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Rhode Island Energy™
a PPL company

July 31, 2025

VIA HAND DELIVERY AND ELECTRONIC MAIL

Stephanie De La Rosa, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket No. 24-34-EL – Development of Tariffs Applicable to Energy Storage Systems Connected to the Electric Distribution Systems
Rhode Island Energy's Comments

Dear Ms. De La Rosa:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed for filing in the above-referenced docket are the Company's comments in response to the discussion at the PUC-Led Workshop on July 23, 2025, regarding the development of a Retail Storage Tariff.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-784-4263.

Very truly yours,

Andrew S. Marcaccio

Enclosure

cc: Docket No. 24-34-EL Service List

The Narragansett Electric Company
d/b/a Rhode Island Energy
Rhode Island Energy's Comments in Response to PUC-Led Workshop #9

The following responses are the Company's current impressions of the stakeholder prompts. Through continued collaboration in the PUC-led workshops the Company expects to engage, evolve, and modify considerations as appropriate.

Stakeholder Prompts for Comment after Stakeholder Workshop on July 23, 2025

Applicability (Slide 6)

1. Prompt:

If a new ESS-specific interconnection tariff is adopted, this will have implications for existing and future ESS projects. The following lists various potential configurations of ESSs. What configurations should the new interconnection tariff be applicable to? When should the old tariff still apply? Are there other configurations worth noting?

- Existing stand-alone ESS with executed ISA, seeking to change operating schedule
- Existing ESS co-located with new DG
- New ESS, already in application queue
- New ESS, co-located with existing DG
- New ESS, co-located with new DG

Response:

The new interconnection tariff should be applicable to any configuration that consists of a new ESS, regardless of what it is or is not co-located with. Any new ESS that is already in the interconnection queue should have the option to move to the new interconnection tariff or remain with the existing interconnection tariff. If there is an existing ESS that is seeking to change the operating schedule, it will require a restudy and will follow the new interconnection tariff. Any existing ESS, regardless of what it is interconnected with, should continue to comply with the existing interconnection tariff if there is no proposed change.

The Company's written comments in response to the first set of Stakeholder prompts on December 20, 2024, that pertain to this topic have been included here for reference:

Existing storage facilities, regardless of whether those facilities are co-located with existing facilities subject to existing interconnection tariffs and processes, should continue to comply with those existing tariffs and processes.

Existing storage facilities that seek to change their operating procedures following the addition of a new, co-located facility should comply with whatever interconnection tariff and process is in effect when seeking interconnection of the new plus existing combined system. In effect, the existing storage facility can choose whether to continue operations under the existing tariff or reapply as a new combined facility under the new tariff.

New storage facilities added to existing facilities subject to existing interconnection tariffs and processes should comply with whatever interconnection tariff is in effect at the time of interconnecting the new storage facility.

2. Prompt:

Should a new interconnection tariff be developed specific to ESS, or should the existing interconnection tariff be adapted to include ESS?

Response:

The Company believes that either the development of a new interconnection tariff specific to ESS, or adapting the existing interconnection tariff to include ESS, can meet the required objectives. At this stage, the Company is leaning towards adapting the existing interconnection tariff to include ESS given the similarities from a process standpoint for DG and ESS interconnection. The key and unique differentiating factors between the two can be delineated and incorporated into the existing interconnection tariff.

3. Prompt:

How would this tariff interact (if at all) with ESSs connecting to the transmission system? Would they follow the Open Access Transmission Tariff (OATT) instead? Will this be dictated by size of system and whether they intend to participate in wholesale market?

Response:

This tariff should not govern the ESS connecting to the Transmission system. The ESS interconnecting to the Transmission system would follow the OATT and go through the ISO-NE queue. This tariff under discussion would apply to ESS interconnecting to the Distribution

system. This tariff's applicability is not necessarily dependent on the size of the system or the market participation status but rather on the location, i.e., Distribution v. Transmission point of interconnection. ESS connecting to the Transmission system may interact with ESS connecting to the Distribution system from the perspective of the Transmission queue and study management. In other words, there may be ESS systems of a certain size, interconnecting to the Distribution system following the retail interconnection tariff, which may be subject to ASO study. That ASO study timeline may be coordinated with the ISO-NE queue.

