

Building Performance Professionals Association of Vermont

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December 10, 2019

Mr. Thomas Knauer, Policy Director
Vermont Public Utility Commission
112 State Street, P.O. Drawer 20
Montpelier, VT 05620-2701

Re: Case No. 19-2956-INV – Investigation Pursuant to Act 62, Comments Following Third Workshop

Dear Mr. Knauer,

Representing the Building Performance Professionals Association, Richard Faesy and I would like to offer into the record the following comments. These are less in response to specific issues raised in the third workshop on November 22nd, than to the general interest of advancing the goals of Act 62 and providing guidance to the Public Utility Commission and the Vermont Legislature.

The Building Performance Professionals Association is a business trade organization promoting and representing the weatherization industry in Vermont.

Our purpose is not only to promote our member businesses, but also to promote and maintain strong adherence to current standards of building science as developed and promulgated by the Building Performance Institute (BPI), a national building science and energy efficiency standards development organization. BPI develops regional and national standards, and methodologies for safely and effectively insulating, air-sealing, and maintaining air quality and structural and weather integrity in existing buildings. Our work, therefore, is to promote weatherization and building improvement – with the highest building science, safety, and environmental standards in mind. This is written right into BPPA's mission statement.

Like many people in the energy and weatherization industry, members of the BPPA Board have been very focused on finding effective strategies for reducing greenhouse gas emissions. Weatherization and

building envelope efficiency is an important part of addressing this problem. Weatherization alone, however, usually cannot obtain more than a 20% reduction in fuel usage and greenhouse gas emissions.

Seeking much deeper cuts in emissions, the BPPA Board developed the Zero Energy Now program to augment and amplify the benefits of weatherization by combining them with superefficient heating systems (mostly heat pumps) and renewable energy (mostly solar) to transform a home's energy portfolio from one that is largely fossil fuel dependent to one that is predominantly, and in some cases virtually exclusively, renewable.

Program wide, Zero Energy Now pilot efforts in 2016 and 2017 delivered a 64% reduction in fossil fuel use and reliance on the electric grid (a substantial portion of which is still powered by fossil fuels); in individual homes, these were reduced by as much as 98%. A key provision of the Zero Energy Now concept is that it provide a mechanism for getting a home off of fossil fuel *affordably*. The combination of building improvements, superefficient appliances, and renewable generating capacity purchased by the homeowner allows the home's energy bills to be radically reduced as well. This means that the often thousands of dollars in pre-project energy costs can be made available to pay for financing the cost of the energy improvements.

Of the 24 homes for which we have complete data, four could be fully financed for a cost substantially less than the pre-project energy costs – leaving the homeowner with a net *gain* after the project was complete. Four other projects, if they were financed, would cost the homeowner less than \$35 per month more in energy-plus-loan costs than their previous energy bills to achieve the aforementioned reductions.

We are convinced that, with the right regulatory structures in place and some modest incentives, this largely market based mechanism for getting Vermont's existing housing stock off of fossil fuel could be brought to scale and to significant effect in Vermont's fight against climate change.

BPPA is now preparing to roll out Zero Energy Now on a much larger scale. The success of this effort will depend significantly on two critical factors.

The first is the cooperation and collaboration of Vermont's utility community – both the distribution utilities whose net metering and group net metering policies and power purchase programs have been critical to the success and particularly the affordability of our program, and Efficiency Vermont, whose programs, incentive opportunities, and general support of our mission and of the Zero Energy Now concept has been instrumental. Without these elements in place, Zero Energy Now would have little viability and no scalability in the market.

The other critical factor is regulators and policymakers who recognize and support the value of efforts such Zero Energy Now and their potential to have a direct and powerful impact on Vermont's climate goals. Zero Energy Now was designed with Vermont's comprehensive 2050 energy goals in mind. It is important that Vermont's regulators and policymakers create a regulatory environment that takes appropriate steps to accommodate efforts such as this.

With this in mind we ask that you consider the following points which we at BPPA support:

- 1) Support Efficiency Vermont's request that the guiding metric for defining savings be greenhouse gas reductions rather than simple efficiency;

- 2) Support DU & EEU requests for flexibility and greater collaborative capacity so that they can maximize efforts to meet emissions goals and collaborate with each other in supporting program efforts such as Zero Energy Now;
- 3) Develop and structure a regulatory process that looks at the big picture with regard to climate goals, and, as policymakers and regulators, look for ways to support innovative programs such as Zero Energy Now, which have considerable built-in market-based affordability;
- 4) To that end – and as a critical current example – maintain net metering and especially group net metering policies for the immediate future. We recognize that distribution utilities have difficulties with these policies and we are sympathetic to their concerns, but without creating or allowing some similar or alternative strategy for homeowners to “buy in” to their renewable energy generation, Zero Energy Now will not work. It is important that this program not be cut off at the knees before it has a chance to get up and running.

Realizing that we may be submitting these comments somewhat late in the process for this year, we appreciate whatever consideration may be given to them as part of this process.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas S. Perry". The signature is fluid and cursive, with a large, stylized initial "T" and "S".

Thomas S. Perry
Treasurer and Board Member,
Building Performance Professionals Association of Vermont