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To: Monroe, Pamela

Subject: Response to Request for Advance Public Comment on Rules -Site 300

NH Site Evaluation Committee
Pamela Monroe, Administrator
21 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.

RE: Docket # 2015-08

Dear Ms. Monroe,

Thank you for the opportunity to provide Comments on the Rules Related to Certificates of Site and Facility, Site 300, pursuant to RSA 541-A, relative to the siting of high pressure gas pipelines.

First, I must respectfully request that the SEC extend the time for the comment period. Many stakeholders who earnestly want to comment learned of the committee's request on February 19. The ten days available for comments have not been sufficient to reasonably honor or address this request.

Given that NH is at a pivotal juncture regarding its energy future, the SEC has a unique opportunity to break the grip of the antiquated assessment process, developed in the 20th century for the conventional gas industry infrastructure. The NHSEC can take the lead in creating updated, appropriate 21st century rules for evaluating the siting of high pressure gas pipelines-- infrastructure for the high-volume hydraulic fracturing (HVHF) industry.

1) The most critically important new rule that I emphatically recommend is that a Comprehensive Health Impact Assessment (CHIA) be incorporated as a requirement of the SEC siting process.

The need for a CHIA has surfaced as a result of all the health impacts occurring and being documented by epidemiologists, toxicologists, physicians and chemical researchers nation-wide for people living in the vicinity of compressor stations. In fact, Dr. Wilma Subra, McArthur Award winning chemical researcher, has documented the fact that numerous health impacts occur for people who live, work or go to school within a 3 mile radius of a 12,000 horse power (HP) compressor station. NH may be dealing with 2 or more compressor stations if a high pressure gas infrastructure is sited In our state. At least one of them is 41,000 HP and is planned for 1/4 mile from Temple's Elementary School.

Therefore, the rule: “**appropriate setbacks to mitigate potential health and safety impacts**” in reference to compressor stations is entirely inadequate.

2) The next most important rule should be: If it is determined to be harmful or suspected of potentially being harmful to the public health of NH citizens, the rule is to deny the pipeline's permission to be constructed in NH,

3) As the NH OEP's 10 Year Energy Strategy, Appendix A, Chart 3 Indicates, NH's need for natural gas will remain flat up to 2032 and that NH's energy demand will only rise 1 per cent by 2032 due to fewer exports to MA, as a result of their energy efficiency and renewable Installations. Therefore, NH does not need a massive high pressure gas pipeline installation.

a. As the Conservation Law Foundation continues to indicate, LNG is the best "bridge fuel". And Didtrigas has contracted for sufficient LNG to cover NE's winter reliability issues for 10 years!

b. As Dan Dolan, President of the NE Power Generators Association, was quoted saying in 2015, "The 'energy crisis' was overblown. By January, wholesale prices dropped 60%. Last winter was colder than 2014, 2 more major power plants retired, and not a single new pipeline was built!"

c. As ISO-NE reported last spring, "April had the lowest energy demand in 12 years, and the lowest prices in 16 years."

d. As the Energy Information Agency (EIA) has determined from two studies, if natural gas is exported it will raise domestic prices in competition with foreign markets.

4) In addition, I fully support requesting that the SEC require:

- The gas industry to use technology to control air pollutants at the source to protect public health. At a minimum: Electric motors to run the compressors;
- Air-operated control valves rather than gas-operated valves which vent gas to the air each time they open or shut;
- Sufficient on-site containment for venting events such as blow-downs. To continue industry practices of chronically venting gas to the atmosphere is similar to the days before the Clean Air and Clean Water Acts when factories routinely dumped their waste into our environment.
- All above-ground gas pipeline facilities to be housed in structures with equipment to capture and recover fugitive emissions. The cost of these measures to the applicants would certainly be less than the cost of negative health effects in surrounding communities.

