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Request:

During the hearing on July 11, Mr. Ursillo referred to a study process relating to the interconnection to the transmission system that had been taking place with ISO -New England.

- a. Please provide a narrative description of the study process and an explanation of its current status.
- b. Please provide a timeline of when the process was started and steps taken along the way in providing information to ISO New England,
- c. Please provide a copy of any applications that were submitted to ISO New England to commence the process, along with copies of any descriptions that were provided to ISO New England regarding the timing, construction, and operation of the facility, and the applicant's intention on how it would participate in the market.

Response:

- a. The proposed battery energy storage system (the "Project") submitted an Interconnection Request to ISO New England ("ISO-NE") in accordance with the Open Access Transmission Tariff ("OATT"), Schedule 22, Large Generator Interconnection Procedures ("LGIP"). The LGIP process is required for any facility with a gross operating capability of more than 20MW at a temperature at or above 0°F.

At the time of the Project's Interconnection Request, the LGIP processed Interconnection Requests in series, according to the assigned queue position. This means that projects were studied sequentially by queue position and needed to take any prior queued projects, along with any system upgrades or changes, into account during the study. This also meant a proposed project was not responsible for the costs for upgrades triggered by an earlier queued project.

On July 28, 2023 the Federal Energy Regulatory Commission ("FERC") issued Order No. 2023 ("FERC 2023") which aims to reform the existing LGIP to address interconnection queue backlogs, improve certainty, and prevent discrimination of new and emerging technologies. FERC 2023 would eliminate the serial study process for a proposed cluster study process. This would in essence eliminate the existing queue and any new projects that would be submitted during a specified timeframe (~ 1year) would

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be studied together at once. A key impact of the cluster study process is that the costs for upgrades identified during the study would be shared among the projects included without regard to which specific project triggered the upgrades.

Additionally, in order to migrate from the serial study process to the cluster study process, ISO-NE proposes to conduct one Transitional Cluster Study. This Transitional Cluster Study would require any projects with an existing queue position to make one of two decisions: 1) decide to drop out of the interconnection queue and possibly re-apply later after the transition; or 2) participate in the Transitional Cluster Study with the requirement of a significant financial payment (\$5 million) and accept the risk of significant time delays and unknown interconnection upgrade responsibility. The only way for projects with an existing Interconnection Request to avoid facing this decision is to have a completed System Impact Study by August 30, 2024.

A general overview of the LGIP process as related to the Project is detailed below:

1. Submission of a valid Interconnection Request meeting the requirements of the LGIP.
2. Following the submission of a valid Interconnection Request, ISO-NE will issue a Queue Position within the list of all Interconnection Request within the ISO-NE control area.
 - A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.
3. Conduct a Scoping Meeting with the Project, ISO-NE, and any other transmission or distribution system operators affected by the Project.
 - Affected system operators and other affected parties are determined by ISO-NE based on the information provided in the Interconnection Request.
4. Following the Scoping Meeting the Project can request that ISO-NE conduct an optional Feasibility Study.
 - The Feasibility Study will include a list of earlier queued projects that need to be included in the study base case for the Project.
 - The Feasibility Study provides the Project with a list of potential upgrades required for interconnection as well as a non-binding good faith cost estimate for those upgrades.

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5. Following the Scoping Meeting, or following the optional Feasibility Study if requested, ISO-NE will conduct a System Impact Study.
 - The System Impact Study is conducted in a serial order based on relative queue position. The start of the System Impact Study can be delayed by more than a year depending upon the study progression of earlier queued projects.
 - The System Impact Study is much more detailed than the Feasibility Study and provides the Project with upgrades and protection requirements that are required for interconnection, a non-binding good faith cost estimate, and a non-binding estimated time to construct.
 - *According to the new FERC 2023 order, any project System Impact Study that is not completed by August 30, 2024 will be required to move into the new Transitional Cluster Study resulting in a delay of potentially years.*
 - The Project is currently in System Impact Study with a completion date of August 2, 2024.
 6. Following the System Impact Study the Project can request ISO-NE conduct an optional Facilities Study.
 - The optional Facilities Study provides the Project with detailed cost and schedule estimates for the engineering, procurement, and construction of the upgrades and protection requirements as identified in the System Impact Study.
 - The provided good faith estimate can be +/- 20% or +/- 10% at the Project's request.¹
 7. Following the System Impact Study or following the optional Facilities Study, the Project can request a Large Generator Interconnection Agreement ("LGIA").
- b. Below is a timeline of when the process was started and the steps taken along the way in providing information to ISO New England,

September 13,
2021

The Project Submitted an Interconnection Request to ISO-NE in accordance with the LGIP.

