

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

IN RE: DEVELOPMENT OF STORAGE : DOCKET NO. 24-34-EL  
TARIFF FRAMEWORKS :

Division of Public Utilities and Carriers  
Comments Regarding Development of Retail Storage Tariff  
March 26, 2025

Availability/ Eligibility

**1) What customer types/ configurations should be allowed to discharge?**

To answer this question the Division references the following potential configurations for a storage asset:

- 1) Co-located with retail load, no distributed generation
- 2) Co-located with retail load, with distributed generation
  - a. Net Metering Customer (BTM)
  - b. RE Growth Customer (FTM)
- 3) Standalone (not co-located with load), no distributed generation - implies creation of a new tariff for this configuration.
- 4) Standalone (not co-located with load), with distributed generation
  - a. Net Metering Customer (Virtual Net Metering)
  - b. RE Growth Customer
  - c. Neither Net Metering or RE Growth (implies creation of a new tariff for this configuration)

Furthermore, based on the discussion on the March 14 stakeholder call, the term “discharge” is taken to mean discharge to the grid (not to serve load).

Absent specific restrictions that may be contained in an interconnection agreement or subject to any system event or emergency, any of these configurations should be allowed to discharge. Additional metering may be required.

**2) Should there be a limit on how much or what time ESS can be discharged?**

Absent specific restrictions that may be contained in an interconnection agreement or subject to any system event or emergency, there should be no limits to the amount, timing or duration of discharge. Discharge limits imposed through flexible interconnection agreements should be strongly enforced to achieve intended optimization and distribution cost savings. Finally, the Division observes that current retail rates and program design provide limited (or no) price signals to encourage discharging an energy storage system to the grid.

### **3) Does it matter what “type” of power is discharged? Does it vary by tariff or program?**

Yes. The Division interprets “type” to distinguish stored energy that was charged by energy from a renewable or other distributed generation source from stored energy that was charged by grid energy. The “type” of energy and program enrollment are key factors to consider in developing metering arrangements, payments, and tariffs.

For RE Growth configurations, in which a performance-based incentive (PBI) has been established via a competitive bidding process or administratively set rate intended to compensate the generation owner for renewable distributed generation only, it is critical to only allow the energy from the distributed generation resource to receive the PBI. For this reason, configuration 2b) should disallow stored energy to be passed through the separate RE Growth meter unless the storage asset is exclusively charged by the distributed generation resource (noting that this configuration would not seem beneficial to project owners given the losses during the charge/ discharge cycle through the battery). Likewise, configuration 4b) should require that only energy from the renewable resource should be used to charge the battery (and eventually discharge through the RE Growth production meter). It should be noted that in configuration 4b), station service may be required for ancillary loads associated with the DG resource and/ or the storage asset. Again, this station service should not be allowed to be used to charge the battery. The amount of energy export should be within the limits of interconnection requirements and the nameplate capacity of the eligible DG project. RE Growth Rules may restrict this output based on RE Growth Class for which the project was qualified for the RE Growth program.

For Net Metering configurations, given current retail tariff structures and lack of time of use rates, a storage asset in configuration 2a) should not have any restrictions on the “type” of stored energy that can be discharged, including whether this discharge is only to serve load on site. The adoption of time of use rates, depending on rate design and associated tariff provisions, including any future modifications to the net metering tariff, could change this. This is discussed further in the next section of questions. Under current rates, this presents a potential opportunity for customers that are on rates with a demand component to utilize their battery to reduce demand charges, but given the lack of time varying energy rates there is no other incentive to utilize the storage asset other than for purposes of backup power. An important consideration related to this configuration is the renewable energy credits (RECs). Under current net metering statute, the RECs for these projects belong to the net metering customer. Utilization of the renewable energy to charge the battery may result in fewer RECs being generated due to losses during the round trip cycle through the battery. Separate metering may be required to account for this.

For net metering customers in configuration 4a), only energy from the renewable resource should be used to charge the battery and eventually discharge through the net metering production meter.

Configurations 1 and 3 should not have any restrictions on discharge other than any imposed in the interconnection agreement, and in these cases, the only “type” of stored energy possible is energy from the grid. Current rate structures would provide limited economic incentive for these structures, other than for customers in configuration 1 on demand rates with load profiles that are suitable for peak demand reduction using a battery or other storage asset.

