



DEMAND REDUCTION SUBCOMMITTEE MEETING MINUTES

Thursday February 23, 2017
100 Cambridge St., 10th Floor
Boston, MA 02114

Attendees: Eric Belliveau (via phone), Jo Ann Bodemer, Donald Boecke, Amy Boyd, Austin Brandt, Jonathan Goldberg, Michael Goldman, Lyn Huckabee, Craig Johnson, Paul Johnson, Ezra McCarthy, Jerrold Oppenheim, Thomas Palma, Ralph Prah (via phone), Matt Rusteika, Jeff Schlegel, Arah Schuur

1. Call to Order

Schuur called the meeting to order at 10:00 AM.

2. Welcome and Updates

Update on DPU Review of Proposed Demonstration Projects

Goldberg gave an update on the status of the Eversource and Unitil demand demonstration projects. Goldberg noted that Eversource and Unitil filed their proposals and budgets with support of the Council. Goldberg noted that the AG and DOER are listed as intervenors in both Eversource and Unitil's proceedings and that The Energy Network is an additional intervenor in Eversource's proceeding. He added that discovery is open in both proceedings until March. He indicated that evidentiary hearings would be at the end of March with briefs likely in April. Lastly, Goldberg noted that they are unsure of when the DPU would issue an order after that.

P. Johnson asked what the intervener's main objections were. Goldberg indicated that their full comments are available on the DPU website and that their primary two issues had to do with bill impact concerns and whether or not the program administrators (PAs) should be implementing demand response.

DOER Update on Status of Grants

Huckabee noted that they have approval to contract for their peak demand grants and that they are negotiating contracts for a number of different projects. She added that their portfolio of projects, when paired with the PA's portfolio of demonstrations, will cover as much ground on demand response as they could expect to cover. She also indicated that one of the projects would be to address an area that the PAs are unable to address, which is peak demand response with electric vehicles.

3. 2016 Results, Lessons Learned, and Plans for 2017

National Grid – Residential Active Demand Response Demonstration

McCarthy began by reviewing what National Grid's residential active demand response demonstration is testing and results from the 2016 program. Results included program enrollment, per-device event participation, typical per-event savings, per-device savings, and customer satisfaction. He also highlighted key findings that included information about marketing efforts, enrollment, event notification, connectivity, opt-out options, impacts, and customer satisfaction. Following his review of 2016 results, McCarthy discussed National Grid's next steps for the 2017 residential program. These next steps included scaling up the Bring Your Own Thermostat (BYOT) part of the program, increasing cross-program promotion, new Wi-Fi enabled device integration, modifications to the program based on lessons learned from 2016, and additional testing.

P. Johnson noted that they had about 1,700 participants and that most were satisfied and continuing enrollment for 2017. He suggested that National Grid incentivize currently enrolled customers to have friends or relatives sign up. McCarthy noted that they are looking at new and different ways to reach and enroll customers and that is an option they could look at.

P. Johnson asked what caused the variance in opt-out between different devices. McCarthy noted that the Nest devices had a higher rate of opt-out because there was no penalty for them to do so.

Schlegel asked if they had done any initial calculations of what they could achieve system-wide with a program like this. McCarthy indicated that they had not done that yet.

McCarthy noted that they did not always know which customers that had received smart thermostats through the Home Energy Services program had central air, because the vendors did not record that information. Boyd recommended that the PAs should start asking gas customers who are getting smart thermostats through the efficiency program whether or not they have central air. She noted that in the future that could make it easier to identify and market demand response programs to customers.

National Grid – Commercial and Industrial Active Demand Response Demonstration

McCarthy also discussed aspects of National Grid's commercial and industrial (C&I) active demand response demonstration. He began by reviewing the specifics of the demonstration project, which included its purpose, details about the program, and details about customer eligibility. He also covered what customers signed up for and what their incentives were, what their target was in terms of end-use technology, why they thought customers might be interested in participating, what their timeline was, and marketing tools they were using to reach customers.

Boecke asked why customers using natural gas or diesel generators would be ineligible. McCarthy indicated that they are looking to test technologies that can be used in a demand

reduction program for transmission and distribution system benefits and that generators did not fit into that goal.

P. Johnson noted that the marketing tools looked complicated and asked if they had any concerns about that. McCarthy noted that the customers that are being targeted for the program are the largest of large customers and that they would need sophisticated marketing materials in order to decide if participation was a good idea.