¹ For +/- 20% cost estimate the study duration is 90 Calendar days. For +/- 10% cost estimate the study duration is 180 calendar days.

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September 22, 2021	ISO-NE deemed the Interconnection Request valid and assigned the Project a queue position.
October 7, 2021	ISO-NE coordinated a scoping meeting between the Project and Affected System Operators. This meeting was continued at a later date to allow for the Project to provide some additional information.
November 22, 2021	The continuation of the Project Scoping meeting with ISO-NE and the Affected System Operators. The Project requested to move forward with the Feasibility Study.
January 18, 2022	The Project executed a Feasibility Study Agreement and provided the required documentation and models.
January 19, 2022	The Project Feasibility Study Started
August 22, 2022	The Project Feasibility Study was completed. The study showed that the interconnection location was feasible with reasonable upgrades. The Project requested to move forward to System Impact Study.
August 23, 2022 – December 3, 2023	The Project remains on “hold” for roughly 15 months while waiting for earlier queued projects to complete their studies.
July 28, 2023	FERC releases Order No. 2023 effectively reforming the LGIP. The Project is at risk of not having the System Impact Study completed before the deadline and potentially having to wait until the Transitional Cluster Study.
December 4, 2023	The Project System Impact Study Starts
March 21, 2024	FERC releases Order No. 2023-A which allows for more time for ISO-NE to comply with FERC 2023. The date for a System Impact Study to be completed without having to decide to participate in the proposed Transitional Cluster Study.
Est August 2, 2024	The Project System Impact Study is estimated to be completed by ISO-NE. This will make it one of the last projects to come out of interconnection study before the Transitional Cluster Study delays which could be significant.

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- c. When submitting to ISO-NE following the LGIP process a project must specify if it is applying as a Network Resource ("NR") or Capacity Network Resource ("CNR"). A

NR interconnection service will allow the Project to participate in the New England Markets in accordance to the OATT. A CNR interconnection service allows for New England market participation as well as allowing the project to participate in ISO-NE's forward capacity market. A project can be studied as a NR interconnection service and later request to also be studied as a CNR service if the project decides to participate in forward capacity auctions. This Project's initial interconnection is for an NR service with an additional interconnection application for CNR service following.

Please see Attachment EFSB 2-1(c) for a copy of the interconnection request for this project.



Surplus Interconnection Service Requests

Project Information

Proposed Project Name *

GDQ ESS

Reference ID

GDQ-72979

This Interconnection Request is for *

- A proposed new Generating Facility
- An increase in the generating capacity or a modification that has the potential to be a Material Modification of an existing Generation Family
- Commencement of participation in the wholesale markets by an existing Generating Facility
- A change from Network Resource Interconnection Service to Capacity Network Resource Interconnection Service

The type of Interconnection Service requested *

- Network Resource Interconnection Service (energy capability only)
- Capacity Network Resource Interconnection Service (energy capability & capacity capability)

This Interconnection Customer requests (check one, selection is not required as part of the initial Interconnection Request):

- An Interconnection Feasibility Study
- An Interconnection System Impact Study

The Interconnection Customer shall provide the following information

Address or Location of the Facility (including Town/City, County & State)

Name	City	State	County	Zip
	North Kingstown	RI	Washington	02852

Approximate location of the proposed Point of Interconnection: *

RIE L190-2 (0.615 miles from Davisville and 1.935 miles from Old Baptist substations).

Format should include owner of POI, voltage level and name (ex: CMP 115 kv Line 229). Also, please note that all information entered here is visible on the queue to all parties.

Site Maps

Use "Uploads" tab to attach a Site Map

- Click this checkbox to designate that you have uploaded a valid Site Map document.

