HANDY LAW LLC

Memorandum
From: Seth Handy
To: Jonathan Schragg
Date: August 2017
Regarding: Rhode Island Division of Public Utilities and Carriers & Office of Energy Resources Power Sector Transformation Q&A re Beneficial Electrification

I respond on behalf of Handy Law to the supplemental request for comment issued on July 31. We do not represent New Energy RI (NERI) with regard to these proceedings as of this time. We also, admittedly, do not have the expertise of others on these matters. We have reviewed the existing comments and find them thorough and informative and appreciate them all. We will be brief in supplementing those comments as we hope may be useful.

1) Thermal: Much more attention is paid to EV's in the comments than is given to the electrification of our thermal energy load. However, the State Energy Plan highlights thermal as one of the three energy streams that need to be addressed moving forward (together with electricity and transportation). Despite the relative lack of attention given to the thermal sector, it comprises roughly a third of our total energy demand in RI and generates 1 million tons more CO2 per year than our electricity supply. Moreover, other jurisdictions (mainly in Europe, as I understand) have made much more progress in addressing the thermal energy sector than we have, so we have a lot to learn and benefit from precedent. While it is bad that we're behind on addressing thermal energy, our lack of progress to date also presents us with great, untapped opportunity. Danny Musher from OER has convened and led the Rhode Island Renewable Thermal Advisory Working Group. We have participated in that group and suggest coordination between that process and this one to ensure that RI benefits from all expertise assembled on this issue. Here is a link to the final report. http://www.energy.ri.gov/documents/Efficiency/Rhode%20Island%20Renewable%20Thermal%20Market%20Development%20Strategy%20January%202017.pdf. The following recommendations may be of particular interest: 1) setting renewable thermal goals consistent with our GHG emissions targets; 2) incentives for conversion to renewable thermal in the commercial and industrial

building sectors; 3) expansion of HEAT loan to encompass renewable thermal technologies & thorough integration with the RI Infrastructure Bank finance programs (EBF & CPACE); and 4) development of a community-based bulk procurement program for renewable thermal.

2) Integration with Time of Use Rates: We strongly agree with the comments that timely implementation of time of use rates is an extremely important parallel action with the implementation of beneficial electrification. This significant added electrical load must be accompanied with incentives to draw the load in off-peak periods (e.g., charge cars overnight), to the extent feasible.

3) Demand for renewables: The load to be anticipated from beneficial electrification puts great pressure on Rhode Island to deliver on its current renewable energy goals and expedite and enhance development of even much more local renewable energy. If we fail to provide sufficient added supply of distributed renewables, we will sacrifice much of the value identified in PUC Docket 4600 and may deepen the existing threat to our energy security. In addition to improving our statutory programs to better reflect the value of distributed energy resources (as recommended in Docket 4600), enhancement of local renewables requires immediate resolution of present obstacles to project development: utility business plan (another element of Transforming Power Sector), distribution system planning to facilitate and reduce the cost of interconnection (another element of Transforming Power Sector) and improved policies for siting.

4) Proper Valuation: Regulators should contemplate and follow the cost benefit framework laid out in Docket 4600 when implementing policies related to beneficial electrification. One value that is clear and yet is under-accounted are the health benefits from the conversion. If we do not adequately incentivize the transformation of our transportation and thermal energy sectors our society will continue to pay higher health care bills resulting from fossil fuel emissions.

5) Integration with regional energy planning: The issue of beneficial electrification is also integrally related to regional energy planning processes. The concern is that the increased load will lead ISO-NE to require more investment in regional supply and transmission capacity that we seek to avoid through deployment of local energy efficiency and distributed generation. The threat relates to ISO's current inability to track and recognize the capacity-related impact of local distributed energy resources that are not large enough to register with ISO or do not register for other reasons (including the regulatory burden). This is especially

problematic for behind the meter applications which could be very common with the implementation of beneficial electrification. ISO must develop the means to credit the real capacity impact of DERs so that our efforts to supply beneficial electrification through local energy resources succeed in driving down the cost of investments in far off supply and T&D capacity.

Thank you for inviting and considering our comments.