



SUBMITTED ELECTRONICALLY

March 28, 2023

Massachusetts Energy Efficiency Advisory Council
and
Elizabeth Mahony, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge St #1020, Boston, MA 02114

Dear EEAC Members and Commissioner Mahony,

With the undersigned organizations, Clean Energy Group is writing to express our concern about what we see as potentially harmful proposed changes to the Massachusetts ConnectedSolutions program incentive rules. To ensure that any changes are well considered, with appropriate stakeholder input, we urge the Energy Efficiency Advisory Council to convene a dedicated public stakeholder meeting to discuss the Program Administrators' (PAs) proposed cap on performance incentives for batteries.

As you know, ConnectedSolutions is a nation-leading program first developed in Massachusetts, which has now been adopted by other states across New England. The program has proved to be highly successful, having enrolled 34,000 participants with 310 MW of capacity in just the first two years of implementation. It is also highly cost-effective: for every dollar in total program planned costs in 2020, planned benefits totaled \$2.14.

The Program Administrators' (PAs) performance incentive-cap proposal, which was presented at the March 16, 2023 Stakeholder meeting and would take effect within months, presents a danger to the ConnectedSolutions program and undercuts the energy storage and decarbonization goals of the Commonwealth. If implemented as proposed, it would substantially reduce incentives for many ConnectedSolutions battery projects; in some cases, incentives would be reduced to zero. This could significantly damage the energy storage market growth the Commonwealth's programs and policies are intended to promote. We understand that some sort of solution may be needed; but the current proposal, as put forth by the PAs, would have a market-chilling effect.

When the proposal was announced during the March 16th stakeholder meeting, it was met with numerous questions and protests from stakeholders (see: meeting recording at <https://youtu.be/oG-LraKOT7c>). In response, the PAs suggested that they might reconsider their proposal; but they also stated that they intend to adopt a final solution within 2-3 weeks.

We ask the EEAC to slow down this rush to a solution that has not been fully vetted and give both the PAs and the stakeholders time to come up with a more just and equitable solution that will not cause more problems than it solves.

Here is a summary of the proposal presented by the PAs:

A few customers are proposing to enroll very large batteries into ConnectedSolutions for power export during ConnectedSolutions peak events. Some of these batteries are larger than the load of the host facility, with capacity up to 500 times the facility load. The PAs propose to limit ConnectedSolutions performance incentives for these batteries using this formula:

Maximum incentive = facility peak load minus battery nameplate capacity, X150%.

Critically, the facility peak load would be reassessed annually by the PAs.

What would this mean for energy storage projects?

In practice, it means this: the larger the battery relative to the facility peak load, the smaller the per-kW incentive under ConnectedSolutions. When the battery capacity equals or exceeds the facility peak load, the incentive is zero.

A couple of simple examples will illustrate the problem:

Example #1

Consider a fire department that wants to install a battery to provide resilience and demand charge management. The firehouse peak load is 100 kW. To ensure a good resilience benefit, they install a 100 kW battery. Using the PAs' formula above, 100 kW peak load minus 100 kW battery nameplate capacity = 0, and $0 \times 150\% = 0$. The firehouse is not eligible for any ConnectedSolutions incentive.

But this is not the only problem with the proposed capacity cap. The proposal also ignores the effects of using even modestly-sized battery storage for demand charge management over time:

Example #2

Using the same firehouse example, let's say the firehouse installs a 50 kW battery for use in lowering its demand charges. This time, the battery capacity is half the facility peak load. This should be fine, right? The facility peak load of 100 kW minus the battery capacity of 50 kW = 50 kW, multiplied by 150% = 75 kW. The project is eligible for ConnectedSolutions incentives up to 75 kW in year one.

But wait... what happens in year two? Let's assume the firehouse has successfully used its battery to reduce its peak demand. Now in year two the PAs reassess the facility's peak demand and find that it has fallen from 100 kW to 50 kW. At this point the battery capacity is again equal to the facility peak demand, and potential ConnectedSolutions incentives again fall to zero.