- Site maps must be legible when printed on 8½ x 11 or legal-size paper
- Supported File Types include: PDF, JPEG, or PNG Images
- Individual file size can not exceed 2.5 MB

Use "Uploads" tab to attach the Site Control Evidence

- Click this checkbox to designate that you have uploaded a valid Site Control document.
- If for Network Resource Interconnection Service: In lieu of evidence of Site Control, a \$10,000 deposit is provided herewith (refundable within the cure period as described in Section 3.3.3 of the LGIP).
 - Is provided herewith
 - In lieu of evidence of Site Control, a \$10,000 deposit is provided (refundable within the cure period as described in Section 3.34.3 of the LGIP).
- Site Control is not provided because the proposed modification is to the Interconnection Customer's existing Large Generating Facility and, by checking this option, the Interconnection Customer certifies that it has Site Control and that the proposed modification does not require additional real property.

The technical data specified within the applicable attachment to this form (check one):

- Is included with the submittal of this Interconnection Request
- Will be provided on or before the execution and return of the Feasibility Study Agreement (Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope of the studyB) or the System Impact Study Agreement (Attachment A (and Attachment A-1, if applicable)), as applicable

Type of Generating Facility to be Constructed *

BESS

Will the Generating Facility include electric storage capacity?

Yes

If yes, describe the electric storage device and specifications

EPC Power CAB1000 Inverters w/POWIN Stack 750E platform

Primary frequency response operating range for electric storage resources

40-70 Hz

Generating Facility Fuel Type(s) *

- Agricultural Byproducts
- Battery Storage
- Bituminous Coal
- Black Liquor
- Blast-Furnace Gas
- Coal-based Synfuel
- Distillate Fuel Oil
- Fuel Cell
- Geothermal
- Jet Fuel
- Kerosene
- Landfill Gas
- Lignite Coal
- Municipal Solid Waste
- N/A
- Natural Gas
- Nuclear
- Oil
- Other
- Other Biomass Gases
- Other Biomass Liquids
- Other Biomass Solids
- Other Gas
- Petroleum Coke
- Propane
- Residual Fuel Oil
- Sludge Waste
- Solar
- Sub-bituminous Coal
- Tires
- Waste/Other Coal
- Water
- Wind
- Wood Waste Liquids
- Wood/Wood Waste Solids

Generating Facility Capacity (MW)

Temperatures ¹	Maximum Gross MW Electrical Output ²	Maximum Net MW Electrical Output ³	Net MW Capability at the Point of Interconnection ⁴
At or above 90 degrees F *	208	201.43	201.43
At or above 50 degrees F *	208	201.43	201.43
At or above 20 degrees F *	208	201.43	201.43
At or above 0 degrees F *	208	201.43	201.43

Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity)

Temperatures ¹	Requested Gross MW Electrical Output ²	Requested Net MW Electrical Output ³	Requested Net MW Capability at the Point of Interconnection ⁴
At or above 90 degrees F	Gross @ 90	Net @ 90	Requested Net MW @ 90
At or above 50 degrees F	Gross @ 50	Net @ 50	Requested Net MW @ 50
At or above 20 degrees F	Gross @ 20	Net @ 20	Requested Net MW @ 20
At or above 0 degrees F	Gross @ 0	Net @ 0	Requested Net MW @ 0

Notes:

¹ In each row, insert all values corresponding to the given temperature, or a temperature greater than the given temperature, at which aggregate maximum gross output of the Generating Facility would be the highest. For example, if the aggregate maximum gross Generating Facility output occurs at 12 degrees F, all values in the "At or above 0 degrees F" row shall correspond to the 12 degrees F operating condition.

² Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility.

³ Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility less any station service at each generating unit's terminal(s) or inverter/converter terminal(s), as applicable.

⁴ Measured at the Interconnection Customer's proposed Point of Interconnection. The values correspond to the requested levels of Interconnection Service pursuant to Section 3.1 of the LGIP. The values account for any station service, losses incurred in Interconnection Facilities, station or generator step up transformers, and any other auxiliary systems. After the Interconnection Request is deemed valid, any increases to these values shall be subject to a new, separate Interconnection Request.

