



Public Utilities Commission

Chairperson Margaret Curran
Commissioner Marion Gold
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376 Dry Bridge Rd. Unit J3
North Kingstown, RI 02852

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REF: Battery Installation Restriction

Dear Commissioners,

As battery costs decline and battery technologies advance, there is a growing demand for energy storage paired with solar PV installations. However, policy is not keeping up and is constraining the private sector's ability to provide these services.

Issue 1 Experienced:

Battery installations are not currently allowed in homes with a Renewable Energy Growth (REG) solar installation. In previous feedback, National Grid has expressed concern for using batteries to "game" the billing system. With appropriate wiring and policy, this will not be an option for homeowners nor an issue for National Grid.

Prohibiting direct connection of a battery to the REG meter while the Grid is up is a reasonable requirement, as the battery should not have the ability to export energy to the REG meter. The battery should never be able to interconnect with the REG meter, only the solar array.

Prohibiting connection with a REG solar array while the Grid is down is not reasonable policy. The homeowner has purchased and owns the solar equipment and it could be used to recharge the battery and provide power to a home during a National Grid outage and minimize damage to the home such as frozen pipes, spoiled food, etc. In addition, this will discourage participation in Demand Response (DR) programs. Disallowing battery-solar connection during an outage is not an appropriate solution design for limiting gaming of the billing system. Rather, appropriate installation methodology limits and policy should be designed and implemented.

Proposed Solution 1:

Allow a transfer switch to connect REG solar arrays to either batteries or essential load panels, powering loads in the house, during an outage. Batteries will also disconnect from the house load meter during an outage as required.

Issue 2:

National Grid's billing system cannot handle a Net Metering (NM) and REG solar installation on the same account. It is our understanding that this is due to the fact that both residential NM and REG

systems create bill credit and the system cannot handle bill credit from two sources. Not allowing a NM solar installation with batteries on houses that have REG installations handicaps clients that want backup power during a National Grid outage and limit DR participation.

Proposed Solution 2A (short term):

Allow battery interconnections and NM installation on houses with REG installations and limit the NM & Battery system to “zero export” so that the meter never counts backwards. Most battery systems have this option for compliance in states that have a “Zero Export” policy on Net Metering systems. This would eliminate the issue with National Grid’s billing system not being able to account for NM credit and REG credit simultaneously.

Proposed Solution 2B (long term):

Upgrade NGrid’s billing system from the legacy program to one that can handle the complexities of RI solar policy.

In summary, as our Power Sector Transformation investigation and process has shown, energy storage will be, and is currently becoming an important part of the future interactive grid, as well as an economical and practical solution for backup power today. It has also suggested that a Feed In Tariff (FIT), such as the Renewable Energy Growth Program, is a sensible successor to net-metering, once net-metering has reached a certain level of penetration. To not allow a ratepayer to connect a battery to their solar array when the utility cannot provide power is overly prohibitive and raises questions of ownership and rights of a ratepayer. We hope you will take this problem into consideration and begin the process of developing a solution.

Sincerely,
Newport Solar
Doug Sabetti- President