

# Memorandum

To: Energy Efficiency & Resource Management Council  
 From: Mike Guerard, Optimal Energy / EERMC Consultant Team  
 Date: July 22, 2019  
 Subject: Update on EE & SRP Technical Working Groups

Since the last update on the activities of the Energy Efficiency (EE) and System Reliability Procurement (SRP) Technical Working Groups at the April EERMC meeting, the EE TWG met three times and the SRP TWG met twice. The focus for these meeting largely covered considerations and issues relating the draft annual plans. It also provided a forum for stakeholders to also cover general updates on EE issues in state. Also, a key feature of the two working groups that meet separately is updates on each other’s activities so that those who do not participate in both have an opportunity to connect the related efforts.

### EE Technical Working Group Meetings

1. *April 26 EE TWG:*

As a follow-up to the March meeting when stakeholders (Acadia Center, Green Energy Consumers Alliance and the city of Providence) started providing updates on their Priorities, the April meeting covered Priorities presentations from Division of Public Utilities & Carriers, Office of Energy Resources, EERMC and TEC-RI. As a follow-up to the Priorities presentations, National Grid provided the following chart summarizing the key focus areas identified by the groups:

### Key Areas of Focus

1-4 Comments		5-9 Comments	10+ Comments
<ul style="list-style-type: none"> <li>• Finance</li> <li>• Pilots</li> <li>• Benefits</li> <li>• Electric Vehicles</li> <li>• Participation</li> <li>• Workforce</li> <li>• Data</li> </ul>	<ul style="list-style-type: none"> <li>• Future Innovation</li> <li>• Residential Programs</li> <li>• Stakeholder Engagement</li> <li>• Zero Net Energy</li> <li>• Codes</li> </ul>	<ul style="list-style-type: none"> <li>• Cross Docket Coordination</li> <li>• Demand Response</li> <li>• Gas Programs</li> <li>• General Comments</li> <li>• Commercial Programs</li> </ul>	<ul style="list-style-type: none"> <li>• Electrification</li> <li>• Incentives, Goals and Metrics</li> <li>• Income Eligible Programs</li> </ul>

The April meeting also focused on a key programmatic element, heating electrification. The following summary was provided on the status of electric heating activities in 2019:

- Electric heat is shifting from delivered fuels/electric resistance to electric heat pumps.
- 60 trained HVAC contractors.

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- Outreach was done to 1600 customers with a \$1,000 rebate per ton of heating.
- Integrated controls are offered for an additional \$1,500 incentive.
- Heat pump financing – 0% interest for 7 years - 33 loan applications received through June
- Average rebate for heat pumps in RI is around \$2,000.
- Analysis for 15 years of energy costs revealed costs of electric heat pump installation are not cost effective enough for customers to convert now due to current price of gas
- ~150,000 or 35% of homes in RI heat with delivered fuels

Given the importance of electric heating to support carbon reduction as a State Policy, the discussion focused on practical expectations and market conditions that may affect the scalability of installation to include in the 2020 EE Plan.

The final topic covered was National Grid's Marketplace, the online "store", --

<https://marketplace.nationalgridus.com/> The initiative was launched in New York first, and 5,000 power strips and 70,000 light bulbs were sold Quarter 1 through customer email referrals. The launch in RI started in May. It is currently predominantly EE funded, and provides a platform to nudge customers to more EE.

### *2. May 29 EE TWG*

At the May meeting, the primary areas covered were Income Eligible, Advance Meter Functionality (AMF) and Grid's Customer Insights process.

The topic on Income Eligible benefited from new stakeholders joining the discussion – representatives from the George Wiley Center and Center for Justice. The discussion focused on integration of funding from the federal government (DOE and LIHEAP) that is blended with ratepayer funding, and the implementation participants, processes and customer eligibility considerations. Feedback from the group emphasized the need to reach as many eligible customers as possible and maximizing flexibility to serve the unique needs of income eligible customers.

The AMF discussion covered background, technology, collaborative engagement, customer outreach and overlap with EE of the potential move to AMF, or "Smart Meters". One of the key aspects of these meters will ultimately be to allow for time varying rates to better align electricity actual costs with usage patterns. While roll out of AMF will not impact 2020 planning, understanding of the potential ramifications on EE for this technology is important to start planning for.

The "Customer Insights" discussion reviewed the process by which National Grid monitors customer needs and satisfaction, which helps inform EE program planning and deliver strategies and tactics.

### *June 20 EE TWG*

The June EE TWG featured the initial review and discussion on the 2020 Plan Outline Memorandum that was presented at the June EERMC meeting. The main areas of discussion with stakeholders centered on Heating Electrification, Income Eligible programs and equity, and a shifting focus to lifetime savings. While the overall objectives and content of the Outline were covered, these three areas represent the biggest shifts expected to be covered for 2020 planning.

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Other areas covered in detail included an update on planned and active Evaluation work, and Combined Heat & Power (CHP). The Evaluation update focused on what has been completed and ready to include in the first draft of the 2020 Plan, and what is expected to be completed to include in the second draft. The CHP discussion reviewed current planned status, and the limited amount of expected 2020 projects. Large scale CHP projects typically are in the range of 18 months to 2+ years to develop and install. An area that was agreed upon to put more attention is smaller micro-CHP projects.

### SRP Technical Working Group

The SRP TWG met on May 28 and June 19. The July meeting is scheduled for July 25. At the May and June meetings, the discussions covered the limited potential for non-wire alternative (NWA's) expected in 2020 because of limited current areas of significant load constraint. A significant potential change identified for possible inclusion in system reliability planning is natural gas constraints, which has not been an identified area of focus for SRP historically. The discussion led to stakeholder feedback that gas should be added as an area to at least monitor in future planning. Strategies and tactics to review upcoming areas of need for NWAs focused on the key product developed in recent SRP plans -- the Rhode Island System Data Portal. The public-facing portal allows developers identify areas of need. The Heat Map portion of the Portal provides a strong visual to assist in identifying areas throughout the state:

<https://www.arcgis.com/apps/MapSeries/index.html?appid=36c3c4ba3f92493a8d81aea4fae22d9d>

