

## Office of the Consumer Advocate Statement of Legal Position Regarding Geo-Targeted Energy Efficiency Pilots and the 2019 Energy Efficiency Program Plan Update

A review of the relevant dockets before the New Hampshire Public Utilities Commission reveals that the geo-targeting of demand side measures or distributed energy resources, increasingly described as non-wire alternatives (NWAs) has received extensive treatment in dockets before the Commission related to: (1) restructuring; (2) least cost integrated resource planning; (3) net metering; and (4) energy efficiency. However, to date, no utility in New Hampshire has successfully identified a candidate capital upgrade for deferral or avoidance through the use of geo-targeted demand side measures. Below is a summary of excerpts from the various instances where such treatment has been provided to NWAs, or more broadly, targeted energy efficiency, conservation, or other demand side management investments to reduce distribution system costs, along with recommendations regarding the path forward for New Hampshire's ratepayers.

### 1. Restructuring and the Role of Targeted Demand Side Management (DSM)

#### A. The New Hampshire Public Utilities Commission's Restructuring Plan

In its original restructuring plan, issued more than 20 years ago, the Commission explicitly recognized the unique value of energy efficiency and other demand side measures to reduce distribution system costs that would normally accrue to ratepayers. For example, in 1998, as a result of the belief that "the competitive market will be much more successful in serving the need for energy efficiency than the utility funded program of the past," the Commission's Restructuring Plan directed the utilities to "cap the levels of DSM spending for each utility at their latest approved levels and, as they prepare upcoming energy efficiency filings, to keep in mind [the Commission] expect[s] ratepayer funded energy efficiency programs to be phased out within two years from the implementation of retail choice."<sup>1</sup> However, the Commission explicitly preserved targeted DSM programs that would defer or eliminate otherwise necessary distribution system investments, stating:

We do find it appropriate for transmission and distribution companies to integrate specific targeted energy efficiency programs, along with distributed generation, into their transmission and distribution planning. *We believe there are instances when targeted demand side management can reduce capital expenditures by deferring or avoiding costly transmission or distribution investments.* We expect the regulated transmission and distribution companies to conduct that type of analysis and planning as they consider system improvements.<sup>2</sup> (*Emphasis added.*)

#### B. New Hampshire's Restructuring Statute and Targeted DSM

Relatedly, the statute that addresses implementation of restructuring is RSA 374-F:4. When adopting that statute in 1998, the General Court included a provision directly related to NWAs, stating in its original form that "[t]argeted conservation and load management programs and incentives that are part of a strategy to minimize distribution costs shall be included in the distribution charge, and

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<sup>1</sup> New Hampshire Public Utilities Commission. Restructuring New Hampshire's Electric Utility Industry: Final Plan. (February 1997) Pages 112. Available at: <https://drive.google.com/file/d/1rhTwjKB6UZ3OsX8BHlojQOnWfOnf675G/view?usp=sharing>

<sup>2</sup> *id.* at 112-113.

not included in a system benefits charge.”<sup>3</sup> Several years later, in 2007, the general court amended that clause of the statute to read, instead, as it does today:<sup>4</sup>

Targeted conservation, energy efficiency, and load management programs and incentives that are part of a strategy to minimize distribution costs may be included in the distribution charge or the system benefits charge, provided that system benefits charge funds are only used for customer-based energy efficiency measures, and such funding shall not exceed 10 percent of the energy efficiency portion of a utility's annual system benefits charge funds. A proposal for such use of system benefits charge funds shall be presented to the commission for approval. Any such approval shall initially be on a pilot program basis and the results of each pilot program proposal shall be subject to evaluation by the commission.

Both versions of the statute stress the value of targeted DSM programs to minimize distribution costs, with the primary difference between the two being the funding source.<sup>5</sup> In the initial version of the statute, targeted programs were required to be funded via distribution rates. In the more recent version, targeted programs may be funded through distribution rates or the system benefit charge, so long as any system benefit charge funding is only used for customer based energy efficiency measures and is limited to ten percent or less of a utility’s system benefit charge-derived energy efficiency funds.

The General Court’s amendment of the statute to allow recovery geo-targeted demand-side investments through the System Benefits Charge (“SBC”), rather than relying solely on distribution rates, amounts to a determination by the General Court that the proper context for piloting such projects is the regulatory framework, marketing channels, and workforce capacity that New Hampshire has already developed for its SBC-funded energy efficiency programs. Any other method for piloting such programs would be unnecessarily duplicative and not the most cost-effective use of ratepayer funds. This suggests the proper forum for revising the programs to embrace geo-targeting would be the instant docket.

Furthermore, the General Court’s amendment of the statute to clarify that “any such approval shall initially be on a pilot basis,” suggests that such geo-targeting programs should be piloted prior their full-scale integration into least cost integrated resource planning, or integrated distribution system planning.<sup>6</sup> **As a means of safeguarding against even further delays regarding integration of geo-**

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<sup>3</sup> N.H. Rev. Stat. Ann. § 374-F:4, VIII (e) (as appearing from 1998-August 2007).

<sup>4</sup> N.H. Rev. Stat. Ann. § 374-F:4, VIII (e) (as appearing from August 2007 to present).

<sup>5</sup> Additionally, the more recent version of the statute requires any targeted DSM programs using SBC funding to gain Commission approval and be treated and evaluated as pilots.

<sup>6</sup> *Supra.* at note 4. To clarify, the fact that pilots are ongoing should not preclude full-scale integration of non-wires alternatives into least cost integrated resource planning. The two approaches represent similar, but different strategies towards the same goal, and lessons-learned from the pilots could be applied in real time to analysis of NWAs within the least cost integrated resource planning framework. The statute clarifies that pilots must happen first, **but it does not require** the pilots (most of which will take 3-7 years from planning to completion) to have been completed prior to broader embrace of geo-targeting of NWAs in the least cost integrated resource planning process.

**targeting the context of the least cost integrated resource planning,<sup>7</sup> or grid modernization,<sup>8</sup> the Commission should make clear that now is the time to pilot geo-targeting of our energy efficiency programs as a means of building institutional capacity for the regulators and the regulated so they can meaningfully embrace NWAs more broadly as a central component of future least cost integrated resource plan filings.**

With regard to the ideal funding source for such geo-targeted programs, the cost of NWA projects should be recovered through distribution rates as an operating cost via a tariff rider because that mechanism aligns best with the ratepayers to whom the costs and benefits would have otherwise accrued if the conventional solution had instead been embraced by the utility. It also aligns with the intent originally expressed in the restructuring statute, and preserved even after its revision. In the initial pilot however, SBC funding might suffice so long as the appropriate discount rate is then applied to that funding. In the 2019 Update of the Statewide Plan, the joint utilities have suggested lowering the SBC charge 17 percent below what had been previously agreed to.<sup>9</sup> Instead, the Commission should direct that a portion of those funds should be applied towards NWA project deployment.

## **2. Least Cost Integrated Resource Planning and Targeted DSM**

### **A. Statutory Basis for Targeted DSM through Least Cost Integrated Resource Planning**

The statutory subdivision directly relating to restructuring's emphasis on targeted DSM is embodied in RSA 378:37-39, which sets forth the process for least cost integrated resource planning.