Study Process: Required Level of Study (Slide 12)

4. Prompt:

All: In determining the applicable Study Path (Simplified, Expedited, and Standard), are there any other special considerations for ESSs that are not already incorporated into the current tariff?

Response:

The Company's written comments to the first set of Stakeholder prompts on December 20, 2024, that pertain to this topic stated Facility size should determine the study requirements. General guidelines would allow systems less than 250kW to follow a simplified or expedited type of path while systems greater than 250kW would follow a complex type of path. General guidelines may be modified at the discretion of the Company. Location should not determine study requirements. Configuration (in terms of operation) should determine the study requirements. For example, an ESS configured for zero export is one configuration that would be studied in a different manner. The Company is willing to consider additional options for zero export proposals.

In addition, as the Distribution system continues to become more complex, the general guidelines for system size that help define the Study Path may change and have smaller system sizes for the thresholds.

5. Prompt:

All: The current interconnection tariff uses export capacity to determine the Study Path. Should nameplate or export capacity ratings be used to determine the Study Path?

Response:

Study Path should be determined by nameplate (export and import) capacity. In most instances, the export capacity is equal to the nameplate, except in instances where the Developer has an oversized inverter, or in instances identified through study that identify a derating to avoid certain system modifications. In these cases, a derate letter is required. This would typically be collected during the Study phase but could be provided during the Witness Test. A Oneline stamped by an Electrical PE must reflect the derating.

6. Prompt:

All: The current cutoff is 25kW to qualify for the Simplified path (among other requirements). Should ESS have a different kW threshold?

Response:

Currently, the Company intends to keep the threshold the same. The system size thresholds for study path may need to be lowered in the future as the system continues to become more complex; for example, the analysis with one ESS connected to a feeder is more straightforward than an analysis with multiple ESS connected to a feeder.

7. Prompt:

All: ESS may be added to a site that has already undergone a detailed Impact Study. In cases where studies have already been conducted at the site, is it possible to put these projects on an expedited study path? In what scenarios?

Response:

If ESS is added to a site that has already undergone an Impact Study the only scenario where it is possible to progress on an expedited study path would be a case where the ESS commits to the current site limits with the proper protection and control scheme in place to operate and comply.

Study Process: Operating Schedules (Slides 18 -19)

8. Prompt:

RIE: How feasible is it to produce these priority dataset(s), over the short and long term? What are your primary concerns with this?

Response:

Given a specific list of dataset(s), the Company could assess feasibility for each. Additionally, understanding the reason for the request; i.e., what is the purpose of having the data/what will it be used for, can help the Company recommend the most effective information to provide.

Based on what the Company understood from stakeholders in the July 23, 2025 workshop, the Company heard a request for the following:

1) 8760 data
2) Distribution data at the substation or feeder level; equipment ratings, thermal limits, etc.
3) Five-year forecast data

The Company gathers and validates the 8760 data and incorporates it into the study based on the Developer's proposed operating schedule. The Company and Developer can work together during the study process to understand the data and leverage it for optimal interconnection. The Company would need to better understand the purpose of providing this without an operating schedule to determine the most effective way to support the need. The Company's concern with sharing the raw 8760 data is two-fold: for one, it could be misleading as it would not reflect clean-up for items such as weather, emergency conditions, etc. Additionally, Developer visibility to this data can pose a risk when thinking about ESS operating in an unconstrained manner or allocating firm capacity. Providing the data without a proposed operating schedule may result in ESS operation that accelerates the need for capital investment. Reserving capacity but not necessarily operating in a manner that is beneficial to the Distribution system would require the Company to invest in upgrades to the Distribution system to ensure that adequate reserve capacity remains available on feeders, which can adversely impact rates. The Company is focused on supporting the development and interconnection of ESS in a manner that does not adversely impact rate payers.

