

November 14, 2017

BY HAND DELIVERY AND ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 4743 - In Re: Petition of Tesla, Inc. and Sunrun, Inc.
For Declaratory Judgment or an Advisory Ruling on R.I. Gen. Laws § 39-26.4
National Grid Reply Comments**

Dear Ms. Massaro:

I have enclosed ten (10) copies of National Grid's¹ reply comments in the above-referenced docket. As background, on September 28, 2017, Tesla Inc. and Sunrun Inc. (Petitioners) filed a Petition for Declaratory Judgment, or in the alternative, an Advisory Ruling, regarding the eligibility for net metering of certain small-scale solar power generation systems paired with battery storage (Petition). On November 7, 2017, National Grid filed comments in the docket agreeing with the Petitioners that "a narrow advisory ruling by the PUC addressing whether Rhode Island Small Scale Solar+Storage facilities are eligible for net metering services as a solar net metering facility is appropriate at this time."² On November 7, the Rhode Island Office of Energy Resources (OER) and the Rhode Island Division of Public Utilities and Carriers (Division) also filed comments in the docket supporting the Petition provided that such systems meet certain eligibility requirements.³

The Petition sets forth the following specific net metering eligibility requirements for paired solar plus battery storage facilities: "(1) the solar power generating system is no greater than 25 kW alternating current (AC); (2) the battery storage charges only from the solar power generation system; and (3) where the customer-host does not take electric supply service under a time-varying of time-of-use (TOU) rate (Rhode Island Small Scale Solar+Storage)."⁴ In the Division's Initial Comments, the Division proposes that, in addition to those eligibility requirements stated in the Petition (as set forth above), National Grid incorporate provisions in

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

² See National Grid comments dated November 7, 2017 (National Grid's Initial Comments) at page 2.

³ See OER's comments dated November 7, 2017 (OER's Initial Comments) at page 1 and Division's comments dated November 7, 2017 (Division's Initial Comments) at pages 3 and 5.

⁴ See Petition at page 1. National Grid notes that if the customer agrees and has demonstrated that the battery would only be charged from the solar and will not export to National Grid's electric power system, then the TOU rate restriction would not be necessary for the Rhode Island Small Scale Solar+Storage facilities.

its net metering and interconnection tariffs specifying that National Grid has the right to inspect the Rhode Island Small Scale Solar+Storage facilities to ensure that the battery is charged only from the solar facility, and, that violations of the net metering eligibility requirements would result in the customer’s⁵ loss of net metering status (with forfeiture of any unreceived net metering credits).⁶ To the extent that the PUC determines that the Rhode Island Small-Scale Solar+Storage facilities are eligible for net metering services, National Grid agrees that the eligibility requirements set forth in the Petition and the Division’s Initial Comments are necessary and appropriate.

National Grid also wishes to take the opportunity in these reply comments to highlight the interconnection and net metering eligibility requirements that should be applicable to the Rhode Island Small Scale Solar+Storage facilities in addition to those specified in the Petition and the Division’s Initial Comments. National Grid has specified, without limitation, certain conditions that would be applicable to the controller component of these facilities.⁷ Any additional interconnection or operational requirements can be included as part of the Interconnection Service Agreement (ISA).⁸ The PUC should also, to the extent the Petition is approved, maintain flexibility for future changes in this emerging technology and interconnection requirements. For instance, without limitation, because projects 25 kW or less generally do not use interval hourly metering (which is required for participation in any ISO-NE⁹ market), the Company does not enroll these size projects in the ISO-NE wholesale market; however, if at a later date, National Grid determines that participation in the ISO-NE market(s) is feasible,¹⁰ then customers, at their sole cost and expense, should be required to comply with the ISO-NE market rules, which may require, without limitation, interval hourly meter upgrades or additions.¹¹ This will ensure that the pairing of battery storage with a solar net metering facility

⁵ Unless explicitly stated, as used herein the term “customer” may mean National Grid’s retail customer and/or the interconnection customer as determined by National Grid.

⁶ See Division’s Initial Comments at page 5.

⁷ See National Grid’s response to Division’s Data Request No. 2-1 at 1-2, part b). However, it should be noted that National Grid’s interconnection standards are evolving with the development of these new capabilities, and are, therefore, subject to change.