**RSA 378:37** identifies the state energy policy of New Hampshire as "meet[ing] the energy needs of the citizens and businesses of the state at the lowest reasonable cost [and] maximize[ing] the use of cost effective energy efficiency and other demand side resources."<sup>10</sup>

**RSA 378:38** details the subject matter of the least cost integrated resource plans (LCIRP) as including, among other things: "A forecast of the future demand for the utility's service area... [a]n

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<sup>7</sup> See *infra* at section 2. This Commission first directed that a geo-targeting analysis in the context of least cost integrated resource planning more than eight years ago.

<sup>8</sup> See *infra* at section 3. This Commission received the Report of the Grid Modernization Working Group more than 18 months ago. In Massachusetts, it took more than five years of stakeholder engagement, straw proposals from regulators, litigation over the basic framework, more stakeholder engagement, proposals from the utilities, and litigation over the proposals to get from the working group report to a final order. New York experienced a similar timeline on the road to their distributed system implementation plans.

<sup>9</sup> Joint Utilities. 2019 Energy Efficiency Plan Update. (September 2018) Pages 10-11. Available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136\\_2018-09-14\\_EVERSOURCE\\_UPDATED\\_EE\\_PLAN.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2018-09-14_EVERSOURCE_UPDATED_EE_PLAN.PDF); See also, Order No. 25,932 at 52-54. (Describing the SBC rate from 2017-20 for each electric distribution utility) Available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-137/ORDERS/15-137\\_2016-08-02\\_ORDER\\_25932.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-137/ORDERS/15-137_2016-08-02_ORDER_25932.PDF); see also Order No. 26,095 at 4. (Stating: "the electric utilities propose an SBC rate of \$0.00275 per kWh" and "the 2019 [electric program] funding level is \$49,488,000"). available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/ORDERS/17-136\\_2018-01-02\\_ORDER\\_26095.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/ORDERS/17-136_2018-01-02_ORDER_26095.PDF)

<sup>10</sup> N.H. Rev. Stat. Ann. § 378:37.

assessment of demand-side management programs, including conservation, efficiency, and load management programs... [and a]n assessment of distribution and transmission requirements.”<sup>11</sup>

**RSA 378:39** sets forth the criteria the Commission shall consider in reviewing LCIRPs for approval, including “environmental, economic, and health related impacts of each proposed option,” and suggests that “[w]here the Commission determines the options have equivalent financial costs, equivalent reliability, and equivalent environmental, economic, and health-related impacts, the following order of energy policy priorities shall guide the Commission’s evaluation: [1] Energy efficiency and other demand-side management resources; [2] Renewable energy sources; [and] [3] All other resources.”<sup>12</sup>

When read together and understood from a historical perspective, the Restructuring Act, the Commission’s Restructuring Plan and the LCIRP statute collectively direct the Commission to require that the utilities earnestly consider opportunities for NWAs in the distribution system planning process. In fact, several of the Commission’s decisions to date have pushed the utilities’ LCIRPs in that direction but, in contrast to the successful projects identified elsewhere in the Northeast,<sup>13</sup> the New Hampshire utilities have not identified any viable NWA candidates. Below is a brief review of the Commission’s previous requests regarding NWAs in the LCIRP process.

## **B. Commission Direction Regarding Targeted DSM Analysis in Least Cost Integrated Resource Plans**

The Commission has been explicitly directing the electric distribution companies to analyze meaningfully specific capital investments to defer or eliminate through targeted DSM as part of their LCIRPs since at least 2010. Below is a review of the relevant orders and related filings.

### **Unitil Energy System and Least Cost Integrated Resource Planning**

In August 2009, Unitil Energy Systems filed a proposal pursuant to RSA 374-G to invest in distributed energy resources. In a June 2010 order, the Commission approved in part and denied in part Unitil’s request for investment in, and rate recovery of, those distributed energy resources.<sup>14</sup> Notably

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<sup>11</sup> N.H. Rev. Stat. Ann. § 378:38. It is worth noting that the statute was revised in 2015 to reference “institution or extension of electric utility programs designed to ensure a more reliable and resilient grid to prevent or minimize power outages, including but not limited to, infrastructure automation and technologies.”

<sup>12</sup> N.H. Rev. Stat. Ann. § 378:39. It’s worth noting that the statute was revised in 2014 to provide for the order of policy priorities that must guide the Commission’s evaluation of the LCIRPs.

<sup>13</sup> See generally Neme, C. and Grevatt, J. Energy Futures Group, on behalf of Northeast Energy Efficiency Partnerships’ Evaluation, Measurement, and Verification Forum. Energy efficiency as a T&D Resource: Lessons from Recent U.S. Efforts to Use Geographically Targeted Efficiency Programs to Defer T&D Investments. (January 2015) Available at: [https://neep.org/sites/default/files/products/EMV-Forum-Geo-Targeting\\_Final\\_2015-01-20.pdf](https://neep.org/sites/default/files/products/EMV-Forum-Geo-Targeting_Final_2015-01-20.pdf); see also Neme, C. and Sedano, R. Regulatory Assistance Project. U.S. Experience with Efficiency as a Transmission and Distribution System Resource. (February 2012) available at: <https://www.raponline.org/wp-content/uploads/2016/05/rap-neme-efficiencyasatanddresource-2012-feb-14.pdf>.

<sup>14</sup> Order No. 25,111, at 31-32. (June 11, 2010) available at: <http://www.puc.state.nh.us/Regulatory/Orders/2010orders/25111e.pdf>.

however, the Commission's order explicitly addressed NWAs, directing Until to provide greater transparency regarding the Company's planned capital investments in its next LCIRP:<sup>15</sup>

The OCA in its closing statement recommended that the Commission require UES to address in its next least cost resource plan the role played by DERs in meeting T&D needs. We agree with the OCA's recommendation and direct UES to include in its next LCIRP its strategy for minimizing T&D costs and, if relevant, the role played by DER investments in that strategy along with details of the T&D circuits or substations likely to benefit from the distributed energy resource investments. A basic strategy for minimizing T&D costs might identify distribution and local network service transmission facilities (circuits and substations) ranked by need for reliability or capacity upgrades. This ranking could be followed by an examination of those facilities where improvements may be needed in the foreseeable future, but are not so urgent as to require immediate investments in T&D infrastructure. For these less urgent but foreseeable T&D capacity needs, UES should evaluate non-wires alternatives (DERs) that may contribute to T&D reliability or capacity solutions by deferring or avoiding potentially more costly investments in T&D infrastructure. DER investments might produce additional value for ratepayers and the state, such as a reduction in the cost of emissions offsets or economic development benefits, which should be identified.

In response to the Commission's directive, Until filed a 2013 LCIRP which extensively detailed the utility's planned capital investments.<sup>16</sup> To Until's credit, the LCIRP provided a rather extensive circuit-specific analysis in Appendices A-I "identify[ing] distribution and local network service transmission facilities (circuits and substations) ranked by need for reliability or capacity upgrades ... [and] an examination of those facilities where improvements may be needed in the foreseeable future."<sup>17</sup> However, the Until's "evaluat[ion of] non-wires alternatives (DERs) that may contribute to T&D reliability or capacity solutions by deferring or avoiding potentially more costly investments in T&D infrastructure," presented in Appendix J, focused only on DERs and their effect on *system-wide* forecasts, rather than the targeted impact they could have on the planned capital investments the Commission directed them to examine.<sup>18</sup>

Commissioner Scott had a direct exchange with Until's Kevin Sprague regarding this shortcoming at a hearing held in March 2014, where he asked, "What's the nexus between the planning process you use and targeting that goes into, if any, of the CORE Programs?" and received the response "We have discussions with [our efficiency staff] on general areas of the system that could or that have [capital investments] coming up in the next [five years] ... I wouldn't say they use it as ... their goal or

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<sup>15</sup> *Id.* at 31-32.

