Douglas Whitbeck 756 Brookline Road Mason, NH 03048 July 24, 2015

Chairman Martin P. Honigberg Debra Howland, Executive Director and Secretary NH Public Utilities Commission 21 S. Fruit Street – Suite 10 Concord, NH 03301

Re: DG 14-380 Liberty Precedent Agreement

Dear Chairman Honigberg and Ms Howland,

I'm sure there will be a mountain of technical documentation submitted regarding the Liberty Precedent Agreement. This is not going to be technical, but I would appreciate the Commission considering the following statements when making their decision.

The industry loves to say that there is a 100-year supply of gas in the Marcellus shale deposit. Yet in their testimony they referred to several fields that are in decline. The Marcellus supply is not infinite.

There is a report, prepared by <u>J. David Hughes</u> on behalf of <u>Post Carbon Institute</u>, that uses the Department of Energy's own data to reach a cautionary conclusion.

"Drilling Deeper: A Reality Check on U.S. Government Forecasts for a Lasting Tight Oil & Shale Gas Boom investigates whether the Department of Energy's expectation of long-term domestic oil and natural gas abundance is founded. It aims to gauge the likely future of U.S. tight oil and shale gas production based on an in-depth assessment of all drilling and production data from the major shale plays, current through early- to mid-2014. The report determined future production profiles given assumed rates of drilling, average well quality by area, well- and field-decline rates, and the estimated number of available drilling locations."

At the risk of giving away the ending, here are perhaps the most significant paragraphs.

From page 4, under EXECUTIVE SUMMARY:

"This report provides an extensive analysis of actual production data from the top seven tight oil and seven shale gas plays in the U.S. (These plays account for 89% of current tight oil production and 88% of current shale gas production, and serve as the primary sources of future production in the EIA's forecasts—82% of forecast tight oil and 88% of forecast shale gas production through 2040.) It concludes that the current boom in domestic oil and gas production is unsustainable at the rates projected by the EIA, and that the EIA's tight oil and shale gas forecasts to 2040 are extremely optimistic. What this means is that the country's current energy policy—which is largely based on the expectation of domestic oil and natural gas abundance far into the future—is badly misguided and is setting the country up for a painful, costly, and unexpected shock when the boom ends."

[The EIA is the Department of Energy's Energy Information Administration.]

From page 302, under SUMMARY AND IMPLICATIONS:

"The EIA's forecast strains credibility, given the known decline rates, well quality by area, available drilling locations, and the number of wells that would need to be drilled to make the forecast a reality. Given this report's "Most Likely" scenario estimate for the seven major plays analyzed, the remaining significant U.S. shale gas plays would need to produce 198.2 trillion cubic feet, or nearly 4 times the EIA's own estimate for "other" plays, by 2040. Failing to do this would jeopardize many current and future investments made on the assumption of a cheap, abundant, and long-term domestic gas supply. Most troubling from an energy security point of view is that much of the shale gas production will occur in the early years of this period, when decisions about long-term investment in exports and domestic infrastructure are being made—making any supply constraints later even more problematic.

"The consequences of getting it wrong on future shale gas production are immense. The EIA projects that the U.S. will be a significant LNG exporter in 2040 (15% of total production—see Figure 3-2). Although the flush of shale gas production is likely to peak by 2020 and decline thereafter, there are 4 approved, 13 proposed, and 13 potential LNG export facilities under consideration. The wisdom of liquidating as quickly as possible what will likely turn out to be a short-term bonanza should be questioned. A sensible energy policy would be based on this prospect."

I firmly believe that the information contained in this report should be considered before reaching any conclusion to increase New Hampshire's dependence on natural gas. You can find the entire report at <a href="http://shalebubble.org/drilling-deeper/">http://shalebubble.org/drilling-deeper/</a> (Before you click print, note the whole document is 315 pages.)

New Hampshire is in a great position to become an exemplary leader in energy policy. We can choose to become more dependent on a finite supply of natural gas, exposing New Hampshire industry to the volatility of higher world market prices. (Our U.S. Senator Jeanne Shaheen has said the rush to export will result in gas price increase of 54%.) Or we can begin an orderly transition to alternative energy sources, conserving what gas reserves we have without massive expenditure on unnecessary fossil fuel infrastructure that will involve seizing New Hampshire citizens' homes and property, imperil private and municipal wells, and threaten numerous New Hampshire farms and treasured conservation areas.

Under the heading "FUEL DIVERSITY AND CHOICE," New Hampshire's 10-Year State Energy Strategy, on page 11, states:

"As demand for all fuels increases on a global scale, these challenges are not expected to ease, and overall prices are predicted to continue increasing. Now more than ever there is a need for focused efforts to reduce New Hampshire's vulnerability to price volatility and supply disruptions, and to expand our ability to be more flexible and resilient. Diversifying our fuel portfolio and increasing the use of in-state resources are critical tools in achieving those goals."

Liberty's plan will not only make New Hampshire overly dependent on one fuel type, it will make us overly dependent on ONE FUEL PROVIDER. That could be called a MONOPOLY.

It would seem the real cost of fracked gas is borne by property owners. I attended a Regional Energy Forum at Saint Anselm College in Manchester, NH. I was surrounded by pipeline engineers and constructors, gas industry lobbyists, and the Director of Maine Governor's Energy Office. There was a lot of talk about MONEY, but no mention of COST – the cost to the people whose property happens to be above a natural gas deposit, the cost to someone whose property is in the way of a pipeline, or the cost to our environment. I got the same feeling listening to the testimony for this proposal. Mr. DaFonte talked about connecting Nashua and Manchester. It would only take a few miles of pipe. That's a very cavalier attitude. A lot of people live between Nashua and Manchester.

In my comments on Tuesday, I asked if, knowing what we know about climate change, massive investment in fossil fuel infrastructure is really the way we want to go. Natural gas is continually referred to as a bridge fuel, but it has also been called a gangplank. It would seem that instead of investing so much in a regressive technology, we would want to move on to sustainable energy sources and innovative electric grids.

I urge you to invest in our future, not our demise. Please consider these factors when making your decision on Liberty's proposal.

Thank you for your consideration.

Most sincerely, Douglas Whitbeck