The Distribution data at the substation or feeder level and five-year forecast data are all publicly available and can be accessed at the Rhode Island System Data Portal. The Company provides education and training on accessing and navigating the Portal in various forums such as through the SRP TWG and the OER Solar Stakeholder meetings. One way to determine an optimal location to apply for interconnection with ESS would be to find areas in the Portal on both the Hosting Capacity tab (for generation) and the Distribution Assets Overview and Load Map (for load) that are red. For illustrative purposes, screenshots are provided with an example below.

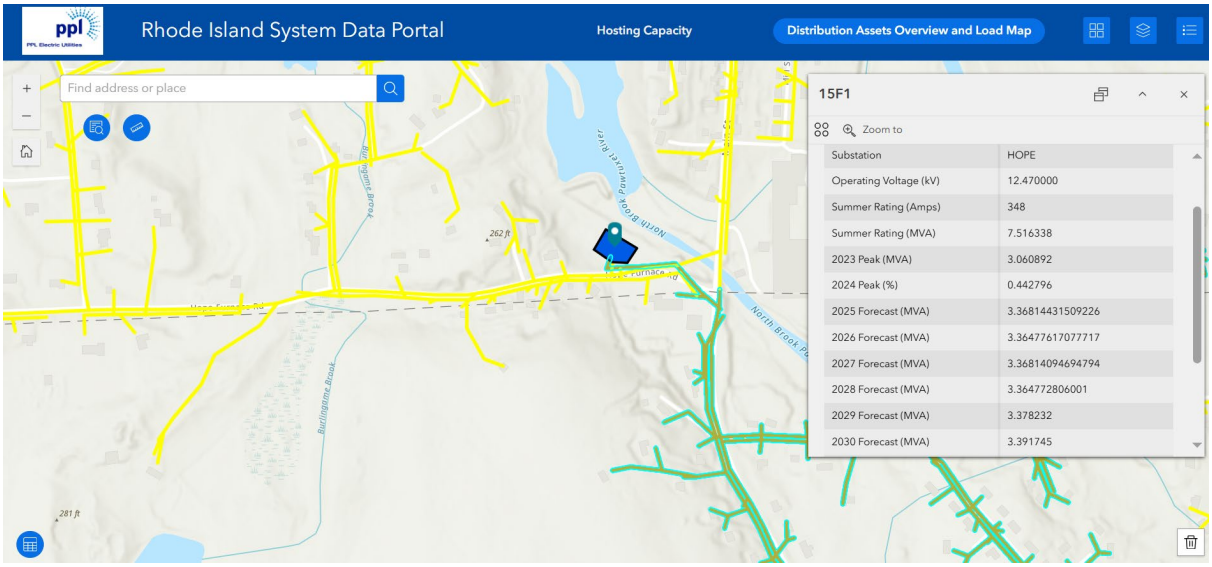


Figure 1 shows the 15F1 feeder at Hope Substation on the Distribution Assets Overview and Load Map tab. This feeder has a Hosting Capacity Color of Orange indicating a range of 90-95% loaded based on 2024 loads (when highlighted, it displays in "green"). Data provided also includes summer ratings & forecasts.