<sup>16</sup> Until Energy Systems. 2013 LCIRP. (July 2013) Available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2013/13-195/INITIAL%20FILING%20-%20PETITION/13-195%202013-07-16%20UES%202013%20LEAST%20COST%20INTEGRATED%20RESOURCE%20PLAN.PDF>.

<sup>17</sup> *Supra*, at note 23; See also, Until 2013 LCIRP Appendices A-I.

<sup>18</sup> *Supra*, at note 23; See also, Until 2013 LCIRP Appendix J.

their mission to go to these areas and ... really hunt out projects. But they use it as ... information in developing projects with customers.”<sup>19</sup>

The Commission approved the Unitil plan without alteration in July 2014, requiring that the next LCIRP include “(1) a description of the methodology of how it conducts distribution planning, (2) a narrative description and a business process model that illustrates how UES integrates least cost objectives into its planning process, and (3) an updated assessment of demand-side energy management programs, including conservation, efficiency improvement, and load management programs.”<sup>20</sup>

Unitil filed a subsequent LCIRP in 2016, which notably discusses some of its CORE energy efficiency efforts, but makes no efforts to analyze the potential for those efforts to actively defer or eliminate otherwise necessary capital investments.<sup>21</sup> The appendix that had formerly discussed opportunities for DERs to avoid capital investments also appears to have been replaced by an appendix describing the grid modernization proposal of the Company’s Massachusetts affiliate.<sup>22</sup>

That LCIRP was approved by the Commission without alteration, but with the explicit requirement that Unitil “address all of the statutory elements of RSA 378:38 in its next LCIRP in sufficient detail and with supporting analysis ... [including] cost comparisons of the various alternatives considered.”<sup>23</sup> The settlement agreement in that docket further specifies that the Company provide in their next LCIRP “the most recent list of proposed capital projects presented to management during the most recent planning session” and “[d]etail regarding the steps taken through each stage of the planning process for each of the three highest-cost distribution capital projects with a status In Service, Under Construction, or Planned, within the prior two years.”<sup>24</sup>

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<sup>19</sup> NH PUC Docket No. DE 13-195. March 27, 2014 Hearing Transcript at 16-18, available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2013/13-195/TRANSCRIPTS-OFFICIAL%20EXHIBITS-CLERKS%20REPORT/13-195%202014-04-10%20TRANSCRIPT%20OF%20HEARING%20HELD%20ON%2003-27-14.PDF> .

<sup>20</sup> Order No. 25,651. April 17, 2014 at 6, available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2013/13-195/ORDERS/13-195%202014-04-17%20ORDER%20NO%2025-651.PDF> .

<sup>21</sup> Unitil Energy Systems. 2016 LCIRP (April 2016) available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/INITIAL%20FILING%20-%20PETITION/16-463\\_2016-04-19\\_UES\\_2016\\_LEAST\\_COST\\_INTEGRATED\\_RESOURCE\\_PLAN.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/INITIAL%20FILING%20-%20PETITION/16-463_2016-04-19_UES_2016_LEAST_COST_INTEGRATED_RESOURCE_PLAN.PDF) .

<sup>22</sup> Unitil Energy Systems. 2016 LCIRP Appendices A-K (April 2016), available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/INITIAL%20FILING%20-%20PETITION/16-463\\_2016-04-19\\_UES\\_ATT\\_2016\\_LEAST\\_COST\\_INTEGRATED\\_RESOURCE\\_PLAN.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/INITIAL%20FILING%20-%20PETITION/16-463_2016-04-19_UES_ATT_2016_LEAST_COST_INTEGRATED_RESOURCE_PLAN.PDF) .

<sup>23</sup> Order No. 26,098, January 9, 2018, available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/ORDERS/16-463\\_2017-01-09\\_ORDER\\_26098.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/ORDERS/16-463_2017-01-09_ORDER_26098.PDF) .

<sup>24</sup> Docket No. DE 16-463, Settlement Agreement, April 6, 2017 at 2-3, available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/MOTIONS-OBJECTIONS/16-463\\_2017-04-07\\_STAFF\\_SETTLEMENT\\_AGREEMENT.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-463/MOTIONS-OBJECTIONS/16-463_2017-04-07_STAFF_SETTLEMENT_AGREEMENT.PDF) .

## Liberty Utilities and Least Cost Integrated Resource Planning

Liberty Utilities filed its 2012 LCIRP in November 2012.<sup>25</sup> Notably, that plan included a brief description of an NWA screening criteria which appears to have been carried over from the previous franchise-holder, National Grid.<sup>26</sup> After its review, the Commission accepted the plan unaltered, but explicitly directed that the Company's next distribution plan "provide a more comprehensive discussion of how Liberty assesses non-wires alternatives in its distribution planning ... and explain, in greater detail, how demand- and supply-side options for distribution planning are integrated by Liberty as part of its planning process."<sup>27</sup> As a result of the Commission's previous directives, Liberty Utilities filed rather extensive details regarding the processes it might undertake to assess NWAs in its distribution system planning, including even assessing a hypothetical project.<sup>28</sup>

However, after describing the further analysis that would be required to determine the costs and benefits of NWAs relative to a currently planned capital investments, the Company notes that analysis would require the help of an outside consultant and opines that "there is not a current mechanism to recover such costs," and that while "the Company is allowed to recover the costs of traditional T&D infrastructure including a return on the investments ... there is no mechanism in place to recover lost revenues or return on investment for certain non-wires solutions."<sup>29</sup> Since the filing of that plan, Liberty and the other New Hampshire IOUs have been granted just such a mechanism in the energy efficiency programs' lost revenue adjustment mechanism.<sup>30</sup> **In response to Liberty's LCIRP assertion regarding cost recovery of an outside consultant to plan and identify NWAs, the Commission should: (a) make clear that such costs would be eligible for recovery through the same mechanism the other geo-targeting program costs are eligible for recovery; and (b) that the Commission itself will also contract with a distribution system planning engineer who will be a technical resource for the stakeholders reviewing planned capital investments for NWA/geo-targeting candidates and help ensure that veracity of analyses provided by the utility consultants.**

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<sup>25</sup> Liberty Utilities., 2012 LCIRP (November 2012), available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2012/12-347/INITIAL%20FILING%20-%20PETITION/12-347%202012-12-03%20GSEC%20DBA%20LIBERTY%20LCIRP.PDF>.

<sup>26</sup> *Id.* at 16. See also Rhode Island Public Utility Commission Order No. 20419, Appendix 1, Page 30. June 7, 2011 (approving National Grid System Reliability Procurement Standard with same criteria as Liberty Utilities NWA Assessment Criteria).

<sup>27</sup> Order No 25,625, at 8. (January 27, 2014) Available at: <http://www.puc.state.nh.us/Regulatory/Orders/2014orders/25625e.pdf>.