⁸ See National Grid’s response to Division’s Data Request No. 2-1 at page 3. The agreement for simplified applications would need to be modified to include an attachment that states that the applicable restrictions for net metering eligibility and any additional operating requirements. For non-simplified projects (the ones that will execute the pro-forma ISA, National Grid will use Attachment 4 (Special Operating Requirements, if any) to incorporate these requirements.

⁹ ISO-NE refers to the Independent System Operator – New England.

¹⁰ “Feasible” means when (i) interval meters are required under the net metering and/or interconnection tariff (or available at the site); and (ii) the Company elects or is required to settle these systems in the market.

¹¹ See National Grid’s response to Division Data Request No. 1-1 at page 2. The cost of net metering services is borne by all of National Grid’s customers. See RIPUC No. 2178(IV)(1). National Grid currently registers all stand-alone net metering facilities greater than 25 kW as settlement-only generators in the wholesale electricity market. The purpose of this registration is to obtain wholesale market revenue for a net metering facility’s energy exports, which ultimately offsets some of the cost of the compensation provided to net metering customers for those exports.

will not interfere with National Grid’s ability to participate in the ISO-NE markets and use the energy and capacity values to offset the cost of net metering for all of its customers.

National Grid also wants to emphasize that one of its underlying assumptions in consideration of the net metering eligibility of solar plus battery storage facilities is that the customer will not “oversize” its solar facility by adding solar panels in excess of the AC inverter capabilities to charge the battery, which could result in the production of more kWh than would otherwise be produced by the solar facility itself. “Oversizing” a facility in this manner can increase the kWh output (and therefore changes the capacity factor assumptions for solar), which could result in more net metering credits being generated at the cost of other customers. As such, the addition of panels in excess of the AC inverter capabilities should be prohibited at this time as a condition to net metering eligibility.

Finally, there should be a process to certify, ensure, and enforce customers’ compliance with all interconnection, operating, and net metering eligibility restrictions. At a minimum this process should include the following: (1) the customer’s initial interconnection application must explain in sufficient and clear detail how the customer will technically configure the storage system to only be able to charge from the solar facility and must include documentation demonstrating the same, including, without limitation, an affidavit (signed by the interconnecting customer, retail customer, and installer) that the battery will charge only from the solar facility and is unable to charge from National Grid’s electric power grid; (2) the customer’s initial application, interconnection service agreement (ISA), the retail customer agreement (Exhibit I to the ISA), and Schedule B (under the net metering tariff) should include an acknowledgement that each party understands and agrees to the net metering eligibility requirements; (3) National Grid should have the right, but not the obligation, to inspect the facility at any time (including after the interconnection) to verify compliance, and to require the interconnecting and/or retail customer to provide any documentation demonstrating continued compliance with the interconnection, operating, and net metering eligibility requirements; and (4) if a noncompliance exists, and if the customer does not resolve the noncompliance quickly to National Grid’s satisfaction (or if there are multiple instances where a customer is noncomplying), National Grid could terminate the customer’s Interconnection Service Agreement and/or suspend net metering service. Any cost related to maintaining, verifying, and enforcing compliance with the interconnection, operating, and/or net metering eligibility requirements, including, without limitation, post interconnection inspections, will be borne solely by the customer. Similarly, any costs National Grid incurs to implement new requirements, such as, without limitation, additional resources to perform inspections or verifications, system changes for verification and/or inspection protocol, should be fully recoverable by National Grid.

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To the extent that the PUC determines that the Rhode Island Small Scale Solar+Storage facilities are eligible for net metering services, National Grid respectfully requests that the PUC impose, at a minimum, the interconnection, operating, and eligibility requirements set forth herein and in the Petition and the Division’s Initial Comments.

Thanks for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Sincerely,

A handwritten signature in blue ink, appearing to read "Raquel Webster", with a light blue circular stamp or watermark behind it.

Raquel J. Webster

cc: Docket 4743 Service List
Jon Hagopian, Esq.
Steve Scialabba, Division

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

November 14, 2017
Date

**Tesla, Inc. & Sunrun, Inc – Petition for Declaratory Judgment –
Docket No. 4743**

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