Testimony of Annette Smith, Vermonters for a Clean Environment, on S.5 to Senate Natural Resources & Energy Committee, January 24, 2023

My name is Annette Smith. I live in Danby. Thank you to the Chair and the committee for hearing my testimony today.

I am executive Director of Vermonters for a Clean Environment, a grassroots organization founded in 1999 in response to a natural gas power plant and pipeline project proposed for Bennington and Rutland Counties. We have worked on issues surrounding mining, landfills, groundwater, stormwater, drinking water, waste water, solid waste, large farms, pesticides, PFAS, plastics contamination, cell towers, the environmental and societal impacts of energy projects, and land use.

VCE assists people in having a voice in what goes on in their communities, in participating in regulatory processes, and we help protect citizens and towns from excesses of development and the illusion of progress. This is my 23rd year testifying in Vermont's legislature.

Our workload is off the charts. There are so many topics that are important for this committee to address:

- Vermont's energy policies need updating (see VCE's white paper, 2018[1])
- we need to establish protections for forests and farmlands and guide development to the built landscape (see maps of a few recent proposals)
- the Public Utility Commission process for siting energy projects needs to be evaluated to determine if there are better options for land use siting of energy projects (see description of process)
- Act 174's Enhanced Energy Planning is not working as intended to give towns a voice, the developer-driven process for siting energy projects is not working to the benefit of Vermonters. (see evaluation of Act 174 EEP)
- We need a new, strategic approach to energy development (see Strategic Energy Planning presentation)

I have submitted documents on all those topics.

In addition, this legislature needs to hold accountability hearings on the Climate Council to assess how it is functioning, as a creation of the Global Warming Solutions Act with its unachievable emissions reduction mandate. I have submitted my evaluation to you.

[1] https://vce.org/VCE_White_Paper_UnderstandingVermontEnergyPolicies_09August2018.pdf

But, instead of talking about any of those pressing needs as they affect Vermonters in the real world, I am here today to offer testimony on S.5, what would be more appropriately be named the Stupid Heat Standard. Since the legislature wants to play games with the name, that is what I'm calling it, because it is a solution in search of a problem and is a bad idea that is not needed. Since it was first proposed two years ago, the state has dedicated $250 million for climate initiatives. On top of that come the Infrastructure and Investment Jobs Act, and the Inflation Reduction Act with many more millions of dollars available to Vermonters.

The Stupid Heat Standard is intended to create incentives for installers to sell technologies to people to switch away from fossil fuels for heating. Those incentives already exist in the form of high fossil fuel prices without targeting one business sector.

When this committee considered the Clean Heat Standard last year, none of those state and federal funds and high fossil fuel prices were a factor.

Now, I ask you to please justify why this Stupid Heat Standard is necessary, especially when it is distracting this important committee from the very necessary energy policy and implementation discussions we should be having that have not happened in recent years in this legislature.

Adoption of the Stupid Heat Standard means increasing electricity consumption from renewable energy, and with the desire for more in-state renewables, the topics I mentioned previously such as the state's energy policies and siting issues should come first.

Where is the renewable electricity going to come from to fuel all this new consumption, and if it is to be sited in Vermont, is the current developer-driven and developer-biased process the most equitable, just and environmentally sound method to achieve this transition?

Specific Objections to the Stupid Heat Standard:

- Pushing more work onto a PUC that is already doing more than any other PUC in the country. In all other states, siting of telecommunications and energy projects -- except for very large projects -- is done through local zoning. Vermont's PUC is already overloaded and doing too much.

- The Stupid Heat Standard proposes to create a convoluted credit system whose primary beneficiaries will be Green Mountain Power, Vermont Gas Systems and those installers who are already doing what the Stupid Heat Standard would require.

- Claims that emissions reductions will result from the installation of heat pumps are based on modeling but have not been supported by actual data. Last year, a Vermont citizen, Kai Mikell Forlie, reached out to numerous energy entities to gather data. His research found two surveys[2,3] from 2017 and 2021 which indicate people love heat pumps for air conditioning, but winter usage can result in high electric bills. You should:
    - Require VGS to provide data on the fossil fuel consumption reduction they have seen as a result of their electric heat pump and water heater installations to date.
    - Require GMP to provide data on how much electricity consumption and consumer costs have increased as a result of electric heat pump and water heater installations to date.