These scenarios illustrate just two cases in which the PAs' proposed capacity cap would defeat the purpose of the ConnectedSolutions program by disincentivizing customers from installing energy storage. There are other scenarios we could put forth, but to summarize, the PAs' proposal creates a number of problems including:

- 1. It disincentivizes large batteries.** In order to make an investment in energy storage, customers and third parties need to be able to monetize battery services such as power export. Limiting performance payments for power export from larger batteries reduces the economic basis for investing in larger batteries.
- 2. It disincentivizes batteries used for peak demand reduction and power export,** by penalizing commercial customers who can do both. This means many smaller commercial customers can no longer receive the full incentive (or any incentive) for installing a larger battery. It also means the grid will not benefit from battery export during peak load hours because systems primarily designed for export will be penalized.
- 3. It calculates incentive rates based on battery nameplate capacity.** This is a problem because most batteries are never fully discharged, both to preserve battery life and to retain some capacity in the battery for other uses, such as emergency back-up power. Under this proposal, battery owners would be penalized for installing larger batteries even though a sizeable fraction of the battery capacity may never be exported during ConnectedSolutions events.
- 4. It introduces a form of baselining.** In the March 16th stakeholder meeting, the PAs made it clear that they would not be implementing baselining – another controversial measure – in ConnectedSolutions this summer, but left the door open to implement it in the future. But the proposed incentive cap is essentially a form of baselining because it nets out battery nameplate capacity from facility peak load before calculating incentives. This means incentives would be based on reductions relative to facility peak load, rather than on power discharged during regional peak events.
- 5. It limits options for office, shopping center and multitenant commercial properties.** This is because landlords at these types of properties often have small utility bills (because tenants are individually metered) but plenty of space to site batteries (for example, in parking lots) that can export during periods of peak demand.
- 6. It undercuts the Commonwealth's environmental justice goals as well as its clean peak goals** by limiting or eliminating the incentive for large batteries that export power during peak events. These battery exports can reduce the need to call on expensive and polluting natural gas- and oil-fired peaker power plants, which are often located in underserved and overburdened urban communities where they emit local pollutants that contribute to negative health impacts.

7. It penalizes battery customers who install solar PV or efficiency improvements.

Since every kW saved through efficiency or generated on-site by solar can reduce the facility's peak load relative to its battery capacity, the proposed incentive cap would reduce ConnectedSolutions incentives for customers installing solar or making efficiency improvements.

8. It undercuts the Commonwealth's workforce development initiatives within MassSave by penalizing all the situations above.

Again, we understand that some amendment of the ConnectedSolutions program rules may be needed to address participants enrolling 500X oversized batteries; we also understand the PAs are eager to finalize the program rules ahead of the summer season. To that end, several of the undersigned organizations have initiated direct conversations with the PAs. However, this issue is important enough that it should be brought to a public forum, with appropriate stakeholder input, so that an optimal solution can be found.

Rather than rushing to adopt a quick fix, we urge the PAs and the EEAC to schedule and advertise a dedicated stakeholder workshop where possible solutions can be brought forth and discussed, and issues addressed.

Thank you for your consideration.

Sincerely,

Todd Olinsky-Paul
Senior Project Director
Clean Energy Group

Darleen D. DeRosa
Vice President, Policy & Regulatory Affairs
Stem

Natalie Hildt Treat
Senior Policy Manger
Northeast Clean Energy Council

Alex Keally
Senior Vice President and General Manager
of Storage Development
Solect Energy

Pete Falcier
Senior Vice President, Regulatory Affairs
Endurant Energy

Russ Aney
Senior Project Developer
Parallel Projects Solar Energy, LLC

Archie Adams
Director of Business Development
Peak Power

Nick d'Arbeloff
Vice President
Solar Energy Business Association of
New England (SEBANE)