August 30, 2024

NECPUC Demand Response and Load Flexibility Working Group
P.O. Box 9111
Essex, VT 05451

Re: Retail Demand Response and Load Flexibility Program Design Considerations

Dear Chairman Phil Bartlett and the NECPUC Demand Response and Load Flexibility Working Group,

CPower appreciates the opportunity to provide comments on the considerations for designing retail demand response and load flexibility programs. In soliciting these comments, the Working Group identified several examples of program design considerations, each of which CPower believes is important and which collectively represent a good starting point for discussion.[1]

In particular, CPower is encouraged by the Working Group's recognition of "consistency across states" as an important issue that should be considered in designing demand response and load flexibility programs. Little consistency currently exists, which increases complexity, administrative burdens, and costs and consequently reduces program participation.

Below, CPower offers several additional considerations for designing retail demand response and load flexibility programs. These considerations are:

1. **Customer experience** - establish program flexibility and incentive structure and levels sufficient to attract a large variety of participants;

[1] In particular, the Working Group identified the following examples of retail program design considerations: rate design; technology standards; consistency across states; evaluation, measurement, and verification; equity; cost-effectiveness; and retail program visibility for ISO-NE markets, operations, and planning. NECPUC Retail Demand Response and Load Flexibility Working Group, New England Conference of Public Utilities Commissioners, available at: https://www.necpuc.org/necpuc-retail-demand-response-and-load-flexibility-working-group/ (last visited Aug. 27, 2024)

2. **Program complexity** – ensure that the program terms and conditions are simple enough for customers to readily understand the costs and benefits of program participation and do not add significant administrative burden for stakeholders, including the utilities;
3. **Eligible technologies** – provide a pathway to participation for a large swath of emerging and traditional technologies, including generators; and
4. **Environmental impact** – balance other considerations and the goals of the particular program with the carbon goals of the regional States, including through, for example, emission control standards for participating generators.

It is important to stress that the various considerations might not all be perfectly compatible and may need to be balanced against each other. In order to find the right balance, it is important to have specific and clear program goals to serve as a guide. CPower therefore encourages the Working Group to first articulate the specific goals for a retail demand response or load flexibility program before delving into the details of program design.

Comments

1. **Customer Experience**

Fundamentally, the success of a demand response or load flexibility program is going to rely on the engagement of customers, who have different motivations and capabilities compared to traditional supply-side resources. It will be critical to program success to incorporate participation flexibility that accounts for diverse customer interests and to adopt incentives sufficient to drive desired customer behavior.

a. *The program should include different participation options to account for diverse customer capabilities.*

In particular, each customer will have a limit to the frequency, duration, and lead time of events that they are willing to tolerate, but such limits will be highly varied amongst these customers. In order to account for this variety, the program should include different incentive structures for different tolerances, including higher incentives for more frequent and longer events and less notification time. This will encourage the

widest practical breadth of participation, while avoiding overspending on a participation that provides less value.

b. *Regulators should structure program incentives to maximize the value procured from customer-sited resources by avoiding harsh penalties for underperformance and creating a reliable revenue stream to encourage upfront customer investments.*

Similarly, state regulators designing a demand response or load flexibility program should avoid onerous penalty structures that deter participation from customers that are not always able to achieve high levels of performance. When the grid is stressed, customers who are only able to deliver 50 percent of committed load reductions still can provide value, even if that reduction is not as valuable as 100 percent performance. Accordingly, the program should tailor incentives to the relative value of the performance levels, while still encouraging participation by customers who might carry a risk of relatively low performance. Said another way, structuring the program to include a large "pay for performance" component is likely to work well for both customers and ratepayers. Customers will receive compensation commensurate with the value they provide to the system and ratepayers will pay only for value received.

Further, the program design should recognize that, to the extent customer participation requires investments to participate, such as the costs to install a battery or opportunity costs during events, the customer will often only make such investments if the program revenue is consistent and reliable. Accordingly, the program design should structure incentives to drive desired customer behavior, recognizing the various considerations and limitations unique to customer-sited resources.

c. *The program should adopt incentive levels sufficiently robust to attract customers and account for other value streams may or may not be available.*

State regulators should also adopt incentives that are robust and tailored to the specific goals of the program. As articulated by the Working Group website, such goals broadly include addressing New England's "challenges related to winter energy

adequacy and peak demand growth." Winter reliability challenges are well-documented in New England. A winter demand response or load flexibility program could provide significant ratepayer cost savings, reliability benefits, and carbon emissions reductions.

