



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Division of
Public Utilities and Carriers
89 Jefferson Blvd.
Warwick RI 02888
(401) 941-4500

November 7, 2017

Luly Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, R.I. 02888

**In Re: Petition of Tesla, Inc. & Sunrun, Inc. For Declaratory Judgment Pursuant to R.I.
Gen. Laws §39- 26.4 et seq., The Net Metering Act
Docket No. 4743**

Dear Luly,

Please find for filing with the Commission, an original and nine (9) copies of the State of Rhode Island Division of Public Utilities and Carriers, (the "Division") comments in response to the aforesaid petition for declaratory judgment in the above captioned docket.

I appreciate your anticipated cooperation in this matter.

Very truly yours,

Jon G. Hagopian, Esq.
Deputy Chief Legal Counsel

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION**

**PETITION OF TESLA, INC. & SUNRUN, INC.
FOR DECLARATORY JUDGMENT
PURSUANT TO R.I GEN. LAWS §39-26.4 *et seq.*,
THE NET METERING ACT**

Docket No. 4743

**THE STATE OF RHODE ISLAND DIVISION OF PUBLIC UTILITIES AND
CARRIERS COMMENTS IN RESPONSE TO PETITION OF TESLA, INC.
& SUNRUN, INC. FOR DECLARATORY JUDGMENT PURSUANT TO
R.I GEN. LAWS §39-26.4 *et seq.*, THE NET METERING ACT**

INTRODUCTION AND SUMMARY

On September 26, 2017, Tesla, Inc. (“Tesla”) and Sunrun, Inc. (“Sunrun”) filed a joint petition seeking a declaratory judgment or an advisory ruling (“Petition”) from the Rhode Island Public Utilities Commission (“Commission”) that pairing a battery storage system with certain net metered solar resources will not affect the eligibility of that system for net metering status. The Commission has established a procedural schedule providing for written objections with a memorandum of law or comments in support of Tesla and Sunrun’s Petition. The State of Rhode Island Division of Public Utilities & Carriers (“Division”) hereby submits the within comments which were developed with the assistance of Daymark Energy Advisor’s after review and consideration of the Petition.

OVERVIEW OF THE FILING

Tesla /Sunrun proposes to pair battery storage with certain solar installations, and have such systems declared eligible for net metering status. Such combined solar+storage systems are described as follows: (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 or time-of-use (“TOU”) rate.¹ Tesla and Sunrun also requested that the Commission open a separate proceeding to address net metering eligibility and treatment of solar+storage systems “under different system configurations, use-cases, sizes and rate structures, including time-varying rates”.²

ANALYSIS

The concept of net metering was introduced to facilitate the ability of customers to generate most or all of their electricity supply from on-premises, behind-the-meter, renewable energy resources. According to R.I. Gen. Laws §39-26.4-2, "Eligible net-metering system" means a facility generating electricity using an eligible net-metering resource that is reasonably designed and sized to annually produce electricity in an amount that is equal to, or less than, the renewable self-generator's usage at the eligible net-metering-system site measured by the three-year (3) average annual consumption of energy over the previous three (3) years at the electric-distribution account(s) located at the eligible net-metering-system site. While the total annual output of a net metered renewable energy resource may approximate the host customer’s total annual energy consumption, output and consumption occur at different times throughout the year. Solar and wind generators will produce electricity when

¹ Petition pg. 1.

² Petition pg. 1.

weather conditions permit, while customer usage occurs around the clock. Net metering allows surplus renewable generation to be exported to the grid when output exceeds consumption, and allows power to be taken from the grid when output is less than consumption. In essence, the utility grid and its associated system of power supply acts as a massive storage system. The utility grid accepts any excess generation, uses that power to reduce conventional generation, and fulfills any shortfalls over a calendar year, just as an extremely large, on-site battery storage system would.

While R.I Gen Laws §39-26.4-1 *et seq.* does not specifically reference storage systems, its intended purpose provides *inter alia* as follows:

§ 39-26.4-1 Purpose. The purpose of this chapter is to facilitate and promote installation of customer-sited, grid-connected generation of renewable energy; to support and encourage customer development of renewable generation systems; to reduce environmental impacts; to reduce carbon emissions that contribute to climate change by encouraging the local siting of renewable energy projects; to diversify the state's energy generation sources; to stimulate economic development; to improve distribution system resilience and reliability; and to reduce distribution system costs.

Similarly, while the Petition does not demonstrate that allowing solar+storage to be eligible for net metering status will further the specific goals of the statute, the Petition does reference some 16 projects that are “stalled” pending a ruling in this proceeding. We believe that allowing solar+storage systems to qualify as net metering will not deter the achievement of the goals of the statute here, and providing a vehicle for any stalled project to proceed may help further achievement of these goals. Therefore, we recommend that the Commission determine at this time that adding battery storage systems to certain solar net metering resources under the requirements proposed in the Petition will not affect such project’s eligibility for net metering status. This recommendation is expressly conditioned on the fact

that the battery storage system be prohibited from being charged from the grid and other conditions, as discussed further in the remainder of this memorandum.

