

# Conservation Law Foundation • Vermont Public Interest Research Group

April 16, 2014

Susan Hudson, Clerk  
Vermont Public Service Board  
112 State St., Drawer 20  
Montpelier, VT 05620-2701

Re: EEU-2013-01 Initial Budget Recommendations

Dear Ms. Hudson:

Conservation Law Foundation (CLF) and Vermont Public Interest Research Group (VPIRG) strongly support the Board approving a budget for Vermont's Energy Efficiency Utilities (EEUs) that will ramp up to and maintain the acquisition of 3% annual efficiency savings as modeled in Scenario #3. A budget that will acquire the 3% annual savings compared to annual load is fully justified and will acquire the reasonably available cost effective energy efficiency savings as required by Vermont law. 30 V.S.A. § 209.

### Savings Level Supported by Potential Study Update

A budget set to acquire 3% annual savings puts Vermont on track to meaningfully reduce costs and pollution. The savings acquired fall well within the energy efficiency potential as recently updated by the Public Service Department. The 2013 Vermont Energy Efficiency Potential Update shows potential demand side management savings statewide between 1.4 million MWh for the maximum achievable potential and 1.8 million MWh for the technical potential for a cumulative total of between 23% and 30% of the 2033 MWh Sales. (Table 1-1 DSM potential savings detail). The savings projected for Scenario 3 are estimated at acquiring between 1.2 and 1.3 million MWh by 2033. While this is less than the maximum achievable, the potential study demonstrates the overall feasibility of acquiring this level of savings.

### Cost Effectiveness

A budget level that would acquire 3% annual savings is cost effective and would deliver savings with a benefit to cost ratio over 2.0. The cost effectiveness of the measures in the Scenario 3 model return societal net benefits compared to costs of 2.34. For every dollar invested, \$2.34 in societal net benefits are acquired. Savings include reduced pollution and reduced electricity and transmission costs. The moderately higher cost-benefit ratios of scenarios 1 and 2 do not justify a lower budget or the reduced commitment to energy efficiency that those scenarios would deliver. CLF and VPIRG have in the past cautioned against relying too heavily on the cost-benefit ratio as it leads to skimming the proverbial cream with a lower budget, and fails to deliver the deeper and longer lasting savings that are needed. Scenario 3 provides a meaningfully greater net benefit to Vermont and Vermont ratepayers at a very favorable cost-benefit ratio. At a time when electricity supply is rapidly transitioning, the increased value of energy efficiency savings are more important. The 3% savings level puts Vermont on track with other states in the region in terms of energy efficiency savings and better ensures that Vermont will continue to bear a smaller share of any new and expensive transmission projects that may be developing to meet reliability and clean energy needs in the region.

### Meets Efficiency Needs

The savings acquired under Scenario 3 better meets Vermont's efficiency needs. Under Scenario 1 or 2 the savings acquired would be fairly stagnant and provide limited new opportunities for Vermonters to reduce costs and pollution. In contrast, Scenario 3 grows energy

efficiency resources at a moderate pace consistent with Vermont's needs to address climate change and reduce greenhouse gas emissions. Vermont statute calls for significantly reducing greenhouse gas emissions and targets a 50% reduction by 2028. 10 V.S.A. sec. 578. Energy efficiency continues to provide the lowest cost means to reduce greenhouse gas emissions, delivering GHG reductions at a fraction of the cost of other resources. Vermont's Comprehensive Energy Plan calls for meeting 90% of Vermont's energy supply with renewable resources by 2050. While this is an ambitious goal, it is made easier with significantly increased investments in energy efficiency. Every kilowatt hour saved through energy efficiency is a kilowatt hour that will not require new investment in renewable power. Vermont's Total Energy Study<sup>1</sup> also supports the significant increase in energy efficiency that a budget based on Scenario 3 would allow. The study notes at pp 29-30: "Reducing the state's total energy demand will be an essential component of all technology pathways that achieve the State's greenhouse gas and renewable energy goals." It is clear that without robust energy efficiency resources Vermont will be ill equipped to meet its statutory and policy goals to reduce emissions and meet our clean energy obligations.

The moderate increase to acquiring 3% of load also moves Vermont to a level of efficiency savings being acquired by other states in the region. For example, as reported by the American Council for an Energy-Efficient Economy (ACEEE), Rhode Island's three year savings goals provide for acquiring 2.5% savings from efficiency in 2014.<sup>2</sup> ACEEE also reports: "Massachusetts' approach has resulted in one of the most ambitious fully-funded state savings targets, annual electric savings targets ramping up from 2.5% to 2.6% from 2013-2015."<sup>3</sup> For Vermont, only Scenario 3 comes close to the savings our neighbors in other New England states are realizing. Even under Scenario 3, the savings for the first three years are below 3% and barely keep Vermont on par with the savings in Massachusetts. The savings for Scenario 1 and 2 fall well below the savings of these other states. The fact that other states are acquiring efficiency at this level shows the soundness of the Scenario 3 level of savings for Vermont.

#### Behavior Measures and Smart Grid Investments

CLF and VPIRG strongly support robust inclusion of behavior measures in the EEU budget. Behavioral measures are valuable additional resource for energy efficiency. They target energy conservation and supplement the many hardwired technology measures that have been so successful in achieving efficiency savings. A number of other states and utilities rely on these measures to reduce energy use and they have a proven track record over a number of years in a variety of markets. They represent a fairly mature and proven resource measure that is appropriate for Vermont to utilize. This is particularly true since Vermont has implemented statewide smart meters and these measures have the ability to help both customers and utilities better use the smart meter technology that is in place enabling even greater savings from energy efficiency at lower cost. The behavioral measures can add value to Vermont's smart meter investments and help customers use the new data that is becoming available. CLF and VPIRG support the level of behavior measures included in Scenario 3, with a portion of these investments targeted for research and development activity over the next 2 years that will specifically identify how best to use behavioral measures to maximize Vermont's smart grid investments. Behavioral measures may well prove to be effective not just in their own right, but also in complementing and increasing the effectiveness of other measures, including efforts to

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[http://publicservice.vermont.gov/sites/psd/files/Pubs\\_Plans\\_Reports/TES/Total%20Energy%20Study%20-%20Leg%20Report%20FINAL.pdf](http://publicservice.vermont.gov/sites/psd/files/Pubs_Plans_Reports/TES/Total%20Energy%20Study%20-%20Leg%20Report%20FINAL.pdf)

<sup>2</sup> <http://www.aceee.org/sector/state-policy/rhode-island>

<sup>3</sup> <http://www.aceee.org/sector/state-policy/massachusetts>

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reduce peak load and utilizing smart meter data to better target marketing and consumer information to facilitate and optimize use of additional hardwired measures. Using a portion of the money allocated to behavioral measures to test various designs with the ultimate goal of maximizing their effectiveness at driving behavior change and increasing the overall effectiveness of the EEU programs simply makes sense.

Thank you for your consideration of these comments.

Sincerely,

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