Cape Light Compact – Residential Offering

Brandt began by reviewing Cape Light's planned residential demand response demonstration offering. After the short review, he went on to highlight preliminary results for 2016. Results included information on participant satisfaction, enrollment motivators, customer acceptance, and event participation. Brandt also highlighted their key takeaways from the 2016 program and, where applicable, what adjustments they were planning on making for 2017.

Boecke asked if they had direct load control as part of this project. Brandt indicated that they did, but that they were only able to do so if the unit was running. He added that there was likely little impact for those that did not have it on since that would indicate they were not already cooling their home.

P. Johnson asked why their enrollment numbers for 2016 were so low. Brandt indicated that they ended up having a limited pool of participants and that the effort to install the equipment needed for the demonstration proved to be a barrier to participation.

P. Johnson asked what their goal was for the 2017 offering. Brandt indicated that they are hoping to enroll 250 participants and that they did not have a reduction target.

Boyd noted that customer fatigue for 2016 appeared to begin in the third hour of an event. She encouraged them to continue to look at that and to do some combination of shorter and longer events to get a better sense of what the thresholds are for customer fatigue.

Cape Light Compact – Commercial and Industrial Offering

Brandt noted that they were proposing to do a mid-term modification (MTM) so that they could also do a thermal storage demonstration project for small and medium C&I customers. He reviewed what they wanted to do as part of that demonstration as well as what effect that would have on program budgets.

Schlegel asked what specifically they were planning on testing with the thermal storage, noting that the technology had already been tested and well documented elsewhere. Brandt noted that they wanted to look at customer acceptance and ability to scale, and performance and grid facing benefits for constrained areas.

Eversource

Goldman updated the subcommittee on the status of their demand reduction demonstration project. He began by going over the DPU's procedural schedule and what they are doing in the meantime. He indicated that they felt the best case scenario at this point is that they get a decision from the DPU in early June. As a result, Goldman noted that it is increasingly unlikely that they will be able to run their demonstration projects for the summer of 2017. He also highlighted some projects that do not require additional budget authorization and shared a sample of a demand curriculum for onsite facility training.

With respect to the demand curriculum, P. Johnson asked whether or not they would be offering certification with the course. Goldman indicated that that was not the plan, but that offering a certification was not something that they considered off the table. He added that they have never done anything like that and so they were taking things one step at a time.

Unitil

Palma updated the subcommittee on the status of Unitil's demand reduction demonstration project. Like Goldman, he reviewed the DPU's procedural schedule for their proposal. Palma also reviewed their two projects – C&I ICAP reduction and day-ahead ISO reductions and residential battery storage with solar – and the planned implementation schedule for each.

Boyd asked why they were more optimistic than Eversource in terms of getting their projects up and running for the summer of 2017. Palma indicated that their schedule is accelerated by one week compared to Eversource, and that their proposal is a little less complicated and has a much lower budget.

Schlegel asked how they planned on dispatching the battery storage with solar. Palma indicated that they will first test a "set and forget" strategy during the summer and then will look to use a direct load control strategy during the winter.

Evaluation Measurement & Verification (EM&V)

Goldman updated the subcommittee on the PAs evaluation plan for the demand demonstration projects. He began by previewing the evaluation objectives and example questions for projects in each sector. Goldman also reviewed the evaluation schedule and timeline for each sector. For the timeline component, he noted that there is still some unknowns for Eversource and Unitil because they have not yet received approval from the DPU to do their demonstrations.

Belliveau asked if there was any assumption that, if one PA demonstration does well in its evaluation, other PAs will do the same thing. Schlegel noted that the goal is for everyone to learn from each other. Palma added that Unitil would be looking at what everyone else did and determining what might and might not work for them.

Oppenheim noted that a small number of customers with health concerns might find an incentive to participate too enticing even if it may have an impact on their health. He suggested that the PAs keep that in mind during evaluation and if and when the programs are implemented.

Schlegel recommended that the final reports from all summer 2017 demonstrations be available in a timely manner consistent with the evaluation plan schedule. He noted that this would mean reports would have to be finalized no later than the beginning of February 2018 in order for the results to be actionable. He noted that the schedule that Goldman presented aligned well with that.

4. 2017 Subcommittee Planning

Schuur noted that the theme of the full Council meeting on March 15 is demand response. She began by reviewing the agenda for that meeting. She also highlighted the timeline of events for upcoming subcommittee meetings through the rest of year and the beginning of 2018. Boyd recommended that the September meeting be scheduled for a longer period of time since it looked like there would be a lot of information to cover.

5. Adjournment

Schuur adjourned the subcommittee at 11:50 AM.