<sup>28</sup> Liberty Utilities 2016 LCIRP, at Bates 58-67, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-097/INITIAL%20FILING%20-%20PETITION/16-097\\_2016-01-15\\_GSEC\\_DBA\\_LIBERTY\\_LCIRP.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-097/INITIAL%20FILING%20-%20PETITION/16-097_2016-01-15_GSEC_DBA_LIBERTY_LCIRP.PDF); see also Liberty Utilities LCIRP Appendix E. Hypothetical Case Study: Evaluation of Non-Wires Solution, at Bates 159-164. Available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-097/INITIAL%20FILING%20-%20PETITION/16-097\\_2016-01-15\\_GSEC\\_DBA\\_LIBERTY\\_ATT\\_LCIRP.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-097/INITIAL%20FILING%20-%20PETITION/16-097_2016-01-15_GSEC_DBA_LIBERTY_ATT_LCIRP.PDF).

<sup>29</sup> *Id.* at 64.

<sup>30</sup> Order No. 25,932 at 59-60, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-137/ORDERS/15-137\\_2016-08-02\\_ORDER\\_25932.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-137/ORDERS/15-137_2016-08-02_ORDER_25932.PDF)

The Commission approved the plan unaltered in July 2017, directing that Liberty’s next LCIRP “address all of the statutory elements of RSA 378:38 in its next LCIRP in sufficient detail and with supporting analysis ... [including] cost comparisons of the various alternatives considered,” and develop “comprehensive standard operating procedures for its employees and managers to better integrate its day-to-day long-term planning with the LCIRP we approve today.”<sup>31</sup>

### **Eversource and Least Cost Integrated Resource Planning**

Eversource submitted its 2013 LCIRP in June 2013.<sup>32</sup> That plan did discuss a process for evaluating deferral of capital expenditures through the deployment through targeted application of C&LM [conservation and load management] Measures, but suggested that “[m]ost projects proposed to address the growth of peak demand also provide reliability benefits as well as address aging infrastructure issues,” and that “C&LM measures do not provide these benefits.”<sup>33</sup> In May 2014, the Commission approved the plan unaltered, but required Eversource in its next filing to describe its methodology for distribution planning and “how PSNH integrates least cost objectives into its planning process ... [and provide] an updated assessment of demand side energy management programs, including conservation efficiency improvement, and load management programs.”<sup>34</sup>

At the direction of the Commission, Eversource submitted its 2015 LCIRP in June 2015.<sup>35</sup> The 2015 LCIRP contained a much greater degree of detail regarding methods for distribution system planning, the CORE energy efficiency programs, and methods for incorporation of the targeted application of C&LM measures, but contained no analysis of the costs and benefits of a specific capital investment compared to any NWA. In Appendix F to the plan, the Company’s TD-190 explicitly discusses the reasons why the Company needs the Commission’s explicit approval before the utility can target its C&LM programs. **The Commission should provide Eversource, and all of the other regulated electric distribution utilities with “explicit Commission approval” Eversource has referenced in its 2015 LCIRP.** Eversource’s suggestion regarding the need for explicit Commission approval is excerpted below:

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<sup>31</sup> Order No. 26,039 at 5-6. Available at: [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-097/ORDERS/16-097\\_2017-07-10\\_ORDER\\_26039.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-097/ORDERS/16-097_2017-07-10_ORDER_26039.PDF)

<sup>32</sup> Public Service Company of New Hampshire. 2013 LCIRP. (June 2013). Available at: <http://www.puc.state.nh.us/Regulatory/Docketbk/2013/13-177/INITIAL%20FILING%20-%20PETITION/13-177%202013-06-21%20PSNH%202013%20LEAST%20COST%20INTEGRATED%20RESOURCE%20PLAN.PDF>

<sup>33</sup> *id.* at 17. (Stating: “Conservation and load management, as a means of deferring capital expenditures needed to address forecasted peak demand, is addressed through NU procedure TD190 – Targeted Application of C&LM Measures to Meet Peak Load Planning Needs. System Planning, Field Engineering, and Marketing Support meet in January of each year to review proposed construction projects. Projects requiring a capacity savings of 1-5 MW with an estimated need date of approximately five years are evaluated by the Marketing Support Department to determine if they are appropriate for targeted C&LM measures.”)

<sup>34</sup> Order No. 25,659 at pages 7-9. Available at: <http://www.puc.state.nh.us/Regulatory/Docketbk/2013/13-177/ORDERS/13-177%202014-05-01%20ORDER%20NO%2025-659.PDF>

<sup>35</sup> Eversource Energy. LCIRP. (June 2015) Available at: <http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-248/INITIAL%20FILING%20-%20PETITION/15-248%202015-06-19%20PSNH%20DBA%20EVERSOURCE%202015%20LCIRP.PDF>

**NOTE 3**

There are regulatory prerequisites that need to be considered and addressed by the Companies prior to implementing targeted application of C&LM Programs.

**CL&P and WMECO** – Preliminary review does not reveal explicit regulatory barriers to targeted application of C&LM Programs. However, a thorough review by NUSCO Legal/Regulatory is recommended prior to initiation of the C&LM Lever.

**PSNH** – Will need PUC approval prior to implementing C&LM Lever (see below).

**Background** - - Previously, PSNH's LCIRP indicated that the electric industry restructuring legislation prohibited allocation of System Benefit revenues in a targeted fashion. However, in the last session of the New Hampshire legislature, a change was made to the state law which had previously prohibited the use of System Benefits Charge funds for "targeted conservation, energy efficiency, and load management..." The kind of thing that this prevented was PSNH evaluating a heavily loaded distribution circuit and using SBC monies to fund a program "targeting" customers on this circuit for efficiency measures. The idea would be to reduce the load on the circuit and thereby reduce PSNH costs by delaying the need for circuit upgrades. With this recent change in the New Hampshire law, targeting (with SBC funds) is now an option -- but this option can only be implemented with explicit Commission approval.

(This technique has been used in other jurisdictions (e.g. see Efficiency Vermont's "geotargeting" - <http://www.efficiencyvermont.com/pages/Common/GeoTargeting/>).

**For Information:** The following is the full text of the applicable portion of New Hampshire HB 395 passed by the legislature and signed by the Governor during 2009.

(e) Targeted conservation, *energy efficiency*, and load management programs and incentives that are part of a strategy to minimize distribution costs *may* be included in the distribution charge or the system benefits charge, *provided that system benefits charge funds are only used for customer-based energy efficiency measures, and such funding shall not exceed 10 percent of the energy efficiency portion of a utility's annual system benefits charge funds. A proposal for such use of system benefits charge funds shall be presented to the commission for approval. Any such approval shall initially be on a pilot program basis and the results of each pilot program proposal shall be subject to evaluation by the commission.*

The Plan also states that "System Planning, Field Engineering, and the Energy Efficiency teams meet annually to review proposed construction projects. Projects requiring a capacity savings of 1-5 MW with an estimated need date of approximately five years are evaluated by the Energy Efficiency team to determine if they are appropriate for targeted C&LM measures."<sup>36</sup> However, when prompted by the OCA regarding whether Eversource had conducted a cost-benefit analysis of energy efficiency investments as non-wire alternatives to a specific capital project in the past year, the Company replied it had not.<sup>37</sup> **The Commission should make clear that any analysis on non-wire alternatives to a specific capital project that might take place in this docket as a pilot, or in future LCIRPs should include an actual cost benefit analysis of the non-wire alternatives compared to the traditional "wires" investment.**

The Plan also asserts that "[t]o date, Eversource has not identified a distribution system capital project that could feasibly be deferred by geographically targeting its existing energy efficiency programs," citing results from an NWA project in Marshfield Massachusetts as example where projected peak demand reductions were not attained.<sup>38</sup> Notably, however, this project appears to have had less

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<sup>36</sup> *Id.* at 12.

