioning of the pipeline and its appurtenances with all debris removed and disposed of according to state and federal regulations and rules.

I would also like to recommend additional New Rules that would require the applicant to fund the following essential precautionary processes:

- a) pre-construction, baseline ambient air, water and soil testing for residences, schools, farms, aquifers and wells within 1 mile of a pipeline and/or 3 miles from compressor stations and metering stations
- b) construction phase air and water testing for the same areas
- c) operational phase testing and monitoring of soil and water quality and quantity
- d) operational phase seasonal air monitoring and analysis for selected pollutants from an updated version of NH's Toxic Air Statutes, selected by NH licensed toxicologists and municipal representatives, measuring hourly, daily, monthly and yearly emissions, especially within a 3 mile radius of 12,000 HP compressor stations, further for larger ones
- e) a baseline pre-construction health survey for citizens living, working, or attending school within a 3 mile radius of a compressor station
- f) 10 years of follow through health assessments for children attending school within a 3 mile radius of a compressor station

Similar to the SEC's consideration of the "<u>cumulative visual impact</u>" of Northern Pass. I support the SEC's consideration of the <u>cumulative health and safety impact</u> of high pressure gas pipelines.

Factors to consider regarding the issue of "public interest":

- 1. With the amount of inevitable environmental destruction of woodlands, conservation land and private property as well as the contamination of water resources and eco-systems and the numerous other potentially harmful health and safety consequences to communities and NH citizens from siting high pressure natural gas pipelines, the question of <u>"public interest"</u> can be answered fairly easily.
- 2. We've come to realize that the reason for electricity rates being set sky-high in the fall of 2015 was simply a response to the reported "energy crisis" of 2014, which we've come to understand was not due to an actual lack of available energy, but the mismanagement of NE's grid. And that is being corrected by the Winter Reliability program and the modernization of the grid.
- **3.** Plus the "crisis" dissolved with the reality that wholesale energy costs plummeted 60% by January, 2015. And, in spite of having an even colder winter, there was no "energy crisis" in 2015, "even though 2 more major power plants had retired and there wasn't a single new pipeline", as the president of the NE Power Generators Association, Dan Dolan, publically stated.
- 4. In fact, ISO-NE's e-news reported that April 2015 had the <u>lowest energy demand in 12 years and the</u> <u>lowest wholesale energy prices in 16 years!</u> Simply no "energy crisis" to be found.
- 5. We've also learned that it's actually NE's <u>transmission costs that raise our rates higher than many</u> <u>other states...not the cost of our energy.</u> Hopefully, ISO-NE or the PUC will respond with solutions to FERC's questions about our overly high transmission costs.
- 6. Plus, as you know, Distrigas has signed a 10 year contract to supply all the energy NE might need for winter peaks.

So with NO "energy crisis" to fix and actual energy prices back to a relative normal, there is no "public interest" in the addition of potentially problematic energy infrastructure.

On the other hand, if, for any reason, a high pressure gas pipeline is sited in NH, I want to acknowledge my appreciation and support for the New Rules recommended by the SEC.

I am attaching a White Paper on the Need for Comprehensive Health Impact Assessment for natural gas pipelines along with the list of its co-authors. Also attached is a Power PT on compressor stations with numerous references to support statements in this comment. It was created by Dennis Gauvin from New Ipswich and John Kieley from Temple.

Thank you for this opportunity to comment on the SEC's New Rules for high pressure gas pipelines. Their Rules are a reflection of their conscientious concern for the health and wellbeing of NH's citizens and communities.

Bev Edwards

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