- S.5 will have the end result of requiring Vermonters to buy more stuff, [4] expensive stuff.[5] The average heat pump installation costs about $20,000. It is insulting to the intelligence of typically-frugal Vermonters. It is parental, dictating to people what they have to do rather than respecting the intelligence of Vermonters who are already choosing the recommended tools of heat pumps, wood pellet stoves and biofuels, without the creation of a convoluted credit system.

- As we have just seen with two recent major winter power outages, the electrification of everything is a formula for people freezing in the dark. Non-electric propane furnaces, wood stoves and fossil fueled generators are what kept people going. Almost all of the systems S.5 requires to create a credit require electricity.

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[2] https://publicservice.vermont.gov/sites/dps/files/documents/Energy_Efficiency/Reports/Evaluation%20of%20Cold%20Climate%20Heat%20Pumps%20in%20Vermont.pdf

[3] https://vce.org/Results%20from%20BED's%20Survey.pdf

[4] https://vtdigger.org/2021/08/23/annette-smith-are-climate-solutions-all-about-technology-and-buying-more-stuff/

[5] https://vce.org/Diversified-Energy-Specialists.pdf

- Many Vermonters rely on propane for which there is no alternative. Therefore, S.5 promotes inequity and is discriminatory. It is not equitable to force people who have no alternatives to use technologies that are not viable. For instance, I have lived off grid with solar panels, batteries and a back-up generator for more than 30 years.[6] I have no alternative to propane, on which I rely for instant hot water heating when the solar hot water system does not produce, and for appliances that, if electric, would use too much electricity especially at night. I turn almost everything electric off at night. I cannot use a heat pump, a pellet stove, or a biofuel furnace. They would drain the batteries at night. An insurance company required me to get a non-electric propane heater to get fire insurance. My request:
    - Propane should be removed from S.5.

- The bill enables VGS (owned by Energir of Canada) to play in the "renewable natural gas" credit markets that are developing in the thermal and transportation sectors, giving VGS the ability to buy and sell credits by purchasing landfill gas from out of state, with no actual benefit to Vermonters. S.5 says as long as there is a "contractual physical pathway" for RNG, it can be used in the credit schemes. Okay, so a few molecules of RNG may make it into Vermont's pipeline through the thousand-mile route from the landfill, maybe. The Department of Public Service testified to the PUC that the Seneca Meadows RNG contract "is one of the most expensive means for VGS to reduce emissions." This is not about greening up anything except VGS's Public Relations Spin. In-state landfill and farm gas that can be generated and used in Vermont is fine to claim as RNG, just as landfill gas used close to its source is a reasonable policy. The Seneca Meadows New York landfill gas contract VGS has been pursuing through the PUC process is a good example of gas that can and should be consumed locally, right there in New York. By allowing VGS to claim out of state RNG as a benefit to Vermonters, the Stupid Heat Standard assures the continuation of pipeline infrastructure and methane leakage all the way to 2050.

  At the end of November, the Massachusetts Commission on Clean Heat, a 22 member body appointed by the Governor, issued its final report. It makes not a single reference to RNG. It does recommend this: "Avoid future investments in and strategically retire gas infrastructure to reduce total costs." Just last month, the New York Climate Action Council adopted

[6] https://vtdigger.org/2022/12/26/annette-smith-lessons-from-living-off-grid/

a plan for adopting that state's emissions reduction law. It acknowledges the severe limitations of RNG. Council member and Cornell Professor Robert Howarth has explained that the plan "does not endorse any widespread use of RNG. In fact, the Plan specifies that it is generally preferable to use biogas ... directly and at the site of production rather than refining the biogas to produce RNG."

This out of state credit system is just another gimmick. People are already upset that the Renewable Energy Credits for all of Vermont's wind projects and most of Vermont's large solar projects are sold out of state. Nobody can point to a Vermont wind turbine and say, "That is renewable energy for Vermonters." Rather than reigning in that credit system, this Stupid Heat Standard enables another, even more convoluted new system. Please:

- Allow only in-state produced RNG.

- S.5 requires the use of more biofuels which entail enormous land conversion and factory farm issues. Vermont's Fuel Dealers are already using more biofuels in their fuel oil mix. They don't need to be forced to do it.

Vermont has real issues related to energy that should be the priority. This Stupid Heat Standard fails to address those issues and is nothing but a distraction. It is dangerous as it places nearly all our energy eggs into one basket: electricity. It is poor public policy that places Vermonters, particularly low income Vermonters at risk. It is a bad idea, plain and simple.

