EESE Board Meeting

August 14, 2020
2021-2023 Plan - Priorities

1. **Commitment to Deliver Cost-Effective Energy Efficiency**

   Energy efficiency is emission-free and is the lowest-cost energy resource available to New Hampshire’s homes, businesses, and municipalities. The NH Utilities recognize that it is imperative to communicate the message regarding how important and beneficial energy efficiency is to their customers.

2. **Provide Significant Benefits to New Hampshire’s Economy**

   Delivering cost-effective energy efficiency programs to customers helps lower energy bills, generates local jobs, reduces the energy dollars that go toward out-of-state energy generation, and increases the quality of the state’s building stock.
3. Increasing Participation through New and Expanded Program Pathways

The NH Utilities remain focused on transforming the way customers think about and use energy by giving them a variety of innovative energy efficiency services and energy information that will help them to better manage their energy use and costs.

4. Offer Effectively-Packaged Solutions to Engage Customers

The NH Utilities must effectively market and package energy efficiency solutions to customers to increase program participation and energy savings. During 2021-2023, rebate offerings for the NHSaves Residential programs will be expanded. For the C&I programs, standard offer marketing pieces specifically developed for target C&I market segments and end-use equipment will be created.
5. Continue to Develop New Hampshire’s Energy Efficiency Workforce

Beginning in 2020 and continuing during the implementation of the 2021-2023 Plan, the NH Utilities will focus on recruiting and retaining a demographically and geographically diverse workforce to support the local energy efficiency industry with personnel who are highly-skilled and equipped to meet the NHSaves Programs’ current and future needs.

6. Increase Outreach to Main Streets, Municipalities and Rural Areas

Part of this strategy will consist of building a community network of energy champions that includes municipal representatives, sustainability groups, energy committees, and economic development commissions.
7. Upgrading Weatherization System and Data Sharing

For the residential programs, the home audit and tracking system will be upgraded and deployed in 2021, which will allow the NH Utilities to streamline contractor interactions and provide better energy savings information to customers.

8. Implement Effective Active Demand Reduction Strategies

Effective demand reduction strategies can help reduce energy prices and price spikes during summer and winter peak demand. For 2021-2023, the NH Electric Utilities will develop and deploy Active Demand Reduction ("ADR") strategies to flatten peak loads, improve system load factors, and reduce costs for customers.
2021-2023 Plan—Priorities (cont.)

9. Implementing an Energy Optimization Pilot

The NH Utilities have developed an Energy Optimization pilot, based on learnings from pilots in other states and from work done at NHEC. The pilot will be designed to gather information and test both program design elements and key regulatory questions about how utilities should claim savings for such a program.

10. Increase Energy Efficiency Portfolio Savings from Non-Lighting Measures

The NH Utilities have carefully considered and accounted for the significant ongoing changes in the residential and C&I lighting marketplaces in their development of the Draft 2021-2023 Plan.
2021-2023 Plan – Highlights

- Increased energy savings for NH Customers
- A True Three-year, 36 month, Plan
- New Program Pathways and Offerings
- Active Demand Response Program
- Energy Optimization Pilot
- TRM to be completed by end of 2020
- Bill and Rate Impact Analysis included
July 1 Draft - 2021-2023 Electric Plan

- 3-Year 2021-23 budget 95% increase over combined 2018-2020 actual and planned budget
- 3-Year annual kWh savings at 4.2% of 2019 sales
- Lifetime kWh savings 29% increase over last term
- Lifetime MMBtu savings 31% increase over last term
## Electric Programs by Sector

<table>
<thead>
<tr>
<th>Electric Budget ($000s)</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2021-2023</th>
<th>Percentage of 3-year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I and Municipal</td>
<td>$37,698</td>
<td>$51,528</td>
<td>$67,446</td>
<td>$156,672</td>
<td>54%</td>
</tr>
<tr>
<td>Residential</td>
<td>$23,903</td>
<td>$24,708</td>
<td>$25,720</td>
<td>$74,330</td>
<td>26%</td>
</tr>
<tr>
<td>Income Eligible</td>
<td>$15,061</td>
<td>$18,950</td>
<td>$23,205</td>
<td>$57,216</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>$76,662</td>
<td>$95,187</td>
<td>$116,370</td>
<td>$288,219</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Budget
- C&I and Municipal: 54%
- Residential: 26%
- Income Eligible: 20%

### Annual Savings (kWh)
- C&I and Municipal: 84%
- Residential: 14%
- Income Eligible: 2%

### Annual Savings (kWh and MMBtu)
- C&I and Municipal: 68%
- Residential: 23%
- Income Eligible: 9%
Stakeholder Feedback

- Increased Savings, particularly 5% electric savings over the 3-year term
July 1 Draft - 2021-2023 Gas Plan

- 3-Year 2021-23 budget 43% increase over combined 2018-2020 actual and planned budget
- 3-Year annual MMBtu savings at 2.8% of 2019 sales
- Lifetime MMBtu savings 12% increase over last term
July 1 Draft - Gas Programs by Sector

