STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION

Petition of Tesla, Inc. and Sunrun, Inc. for Declaratory Judgment or an Advisory Ruling on Rhode Island General Laws §39-26.4, the Net-Metering Act	**Docket No. 4743**

REPLY COMMENTS OF TESLA, INC.

INTRODUCTION

On November 7, 2017, the State of Rhode Island Division of Public Utilities and Carriers ("Division"), the Narragansett Electric Company d/b/a National Grid ("National Grid," or the "Company"), and the Commissioner of the Rhode Island Office of Energy Resources provided comments on the Tesla, Inc. ("Tesla") and Sunrun, Inc. ("Sunrun") (together "the Parties'") Petition in the above-referenced proceeding. Tesla appreciates these initial comments and offers brief replies in an effort to provide clarity on some issues and to hopefully serve as a resource for the Commission to issue an order in this proceeding that best suits the needs of all parties and ratepayers involved.

Tesla notes that the comments submitted in this docket from various commenters express unanimous agreement with the propriety of the Commission's issuing an opinion at this juncture confirming the net metering eligibility of the systems described in the Parties' Petition. Tesla therefore urges the Commission to immediately find such systems eligible; and to open up a broader proceeding to consider broader Net Metering eligibility of all paired systems with battery storage, systems of different sizes and configurations.

For purposes of ensuring a timely decision on the Petition, Tesla is agreeing to the requirement where the battery component does not discharge to the grid and only charges from

the eligible net metering facility. However, we believe a more thorough evaluation of NEM eligibility for paired systems, as well as a more expansive discussion of use cases that should be deemed NEM eligible. For example, even if one accepts for the sake of argument that customers would be motivated to use their battery system to discharge grid-sourced energy back onto the grid, this concern could be addressed through means beyond prohibiting grid-charging.

With regard to this Petition -- Tesla appreciates National Grid's stating that "[f]or the most part, its Policy and Technical concerns are mitigated" where solar power generation systems paired with battery storage meet the criteria set forth in the Parties' Petition. National Grid Comments, p. 2. With regards to National Grid's comment that "it is unclear whether such Solar+Storage systems are eligible as solar net metering facilities under the Net Metering Statute, which does not expressly include Solar+Storage as an eligible renewable resource" (National Grid Comments), Tesla submits that that the issue herein is the clarification that an eligible net metering resource (as defined by the net metering statute) would not be precluded from receiving compensation under the utility's net metering tariff if or when the customer adds a battery behind its meter.

Tesla also appreciates the Division's "recommend[ation] 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." Division Comments, p. 3. However, Tesla does not agree that in order for the Commission to presently find the paired systems described in this Petition to be Net Metering eligible, that the Commission must first require express revisions to National Grid's net metering tariff and interconnection standards, as the Division has commented on p. 5. For the reasons we describe herein, there are already adequate measures in place – chiefly, the fact that the

interconnection processes already require a project proponent to certify that the subject system will operate as the proponent has represented in the application -- that eliminate the need for any formal, time-consuming, revisions to the Tariff or interconnection standards before confirming net metering eligibility for this use case. We note as well that New York and Massachusetts have awarded immediate relief without first adjusting tariff provisions or interconnection standards; and have instead opened separate inquiries to explore eligibility issues more broadly.[1]

With regard to the Division's recommendation that there be an "express prohibition" on grid charging, Division Comments, pp. 3 – 4, Tesla responds that such prohibition would be unnecessary and imprudent. As the Division itself noted, there are economic forces in place today (chiefly, the lack of TOU-based rates) that diminish "any financial incentive to charge the battery of a paired system from the grid at this time,"[2] which, Tesla respectfully submits, serve as de facto controls on charging from the grid. It is worth noting that prohibiting grid charging will likely impair the customer value proposition in some instances, for example, in the case of systems deployed to provide back-up power. Should an outage occur and the grid to come back online in the evening when solar is not available, and after the storage has discharged to meet onsite needs during the outage, grid charging may be desirable to ensure the battery is fully available for the next prospective outage event. Notably, grid-charging in support of this back-up application doesn't adversely impact NEM. In short, grid charging is not the concern per se; rather the stated concern is charging with grid energy during times when prices are low, with an

[1] *See* New York Public Service Commission Case No. 15-E-0751, *In the Matter of the Value of Distributed Energy Resources*, Order on Net Energy Metering Transition, Phase One of the Value of Distributed Energy Resources, and Related Matters, at 17, 48 (March 9, 2017). *See also* Massachusetts Department of Public Utilities 17-105, Order, September 12, 2017), p. 18 (providing an Advisory Ruling that Small Scale Solar & Battery Storage Facilities are eligible to net meter; and stating that a separate Inquiry would address additional issues, including the process for customers to certify, ensure, and enforce their compliance with the criteria of Small Scale Solar & Battery Storage Facilities).

