

TO: Carmen D. Diaz, Acting Secretary of the Board

FROM: Pamela G. Frank, CEO, ChargeVC-NJ

DATE: December 12, 2022

SUBJECT: In The Matter of New Jersey Energy Storage Incentive Program

On behalf of the membership of ChargeVC-NJ, we appreciate the opportunity to provide written comments on the New Jersey Board of Public Utilities (BPU) Storage Incentive Program (NJ SIP) Straw Proposal.

COMMENTS

ChargeVC-NJ is a not-for-profit business association with a diverse membership that includes utilities, automotive dealerships, original equipment manufacturers, technology companies, community organizations, and environmental, equity and community advocates. The organization is focused on the transition to electric vehicles (EVs).

In addition to being an essential part of achieving New Jersey's clean energy goals, storage is an integral part of the state's EV development. The majority of our comments focus on the applicability of storage to the development of New Jersey's EV market.

- a) **Importance for EV Charging:** Coupling storage with EV charging infrastructure is an important new application which should be explicitly endorsed by the NJ SIP. Integrating storage with EV-chargers can help reduce peak loads, reduce customer costs (associated with demand charges and other costs), and reduce service requirements and/or distribution system upgrades. Integration of storage also allows electrification projects (both transportation and distributed energy generation projects like solar) to be implemented faster, especially notable given the timing of significant federal investments. In many cases, storage may not be a stand-alone asset, but may take the form of batteries closely coupled with chargers/charging-infrastructure. Additionally, storage may be mobile apart from the battery in an existing EV (i.e. large storage on trucks/and or barges on waterways), significantly increasing the flexibility for all the ways it may be utilized. All configurations should be supported and encouraged by the NJ SIP. We also recognize that experience will further inform the long-term cost/benefit of storage and New Jersey is at the beginning with respect to its experience with storage technology.
- b) **Diverse storage applications:** There are a diverse range of applications for storage. Examples include but are not limited to firming of renewables, reducing peak loads and customer costs, reducing service requirements, and accelerating project development. It

is critical that the BPU storage program support the full range of applications and use cases, including cases where storage is embedded as part of a broader project (solar, EV-charging, etc.). When not in operation, EVs also present opportunities to utilize the EV batteries for storage. Although the current NJ SIP focuses on "stand-alone storage", in many cases storage will be coupled with other technologies or may take a different form (i.e. a fleet of vehicles) which is appropriate and should be encouraged by the NJ SIP.

c) **The 2030 goal of 2,000 MW of storage should be increased to allow for more cost-effective storage for the following reasons:**

- The goal is incompatible with New Jersey's massive offshore wind, solar, and EV goals;
- Storage resources in New Jersey can reduce CO2 emissions throughout PJM; acting as zero emissions peakers, replacing CO2 emissions from fossil plants;
- In EV related applications, storage is needed to manage charger load to the benefit of ratepayers, preventing cost increases and reliability issues;
- 2,000 MW is below the goal of other leading states.

As of December 5, 2022, there were eleven states with energy storage targets, including New Jersey. Massachusetts has nearly completed its short-term goal of 250 MW by 2025 while it evaluates its long-term goals. The other states have 2030 energy storage goals ranging from 400 MW to 15,000 MW but due to the variety of market sizes and other market dynamics, it is challenging to directly compare different states' storage goals.

One simple method is to standardize the storage goals as a percentage of each state's peak electric load. Based on this metric, California is in the forefront of the 2030 goals with storage capacity target of 15,000 MW (33% of current peak load). Maine, Connecticut, Arizona, and New York have 2030 goals ranging from 400 MW to 6,000 MW, which represents about 18-19% of each state's respective peak load. Nevada and Michigan's 2030 goals are about 13% of their peak loads. Virginia's goal of 3,100 MW also represents about 13% of peak load, but it is a 2035 goal rather than a 2030 goal.

In contrast to its renewable energy commitments, which showcase New Jersey as a market leader, the storage goal of the New Jersey SIP is the most modest of the states that have specific 2030 goals, recognizing energy storage as a critical component of

the green energy future. New Jersey's 2030 goal of 2,000 MW represents approximately 11% of current peak load.

New Jersey's commitment to cost effective energy storage should reflect the proven market leadership it has demonstrated in renewable energy generation. Combined with the long-term EMP goal of 8.7 GW, the BPU should consider doubling the 2030 SIP capacity to 4,000 MW.

d) **Structure of incentives must recognize the value of storage and be consistent, reliable, and bankable:**

(1) **Value of Reducing Load:** The NJ SIP focuses on the environmental value of storage, which ChargeVC endorses when designed appropriately. Storage will also have other important benefits such as the ability for storage to reduce peak loads, and/or to reduce growing service requirements that would drive significant distribution upgrades. Storage applications which defer or avoid such upgrades are significant elements of storage value. In addition to environmental value, these other key benefits should be recognized by the BPU SIP.

(2) **Stacking Value Capture:** Consistent with the points made above, in many cases storage will be built as part of a broader project, and there will be other incentives applicable to the project through utility make-ready programs, federal tax credits, and other state-agency grants. It is critical that the NJ SIP be complementary with these other incentives, and that projects be allowed to "stack" the BPU incentive with other value streams. The target of 30% of project costs for the fixed-incentive is reasonable to achieve economic viability. For storage investments to be attractive, the BPU incentive must be IN ADDITION TO other incentives, not INSTEAD OF other incentives, although it is important to ensure that total incentives for a project do not exceed project costs.

(3) **Bifurcation of the NJ SIP into fixed and variable incentive structures is appropriate; the declining block structure is too complicated.** The NJ SIP should start with a simple structure. More complexity may be required, but that decision should be informed by first generation program results.

e) **The NJ SIP should be amended to recognize that utilities have an important role to play in storage development:** The NJ SIP contemplates a storage market dominated by private investment, and there is minimal content regarding what the role of the utility will be in developing this market. ChargeVC considers this a major weakness. The NJ SIP would

benefit from the recognition of an appropriate role for the utility in storage market development including utility ownership in particular cases. Utilities should have the ability to make investments in energy storage and can provide expertise to site locations for utility scale and provide operational flexibility. The utilities will need to work with BPU Staff to develop and implement new tariffs that allow for interconnection and compensation of behind-the-meter storage projects. Utilities will also need to implement new processes to handle the growing number of storage projects required to meet state goals. This is significant and new support should be recognized. While many projects can be owned and operated by the private market, there are cases where utility ownership and operation is appropriate. The NJ SIP should be expanded to recognize all elements of utility involvement and be permissive, allowing utilities to make proposals for utility-based storage programs with full and timely cost recovery for incremental spending required under storage programs.

- f) **Recognition of battery storage that exists in EVs when the vehicles provide service to the grid:** For the vast majority of a 24-hour day, EVs are not driving on the roads. The NJ SIP should recognize the future capacity of these batteries and the value those batteries can provide to the grid. Fleet vehicles, in particular, operate on predictable schedules and can be put to work, functioning as extensions of building energy management systems when parked overnight. The BPU should establish rate schedules that encourage vehicle-to-grid utilization of both individual- and fleet-owned vehicles.

This value recognition may provide an opportunity to bridge the vehicle affordability gap. Electric car share and ride share programs that serve overburdened communities can make use of revenue from batteries; electric school buses and transit buses can use the revenue that recognizes demonstrable value to help offset the high cost of these vehicles for use by the public.

We appreciate the opportunity to provide comments on the NJ BPU's Energy Storage Incentive Program and look forward to discussing this matter further.