

**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 Distributed Energy Resources :  
Management Plan :

**REJOINDER TESTIMONY OF  
WANDA REDER**

**PPL Electric Statement No. 2-RJ**

**August 26, 2020**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Wanda Reder, and my business address is 34W676 Country Club Road, Wayne,  
3 Illinois 60184.

4

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am the President and CEO of Grid-X Partners, LLC (“Grid-X”).

7

8 **Q. HAVE YOU PREVIOUSLY SUBMITTED IN TESTIMONY IN THIS**  
9 **PROCEEDING?**

10 A. Yes. My direct testimony is set forth in PPL Electric Statement No. 2, and my rebuttal  
11 testimony is set forth in PPL Electric Statement No. 2-R.

12

13 **Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

14 A. I will respond to some of the allegations and recommendations made in: OCA Statement  
15 No. 1-SR, the Surrebuttal Testimony of Ron Nelson submitted on behalf of the Office of  
16 Consumer Advocate (“OCA”); and SEF Statement No. 1-SR, the Surrebuttal Testimony of  
17 John Costlow submitted on behalf of the Sustainable Energy Fund (“SEF”). In this  
18 rejoinder testimony, I will address those witnesses’ surrebuttal testimony in that order.

19

20 **Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR REJOINDER**  
21 **TESTIMONY?**

22 A. No.

23

1 **I. OCA STATEMENT NO. 1-SR – SURREBUTTAL TESTIMONY OF RON NELSON**

2 **Q. OCA WITNESS NELSON ALLEGES THAT PPL ELECTRIC’S DER**  
3 **MANAGEMENT PLAN APPEARS TO BE DISCRIMINATORY BASED ON THE**  
4 **DEFINITION IN INSTITUTE OF ELECTRICAL AND ELECTRONICS**  
5 **ENGINEERS (“IEEE”) 1547-2018. (OCA STATEMENT NO. 1-SR, P. 15.) DO YOU**  
6 **AGREE?**

7 A. No. The DER Management Plan is technology neutral, applies to all inverter-based DERs,  
8 and fully embraces IEEE 1547-2018 and Underwriters Laboratories (“UL”) 1741. I also  
9 disagree with Mr. Nelson that the issue of DER compensation for grid services should be  
10 addressed by the Pennsylvania Public Utility Commission (“Commission”) in a different  
11 proceeding before it approves anything similar to the PPL Electric’s DER Management  
12 Plan. The Company has provided ample evidence and has made a compelling case that it  
13 is prepared to implement the DER Management Plan and that no additional compensation  
14 to customers is warranted. Moreover, should the Commission determine that compensation  
15 is required, PPL Electric’s tariff already has provisions in place to determine the rate of  
16 compensation.

17  
18 **Q. MR. NELSON ALSO ASSERTS THE FOLLOWING IN HIS SURREBUTTAL**  
19 **TESTIMONY: “THE SETTINGS ASSOCIATED WITH THE SMART INVERTER**  
20 **ARE WHAT IEEE 1547-2018 CONSISTS OF, WHILE THE STANDARD**  
21 **REQUIRES THAT DER ARE CAPABLE OF ENABLING MONITORING AND**  
22 **CONTROL. PPL HAS CONFLATED THESE TWO ISSUES THROUGHOUT**  
23 **BOTH DIRECT AND REBUTTAL TESTIMONIES BY ASSERTING THAT IEEE**

1           **1547-2018 REQUIRES COMMUNICATION AND CONTROL.” (OCA**  
2           **STATEMENT NO. 1-SR, P. 18.) PLEASE RESPOND.**

3    A.    I disagree that PPL Electric has “conflated” these two issues. To the contrary, the Company  
4           fully understands and embraces the capabilities that IEEE 1547-2018 enables. PPL  
5           Electric’s DER Management proposal would allow the Company to utilize one of two  
6           communications ports, a requirement specified in IEEE 1547-2018, to monitor and manage  
7           DER that is interconnected with the Company’s distribution system. PPL Electric simply  
8           is seeking approval to use the capabilities required by IEEE 1547-2018 to better manage  
9           its distribution system, increase the hosting capacity on its distribution circuits, and provide  
10          safer and more reliable service to all of its customers.

