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George Twigg, Executive Director  
New England Conference of Public Utility Commissioners

**Subject: Comments to the NECPUC Retail Demand Response & Load Flexibility Working Group**

## Request for Comments

Your recent message requested comments regarding “What retail program design considerations do regulators need to take into account to enable more widespread adoption of demand response and load flexibility programs, with a particular focus on programs that will mitigate New England’s winter energy adequacy issues?” We’d like to address just a few of the examples you included and some topics that would cross several of those categories. We thank you for your invitation and look forward to the comments from other parties and the reaction from the working group.

## Comments

Icetek has worked with our customers to provide load flexibility and demand response participation in retail programs and in wholesale markets for twenty years. Our experience covers several states throughout the Northeast, and our customers are driven by cost savings, on-site power quality, reliability, emission reductions, organizational goals, and responsibility to the communities they serve as universities, hospitals, manufactories, and large-scale employers.

This experience tells us that a retail program design should address several factors, which we will categorize as Feasibility, Payment Structure, Responsiveness, Integration with Wholesale Markets, and Implementation Trust.

### FEASIBILITY

Any program must be one that is feasible enough to enable significant participation. Elements such as the enrollment process, event notification, data collection and submission requirements, and payment should all be administratively simple enough to achieve significant response and program success. A balance should be achieved with assurance that the end-use customers who ultimately pay for these programs are receiving the service for which they are being asked to pay.

### REASONABLE PAYMENT STRUCTURE

The structure and amount of payment is always a key discussion point in any program design, and as such we will choose not to dwell upon it here. We include it in the list only to avoid omission.

### STABILITY AND RESPONSIVENESS

We would hope that any program design can be both stable enough that customers can prepare to respond, but also recognize that change must always be constant in order to keep the program viable and successful. Recent retail program designs may act as examples of both success and highlight the challenges with achieving this balance. A program with requirements to curtail load (or produce

distributed energy) every afternoon or evening during set periods of time is very stable and is likely to reduce system costs for all customers under the conditions that exist today and in the recent past. However, we have already seen significant changes that should be addressed. The great success of rooftop solar project means that on many days each year mid-day loads drop below those of morning, evening, and even sometimes overnight loads. Peak loads that we once expected to occur in the afternoon have already shifted into the evening and may shift on some days to late morning instead. Program design should be allowed to evolve quickly enough that it constantly benefits the customers who pay the cost.

#### INTEGRATION WITH RETAIL RATE STRUCTURE AND WHOLESALE MARKETS

We hope that this topic becomes a key discussion point. The changes outlined above are already causing conflicting signals to customers. A retail rate design common to large customers may include a monthly demand charge based upon usage during “peak” hours that may last 10 or 16 hours each day. But wholesale market signals could incentivize additional load during the middle of a bright sunny day rather than during overnight hours. Some current retail program designs may miss the wholesale peak by an hour or more if they are based upon load shape assumptions that are just a few years old. If the regional grid runs short of reserves but a retail program window looms just ahead, customers are forced to choose between wholesale market signals showing dire reliability warnings and retail program windows just a few hours away. To the maximum extent possible all three jurisdictions should recognize and incorporate the others, although we recognize that they are governed by entirely separate jurisdictions and their regulatory timeframes.

A concrete example may be helpful. On any given day a savvy customer in Massachusetts today may face up to half a dozen different signals to reduce load, or to charge or discharge an on-site storage system. All customers have some form of retail rate structure that includes at least one type of demand charge, typically bounded by certain hours of the day. They can avoid costs by reducing load during the annual peak load day each year (ICAP), and some customers can do the same for the peak load in each calendar month. Enrollment in either or both of the Connected Solutions and Clean Peak Standard programs add additional requirements, and valued participation in the ISO New England wholesale markets can layer on incentives for the energy, reserves, regulation, and capacity markets. Participation in all of these activities is valuable both to them and to the entire region. Any amount of lower-cost and cleaner resources in the wholesale markets produces cost and emission reductions for everyone in the region. When these signals align the conflict is reduced, but when they don't a customer is forced to participate in one or the other in real-time, potentially reducing the benefit to the region<sup>1</sup>.

#### COMMUNITY BENEFIT

Program design necessarily includes traditional cost-benefit analyses, and we support that aspect of the discussion. Any cost imputed upon retail customers should be levied only when there is a compensating cost reduction. But because the participants in “Demand Response & Flexible Load” programs are end-use customers there is an opportunity to expand our view regarding value. End-use customers can and should be evaluated for impact on carbon emissions to meet state policies and for their service to the community through grid reliability and resiliency. The likely participants in these programs are prominent members of their respective communities and have a responsibility of service that should be included in program design. Imagine, as one example, a safety-valve in program design such that a

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<sup>1</sup> For a visual example, see Slides 6-7 of [https://www.iso-ne.com/static-assets/documents/100008/clg\\_meeting\\_hurley\\_panelist\\_presentation\\_03\\_06\\_2024.pdf](https://www.iso-ne.com/static-assets/documents/100008/clg_meeting_hurley_panelist_presentation_03_06_2024.pdf)

participant is not penalized for missing a program response window because they instead chose to respond to an ISO New England OP-4 Action or Capacity Scarcity Condition.

#### IMPLEMENTATION TRUST

Although not often considered as part of program design, we think that the trust between the retail customers who participate in the programs and the entities who administer them – perhaps the existing electric distribution company or an independent regulated utility - is paramount. Customers will participate if they believe and have concrete evidence that concerns about program design will be heard and evaluated, that changes in program design will be clearly communicated in a timeframe that supports the feasibility to accommodate those changes, that any metering data transferred will be handled with the necessary care, and that payment according to the published structure will be made within a reasonable period of time. Without trust in these activities many customers will ignore requests for valuable participation because it just isn't worth the time they take away from core organizational activities. Too often these factors are not considered in program design and are instead left to a later phase that considers implementation details, and too often the program suffers because of it.

Thank you again for the effort you are making towards this critical element of overall electric grid reliability, customer cost, and emissions reductions.

Sincerely,

Doug Hurley, VP of Policy  
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