<table>
<thead>
<tr>
<th>Gas Budget ($000s)</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2021-2023</th>
<th>Percentage of 3-year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I and Municipal</td>
<td>$4,767</td>
<td>$5,574</td>
<td>$6,525</td>
<td>$16,865</td>
<td>41%</td>
</tr>
<tr>
<td>Residential</td>
<td>$5,280</td>
<td>$5,901</td>
<td>$6,410</td>
<td>$17,591</td>
<td>42%</td>
</tr>
<tr>
<td>Income Eligible</td>
<td>$2,075</td>
<td>$2,360</td>
<td>$2,646</td>
<td>$7,080</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>$12,121</td>
<td>$13,835</td>
<td>$15,580</td>
<td>$41,536</td>
<td>100%</td>
</tr>
</tbody>
</table>

Budget

Annual Savings (MMBtu)
Stakeholder Feedback

- Increased Savings, particularly 3% natural gas savings over the 3-year term
Marketplace Risks

Uncertainty in Marketplace creates significant risk for additional savings

• 2020 experience showing uptake for residential, with high incentive levels
• 2020 experience for small business mixed
• 2020 experience showing much more caution on capital projects for large business
  • Longer planning process for large projects means current caution impacts 2021 as well
• Economic trend and potential additional impacts of COVID-19 going into 2021 are difficult to predict
Stakeholder Comment Response

To Facilitate a Plan that includes increased savings of 33%(gas) - 46% (electric) over the current term, and 7% - 20% over July 1 Draft, during a pandemic, NH Utilities need Stakeholder Support for:

• True 3-year planning period
• Mid-Term Modification triggers
• Lowering of PI threshold for savings and benefits to the previous level of 65%
• Significant Marketing through Proven Approaches (per July 1 Plan)
• Predictable phase out of lighting (per July 1 Plan)
• Higher SBC and LDAC rates than the July 1 draft
A True 3-Year Planning Process

• A true 36-month plan in which the program budgets, energy savings goals, and planned program designs are approved by the Commission for the entire triennium.
• Elimination of annual program start-stop dynamic will reduce confusion and frustration among vendors and customers
• Increased flexibility for program evolution and risk-taking
• Adjudicative proceedings reserved for critical program design issues / mid-term modifications
• Increased resources available to focus on program delivery and reaching customers, rather than on formal planning processes
New Program Pathways and Offerings

• Notable program changes
  • Focus on multiple pathways (all)
  • Appliance Vouchers (HEA and HPwES)
  • Expansion of Visual Audit (HEA and HPwES)
  • High Performance Homes (Energy Star Homes)
  • Expanded Midstream (Res and C&I)
  • Standard Offers (C&I)
  • Tiered Incentives (C&I)
  • New Approaches to Behavioral Based Strategies
    • Aerial Infrared Mapping
  • Addition of Code Compliance element for New Construction
  • Focus on Workforce Development
The goals of the Residential and C&I ADR programs are to flatten peak loads, improve system load factors, and reduce costs for all grid-tied New Hampshire customers. Demand savings (kW) are tied to dispatching resources during the ISO-NE peak demand period.

Planned offerings:

<table>
<thead>
<tr>
<th>Offering</th>
<th>Participating Utilities</th>
<th>Targeted Peaks</th>
<th>Event Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Wi-Fi tStat DLC</td>
<td>Eversource, Unitil</td>
<td>ISO-NE annual system peak Benefits based on ISO-NE top 62 days – max 15 events, 3 hour duration each</td>
<td>June – Sept. 2-7 pm non-holiday weekdays</td>
</tr>
<tr>
<td>Residential Storage</td>
<td>Eversource (Unitil TBD)</td>
<td>ISO-NE annual system peak Benefits based on ISO-NE top 62 days – max 60 events per season, 2 or 3 hour events.</td>
<td>Daily dispatch program. June – Sept. 2-7pm non holiday weekdays</td>
</tr>
<tr>
<td>C&amp;I Curtailment</td>
<td>Eversource, Unitil, Liberty</td>
<td>ISO-NE annual system peak Benefits based on ISO-NE top 62 days – max 8 events per season, 3 hour events.</td>
<td>Targeted curtailment/shedding. June – Sept. 2-7pm non holiday weekdays</td>
</tr>
<tr>
<td>C&amp;I Storage</td>
<td>Eversource, Unitil</td>
<td>ISO-NE annual system peak Benefits based on ISO-NE top 62 days – max 60 events per season. 2 or 3 hour events.</td>
<td>Daily dispatch program. June – Sept. 2-7pm non holiday weekdays</td>
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Energy Optimization Pilot

- Will focus on converting residential delivered fossil fuel heating systems to cold climate air source heat pumps (“ASHPs”), including central and mini-split systems.

- Will be designed to gather information and test program design elements and key regulatory questions regarding impacts on fossil fuel and electric consumption, electric system peaks, and participant and non-participant bill impacts.

- Will reach customers through various channels, including HPwES participants and HVAC contractors, and target 100 home installations per year for 2021-2023.

- Will target customers with existing HVAC configurations that are well-suited for ASHP conversions, but who are not already actively planning to install ASHPs for heating:
  - Customers who have **central A/C systems** that are failing or old
  - Customers with **window A/C units** who are not actively considering heat pumps
  - Customers who are **actively considering** adding a **central A/C system**
  - Customers who are **interested in heat pumps as a cooling solution**.
Marketing Priorities 2021-2023

Building on experience gained from Market Assessment Study and results from 2018-2020, and incorporating impacts from Covid-19:

1. Continue to build awareness and demonstrate the value of energy efficiency;

2. Convince customers to take action and participate in NHSaves offerings

3. Increase education and outreach efforts to both customers and trade allies.
Discussion