The issue of grid charging is an important one. If a net metered solar+storage system is allowed to be charged from the grid, it could cause the solar+storage system to be in violation of the statute that requires the net metering system to be sized approximately equal to or less than the host customer's consumption. Tesla /Sunrun assert that the system that they propose contains an installer setting that prohibit charging from the grid, presumably from a "smart" inverter. They also assert that they have a legal and financial incentive ("ITC") not to charge the system from the grid, because a battery system that is charged from anything other than the renewable (solar array) generation with which it is coupled limits the eligibility of the solar+storage system for receiving an investment tax credit. A storage system can receive less than 100% of the ITC if a portion of the unit's output comes from grid charging.³ We agree that an ITC, to the extent that it is applied for and received, can provide a financial incentive to avoid charging the solar+storage system from the grid. However, this does not appear to be a legal prohibition. In its response to Division Data Requests Set 2, National Grid states that, as presently configured, it would not be able to independently verify that charging from the grid does not occur. National Grid's responses identify additional equipment that could be installed to achieve independent verification, but the cost of the equipment has not been provided, nor has equipment been specified in detail

Without TOU rates, there may not be much financial incentive to charge a solar+storage system from the grid at this time. Most rates in Rhode Island, including rates for Standard Offer power supply, are currently not TOU-based. Rates are typically set for a

³ <https://www.nrel.gov/docs/fy17osti/67558.pdf>

year in advance, so it may not make sense to charge the solar+storage system from the grid and sell that power back at the same rates. It is possible that competitive suppliers may, now or in the future, offer TOU-based rates for competitive power supply, which could provide an incentive to charge the solar+storage system from the grid if an arbitrage opportunity presents itself, allowing the net metered host to charge at lower rates and discharge at higher rates.

One way to move forward at this time is for the Commission to approve solar+storage systems as described in this Petition as eligible for net metering and for National Grid to incorporate specific provisions in its net metering tariff and interconnection standards as follows:

- the solar power generating system is no greater than 25 kW alternating current (“AC”);
- the battery storage charges only from the solar power generation system, and that grid charging is expressly prohibited;
- National Grid shall have the right to inspect such solar+storage system to ensure that no grid charging occurs; and
- any violations of these provisions would cause the customer host to lose its net metering status and forfeit any unreceived net metering credits.

It is possible that National Grid or other parties to this proceeding may wish to include other provisions to address issues from this proceeding. Such additional provisions could be proposed in reply comments.

It is our understanding that Rhode Island may be considering TOU rates in the future. Thus, an additional docket to address solar+storage system under conditions different than proposed in this Petition would be warranted at that time.

State of Rhode Island
Division of Public Utilities and
Carriers

By his attorney,



Jon G. Hagopian, Esq. (#4123)
Deputy Chief Legal Counsel
State of Rhode Island
Division of Public Utilities and Carriers
89 Jefferson Blvd.
Warwick, R.I. 02888
Tel.401-941-4500

Dated: November 7th, 2017

CERTIFICATE OF SERVICE

I hereby certify that on the 7th day of November, 2017, that I transmitted an electronic copy of the within Comments to the attached service list and to Luly Massaro, Commission Clerk via electronic mail and regular mail.



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

List updated 10/7/17

Name/Address	E-mail	Phone
Seth H. Handy, Esq. HANDY LAW, LLC 42 Weybosset St. Providence, RI 02903	seth@handylawllc.com;	401-626-4839
	becca.polisuk@sunrun.com;	
	chris.rauscher@sunrun.com;	
Kevin Auerbacher, Esq. Tesla, Inc. 1050 K Street, NW, Suite 101 Washington, DC 20001	Kauerbacher@tesla.com;	202-657-3155

Bicky Corman, Esq. EKM Law, PLLC 1616 H Street, NW, Suite 300 Washington, DC 20006	bcorman@ekmlawfirm.com ;	202-213-1672
Jon Hagopian, Esq. Division of Public Utilities & Carriers	Jon.hagopian@dpuc.ri.gov ;	401-784-4775
	Steve.scialabba@dpuc.ri.gov ;	
	Al.contente@dpuc.ri.gov ;	
Richard Hahn Daymark Energy Advisors One Washington Mall, 9 th floor Boston, MA 02108	rhahn@daymarkea.com ;	617-778-2467
Original & 9 copies file w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	Luly.massaro@puc.ri.gov ;	401-780-2107
	Cynthia.WilsonFrias@puc.ri.gov ;	
	Todd.bianco@puc.ri.gov ;	
	Alan.nault@puc.ri.gov ;	
Raquel Webster, Esq. National Grid	Raquel.webster@nationalgrid.com ;	781-907-2121
	Joanne.scanlon@nationalgrid.com ;	
	Celia.obrien@nationalgrid.com ;	
Christopher Kearns Andrew Marcaccio, Esq. Office of Energy Resources	Christopher.Kearns@energy.ri.gov ;	
	Andrew.Marcaccio@doa.ri.gov ;	
	Danny.Musher@energy.ri.gov ;	
	Nicholas.ucci@energy.ri.gov ;	