

## Rhode Island Public Utilities Commission Docket No. 5000

# IN RE: INVESTIGATION INTO THE TREATMENT OF STORAGE AS AN ELECTRIC DISTRIBUTION SYSTEM RESOURCE

Rhode Island Energy Comments August 4, 2023

The Narragansett Electric Company d/b/a Rhode Island Energy ("Company") respectfully submits the following comments on the Rhode Island Public Utilities Commission's draft Report to the Rhode Island Senate in Response to Resolution 416, entitled *Examination of the Value of and Need for Energy Storage Resources in Rhode Island* ("Report") dated July 10, 2023.

Rhode Island Energy supports the Report's recommendations to develop an energy storage interconnection tariff and an energy storage electric service tariff. Rhode Island Energy focuses its comments below on gaining clarity on and informing the Report's recommendations for next steps. If the recommendations for future action in the Report are adopted, Rhode Island Energy would be an eager partner in those discussions and would provide additional technical comments as appropriate for the discussions at that time.<sup>1</sup>

Rhode Island Energy appreciates the thoughtful exposition about the evolving role of energy storage in the Report. Energy storage is a tool that can provide value, and our collective objective is to procure and compensate the specific components of the value stack easily and appropriately. To that end, Rhode Island Energy agrees that "prudent, measured progress on energy storage should be the near-term goal" and that strategic, collaborative development of tariffs is a way to advance that short-term goal in a systematic manner.

## Energy storage service tariff

Rhode Island Energy agrees that developing a service tariff for energy storage would be valuable and appropriate. For example, an energy storage system that charges from the electric power system mid-day where local solar production saturates the feeder may not be a cost causer that warrants a demand charge. In developing an energy storage service tariff, Rhode Island Energy – in collaboration with the Commission and stakeholders – could more accurately identify, quantify, and allocate costs and benefits specific to energy storage systems. Rhode Island Energy suggests an additional topic of discussion could be whether a tariff(s) applying to electrically paired distributed generation and energy storage systems may (or may not be) warranted, and whether/what revisions may be necessary for differential treatment of energy storage charged from a paired renewable energy system or from the electric power system.

<sup>&</sup>lt;sup>1</sup> Technical comments include specifics regarding balancing electricity generation and consumption as a matter of *both* timing and location, consideration of round-trip energy shift implications of charging and discharging, Group 1 benefits during charging in Scenario 2, and nuances in characteristics of Scenario examples.



The Report states "The service tariff framework development would build upon the work of Chapters 2 and 3 of this Report to identify net beneficial products and values from standalone energy storage resources, the specific charging and discharging activities through which those products and values are delivered, and the time- and location-based constraints under which values from standalone storage resources are actually exchanged."

Rhode Island Energy is interpreting the Report as suggesting that an energy storage service tariff should perhaps differentiate between energy storage systems that participate in different markets or provide different value, and that the rates themselves should incorporate these value streams. Doing so may introduce several risks. First, the rates may become stale as markets and market valuation changes over time. Second, an energy storage resource may need to switch between different rates as it changes its market participation, or otherwise be locked into participation in a certain manner. Third, some value streams may not be able to be realized at this time but may become available at a future time (e.g., with increased visibility and control of the electric power system through grid modernization).

Perhaps another way to consider an energy storage service rate is to consider the cost-of-service of energy storage devoid of participation in any market or program. Then, any market or program participation, which is optional and at the discretion of the energy storage operator, can be layered on the service rate by the operator in order to build the value proposition and deliver clear market signals to energy storage operations. Whether the Commission and stakeholders consider the top-down approach described in the Report or the bottom-up approach offered here, Rhode Island Energy respectfully requests the authors remove the specifics from the Report and instead collaborate with stakeholders to develop the foundation of an energy storage service tariff during its proceedings.

Regarding process: Rhode Island Energy appreciates the stepwise process outlined in the Report. Readers of the Report, including Rhode Island Energy, may benefit from additional clarity around (i) the definitions of a 'tariff framework' and 'model tariff', (ii) whether the intention is to draft a model tariff or find a model tariff from another jurisdiction, (iii) whether the model tariff includes specific rates, and (iv) what the process looks like if there are multiple model tariffs filed or if time constraints prevent the Commission's review of the model tariff as described in the Report. Rhode Island Energy observes that any future energy storage service tariff should also be compatible with future dynamic rate structures and programs, which the Commission may take into consideration in determining the timing appropriate regulatory action to direct the Company to file an energy storage service tariff.

### Interconnection Tariff

Rhode Island Energy agrees that a critical review of its interconnection tariff to ensure transparency and consistent application to energy storage systems would be beneficial. The Report suggests potentially developing an interconnection tariff specific to energy storage. Rhode Island Energy offers that having a single interconnection tariff – for both distributed generation, standalone energy storage, and paired systems – may be more streamlined for users. The Company currently applies its distributed generation interconnection tariff to standalone and



paired energy storage systems. Indeed, the Company currently provides interconnection applicants the option to study an electrically paired distributed generation and energy storage system in aggregate (e.g., adding nameplate capacities) or with export to the electric power system limited, such as by inverter size. Rhode Island Energy's existing interconnection tariff – with amendments – may be a viable solution for specifying the terms of interconnection for energy storage.

In addition to improving clarity and transparency for interconnecting energy storage systems, Rhode Island Energy is eager to discuss terms and conditions for dispatching distributed energy resources, including to facilitate communication between the Company and those resources. Dispatchability has the potential to unlock local distribution system values that would otherwise be unavailable.

### Periodic Market Assessment

Rhode Island Energy agrees that the location- and time-dependent nature of the products and values offered by energy storage may not be well-served by a static, system-wide target level of energy storage deployment. As such, a periodic market assessment would be a helpful tool to encourage the right level of energy storage development in the right place at the right time.

Rhode Island Energy welcomes further discussion about the objectives of a periodic market assessment and the appropriate organization to advance each objective. For example, Rhode Island Energy's role as distribution system operator provides Rhode Island Energy unique insight into hyper-local and timely value of energy storage. However, it may be less appropriate for Rhode Island Energy to assess and opine on the market efficiency of regional transmission markets in which energy storage may participate.

Thank you for your consideration of these comments. Rhode Island Energy looks forward to further engagement with the Commission and stakeholders.