[2] Division Comments, pp. 4 – 5.

intent to export that energy to the grid power in exchange for NEM credit. To that end, an outright prohibition on grid charging seems overbroad and unnecessary, particularly in instances where customers are not on TOU rates. Notwithstanding the foregoing, the customer's certification that information provided in its interconnection application is, to the best of the customer's knowledge, true,[3] provides ample assurance that the installer setting's prohibiting grid-charging will remain intact.

Tesla is also concerned that an express prohibition against grid-charging is not technically practical. Tesla recommends (again for this small set of customers and for the purposes of advancing an expedited narrow decision) that small amounts of inadvertent grid charging should be allowed. Based on system response times of a Solar+Storage system, there may be a brief lag between a ramp down in solar production and a corresponding ramp down in battery charging, resulting in a small amount of inadvertent grid charging.

With respect to the Division's comment (p. 4) that "if a net metering 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," [4] Tesla disagrees, in two ways. First, practically speaking, the interconnection application reviews a system size based on historic consumption (R.I. Gen. Laws § 39-26.4-2(6)), and does not evaluate system sizes with the prospective interconnection facility units. Second, Tesla submits that the addition of a battery would not increase or decrease the amount of energy that is being net metered. For customers where time-of-use rate structures are not available, over a monthly or annual period, the charging and

[3] *See, e.g.*, R.I.P.U.C. No. 2163 (The Narragansett Electric Company Standards for Connecting Distributed Generation), Sheet 54.
[4] Division Comments at 4 – 5.

discharging energy of the battery would cancel out, except for some net increase in energy consumption based on battery efficiency losses. For these customers, granting net metering eligibility does not provide anysignificant additional financial benefit when the customer adds a battery, so there would not be a financial rationale to deny these customers from being eligible for net metering.

With respect to the Division's statement that "National Grid shall have the right to inspect such Solar+Storage system to ensure that no grid charging occurs," Tesla believes that if National Grid reasonable inspections are done for this particular set of systems for purposes of expediting a narrow clarification, it would be at National Grid's cost, and should not impose additional costs or increase timelines on battery deployment. These inspections should not withhold interconnection approval; rather, they should be conducted as a spot-check. Additionally, such inspection costs should not be a barrier to customer adoption of solar and batteries; and customers who may be selected for random inspections should not be unfairly penalized.

The Division noted that National Grid stated in a data request response that additional equipment could be installed to achieve independent verification of grid charging, but that the specific equipment or their costs have not been identified.[5] In response to this, Tesla asks that the Commission not impose system design requirements at this time related to grid charging that would somehow require product changes or additional costs.

[5] The Division noted that National Grid stated in a data request response that additional equipment could be installed to achieve independent verification of grid charging, but that the specific equipment or their costs have not been identified. Division Comments at 4.

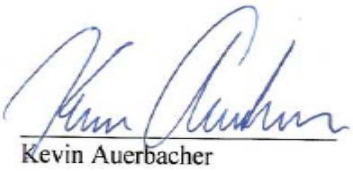
The Division also recommended that any violations of these provisions result in the customer host losing his or her NEM status and forfeiting any unreceived NEM credits.[6] We disagree, and submit that customers must first be given a warning and an opportunity to correct system operation before losing net metering status and forfeiting net metering credits. If there were an unintentional error in system configuration or operation, immediately removing net metering eligibility would be an excessive penalty. Again, while the probability of such violations is extremely unlikely given system configurations and protections, Tesla respectfully asks that customers who may cause such a violation have the opportunity to be warned and to cure the violation by correcting the system operation, should a violation occur before such a penalty would be applied.

CONCLUSION

Tesla wishes to thank the Division, National Grid, and Commissioner Grant for their support of allowing solar+storage systems to receive net metering credits. As aptly stated by Commissioner Grant, energy storage has great potential to bring substantial and diverse benefits to customers, the electric system, and society.[7] Accordingly, Tesla respectfully asks the Commission to grant this petition which will play a key role in the advancement of energy storage technology in Rhode Island.

[6] *Id.*
[7] Comments of the Rhode Island Office of Energy Resources Commissioner Carol J. Grant (Nov. 7, 2017).

Respectfully submitted,



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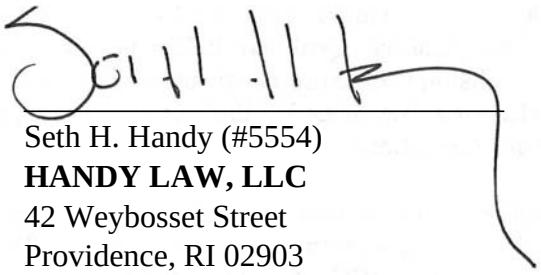

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