



To: Members of the Energy Efficiency Advisory Committee

Fr: PathZERO Energy, Doug Denny-Brown, Co-Founder

Re: Written Public Comments Adding to June 2, 2021 Oral Comments

Dear Committee Members.

I provide these comments today on behalf of PathZERO Energy in addition to oral comments on June 2, 2021. PathZERO Energy, Inc. (“PZE”) is an energy efficiency company serving commercial and industrial customers based in Bedford, Massachusetts, that is introducing what should be a ground-breaking energy efficiency technology for commercial and industrial, and perhaps other business customers as well. PathZERO Energy’s name was chosen to reflect its goal is to assist businesses and the Commonwealth on their path to net zero and zero emissions. PathZERO Energy is run by co-founders Doug Denny-Brown, with experience at the Department of Public Utilities and within energy efficiency and solar development, and David Berardi, with a career running energy management and controls companies.

I and we at PZE thank the EEAC for the opportunity to submit written or oral comments in the public listening and executive sessions and otherwise, and hope our comments will assist the EEAC and the Program Administrators to make adjustments to the existing core three-year program to enhance it further and allow it the best chance to meet climate change, legislative, and other key goals and priorities. We understand it is has a particularly difficult past year or so due to COVID on top of everything, for everyone, especially the Program Administrators, as they maintain the existing program, try to meet their savings goals, and work on the new three-year plan simultaneously, but also know that we are at an inflection point with no time to lose to decrease electricity usage.

For PathZERO Energy, its primary means of assisting its C&I customers and the Commonwealth to achieve electricity savings is through importing a unique cutting edge energy efficiency technology from a manufacturer in the United Kingdom as the Master Distributor for the United States. This established energy efficient voltage optimization and control technology, named “MAX,” was specifically designed to achieve electricity savings through voltage reduction using a unique patent-protected “third winding” that is added to typical double wound transformer coils and allows the process to be 90% more efficient than traditional voltage optimization and control technology. This efficiency and patented design save between 5% and 10% of electricity on a whole site basis through a “back EMF” process on the low end of an existing transformer, or can be combined with a highly efficient amorphous core HV transformer for additional savings. This copper wound equipment has an expected life of 20-50 years, similar to traditional transformers, and is proven, having been deployed in the United Kingdom by the thousands over the last decade. The energy efficiency savings is benchmarked by the manufacturer using traditional Evaluation, Measurement, and Verification protocols using the International Performance and Measurement Valuation Protocols in a manner similar to that used by utilities and other energy efficiency companies. This technology was submitted to the Massachusetts Technology Assessment Committee run by the Program Administrators in December 2019, and PZE was informed of its approval, on a custom basis, as an energy efficiency incentive eligible

device in early January 2021 within the Commercial and Industrial Referred Technologies sector of Masssave.

After much time and effort, and reach out to MTAC and the utilities, we were and still are very excited about the ability to roll out this technology in Massachusetts and are working with a premier Massachusetts energy facilitator who assists the utilities and large C&I customers to identify and implement worthwhile energy efficiency measures using the MAX technology. However, while numerous large C&I customers have been identified and met with, and are excited about implementing the technology, efforts to implement the technology have been slow. While several utility energy efficiency representatives were excited about MAX's potential and proactive, these actions were not universal, and efforts to obtain on-site voltage information and verify the potential of the MAX equipment and appropriate energy efficiency incentives, and the lack of a utility company energy efficiency study have stalled implementation, with the end result being that eighteen months after submitting MAX to MTAC, and six months after approval, the potential of this technology remains largely sidelined, albeit temporarily.

We submit these comments not to lament the time it has taken to bring this technology to market, nor to criticize the utility representatives, who have a lot on their plates and generally been helpful, but instead to help them by pushing for more financial and staffing resources for MTAC and the PAs. We also ask the Committee to urge or require PAs to put an emphasis on a speedy and thorough MTAC review, with expedited third party testing or sufficient supporting evidence that will assist the best new or unused energy efficiency technology in coming to market to save electricity as soon as reasonably possible. Perhaps the PAs could even provide a regular report to the Committee about the new energy efficiency technologies in the MTAC queue, with descriptions, potential, time in the queue, etc With LEDs being phased out, and much of the existing low hanging energy efficiency fruit being picked over the last decade, we need to find new fruit, and then figure out how best to pick it, and quickly and efficiently!

PathZERO Energy also wants to indicate, among the many previously filed written and given oral comments that it supports, in particular, those filed by the The Boston Green Ribbon Committee on February 23, 2021, which highlighting the needs and potential within the large commercial and industrial ("C&I") space to urge more ambitious policies to achieve deeper and long-lasting energy and emissions reductions within this sector.

Again, we would like to thank the Committee Members for the opportunity to submit written comments in the public listening sessions and workshops held throughout the past few months, and hope our comments have been helpful. We also stand ready to provide additional information if helpful.

Thank you for your time,

Douglas Denny-Brown

Co-Founder

PathZERO Energy, Inc.

Cell: 781-760-1097

Dougdb@pathZEROenergy.com

<https://www.pathzeroenergy.com>