## Rates

- 4) What should ESS be paid for discharge? Should it have a time varying component? What should ESS pay when it is charging? Does the configuration dictate what the ESS pays and is paid?**

As a general comment, the Division notes that, until AMF is fully deployed and RIE is able to roll out time varying retail rates, storage assets co-located with retail load, whether paired with renewable generation or not, will have limited economic dispatch opportunities (such as demand side management programs like Connected Solutions or, for customers on demand rates, potential peak demand shaving to reduce retail demand charges). Given the need for certainty about the long-term economics of operating storage for the investment analysis process, it seems counterproductive to introduce interim solutions for retail rates to bridge the gap between today's static rate environment and a future with time varying, dynamic rates. As a result, the Division recommends focusing this current effort on potential new stand-alone retail storage tariffs.

Storage Assets in a standalone configuration (i.e. not co-located with retail load) whether paired with DG or not, could be eligible for a new retail stand-alone storage rate that provides pricing signals for charging and discharging of these assets in a manner that provides grid benefits and/or reductions in energy supply costs. This new rate should be time differentiated and would be based on clearly identifiable benefits to ratepayers and could include multiple components, including energy, capacity and transmission-related elements as well as distribution grid services. The interconnection study process could be used to facilitate dispatch limiting schedules for these assets that would result in reduced costs for interconnection but potentially impact the flexibility of the resource to fully respond to price signals.

New stand-alone retail storage tariffs will require comprehensive evaluation. The Division is not in a position to perform this analysis or recommend rates. The Division's primary objectives are that the ESS be paid at the Company's avoided cost for discharge and implemented without inequitable cross subsidization between customers. If additional incentives or credits for discharge of storage are offered, they must be aligned with the quantifiable, tangible benefits resulting in a positive benefit-to-cost ratio for ratepayers.

## Terms and Conditions

### **5) How do customers establish eligibility for the retail tariff? How to establish that specific types of discharge are eligible to receive compensation?**

TBD based on ultimate design of a stand-alone retail storage tariff. Once AMF is fully deployed and time varying rates are developed, considerable changes will likely be required to integrate net metering, RE Growth and other programs (e.g. Connected Solutions). These will require new rules related to eligibility, allowed configurations, terms, conditions and rates.

### **6) What are the appropriate metering requirements?**

Recognizing that AMF deployment is not expected to be complete until late 2026 and that advanced functionality of these meters may happen in phases, the Division requests that RIE provide information to stakeholders in this docket regarding the capabilities of AMF meters. This would include the ability to measure load separately from generation/ storage discharge, customer access to meter data, integration with TVR and real time pricing signals, etc. The goal of this is to understand what functionality and capabilities AMF may unlock with respect to integration of energy storage (plus other DERs) and the potential impacts to tariff and program designs, metering requirements, etc.

Each configuration discussed in these prompts will have different metering configurations, with many informed by RIE's current or potential programs. The Division proposes that the Company is best positioned to evaluate the varying ESS integration scenarios, and present optimal metering options. The Company should consider AMR transition to AMF and discuss the most cost-effective method to provide requisite metering in the near and long term.

### **7) Should there be any size limitations for eligibility for retail tariff?**

Storage assets would potentially have size limitations based on the interconnection process and the final Interconnection Agreement. Additionally, limitations based on the retail tariff load limits may apply (i.e. adding a large storage asset to a site with existing load may result in that customer being forced into a different rate class).

## General

- 8) Per the previous slide, should storage “live” within existing tariffs or have a standalone tariff? If both, what elements should be in a standalone rate that make it distinct?**

Generally, storage assets co-located with load should live within the retail tariff applicable to the load. This does not preclude a storage asset from participating in demand response, curtailment, or load management programs, subject to the terms of those programs and their retail tariff. The potential standalone retail tariff described above would need to clearly identify that the load on the site related to ancillary equipment associated with the storage asset (lighting, IT, instrumentation, ventilation and safety) would be separately metered under a traditional retail tariff (e.g. C-06).

- 9) If layered on top of another program, what programmatic changes would be appropriate?**

At this time, the Division does not recommend layering a storage tariff on top of other programs. Once time varying rates are broadly available, these programs will need to be significantly modified to accommodate the new rates, especially net metering.