<sup>37</sup> Response to OCA 2-016, available at: <https://tinyurl.com/17-136-OCA-2-016>.

<sup>38</sup> *Id.* at 28.

than one year’s lead time to achieve the desired demand reduction.<sup>39</sup> Such limited lead time is very clearly not a best practice in non-wire alternative planning and may likely have been the cause of any project shortcomings.<sup>40</sup>

The Commission approved Eversource’s LCIRP unaltered in August 2017, but directed that Eversource’s next LCIRP contain a “full analysis of how to maximize the use of cost-effective energy efficiency and other demand resources ... in sufficient detail to provide the Commission an understanding of what options to a particular project have equivalent financial costs.”<sup>41</sup>

### C. Timeline for Pending Least Cost Integrated Resource Plans

RSA 378:38 describes the timeline for LCIRP submission as “within 2 years of the Commission’s final order regarding the utility’s prior plan, and in all cases within 5 years of the filing date of the prior plan.”<sup>42</sup> Below is a table containing the due date for each electric distribution utilities’ next LCIRP based on the most recent submission and approval dates.

	Last Plan Filed	Last Plan Approved	Next Plan Submitted
Eversource	June 19, 2015 ( <a href="#">Plan</a> )	August 25, 2017 ( <a href="#">Order Approving</a> )	August 25, 2019
Liberty	January 14, 2016 ( <a href="#">Plan, Appendix</a> )	July 10, 2017 ( <a href="#">Order Approving</a> )	July 10, 2019
Unitil	April 9, 2016 ( <a href="#">Plan, Appendices</a> )	January 9, 2018 ( <a href="#">Order Approving</a> )	January 9, 2020

The discussion above regarding Unitil, Liberty, and Eversources’s recent LCIRP filings highlights a concerning trend towards the Commission directing the Companies to perform a meaningful analysis of the potential for demand side investments to actively defer or eliminate the need for otherwise necessary capital investments, the Company providing only minimal analysis, and the parties settling on requirement that the Company provide more detail in the next LCIRP several years in the future without the Companies actually providing the necessary details and analysis describing whether specific capital projects can be deferred or eliminated through the targeted deployment of NWA’s.<sup>43</sup> **In addition to explicitly directing the regulated electric distribution utilities to pilot the geo-targeting of demand side**

<sup>39</sup> Rocky Mountain Institute et al., Marshfield Pilot Design Report. (December 18, 2007) at 14-15, available at: [http://s3.amazonaws.com/zanran\\_storage/masstech.org/ContentPages/29104746.pdf](http://s3.amazonaws.com/zanran_storage/masstech.org/ContentPages/29104746.pdf).

<sup>40</sup> *Supra.* at 64 n. 13 (describing the “minimum years before need” incorporated into the non-wire alternative screening criteria of various jurisdictions).

<sup>41</sup> Order No. 26,050 at 6, available at: [http://www.puc.state.nh.us/regulatory/Docketbk/2015/15-248/ORDERS/15-248\\_2017-08-25\\_ORDER\\_26050.PDF](http://www.puc.state.nh.us/regulatory/Docketbk/2015/15-248/ORDERS/15-248_2017-08-25_ORDER_26050.PDF).

<sup>42</sup> *Id.*

<sup>43</sup> To its credit, Liberty Utilities was straightforward in its 2016 LCIRP about why it is not in the Company’s financial interest, or the interest of any of the investor-owned utilities, to analyze in meaningful fashion the potential for targeted energy efficiency, load management, or other DERs to defer or eliminate otherwise necessary capital investments.

**management programs within the instant docket, the Commission should make clear that the regulated electric distribution utilities' forthcoming LCIRPs shall no longer rebuff the Commission's persistent insistence on meaningful analysis of non-wire alternatives within the least-cost integrated resource planning process.**

### **3. Net Metering and Non-Wire Alternatives.**

While in the midst of evaluating several of the LCIRPs discussed above, the Commission also approached the idea of NWAs from the perspective of their potential to help craft a new alternative net metering tariff. Below is a review of the relevant Orders and related filings.

#### **A. Commission Order No. 26,029 and Non-Wire Alternative Pilots.**

In its June 2016 Order Adopting a New Alternative Net Metering Tariff, the Commission *inter alia* directed the state's electric utilities to "develop non-wires alternative pilot programs *focused on* the installation of [distributed generation] in lieu of potential utility distribution system upgrades."<sup>44</sup> One of the four working groups created pursuant to Order No. 26,029 was tasked with considering what NWA pilots the utilities should develop, after which the utilities were expected to submit detailed proposals for Commission approval. Each of the utilities submitted a list of its pending capital projects, and Unitil and Liberty submitted several NWA candidates. Eversource only submitted a list of 17 planned capital projects, most of which were to be built the following year, and few/none of which the Company believed would be suitable as NWA candidates.<sup>45</sup> All of these documents are linked and described in the table below.

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<sup>44</sup> Order No. 26,029 at 64-65 (emphasis added), available at:

[http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/ORDERS/16-576\\_2017-06-23\\_ORDER\\_26029.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/ORDERS/16-576_2017-06-23_ORDER_26029.PDF)

The proposal originated in one of the rival two settlement agreements that were before the Commission – the so-called "Energy Future Coalition" (EFC) consisting of the Acadia Center, The Alliance for Solar Choice, Borrego Solar Systems, the Conservation Law Foundation, the Energy Freedom Coalition of America, the New Hampshire Sustainable Energy Association, Revision Energy, the Granite State Hydropower Association, Sunraise Investments LLC, Solar Endeavors LLC and Revolution Energy LLC. Elsewhere in the Order, the Commission described the EFC non-wires alternative pilot as "intended to test the concept of deploying **DER** [distributed energy resources] to identified locations where they may replace or defer traditional utility T&D [transmission and distribution] investments, such as new lines and substations, on a cost-effective basis, using incentive mechanisms that 'drive investments to specific areas on the grid.'" *Id.* at 28 (emphasis added). In supplemental testimony filed on March 10, 2017, the EFC also identified the subject of the non-wire alternative pilots as distributed energy resources (DERs), rather than distributed generation (DG). EFC Supplemental Settlement Testimony at 17.

<sup>45</sup> This was stated at the technical session held on November 6, 2017.