Safety Impacts:

- Setbacks may have relevance for public safety wherever applicants propose to route high-pressure gas pipelines near sensitive sites. But other siting proposals for high-pressure gas pipelines also involve risks to public safety. For instance, siting high-pressure gas pipelines alongside high-voltage power lines is dangerous. The electric field accelerates

the rate of pipeline corrosion. Large grounding arrays are required to combat corrosion. However, in much of New Hampshire where the power lines pass across shallow-to-bedrock soils, the ground does not offer much grounding. In Mason, for instance, power surges that destroy electrical equipment during thunderstorms are common, due to the general lack of good grounding. The likelihood of accelerated pipeline corrosion where pipelines abut power lines puts two energy systems at risk. A pipeline failure here could destroy two energy supply systems at one blow, which may take some time to repair and have regional economic repercussions. SEC needs to seriously weigh the consequences of such unwise pipeline siting as is proposed for NED. Without a careful ongoing pipeline grounding maintenance program, overseen by independent contractors, a catastrophic event is foreseeable.

Pipeline decommissioning plan requirements

- SEC should require that all pipelines and infrastructure be removed, all waste and toxic residue properly disposed of, the land restored to original grade, loamed and planted with native plants. This deconstruction would re-run all the trauma of construction but would better serve landowners and communities in the long run.
- Project-related sound and vibration impact assessments. SEC should require high-pressure gas pipelines and their infrastructure to meet the same standards as wind energy systems as specified in Site 301.14(f)(2). If no more than 5dBA above background is appropriate for wind, this should be applied to all energy systems. In addition, SEC should require compressor stations and gas valve and meter stations to be sited within enclosed buildings constructed to reduce noise and vibration impacts on surrounding properties.
- Application requirements to ensure quality construction that minimizes safety issues. Quality construction seems to be lacking in new pipelines. In light of PST's findings that newer pipelines are failing more frequently than ones 75 years old, the SEC would be prudent to make a rule that no new pipeline construction until the problems are identified. In the absence of such a safety measure, SEC should insist that high-pressure gas pipeline applicants adhere to industry standards for all aspects of pipeline construction, maintenance, and reporting as covered in Code of Federal Regulations title 49 part 192 —TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARD. SEC should require verification of compliance to these regulations by continued on-site inspections by qualified industry experts independent from but funded by the pipeline company, reporting to the appropriate NH agencies both during and after construction. Since these standards are a minimum, SEC should also require that applicants meet the following requirements for construction:
 - Class 4 pipe should be used everywhere, including rural areas.
 - Pipelines should be buried below the frost line all along their routes.
 - Independent electrical engineers (funded by the applicant) should determine that the grounding arrays for high-pressure gas pipelines that follow power lines are sufficient to prevent corrosion, ·

- Daily inspections by independent contractors (funded by the applicant) for pipe welds, grounding arrays, fill material and placement, blasting, and whatever else needs inspection before the pipeline is buried. X-ray inspection for ALL welds should be required. ·
- Regarding blasting, SEC should require well testing and foundation inspections before and periodically after blasting for all wells and buildings up to 1,000 feet away from pipeline blasting sites. Well tests should be for quantity as well as quality, and include radon, arsenic, benzene, VOCs and chemicals used in blasting among other parameters. Foundation inspections should include basement air testing for radon.
- Not only is quality construction vital for safety, ongoing pipeline maintenance must be responsibly carried out. SEC should insist that high-pressure gas pipeline applicants meet the following requirements for maintenance:·
- Independent electrical engineers (funded by the applicant) should determine that maintenance plans for grounding arrays are sufficient and implemented.·
- Staff present daily at compressor stations to monitor and eliminate leaks. Industry practice appears to be for compressor stations to be unstaffed most of the week.·
- Pigging stations must properly contain and dispose of residue from cleaning pipelines.
- A maintenance plan for all above-ground infrastructure should be approved by independent engineers.

Thank you for your consideration.

Beverly Edwards
Chair, Temple Energy Committee