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August 3, 2017

## VIA E-MAIL

Debra Howland Executive Director and Secretary New Hampshire Public Utilities Commission 21 S. Fruit Street, Suite 10 Concord New Hampshire 03301

**RE: DG** 16-852

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities Petition for Expansion of Franchise to the Town of Hanover and City of Lebanon

Dear Ms. Howland:

Please file this letter as a public comment in the above-referenced docket.

Shame on Liberty Utilities, the petitioner in this matter.

While citizens are throwing their little buckets of help on a 10-alarm blaze as fast as possible, Liberty Utilities continues to undermine their efforts and literally pour gas on the fire.

The news on climate change only gets worse. At the end of June, climate change experts, including former United Nations climate chief Christiana Figueres and Hans Joachim Schellnhuber of the Intergovernmental Panel on Climate Change, published a letter in the journal *Nature* warning that we only have three years left to address the problem before it is too late. If that were not bad enough, two different studies published in the journal *Nature Climate Change* just this week (on July 31, 2017) conclude that, absent a rapid escalation in action to combat climate change, it may already be too late. If this is true and the global temperature increases by more than 2 degrees Celsius (3.6 degree Fahrenheit) from pre-industrial levels, as these and another study, from last year, all predict, we are looking, "best case," at the following scenario (taken from Andy Berrens' synopsis of the book "Six Degrees," by Mark Lynas):

## "BETWEEN TWO AND THREE DEGREES OF WARMING

Up to this point, assuming that governments have planned carefully and farmers have converted to more appropriate crops, not too many people outside subtropical Africa need have starved. Beyond two degrees, however, preventing mass starvation will be as easy as halting the cycles of the moon. First millions, then billions, of people will face an increasingly tough battle to survive ...

Warmer seas absorb less carbon dioxide, leaving more to accumulate in the atmosphere and intensify global warming. On land, matters would be even worse. Huge amounts of carbon are stored in the soil, the half-rotted remains of dead vegetation. The generally accepted estimate is that the soil carbon reservoir contains some 1600 gigatonnes, more than double the entire carbon content of the atmosphere. As soil warms, bacteria accelerate the breakdown of this stored carbon, releasing it into the atmosphere.

The end of the world is nigh. A three-degree increase in global temperature — possible as early as 2050 — would throw the carbon cycle into reverse. Instead of absorbing carbon dioxide, vegetation and soils start to release it. So much carbon pours into the atmosphere that it pumps up atmospheric concentrations by 250 parts per million by 2100, boosting global warming by another 1.5C. In other words, the Hadley team had discovered that carbon-cycle feedbacks could tip the planet into runaway global warming by the middle of this century — much earlier than anyone had expected …"

Beyond all the horror of the above, are the economic/business consequences of losing the climate change battle. "[C]limate change will cause damage to facilities, disrupt supply and distribution chains; threaten power supplies; jeopardize the global food and water resources; and add overall uncertainty to the marketplace thus increasing the cost of doing business," On the national level:

"One study shows that if global warming emissions continue to grow unabated—a high-emissions scenario—the annual economic impact of more severe hurricanes, residential real-estate losses to sea-level rise, and growing water and energy costs could reach 1.4 percent of GDP by 2025, and 1.9 percent by 2100 (Ackerman and Stanton 2008)."

*See* <u>Climate Change in the United States: The Prohibitive Costs of Inaction</u>. On our state and local levels alone:

- 1. One study has determined that it will cost just three New Hampshire towns between \$1.9 and \$2.9 billion to address the impacts of climate change. *See* page 23;
- 2. Another study concludes that <u>over 7,000 New Hampshire homes could be</u> under water by 2100 due to sea rise caused by climate change

If we do not die first, we will go bankrupt at every level if we do not meet climate change head on, right now.<sup>1</sup>

The urgency could not be more obvious.

<sup>&</sup>lt;sup>1</sup> Do not ignore the costs of climate change, Public Utilities Commission ("PUC"), when making your public interest determination: they are well-established negatives of using fossil fuels.

The Town of Hanover certainly understands the urgency. Dartmouth College has committed to renewable energy and the entire Town of Hanover voted at its May town meeting to transition from electricity to 100% renewable sources of energy by 2030 and 100% renewable sources of energy for heat and transportation by 2050.

The City of Lebanon understands it, as well. On July 10, 2017, with the support of the Lebanon Energy Advisory Committee and the Lebanon City Council, the City of Lebanon Planning Board unanimously adopted an addendum which removes references supporting "natural gas" and "liquefied natural gas" from the Lebanon Master Plan.

Indeed, the entire state of New Hampshire and country get it. More than two-thirds of New Hampshire's cities and towns, *i.e.*, 160+ out of 234, have voted for government action to address climate change and, consistently, more than a two-thirds (68%) majority of Americans as a whole are concerned about it.<sup>2</sup>

Yet, despite its obvious knowledge of the crisis and the fact that its shareholders and employees, too, have children, Liberty Utilities is not only *not* being an immediate part of the solution like the good citizens of Hanover and Lebanon, but continues to exacerbate the problem by pushing long-term commitments to methane with time we do not have.

Of course, as emissions of methane, which comprises roughly 95% of today's natural gas, are a major greenhouse gas, any sincere effort to reduce greenhouse gases must include reducing methane emissions—starting now. Indeed, as stated on page 10 of President Obama's Climate Action Plan: "curbing emissions of methane is critical to our overall effort to address global climate change." Increasing, rather than reducing, methane emissions, by more as opposed to less gas use, only brings us that much closer, that much faster, to the edge. The problem is at least twofold: (1) gas drilling, production and infrastructure leak enormous amounts of methane into the atmosphere; in fact, scientists at Harvard University and other institutions have found that methane leaks far exceed official estimates; and (2) carbon dioxide, the oil/coal greenhouse gas getting most of the attention, has a more protracted effect; but, "[w]hile CO2 persists in the atmosphere for centuries, or even millennia, methane warms the planet on steroids for a decade or two before decaying to CO2" and "[i]n those short decades, methane warms the planet by 86 times as much as CO2. Contrary to initial hopes that natural gas was "the clean bridge fuel solution" to navigate us around climate change, it will not get us there.

PUC Staff members and the Office of the Consumer Advocate are right in pressing Liberty Utilities for <u>proof of customer support for its Hanover/Lebanon gas expansion plans</u>. There is no support. There can be no support, if we care about those we leave behind.

You embarrass yourself, Liberty Utilities, by showing that you do not care the slightest.

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<sup>&</sup>lt;sup>2</sup> Pay heed, as well, PUC, of this public will when making your public interest determination: the public wants government action that addresses—not increases—climate change.

Liberty Utilities' gas expansion plans are contrary to the will of the citizens of Hanover and Lebanon, as evidenced by the official town actions and documents discussed above and the wave of negative public comments in this matter, and Liberty Utilities should be ordered to include such information in its marketing to prospective Hanover and Lebanon customers, and the PUC should take administrative notice of such facts in denying Liberty Utilities' petition, accordingly.

Sincerely,

//s//Richard M. Husband

cc: Concerned citizens