



February 8, 2021

**Via Electronic Filing**

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2<sup>nd</sup> Floor  
Harrisburg, PA 17120

RE: *Petition of PPL Electric Utilities Corporation for Approval of Tariff Modifications and Waivers of Regulations Necessary to Implement its Distributed Energy Resources Management Plan*, Docket No. P-2019-3010128

Secretary Chiavetta:

Enclosed please find the comments of Sunrun Inc. on PPL Electric's DER Management Pilot Implementation Plan for filing in the above-referenced proceeding. Copies have been served as indicated on the enclosed Certificate of Service.

Sincerely,

/s/ James M. Van Nostrand  
James M. Van Nostrand  
Keyes & Fox LLP

*Counsel to Sunrun Inc.*

cc: The Honorable Mary Long (email only)  
The Honorable Emily I. DeVoe (email only)

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities Corporation :  
for Approval of Tariff Modifications and Waivers : Docket No. P-2019-3010128  
of Regulations Necessary to Implement its :  
Distributed Energy Resources Management Plan :

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**COMMENTS OF SUNRUN INC. ON  
PPL ELECTRIC’S DER MANAGEMENT PILOT IMPLEMENTATION PLAN**

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Sunrun submits these comments on PPL Electric’s DER Management Pilot Implementation Plan (“Implementation Plan”) filed with the Commission on January 19, 2021 pursuant to the schedule provided in the Implementation Plan.

**I. Approved List of Smart Inverters**

PPLs Implementation Plan requires smart inverters for distributed energy resources requesting interconnection after January 1, 2021 to meet both the UL Standard 1741 Supplement A (“UL 1741 SA”) and PPL’s internal testing for communications capabilities under IEEE 1547-2018. Additionally it states that *“The Company shall perform its testing expeditiously so DER interconnections are not delayed.”* To date, this commitment has not been met as many projects are currently experiencing interconnection delays related to this Pilot Program. Determining whether smart inverters meet UL 1741 SA is straightforward, and most commercially available inverters are compliant. However, the second requirement requires the actual evaluation of each inverter model and based on our experience with the process can take a substantial amount of time to complete. Sunrun expected a larger number of smart inverters to be approved at this point in order to avoid long delays for projects seeking to interconnect with UL 1741 SA-compliant smart inverters.

To date, a limited number of inverter providers have been tested and approved for interconnection in PPLs territory. Many common inverter models, even for manufacturers who have some inverters on the approved smart inverter list, have not yet been approved. In some cases PPL's DER management device is not currently compatible with the smart inverter. Some projects are now in their second month of waiting for the ability to apply for interconnection, which is having a substantial impact on the ability of installers to serve PPL customers. It is unreasonable to expect customers and installers to have UL 1741 SA and IEEE 1547-2018 (including IEEE 2030.5 communication protocols which is acceptable under IEEE 1547-2018) compliant projects delayed interconnection for months as they await testing for compatibility with PPL's DER management device. As such, we recommend two different approaches to resolving the issue of delayed interconnection. The first is that interconnection should not be delayed for inverters that meet UL 1741 SA and IEEE 1547-2018 standards, but are pending PPL testing. These projects should move forward with interconnection and be exempt from the Pilot. At such time that PPL updates its list of inverters approved for the Pilot Program, new customers (i.e., customers applying after the approved list of inverters is updated) with those inverters could participate in the Pilot. Alternatively, Pilot Program implementation as a whole should be delayed until PPL demonstrates that its DER management device is compatible with a larger number of smart inverters, including smart inverters with IEEE 2030.5 communication protocols.