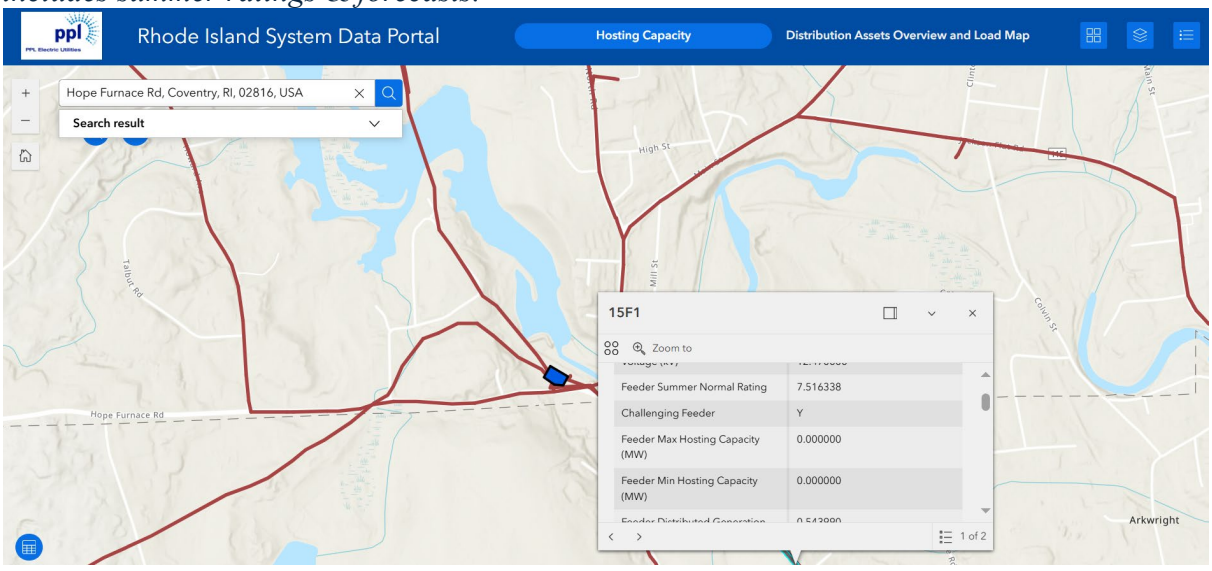


Figure 2 shows the same 15F1 feeder at Hope Substation but on the Hosting Capacity tab. This feeder has a Hosting Capacity of Red indicating a range of 0 - 0.3MW remaining. There is 0MW remaining on this feeder. In addition to maximum and minimum Hosting Capacity, this provides the connected and in queue DG in MW, Substation limits, etc.

The attribute table in the bottom left of both Figure 1 and Figure 2 can also be used to filter/sort/view substation data.

9. Prompt:

RIE: How is RIE currently thinking about Flexible Interconnection and HCAs? Are there any pilot programs or studies in the works?

Response:

The Company recognizes that one way to derive the most value from ESS interconnections is to do so with Dynamic Flexible Interconnection. There are currently two Distributed Energy Resource Management Systems (DERMS) pilots under study. The main purpose of the pilots is to assess technical feasibility and gain lessons learned as the Company drives to dynamically controlled interconnected DERs. The Company can use the pilots to demonstrate and prove the value of DERMS.

10. Prompt:

How can utilities be assured that the Facility will adhere to an operating schedule? Do adequate rules exist for advanced monitoring capabilities or do these need to be made? What penalties make sense for violating flexible interconnection agreements?

Response:

The Facility will be required to demonstrate their ability to adhere to an operating schedule during the witness test. The Company will have protection in place on the Company side of the interconnection that will trip the ESS offline accordingly.

11. Prompt:

Would it be useful to conduct alternative studies based on different operational scenarios for ESS? How should alternative studies for ESS be initiated?

Response:

Many schedules cannot be studied without impacting downstream customers in queue in terms of interconnection timelines. For that reason, as stated in the Company's written comments to the first set of Stakeholder prompts on December 20, 2024, the process should allow the applicant to

seek one alternative study. Subsequent requests should be treated as a new application with a revised queue position date. The alternatives should be initiated and sequenced as follows: the customer's proposed schedule, which should meet the Company's operational guidelines, should be studied first. At this time, the Company will also provide an alternative to the customer that minimizes the system modification costs. The customer could either choose the alternative proposal, maintain the initial proposal, or re-apply to seek additional alternatives. The Company cannot start the subsequent ESS study until the operating schedule of the previous ESS interconnection is determined.

12. Prompt:

The current tariff requires a Facility's proposed "sequence of operation" (Section 4.3). How is this defined? What timescale is data reported?