That said, it is evident that the skids have been greased for this bill to pass and it will be enacted into law. I could have submitted a lot of credible information about the failure of credit markets to reduce emissions, but didn't want to waste my time since this bill is a done deal.

Legislators will get to claim they did something about climate change. Leadership will boast that Vermont is first in the nation. Proponents will get to make money selling it to other states. Vermonters will be paying the price of this stupid and corrupt policy which is really all about money.

Now to Questions:

1. To whom do low and moderate income fuel customers disclose their income? If a heat pump installer sells a credit to a fuel dealer, how many

times will that information get transferred? Who keeps the database? How secure is it?

2. What real world Vermont data exists to show that installing an electric heat pump reduces fossil fuel emissions? Does the data support the modeling? What kinds of high electric bill shocks are happening to people with heat pumps during the coldest months?

3. Heat pumps cost a lot of money, and the subsidies pay only a portion. Are people living paycheck to paycheck supposed to take out loans and incur debt to enable an installer or fuel dealer to earn credits?

4. Will a fuel subsidy program for electric heat customers be created, similar to LIHEAP, as Vermont's electricity customers will be using more electricity for heating, cooling, hot water, and vehicle charging?

5. What options are available for customers who use propane?

6. In addition to a gasoline generator, I also have a propane generator. How will the Stupid Heat Standard allow for my different usage of propane for heating versus electricity generation for battery charging and running heavy machinery?

7. What is the plan for small propane companies whose businesses will be forced out under this bill?

8. Will there be job training, or any assistance for the owners of the family fuel delivery companies whose shut-down will be a consequence of this bill? For those who stay in business, will there be transition funding to assist these companies with the costs of doing so?

9. Where are all the electricians, plumbers and contractors who are to be hired to do weatherization and new technology installations?

10. Once this is in place, why can't I just drive over to New Hampshire and get my propane cylinders filled?

11. An unelected Climate Council has made a recommendation that is being pushed to an unelected PUC to develop. How is the legislature going to

hold the Climate Council and the PUC accountable for the decisions they are making?

12. The Climate Council has a Science & Data subcommittee and a Just Transitions subcommittee. Why is it necessary for the PUC to create two new subcommittees whose charge mirrors the subcommittees already in place at the Climate council?

13. Why is the PUC charged with hiring a consultant to do a life-cycle emissions analysis when ANR has contracted for the same thing?

14. Will CO_2 emissions from burning wood be accurately accounted for rather than excluded as "biogenic"? ANR's life-cycle emissions analysis contractor will use Vermont's in-state GHG emissions inventory to quantify the impacts from biomass within the state boundary. The contractor indicates in a July 9th, 2022 email that ANR does not expect the contractor to include "biogenic" CO_2. For combustion of biomass (e.g., stationary combustion of wood), there will be GHG emissions from methane and nitrous oxide that will be included. The contractor offers an option to track biogenic carbon dioxide from combustion. Please:
    - Explicitly require of ANR and the PUC an honest accounting of biogenic CO_2 emissions. This will definitively show that McNeil and Ryegate biomass plants are major sources of CO_2 emissions in Vermont.[7]

The threat of litigation if Vermont fails to meet the Global Warming Solutions Act emissions reduction mandates is being held out as the imperative to pass the Stupid Heat Standard. This threat is overblown. How many times has Thomas Melone of Allco Renewable Energy sued state government? Well, the PUC has been sued twice in Federal Court along with the governor and other state agencies, and ANR has also been sued in Superior Court. The most likely response

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[7] -- The CO_2 emissions of McNeil are 503,000 metric tons.
-- The CO_2 emissions of an automobile are annually about 4.6 metric tons.
-- McNeil's CO_2 emissions are equivalent to about 109,347 automobiles. (More than half the registered automobiles in Vermont)
-- Ryegate's air pollution emissions are a bit less than half of McNeil's, so assuming the CO_2 emissions are similar, about 200,000 metric tons of CO_2 or about 35,000 automobiles.
-- Add McNeil and Ryegate and the two plants are putting out CO_2 emissions equivalent to about 145,000 automobiles, or about 2/3rds of all the registered automobiles in Vermont, 193,407 in 2022.

to a lawsuit will be a countersuit challenging the constitutionality of the Global Warming Solutions Act. The threat of litigation should not be a driving force in the legislature's actions to address climate change.

Thank you for hearing my testimony. I would be glad to answer questions.