## November 2017 NWA Proposals in Response to Commission Net Metering Order

<p><a href="#">Eversource Project List</a></p>	<p>Eversource submitted a list of 17 projects, most of which it described as “asset condition” or “reliability” related. Notably, <u>almost all of the projects had a planned date to commence construction within 24 months of the date of the list’s submission</u>, providing inadequate lead time for any NWA analysis or solution. Essentially, Eversource provided the wrong list of projects and instead should have identified projects with a lead time of 24 months or more, not 24 months or less.<sup>46</sup> The least expensive project was projected to cost \$1,000,000 and the most expensive project was projected to cost \$11,000,000.</p>
<p>1. <a href="#">Unitil Five Year Capital Investment Plan</a></p> <p>2. <a href="#">Six NWA Candidates</a></p>	<p>Unitil submitted two documents: (1) a five year capital investment spreadsheet; and (2) a document identifying six NWA candidates with further description of the identified need. The six candidates identified by Unitil would need their conventional solutions online between 5-10 years from now. The NWA candidate projects ranged in cost from \$40,000 to \$2.6 million.</p>
<p>1. <a href="#">Liberty Five Year Capital Investment Plan</a></p> <p>2. <a href="#">Two NWA Candidates</a></p>	<p>Liberty submitted two documents: (1) a five year capital investment spreadsheet; and (2) a document identifying two NWA candidates with further description of the identified need. The NWA candidate projects ranged in cost from \$550,000 to \$650,000 and had an engineering start dates between 2019 and 2020.</p>

### B. Staff NWA Recommendation and Pilot Program Comments

After an initial meeting of the NWA working group, it became clear that no consensus existed among stakeholders regarding whether the Commission’s Order envisioned pilots solely focused on Distributed Generation (DG), or pilots that maintain an element of technology agnosticism by leaving any solicitation open to all Distributed Energy Resources (DERs). At the recommendation of Staff,<sup>47</sup> the Commission issued a secretarial letter on November 17, 2017 soliciting comment on seven questions relating to NWAs, including whether “the NWA pilot programs should be limited to distributed

<sup>46</sup> Not only was Eversource’s list not helpful in this respect, but it also failed to comply with the Commission’s direction in its Order Adopting a New Alternative Net Metering Tariff that “[t]he utilities should identify all distribution circuits or substations that are planned for upgrades within the next 5 years.” Order No. 26,029 at 64 (June 23, 2017). This may have been because Eversource only plans capital investments three years into the future, as noted at page 5 of their recently submitted Marginal Cost of Service Study. **The Commission should clarify that a capital planning horizon of only two or three years impedes meaningful consideration of NWAs to otherwise necessary capital investments, and that the electric distribution utilities’ capital asset planning horizons should reach out to at least five years in the future.**

<sup>47</sup> New Hampshire Public Utilities Commission, Staff Recommendation that the Commission Seek Comment from Various parties on NWA Pilot Programs, November 9, 2017, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2017-11-09\\_STAFF\\_REQUEST\\_COMMENTS.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2017-11-09_STAFF_REQUEST_COMMENTS.PDF)

generation (DG) projects or ... also be open to other distributed energy resources (DERs), such as demand response, energy efficiency measures, or battery storage, either on a standalone basis or in concert with DG installations?”<sup>48</sup> Notably, the Office of the Consumer Advocate, and every other party except the utilities, commented that the NWA projects should not be restricted to DG-only projects.<sup>49</sup> The Joint Utilities instead argued that “the pilot programs should be limited to DG projects” and that “any pilot that includes just DG (i.e. which excludes storage, DR, and EE) is unlikely to yield cost-effective and meaningful insights into the ability of DG to avoid or defer traditional utility investments.”<sup>50</sup>

### C. Staff Recommendation and Commission Order Addressing NWA Pilot Programs

In February 2018, Staff filed a recommendation with the Commission regarding the various issues addressed in the stakeholder comments. Their recommendation suggested the “[d]evelopment and implementation of any NWA pilot programs restricted only to DG be suspended indefinitely ... [and] “acknowledge[ed] that unrestricted NWAs may be appropriate in another context, such as grid modernization or utility integrated resource planning.”<sup>51</sup> In April 2018, the Commission issued its Order Addressing Non-Wires Alternative Pilot Programs “defer[ing] consideration of *unrestricted* NWA implementation, whether on a pilot or full-scale basis, to another context, such as grid modernization or utility integrated resource planning.”<sup>52</sup> (*Emphasis added.*)

It has now been more than a year since the joint utilities first put forth candidates for potential capital investments that could be targeted for deferral or elimination by NWAs. In that time, and in the time since previous LCIRP filings where the Commission has made clear its desire for full NWA analysis only to have their efforts rebuffed by subsequent plans, the joint utilities have likely invested in millions of dollars’ worth of capital assets to which ratepayers will be tied for decades to come. Some of those capital assets may have ultimately proven necessary, but experience in other jurisdictions shows there is real potential for targeted demand side resources such as energy efficiency to provide a highly cost-effective alternative those investments.

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<sup>48</sup> New Hampshire Public Utilities Commission, Secretarial Letter Seeking Comment from Various parties on NWA Pilot Programs, November 17, 2017, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2017-11-17\\_SEC\\_LTR\\_COMMENTS\\_DUE\\_12-8-17.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2017-11-17_SEC_LTR_COMMENTS_DUE_12-8-17.PDF).

<sup>49</sup> See generally New Hampshire Office of the Consumer Advocate, Comments on the Commission’s Request for Comment on Certain Matters Relating to the Non-Wires Alternative Pilot Programs, December 8, 2017, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2017-12-08\\_OCA\\_COMMENTS.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2017-12-08_OCA_COMMENTS.PDF).

<sup>50</sup> Non-Wires Alternatives – Joint Comments of the Electric Utilities, December 8, 2017. Available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2017-12-08\\_UES\\_ELECTRIC\\_UTILITIES\\_COMMENTS.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2017-12-08_UES_ELECTRIC_UTILITIES_COMMENTS.PDF). Although the logic is something of a non sequitur, this argument earned the joint utilities at least one more year of not having to consider non-wire alternatives to their planned capital projects.

<sup>51</sup> New Hampshire Public Utilities Commission Staff. Recommendation Regarding Reconsideration of Non-Wires Alternative Pilot Programs, February 16, 2018, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2018-02-16\\_STAFF\\_MEMO\\_REC.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2018-02-16_STAFF_MEMO_REC.PDF).

<sup>52</sup> Order No. 26,124, April 30, 2018., at 15, available at [https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-576/ORDERS/16-576\\_2018-04-30\\_ORDER\\_26124.PDF](https://www.puc.nh.gov/Regulatory/Docketbk/2016/16-576/ORDERS/16-576_2018-04-30_ORDER_26124.PDF).

In this context, we remind the Commission of the observations set forth by the OCA in its December 2017 Comments on the NWA Pilot Programs, regarding whether those pilots should be deferred for implementation in other contexts:<sup>53</sup>

Every project not considered for deferral or elimination through the use of an NWA solicitation is a missed savings opportunity for ratepayers .... The utilities have all summarily written off NWA pilot programs in their least-cost integrated resource plans (LCIRPs) as recently as last year, and then produced extensive lists of potential candidates for the present docket. The grid modernization initiative remains only an investigation. We are likely years before any pilots related to the grid modernization will take place. Delaying that long would result in a missed opportunity to reduce costs for ratepayers.