11  
12   **Q.    DO YOU AGREE WITH MR. NELSON’S ARGUMENT THAT PPL ELECTRIC’S**  
13           **INTERPRETATION OF THE NATIONAL ASSOCIATION OF REGULATORY**  
14           **UTILITY COMMISSIONERS (“NARUC”) RESOLUTION IS MISLEADING?**  
15           **(OCA STATEMENT NO. 1-SR, PP. 16-20.)**

16    A.    No. As Mr. Nelson noted in his surrebuttal testimony, “[t]he NARUC Resolution  
17           encourages regulators to move quickly to implement IEEE 1547-2018. There are many  
18           operational issues that can be avoided by upgrading smart inverters in the near term.”  
19           (OCA Statement No. 1-SR, p. 18.) PPL Electric agrees and requests approval of the DER  
20           Management Plan to move forward accordingly. While the NARUC Resolution does not  
21           explicitly address monitoring and management, IEEE 1547-2018 requires this functionality  
22           in smart inverters. Clearly, IEEE 1547-2018 envisioned the need for monitoring and  
23           management of DERs by requiring smart inverters to have specified communication

1 capabilities. The suggestion that these capabilities should not be utilized by PPL Electric  
2 undermines a critical component of the IEEE 1547-2018 effort.

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4 **II. SEF STATEMENT NO. 1-SR – SURREBUTTAL TESTIMONY OF JOHN**  
5 **COSTLOW**

6 **Q. SEF WITNESS COSTLOW ARGUES THAT YOUR PROJECTIONS FOR SOLAR**  
7 **ADOPTION IN PPL ELECTRIC’S SERVICE TERRITORY SHOULD BE**  
8 **REJECTED BECAUSE “[R]ESPECTFULLY, MS. REDER IS NOT ON THE**  
9 **GROUND IN PENNSYLVANIA AND DOES NOT HAVE A COMPREHENSIVE**  
10 **UNDERSTANDING OF THE PENNSYLVANIA, AS [HE] DO[ES].” (SEF**  
11 **STATEMENT NO. 1-SR, P. 7.). WOULD YOU PLEASE RESPOND?**

12 A. Mr. Costlow’s characterization of my qualifications and “understanding” of the  
13 Pennsylvania market should be rejected entirely. Throughout my career, I have had the  
14 opportunity to gain significant knowledge of what is happening in Pennsylvania, in the  
15 United States, and around the world, giving me substantial context, perspective, and insight  
16 that should not be overlooked in this proceeding. In terms of Pennsylvania, I have spent  
17 significant time here in the Commonwealth in the past year, even living in Allentown,  
18 Pennsylvania part-time. Furthermore, when I was a Vice President and an officer for  
19 Exelon Energy Delivery, I was directly responsible for PECO Energy Company’s Electric  
20 Delivery Asset Management, Planning, Work Management, Standards, Engineering and  
21 more. This required an acute awareness and understanding of the assets, reliability, safety,  
22 financial and regulatory elements of the electric system in Pennsylvania and the  
23 communities served. Also, through my consulting services, I have gained an in-depth  
24 understanding of the challenges faced by PPL Electric and the solar market in Pennsylvania

1 and have brought my experience and knowledge from other jurisdictions to provide insight  
2 and solutions to those challenges. Therefore, contrary to Mr. Costlow’s allegation, I am  
3 and have been “on the ground in Pennsylvania.” (SEF Statement No. 1-SR, p. 7.)

4 More broadly, for the United States, I currently serve as the Chair of the U.S.  
5 Department of Energy (“DOE”) Electricity Advisory Committee (“EAC”). Prior to  
6 becoming chair, I led the U.S. DOE EAC Smart Grid Sub-Committee, and my co-chair  
7 formerly led the Pennsylvania OCA. From a global perspective, I was the President of the  
8 IEEE Power & Energy Society, which sponsored the development of IEEE 1547-2018 to  
9 address the challenges posed by DERs and the opportunities that smart inverters offer. The  
10 standard development has progressed as planned and as represented in my rebuttal  
11 testimony, IEEE 1547.1 was approved earlier this year. Thus, respectfully, I disagree with  
12 Mr. Costlow and maintain that in addition to having comprehensive knowledge of the  
13 industry at large, I have specific understanding and experience in Pennsylvania. Therefore,  
14 my perspective on projections for solar adoption in the Company’s service territory should  
15 be considered.

16  
17 **Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY AT THIS TIME?**

18 **A.** Yes, although I reserve the right to supplement my rejoinder testimony.