As discussed in the technical meetings, Enphase microinverters in particular have been problematic - and based on the most recent updates from PPL may not be able to participate in the Pilot Program for several more months. PPL has proposed that Enphase inverters with communications protocols under IEEE 2030.5 be allowed to interconnect following the Company's testing, without requiring participation in the Pilot Program. While this approach

may be reasonable given the circumstances, we believe it should be applied beyond just Enphase inverters. The Settlement provides that PPL “shall not deny or delay the permission to connect and operate a DER due to unavailability of DER management devices” and “[a]ny DER not equipped with a DER management device for this reason shall not be part of the pilot program.”<sup>1</sup> If one inverter model is able to interconnect without participating in the Pilot Program, all inverter models compliant with UL 1741 SA but for which PPL has not tested for compatibility, or for which have been tested but compatibility issues have been identified, should be able to interconnect and operate without participating in the Pilot.

Inverters that can show UL 1741 SA and IEEE 1547-2018 compliance should be able to proceed with interconnection with the presumption of compatibility with the DER management device, which would be substantiated through PPL’s testing. Should testing uncover compatibility issues with the DER management device that cannot be resolved, those projects should not be required to participate in the Pilot Program but still be allowed to interconnect per paragraph 56 of the Settlement.<sup>2</sup> This parallel approach to testing would alleviate the delays in interconnection currently being felt by customers and installers while still allowing testing by PPL to determine compatibility with the Pilot Program. In the case that a UL 1741 SA and IEEE 1547-2018 compliant smart inverter is not compatible with the DER management device, it is incumbent upon PPL and/or the smart inverter manufacturers to determine a solution to allow participation in the Pilot Program. Until that is possible those systems should not be delayed or

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<sup>1</sup> Joint Petition for Settlement of all Issues at paragraph 56 *available at* <https://www.puc.pa.gov/pcdocs/1679576.pdf>.

<sup>2</sup> *Id.* (providing “Paragraph 55 notwithstanding, the Company shall not deny or delay the permission to connect and operate a DER due to the unavailability of DER management devices. Any DER not equipped with a DER management device for this reason shall not be part of the pilot program.”).

denied interconnection despite meeting the required UL 1741 SA and IEEE 1547-2018 technical certifications.

Should a significant number of common smart inverter models not be compatible with the DER management device, and therefore unable to participate in the Pilot Program, the Pilot Program should be reconsidered. The Pilot Program should not be allowed to be implemented in such a manner that it stymies DER development in PPL's territory.

## **II. Utilization of Remote On/Off Functionality**

PPL has indicated that additional language will be added to the final Implementation Plan regarding its planned use of remote on/off functionality for DER systems to specify that it would only be used in emergency or outage situations where the DER has not safely isolated from the distribution system. The addition of this language would be appreciated by Sunrun to ensure that solar plus energy storage systems providing back-up power during outages are not mistakenly turned off. Back-up power is the primary customer benefit of adding energy storage and as such it is important to protect that value for customers. PPL should be able to differentiate DERs which have storage from those which do not, as to more effectively utilize remote on/off technology only when it should be used per the Settlement. We encourage PPL to work with the Parties on the practical implementation of this functionality. Without a better understanding of the practical mechanics of this use case it is difficult to propose specific protections for customers with energy storage systems to ensure they are able to fully utilize back-up power.

Sunrun appreciates the opportunity to provide these comments and we look forward to resolving the interconnection delays associated with this Pilot Program.

Respectfully submitted,

/s/ Kyle Wallace

Senior Manager, Public Policy

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February 8, 2021

**AFFIDAVIT**

I, Kyle Wallace, certify that I am Senior Manager, Public Policy at Sunrun Inc. and that, in said capacity, I am authorized to and do make this Affidavit for it, that the facts set forth in the foregoing Comments of Sunrun Inc. on PPL Electric's DER Management Pilot Implementation Plan are true and correct to the best of my knowledge, information and belief. I understand that false statements made herein are made subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

/s/ Kyle Wallace

Kyle Wallace

Senior Manager, Public Policy

Sunrun Inc.

Dated: February 8, 2021

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities Corporation :  
for Approval of Tariff Modifications and :  
Waivers of Regulations Necessary to : Docket No. P-2019-3010128  
Implement its DER Management Plan :  
:

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of the foregoing document upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

VIA E-MAIL

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**Hon. Emily DeVoe**  
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Dated this 8th day of February, 2021.

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