In order to incent customers to provide winter load reductions, a higher incentive rate than what they are currently receiving for summer programs will be needed. The reason for this is that customers in summer programs generally have the additional benefit of capacity tag savings to supplement the incentives that they earn from such programs. These two benefits together make curtailment worthwhile for customers. Winter load reductions, on the other hand, do not yield capacity tag savings, therefore customers will need a higher incentive to make such a load reduction cost effective. To that point – note that CPower participated in Winter ConnectedSolutions programs in Connecticut, Massachusetts , and Rhode when these programs were in place in prior years but the only customers who were interested in participating were those with behind the meter generation. For other customers, the potential benefit (*i.e.*, the incentive rate) was not large enough to make it worth their while.

Notably, the capacity construct in New England is changing and at some point in the future, curtailing winter peak load may yield capacity tag savings. Until such time though, customers will need higher incentives in the winter to incent a load reduction.

2. **Program Complexity**

While it is significantly intertwined with customer experience, these comments highlight program complexity as a separate consideration because of its broader implications. The customer impact of program complexity should be axiomatic – customers are less likely to participate if the complexity of the program rules makes it difficult for them to decipher all of the costs and benefits of such participation. It is therefore important that the program is designed with an eye towards simplicity in order to reach customers with diverse levels of sophistication and risk tolerance.

Even aside from the customer impact, an overly complex program will reduce its cost-effectiveness, as it would increase the administrative burden on stakeholders such as third-party providers, utilities, and regulators. For example, program designs that

require significant upgrades to utility systems may be less cost effective than simpler programs. The program design should strive for simplicity to control costs and facilitate customer participation.

3. Eligible Technologies

Again, to maximize customer participation and the impact of a demand response or load flexibility program, the program should include as many technologies as possible. This means providing pathways to participation for emerging technologies such as battery storage, as well as existing behind-the-meter (BTM) fossil generation. Providing a pathway for existing BTM fossil generation can *reduce* carbon emissions if structured properly. Specifically, a program that allows fossil generation to participate only if it meets specific environmental standards or commits to replacement of the generator with a battery within a certain timeframe could incent many BTM generators to install upgrades that reduce their carbon emissions or retire altogether. The program design could also account for the negative externalities of fossil generators by offering a lower incentive level to these resources, which will have the added benefit of encouraging customers to transition to technologies with a higher earning potential, like batteries.

4. Environmental Impact

CPower fully supports the various climate goals of the New England states and it is important that these goals remain a backdrop when designing demand response and load flexibility programs within the region. Regulators can design such programs to avoid some of the most intransigent emissions within the power sector by reducing reliance on fossil fuel peaker plants. It is important that these programs not only help alleviate challenges related to winter energy adequacy and peak demand growth, but are also consistent with regional climate goals.

As noted above, bringing existing fossil generators into the program can also provide regulators with a tool to reduce the environmental impact of those resources. Again, these generators are already on the system and often operating outside of an existing program, particularly in the winter, with limited visibility into the frequency and manner of their dispatch. A program that is inclusive of generators could be designed to limit how much these generators need to be used. As mentioned above, the design could

also make generator participation contingent on adding controls to limit emissions during program events. Accordingly, if designed correctly, a program that includes generators can support the transition to a decarbonized grid.

Conclusion

CPower appreciates the opportunity to provide these comments on the considerations for designing retail demand response and load flexibility programs. CPower looks forward to working with the Working Group to develop a framework that will aid state regulators in developing programs that can most effectively address challenges related to winter energy adequacy and peak demand growth.

Sincerely,

/s/ Lee Ewing
Lee Ewing
Manager, Regulatory and Government Affairs
CPower Energy Management
Lee.Ewing@CPowerEnergy.com
410-978-2437

Nancy Chafetz
Senior Director, Regulatory Affairs
CPower Energy Management
Nancy.Chafetz@CPowerEnergy.com
856-220-7466