General description of the equipment configuration, including any proposed control technologies to restrict the Large Generating Facility's output to the requested Interconnection Service levels, if applicable (# of units and GSUs): *

A 205 MW battery energy storage system, made up of 159 EPC Power 1500 kVA Inverters with 53-4500 kVA GSU, rated at two hours. Project interconnection consists of a customer-owned 34.5/115 kV step-up transformer, with an underground generator lead duct bank to a new 115 kV riser and three-breaker ring bus that would be owned by the transmission utility, with a 115 kV overhead connection to the

Requested Commercial Operations Date *

Requested In-Service Date *

Requested Initial Synchronization Date *

06/01/2026		06/01/2026		06/01/2026	
					<input type="text"/>

EFSB 2-2

Request:

Please provide an explanation of the extent to which anyone from QDC or Green Development has had meetings or exchanged technical information about the Project with Rhode Island Energy/Narragansett Electric or National Grid regarding the interconnection of the battery storage system to the transmission facilities owned by Narragansett Electric.

Response:

As to QDC's interactions:

QDC has regular standing meetings with Rhode Island Energy ("RIE") every other week. During these regular meetings QDC and RIE discuss all relevant projects that affect the provision of electricity or natural gas. QDC generally updates RIE about the buildings and other developments that are in the works at the Quonset Business Park so that QDC and RIE can strategize how best to source energy needs. The proposed battery system was discussed with RIE at these meetings, only in a high-level sense, letting RIE know about the potential project.

As to Green Development's interactions:

The LGIP provides the option for the Interconnection Customer to assume the responsibility for the design, procurement, and construction of required interconnection upgrades ("Customer Build"). It is the intent of the project to exercise this option with the Affected System Operator, in this case, Rhode Island Energy ("RIE")

While RIE has been involved in the Project as an Affected System Operator since the initial scoping meeting in October 2021, Green Development requested a meeting with RIE to review the Project and discuss the option of Customer Build. A meeting was held on June 29, 2023, and RIE notified Green that additional involvement of PPL would be necessary. Another meeting was held on May 2, 2024, which included the transmission teams of both RIE and PPL. At that time, the Project already had estimated costs for the construction of the interconnection infrastructure as identified in the Feasibility Study. However, final requirements for interconnection would be the result of the completion of the System Impact Study which is not expected until August 2, 2024.

As to QDC's interactions:

Prepared by or under the supervision of: Chelsea Siefert

As to Green Development's interactions:

Prepared by or under the supervision of: Matthew Ursillo

Quonset Development Corporation
EFSB Docket No. SB-2024-01
In Re: Quonset Development Corporation's
Petition For Declaratory Order
Responses to the Energy Facility Siting Board's Second Set of Data Requests
Issued on July 11, 2024

EFSB 2-3

Request:

The minutes of October 2022 indicate that a letter of support was provided by a representative of Narragansett Electric/Rhode Island Energy. Please provide a copy of the referenced letter.

Response:

Please see Attachment EFSB 2-3.

From: Schuster, Brian E. (RI Energy) <BEschuster@rienergy.com>
Sent: Tuesday, October 18, 2022 8:11 AM
To: King, Steven <sking@quonset.com>
Cc: Kresse, Ted (RI Energy) <TRKresse@rienergy.com>; Stasiuk, Paul A. (RI Energy) <PAStasiuk@rienergy.com>
Subject: Rhode Island Energy - Battery Storage at QDC

Good Morning Steve,

Thank you for sharing the news about the potential development of a utility scaled battery storage project at the Quonset Business Park. As you know, battery storage technology can play a major role to ensure homes and businesses can be powered by renewable energy, even when the sun isn't shining or the wind isn't blowing. These types of projects become even more important as Rhode Island looks to expand its offshore wind capacity in the years ahead. Just this past week, we surpassed a major milestone in that category when we announced the issuance of a Request for Proposals for another 600 to 1000MW of offshore wind for the state. This is in addition to the arrival of the Revolution Wind project that is slated to come online in the next few years.

To that end, more projects like the one you have described should be pursued so that we can purposefully deploy this additional wind energy whether the wind is blowing or not. By doing that, we can increase the value of this clean energy; by increasing production and potentially reducing costs. Battery storage systems also allow us to help manage our grid during peak loads and to eventually achieve net zero carbon production, by phasing out fossil fuel plants that have traditionally been used as a back-up to provide a reliable, steady supply of energy.

We look forward to hearing more about the project in the months ahead, and extend our support for it during these initial planning stages.

Sincerely,

Brian

Brian Schuster | Head of External Affairs

Office: (781) 907-3443 | Mobile: (508) 341-9659 | beschuster@rienergy.com



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