It is now November 2018. That is a full eight years after the Commission first directed Unitil to file an LCIRP which “identif[ies] distribution and local network service transmission facilities (circuits and substations) ranked by need for reliability or capacity upgrades... [and for] less urgent but foreseeable T&D capacity needs... evaluate non-wires alternatives (DERs) that may contribute to T&D reliability or capacity solutions by deferring or avoiding potentially more costly investments in T&D infrastructure.” The OCA has not completed an in-depth analysis of the Company’s capital investments since that time, but suspects there is a substantial dollar figure tied to investments which were never meaningfully compared to less costly NWAs such as energy efficiency. When this story is expanded across all three utilities, the cost to ratepayers of continuing to defer consideration of targeted energy efficiency and other NWAs is likely substantial.<sup>54</sup>

Furthermore, the Commission’s Grid Modernization Working Group report was issued in March 2017 and the Commission has taken no action on the working group’s recommendation to open a formal docket to adjudicate the non-consensus items within the report,<sup>55</sup> one of which was related to the full integration of NWAs into the distribution system planning process.<sup>56</sup> In Massachusetts, a similar report was facilitated by Raab Associates and filed with the Department of Public Utilities on July 2,

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<sup>53</sup> New Hampshire Office of the Consumer Advocate, Comments on the Commission’s Request for Comment on Certain Matters Relating to the Non-Wires Alternative Pilot Programs, December 8, 2017, at 5-6, available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576\\_2017-12-08\\_OCA\\_COMMENTS.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/LETTERS-MEMOS-TARIFFS/16-576_2017-12-08_OCA_COMMENTS.PDF).

<sup>54</sup> Office of Strategic Initiatives, New Hampshire Ten Year Energy Strategy (April 2018) at 21, available at: <https://www.nh.gov/osi/energy/programs/documents/2018-10-year-state-energy-strategy.pdf> (citing Bob Sanders, “Electric transmission costs scrutinized at NH Energy Summit,” NH Business Review, October 4, 2016, stating: “New Hampshire Public Utilities Commissioner Bob Scott, who said he examined Eversource rates from 2005 to 2015, said that transporting the power seemed to be the biggest contributor to the rise in costs. According to Scott, distribution costs increased by 78 percent, and transmission costs rose 374 percent”).

<sup>55</sup> Grid Modernization Working Group Report., March 17, 2017, at 33 (recommending that the Commission “open a docket with testimony and discovery to fully adjudicate the non-consensus and other relevant items”), available at: [https://puc.nh.gov/Regulatory/Docketbk/2016/16-576/TRANSCRIPTS-OFFICIAL%20EXHIBITS-CLERKS%20REPORT/16-576\\_2017-03-30\\_EXH\\_72.PDF](https://puc.nh.gov/Regulatory/Docketbk/2016/16-576/TRANSCRIPTS-OFFICIAL%20EXHIBITS-CLERKS%20REPORT/16-576_2017-03-30_EXH_72.PDF).

<sup>56</sup> Office of the Consumer Advocate, Comments in Response to Report of the Grid Modernization Working group. May 19, 2017, at 6-7, available at: <https://drive.google.com/file/d/1DsOpxvRDJvdWzeAvL9pLeZOht5vlgTKL/view>.

2013.<sup>57</sup> After that, it took almost five years of gathering input, plan development, and litigation before the utilities actually had their grid modernization plans approved on May 10, 2018.<sup>58</sup> Similarly, it took between 16 and 24 months to approve the regulated electric distribution utilities' most recent round of least cost integrated resource plans. It seems likely that the pending grid modernization docket and related LCIRP updates will not take a shorter amount of time for the state of New Hampshire to resolve. **The Commission should not defer piloting of geo-targeted demand side management programs to future LCIRPs or grid modernization proposal because historical evidence suggests approval of such proposals will not likely occur for at least another two years.** It would be an unfortunate loss for ratepayers if the Commission were to wait until they've resolved the *many* issues discussed in the grid modernization working group's report prior to requiring the utilities to *pilot* NWA's.

#### 4. The Energy Efficiency Resource Standard (EERS) and Targeted DSM

NWA's have been raised in at least three places relative to the EERS and related plans. The first of these instances was during a July 20, 2015 technical session in Docket No. DE 15-137. At the request of the Commission, Northeast Energy Efficiency Partnerships (NEEP) provided a presentation on "Guiding Principles and Messaging" for the EERS, which identified targeting of constrained portions of the transmission and distribution grid as an opportunity for the EERS.<sup>59</sup> More recently, EESE Board's EERS Committee authored a resolution which suggested the EESE Board ask "the utilities to consider adding certain pilot projects to the plan ... [such as] geo-targeting."<sup>60</sup> The EESE Board later unanimously approved the resolution, with the PUC representative abstaining.<sup>61</sup> Finally, in the OCA's testimony regarding Commission approval of the 2018-20 Plan, Jeffrey Loiter included discussion of NWA's relative to the importance of peak demand reduction.<sup>62</sup> In summary, the OCA, the EESE Board, and others have made it clear that such strategies should be incorporated into New Hampshire's energy efficiency programs as a means of maximizing ratepayer value.

Although a commitment to piloting NWA's wasn't included anywhere in the settlement agreement that led to the Commission's approval of the 2018-20 Plan, there was also no provision

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<sup>57</sup> Massachusetts Electric Grid Modernization Stakeholder Working Group Process: Report to the Department of Public Utilities from the Steering Committee, July 2013, available at: <http://magrid.raabassociates.org/Articles/MA%20Grid%20Mod%20Working%20Group%20Report%2007-02-2013.pdf>.

<sup>58</sup> Malali, P., *MA DPU Approved Significant Investments and Upgrades to State's Grid Modernization Technologies*, May 2018, available at: <https://www.energycleantechcounsel.com/2018/05/21/ma-dpu-approves-significant-investments-and-upgrades-to-states-grid-modernization-technologies/>.

<sup>59</sup> Treat, N. and Buckley, B, Northeast Energy Efficiency Partnerships, Presentation to the New Hampshire Public Utilities Commission on EERS Guiding Principles and Messaging, Slide 10, available at: [https://neep.org/sites/default/files/resources/DE%2015-137%20-%20NEEP%20Guiding%20Principles\\_1.pdf](https://neep.org/sites/default/files/resources/DE%2015-137%20-%20NEEP%20Guiding%20Principles_1.pdf).

<sup>60</sup> EESE Board EERS Committee Resolution, July 11, 2017, available at: <https://drive.google.com/file/d/1bxWG1ukQgbJwp2ClS2SgioMilZbnkSYm/view?usp=sharing>.

<sup>61</sup> EESE Board Meeting Minutes, July 21, 2017., available at: <https://www.puc.nh.gov/EESE%20Board/Meetings/2017/072117Mtg/EESE%20Board%20Minutes%20July%2021%202017%20FINAL.pdf>.

<sup>62</sup> Loiter, J. Direct Testimony on 2018-20 Energy Efficiency Resource Standard Implementation Proceeding, November 2017, at 12-13, available at <https://tinyurl.com/Loiter-Testimony>.

*excluding* NWAs or geo-targeted efficiency investments in future iterations of the plan. More importantly, the 2018-20 Plan settlement agreement was filed on December 8, 2017 and negotiated in the days immediately preceding that date. As discussed above, three weeks prior to the 2018-20 settlement the Commission had issued a Secretarial Letter soliciting comments on whether technology agnostic NWAs, including those that employ targeted energy efficiency, should occur under the auspices of the NWA pilots required in the Commission’s Alternative Net Metering Tariff Order.

