

**Public Service of New Hampshire d/b/a Eversource Energy**  
**Docket No. DE 20-092**

**Date Request Received: 09/17/2020**

**Date of Response: 10/01/2020**

**Request No. STAFF 1-012**

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**Request from: New Hampshire Public Utilities Commission Staff**

**Witness: Tom Palma**

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**Request:**

Unitil: Reference Bates p. 790, for Unitil, please provide p. 13 of Attachment H1 showing a summary of the ADR program similar to Eversource's Bates p.632, (p. 13 of Attachment E1) and Liberty's Bates p. 700 (p. 13 of Attachment F1).

**Response:**

Please see Attachment Staff 1-012 for the requested information.

Unitil Energy Systems Inc  
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 Attachment E1 - September 1, 2020  
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**ADR Program Cost-Effectiveness**

| 2021                                          |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|-----------------------------------------------|-----------------------|-----------------------|---------------------------------------------------|----------------------------------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------------------|
|                                               | Benefit/Cost          |                       | Utility Costs<br>(\$000 -<br>2021\$) <sup>1</sup> | Customer<br>Costs (\$000 -<br>2021\$) <sup>1</sup> | Annual MWh<br>Savings | Lifetime<br>MWh Savings | Winter kW<br>Savings | Summer kW<br>Savings | Number of<br>Customers<br>Served |
|                                               | Ratio                 | Benefit (\$000)       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|                                               | Granite State<br>Test | Granite State<br>Test |                                                   |                                                    |                       |                         |                      |                      |                                  |
| <b>Residential Programs</b>                   |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| A5 - Residential Active Demand Response       | 0.79                  | 27.1                  | 34.5                                              | -                                                  | -                     | -                       | -                    | 125.0                | 125                              |
| <b>Sub-Total Residential</b>                  | <b>0.79</b>           | <b>27.1</b>           | <b>34.5</b>                                       | <b>-</b>                                           | <b>-</b>              | <b>-</b>                | <b>-</b>             | <b>125.0</b>         | <b>125</b>                       |
| <b>Commercial, Industrial &amp; Municipal</b> |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| C5 - C&I Active Demand Response               | 3.21                  | 442.9                 | 138.0                                             | -                                                  | (2.6)                 | (2.6)                   | -                    | 1,900.0              | 19                               |
| <b>Sub-Total Commercial &amp; Industrial</b>  | <b>3.21</b>           | <b>442.9</b>          | <b>138.0</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>1,900.0</b>       | <b>19</b>                        |
| <b>Total</b>                                  | <b>2.72</b>           | <b>470.0</b>          | <b>172.5</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>2,025.0</b>       | <b>144</b>                       |

(1) Utility and Customer Costs in 2021 Dollars

| 2022                                          |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|-----------------------------------------------|-----------------------|-----------------------|---------------------------------------------------|----------------------------------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------------------|
|                                               | Benefit/Cost          |                       | Utility Costs<br>(\$000 -<br>2021\$) <sup>1</sup> | Customer<br>Costs (\$000 -<br>2021\$) <sup>1</sup> | Annual MWh<br>Savings | Lifetime<br>MWh Savings | Winter kW<br>Savings | Summer kW<br>Savings | Number of<br>Customers<br>Served |
|                                               | Ratio                 | Benefit (\$000)       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|                                               | Granite State<br>Test | Granite State<br>Test |                                                   |                                                    |                       |                         |                      |                      |                                  |
| <b>Residential Programs</b>                   |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| A5 - Residential Active Demand Response       | 1.02                  | 41.6                  | 40.9                                              | -                                                  | -                     | -                       | -                    | 187.5                | 188                              |
| <b>Sub-Total Residential</b>                  | <b>1.02</b>           | <b>41.6</b>           | <b>40.9</b>                                       | <b>-</b>                                           | <b>-</b>              | <b>-</b>                | <b>-</b>             | <b>187.5</b>         | <b>188</b>                       |
| <b>Commercial, Industrial &amp; Municipal</b> |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| C5 - C&I Active Demand Response               | 3.82                  | 541.3                 | 141.8                                             | -                                                  | (2.6)                 | (2.6)                   | -                    | 2,300.0              | 23                               |
| <b>Sub-Total Commercial &amp; Industrial</b>  | <b>3.82</b>           | <b>541.3</b>          | <b>141.8</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>2,300.0</b>       | <b>23</b>                        |
| <b>Total</b>                                  | <b>3.19</b>           | <b>582.8</b>          | <b>182.7</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>2,487.5</b>       | <b>211</b>                       |

(1) Utility and Customer Costs in 2021 Dollars and will not equal the nominal costs presented in the Costs tab.

| 2023                                          |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|-----------------------------------------------|-----------------------|-----------------------|---------------------------------------------------|----------------------------------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------------------|
|                                               | Benefit/Cost          |                       | Utility Costs<br>(\$000 -<br>2021\$) <sup>1</sup> | Customer<br>Costs (\$000 -<br>2021\$) <sup>1</sup> | Annual MWh<br>Savings | Lifetime<br>MWh Savings | Winter kW<br>Savings | Summer kW<br>Savings | Number of<br>Customers<br>Served |
|                                               | Ratio                 | Benefit (\$000)       |                                                   |                                                    |                       |                         |                      |                      |                                  |
|                                               | Granite State<br>Test | Granite State<br>Test |                                                   |                                                    |                       |                         |                      |                      |                                  |
| <b>Residential Programs</b>                   |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| A5 - Residential Active Demand Response       | 1.20                  | 56.5                  | 47.1                                              | -                                                  | -                     | -                       | -                    | 250.0                | 250                              |
| <b>Sub-Total Residential</b>                  | <b>1.20</b>           | <b>56.5</b>           | <b>47.1</b>                                       | <b>-</b>                                           | <b>-</b>              | <b>-</b>                | <b>-</b>             | <b>250.0</b>         | <b>250</b>                       |
| <b>Commercial, Industrial &amp; Municipal</b> |                       |                       |                                                   |                                                    |                       |                         |                      |                      |                                  |
| C5 - C&I Active Demand Response               | 3.95                  | 641.9                 | 162.7                                             | -                                                  | (2.6)                 | (2.6)                   | -                    | 2,700.0              | 27                               |
| <b>Sub-Total Commercial &amp; Industrial</b>  | <b>3.95</b>           | <b>641.9</b>          | <b>162.7</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>2,700.0</b>       | <b>27</b>                        |
| <b>Total</b>                                  | <b>3.33</b>           | <b>698.4</b>          | <b>209.8</b>                                      | <b>-</b>                                           | <b>(2.6)</b>          | <b>(2.6)</b>            | <b>-</b>             | <b>2,950.0</b>       | <b>277</b>                       |

(1) Utility and Customer Costs in 2021 Dollars and will not equal the nominal costs presented in the Costs tab.