Response:

The Company interprets the "sequence of operation" with respect to ESS to simply mean the charge and discharge % of nameplate schedule. There is no timescale interpreted or assigned to the tariff language.

13. Prompt:

The current tariff, Section 4.3.3 there is a Reduced Rating Capacity option, where developers submit an export capacity that is lower than the nameplate capacity. Is this currently used often? What portion of projects?

Response:

Approximately 5-10% of applicants use a derated system. The response to Prompt 5 provides further details on derating.

14. Prompt:

The current tariff has limited description of Power Control System (PCS). Would further defining and describing the requirements for the use of PSC help further ESS deployment?

Response:

No, the Company does not believe that further defining the requirements for a Power Control System (PCS) will help further ESS deployment. Additional technical requirements may be included in the Company's ESB.

Study Process: Study Queues (Slide 23)

15. Prompt:

In the current tariff, are design modifications while remaining in the queue allowable? For ESS, what design modifications (e.g., increase in export capacity, extension of operating profile), if any, would be allowable while remaining in the queue? At what point in the process (e.g., pre-impact study, post-impact study) would they be allowable?

Response:

In the current tariff, a reduction in size is allowed while remaining in the queue. The tariff should state that major changes may result in removal from the current queue position. The Company is in the process of defining major and minor changes within its ESB. An example of a minor change is a change from a certified inverter manufacturer to another certified inverter manufacturer. An example of a major change is a change in size or operating profile.

16. Prompt:

Is there an opportunity to add Group Study processes to the ESS tariff?

Response:

The Company would be open to including tariff language that provides an option for Group Study in instances where mutual agreement is reached between the Company and the applicants including defined terms.

17. Prompt:

Scenario: A developer is looking to co-locate a new ESS with an existing DG. They already paid for System Modifications due to the DG. Should their ESS get queue priority? Under what conditions?

Response:

The Developer would still apply for interconnection and enter the queue. A case in which a protection and control scheme is proposed to maintain the current site import and export limits, may be subject to an accelerated path with parallel review, but not a jump in queue.

18. Prompt:

Scenario: A developer pays for a 3 MW interconnection, but initially only installs 2 MW of solar. A few years later, they would like to install 1 MW of storage. Do they still need to wait in the interconnection queue for this?

Response:

This scenario would be specific to and depend on the customer's initial Interconnection Service Agreement. The customer would still likely need to apply and enter the interconnection queue.

Costs (Slide 26)

19. Prompt:

Should the same cost requirements in the existing tariff apply to ESS? What are the unique elements of storage that should be considered?

Response:

As a result of the more complex analysis for ESS, it is the Company's position that ESS study costs and timelines should increase. Not only does energy storage require a charging study and discharging study, but each of these studies could be further complicated by existing load and generation profiles. load and generation profiles can also change substantially across months or seasons.

20. Prompt:

Do impact studies use export capacity or nameplate capacity values to assess grid impacts and determine system modification costs?

- IEEE Std 1547.7 Guide for Conducting Distributed Impact Studies for Distributed Resource Interconnection – pending a revision including best practices for impact studies

Response:

The impact studies use export capacity (and import capacity for ESS). Prompts 5 and 13 also provide details on this topic.

21. Prompt:

How does RIE model interconnection costs for storage (assumptions around charging during peak events)?

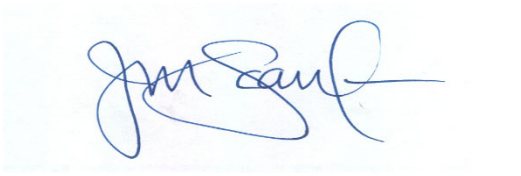
Response:

The Company analyzes the Developer's proposed ESS schedule, which in certain cases could include charging during peak. RIE models the interconnection costs to the Developer proposed request.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.



Joanne M. Scanlon

July 31, 2025
Date

Docket No. 24-34-EL-TC & I – Public Utilities Commission - Development of Tariffs Applicable to Energy Storage Systems Connected to the Electrical Distribution Systems - Service List updated 7/31/2025

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