As such, whether the NWA working group established in Docket No. DE 16-576 was the appropriate venue for considering NWAs that included energy efficiency was still a question pending resolution with the Commission during the 2018-20 Plan settlement negotiations. We now know the answer to that question is no, and furthermore understand the Commission’s preference for addressing technology-specific NWAs in their respective dockets.<sup>63</sup> For energy efficiency investments, that docket is the instant docket, DE 17-136. **The Commission should direct the regulated electric distribution utilities to work with the Staff, OCA, and parties to this docket to identify technology-specific NWA pilots focused on energy efficiency investments with Liberty and Unil each striving to identify one such pilot and Eversource striving to identify three such pilots.**<sup>64</sup>

Thus far in the 2019 Update process the joint utilities, and more specifically Eversource, have taken a posture in favor of deferring *even further* into the future advancements in statewide program design that might allow for the piloting of geo-targeted demand side management, largely by objecting to requests for data which would have allowed the OCA and its consultants to better determine the universe of candidate pilot projects.<sup>65</sup>

However, nothing — not even procedural obstruction or issue mischaracterization in the instant docket by talented utility attorneys — is as powerful as an idea whose time has come. As described above, the integration of geo-targeting pilots into New Hampshire’s statewide energy efficiency programs, and subsequently, the broader integration of NWAs into the least cost distribution system planning for the benefit of our state’s distribution ratepayers is precisely such an idea.

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<sup>63</sup> Order No. 26,125 at 16 (deferring consideration of technology agnostic NWAs to another context but suggesting Docket No. DE 16-576 stakeholders “should also consider implementing one or more demonstration projects using DO plus storage to address distribution system capacity upgrade avoidance or deferral”), available at: [http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/ORDERS/16-576\\_2018-04-30\\_ORDER\\_26124.PDF](http://www.puc.state.nh.us/Regulatory/Docketbk/2016/16-576/ORDERS/16-576_2018-04-30_ORDER_26124.PDF).

<sup>64</sup> Order No. 26,029 at 64 (stating “We therefore approve the EFC proposal that the utilities develop non-wires alternative pilot programs focused on the installation of DG in lieu of potential utility distribution system upgrades. There should be at least one such pilot program location in each utility service territory, assuming appropriate locations can be identified, and Eversource should have at least three such locations. The utilities should identify all distribution circuits or substations that are planned for upgrades within the next 5 years, the reason for the planned upgrades, the reliability criteria and benefits of the planned upgrades, and the estimated costs of the planned upgrades. The utilities should also propose for Commission review and approval the specific locations on such circuits or affecting such substations where they believe pilot programs should be implemented. If the identification of those specific locations requires a study, then the necessary study should be performed.”).

<sup>65</sup> The utilities have suggested several material changes to New Hampshire’s energy efficiency programs in the 2019 Update of the 2018-20 Plan, as summarized by the chart entitled “Attachment A: Summary of Material Changes” provided at Bates pages 50-51 of the 2019 Update. The OCA, and other docket participants, have no less of a right than the joint utilities to propose such *material* changes, or seek discoverable materials which will almost certainly inform any such proposals.

**In order to rectify the information asymmetry that flows from the continued objections in this docket to the OCA's inquiries regarding the regulated electric distribution utilities' planned capital investments, the Commission should: (1) Make clear to the regulated electric distribution utilities that such information is relevant to this proceeding and must be provided; and (2) Supplement the current procedural schedule in 17-136 with a secondary track that will employ a collaborative process to identify candidate capital projects to be deferred or avoided through piloting of geo-targeted energy efficiency investments.<sup>66</sup> That procedural schedule should include (a) at least two rounds of discovery, with the first beginning in early January, (b) at least three technical conferences where the parties to work collaboratively to agree upon which projects will provide the best candidates, and (c) a hearing date to consider approval of specific pilots no later than May 1, 2019.**

## **Conclusion and Recommendations**

Geo-targeting of demand side measures or distributed energy resources, increasing described as non-wire alternatives (NWAs) have received extensive treatment in dockets before the Commission, related to: (1) restructuring; (2) least cost integrated resource planning; (3) net metering; and (4) energy efficiency. However, to date, no utility in New Hampshire has successfully identified a candidate capital upgrade for deferral or avoidance through the use of geo-targeted demand side measures. Identifying cost-effective non-wire alternatives projects to pilot strategies for targeted demand side measures in the near future has the potential to result in significant ratepayer value, and should be a priority of the New Hampshire Public Utilities Commission moving forward.

The Office of the Consumer Advocate's recommendations to the Commission in this docket relative to non-wires alternative pilots are as follows:

1. The Commission should make clear that now is the time to pilot geo-targeting of our energy efficiency programs as a means of building institutional capacity for the regulators and the regulated so they can meaningfully embrace NWAs more broadly as a central component of future least cost integrated resource plan filings.
2. The Commission should both: (a) make clear that the costs of an outside consultant to plan and identify NWAs would be eligible for recovery through the same mechanism the other geo-targeting program costs are eligible for recovery; and (b) that the Commission itself shall also contract with a distribution system planning engineer who will be a technical resource for any stakeholders reviewing planned capital investments for NWA/geo-targeting candidates and help ensure that accuracy of analyses provided by the utility consultants.
3. The Commission should provide Eversource, and all of the other regulated electric distribution utilities with "explicit Commission approval," or better yet, direction to propose geo-targeting pilots, consistent with the need Eversource has referenced in its 2015 LCIRP.
4. The Commission should make clear that any analysis on non-wire alternatives to a specific capital project that might take place in this docket as a pilot and in any pending LCIRP, should

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<sup>66</sup> The Commission should consider modeling this collaborative process on the one approved by the Michigan Public Service Commission in April 2018 in Case No. U-18262 at Appendix E of its Order, available at: <https://tinyurl.com/READ-ME-17-136>

include an actual cost-benefit analysis of the non-wire alternatives compared to the traditional “wires” investment.

5. The Commission should clarify that a capital planning horizon of only two or three years impedes meaningful consideration of NWA to otherwise necessary capital investments, and that the electric distribution utilities’ capital asset planning horizons should reach out to at least five years in the future, or preferably ten.
6. The Commission should not defer piloting of geo-targeted demand side management programs to future LCIRPs or grid modernization proposal because historical evidence suggests approval of such proposals will not likely occur for at least another two years and that would result in a major missed opportunity for New Hampshire’s ratepayers.
7. The Commission should direct the regulated electric distribution utilities to work with the Staff, OCA, and parties to this docket to identify technology-specific NWA pilots focused on energy efficiency investments with Liberty and Unitil each striving to identify one such pilot and Eversource striving to identify three such pilots.
8. In order to rectify the information asymmetry that flows from the continued objections in this docket to the OCA’s inquiries regarding the regulated electric distribution utilities’ planned capital investments, the Commission should: (1) make clear to the regulated electric distribution utilities that such information is relevant to this proceeding and must be provided; and (2) supplement the current procedural schedule in 17-136 with a secondary track that will employ a collaborative process to identify candidate capital projects to be deferred or avoided through piloting of geo-targeted energy efficiency investments. That procedural schedule should include (a) at least two rounds of discovery, with the first beginning in early January, (b) at least three technical conferences where the parties to work collaboratively to agree upon which projects will provide the best candidates, and (c) a hearing date to consider approval of specific pilots no later than May 1, 2019.



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