

July 22, 2025

**Via E-Filing**

Matthew L. Homsher, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Petition of PPL Electric Utilities Corporation for Approval of its Second Distributed  
Energy Resources Management Plan, Docket No. P-2024-3049223

Dear Secretary Homsher:

Please find attached for filing the Joint Solar Parties' Exceptions Reply, and certificate of service showing that the Joint Solar Parties' ("JSPs") served today on the persons on the formal and the parties' informal service list a copy of their Reply.

If you have any questions, please do not hesitate to contact me at (202) 213-1672.

Respectfully submitted,



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Attachment

cc: Administrative Law Judge Coogan  
Service List

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I hereby certify that I have this day served a true copy of the foregoing upon the parties listed below via electronic mail and/or hand-delivery, in accordance with the requirements of 52 Pa. Code § 154 (relating to service by a party):

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Dated this 22nd day of July, 2025

/s/ Bernice I. Corman

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities Corporation for	:	
Approval of its Second	:	Docket No. P-2024-3049223
Distributed Energy Resources	:	
Management Plan	:	

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**REPLY OF JOINT SOLAR PARTIES TO  
EXCEPTIONS OF PPL ELECTRIC UTILITIES CORPORATION TO  
THE RECOMMENDED DECISION**

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## I. INTRODUCTION

On June 30, 2025, the Pennsylvania Public Utility Commission (the “Commission”) issued the well-reasoned and thoroughly-supported Recommended Decision (“RD”) by Administrative Law Judge John M. Coogan recommending that the Commission deny PPL Electric Utilities Corporation’s (“PPL’s”) Petition (“Petition”) for Approval of its Second Distributed Energy Resources Management Plan (“Second DER Management Plan”) for failure to meet its burden of proof. RD p. 1.

On July 15, 2025, the Joint Solar Parties (“JSPs”)<sup>1</sup> filed an Exceptions brief in which they expressed their support for the RD and lack of objection to any of its contents, but explained that the purpose of their filing was to note the RD’s omission of certain housekeeping matters that should be addressed for PPL to wind down its Pilot Program in an orderly fashion. PPL’s First DER Management Plan and Pilot Program, approved by the Commission in 2020,<sup>2</sup> RD ¶ 16, was set to end on March 21, 2025.<sup>3</sup> On September 12, 2024, the Commission approved the Pilot’s continuing until thirty days after the Commission’s Final Order entered in this docket.<sup>4</sup> Under the terms of the Commission’s September 12, 2024 Order, the Commission’s adoption of the RD and denial of PPL’s Petition in this proceeding will have the effect of terminating PPL’s Pilot Program.

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<sup>1</sup> The Joint Solar Parties is an ad hoc group of entities consisting of American Home Contractors, Inc. (“AHC”); Enphase Energy, Inc. (“Enphase”); the Solar Energy Industries Association (“SEIA”); SolarEdge Technologies, Inc. (“SolarEdge”); Sun Directed; Tesla, Inc. (“Tesla”); and Trinity Solar, LLC. Sunnova, Inc. was a member but withdrew on September 13, 2024. See Order Modifying Scheduling Order (Oct. 21, 2024), n. 1.

<sup>2</sup> RD ¶ 16 (citing *Petition of PPL Electric Utilities Corporation for Approval of Tariff Modifications and Waivers of Regulations Necessary to Implement its Distributed Energy Resources Management Plan*, Pa. PUC Docket No. P-2019-3010128 (Order entered Dec. 17, 2020)).

<sup>3</sup> PPL St. 1, p. 13.

<sup>4</sup> RD ¶ 25 (citing *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 (Opinion and Order entered Sep. 12, 2024)).

On July 15, 2025, PPL also filed Exceptions (“PPL Exc.”). Therein, PPL seems to be attempting to relitigate the entire case it put forth before Judge Coogan. No other party filed Exceptions.

The JSPs file the instant Reply Exceptions and hereby respectfully request that the Commission deny PPL’s Exceptions and issue an order adopting the RD, as well as incorporate the adjustments recommended in the JSPs’ Exceptions to facilitate the orderly wind-down of PPL’s Pilot Program.

## II. SCOPE OF REVIEW

As was stated in the RD, as the proponent of a rule or order in this proceeding, PPL bears the burden of proof pursuant to 66 Pa.C.S. § 332(a), which PPL must establish by a preponderance – or greater weight -- of evidence which is substantial and legally credible.” *See* RD, p. 25, *citing Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm’n*, 578 A.2d 600, 602 (Pa. Cmwlth. 1990).

Once PPL makes out a *prima facie* case, the burden of proof shifts to an opposing party such as the JSPs. As noted in the RD, the Commission must measure the weight and credibility of all evidence. RD, p. 25. If the JSPs were to present evidence found to be of co-equal or greater weight, then PPL will not have met its burden. *See Id.*, *citing Milkie v. Pa. Pub. Util. Comm’n*, 768 A.2d 1217, 1220 (Pa. Cmwlth. 2001). Further, any finding of fact necessary to support an adjudication must be based on substantial evidence,<sup>5</sup> which is evidence a reasonable mind might accept as adequate to support a conclusion. RD, p. 26, *citing Borough of E. McKeesport v. Special/Temporary Civil Serv. Comm’n*, 942 A.2d 274, n. 9 (Pa. Cmwlth. 2008) (“*McKeesport*”); and *Kyu Son Yi v. State Bd. of Vet. Med.*, 960 A. 2d 864, 874 (Pa. Cmwlth. 2008) (citation omitted).

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<sup>5</sup> RD, p. 26 (*citing Met-Ed Indus. Users Group v. PA. Pub. Util. Comm’n*, 960 A.2d 189, n. 2 (Pa. Cmwlth. 2008), which in turn cites 2 Pa.C.S. § 704).

Critically, as Judge Coogan explained in the RD, the Commission is not required to consider expressly and at length each contention and authority brought forth by each party to the proceeding. RD, p. 26. As he also noted, it is not the law in this Commonwealth:

... that an administrative agency must set forth findings specifically noting the rejection, and reasons for such rejection, of each and every minor allegation of a party. A voluminous record does not create, by its bulk alone, a multitude of real issues demanding individual attention.

*Id.*, citing *Univ. of Pa. v. Pa. Pub. Util. Comm'n*, 485 A.2d 1217, 1222 – 1223 (Pa. Cmwlth. 1984), and *Application of Midwestern Fidelity Corp.*, 363 A.2d 892, 902, n.6 (Pa. Cmwlth. 1976).

Moreover, as Judge Coogan also explained:

... [A] Commission decision is adequate where, on each of the issues raised, the Commission was merely presented with a choice of actions, each fully developed in the record, and its choice on each issue amounted to an implicit acceptance of one party's thesis and rejection of the other party's contention.

*Id.*, citing *Popowsky v. Pa. Pub. Util. Comm'n*, 706 A.2d 1197, 1204 (Pa. 1997) ("*Popowsky*").

This case was extensively litigated, involving tens of thousands of pages of initial, rebuttal, surrebuttal, rejoinder and surrejoinder testimony and hundreds of exhibits from the parties' fact and expert witnesses;<sup>6</sup> two days of live testimony; post-hearing briefs; and extensive and extensively litigated written discovery. In short, the choices before Judge Coogan were indeed "fully developed in the record" and his consideration of same is documented in the RD; and the RD clearly reflects his "implicit acceptance of one party's thesis and rejection of the other party's contention." *Id.*

It is axiomatic that this body is to provide Judge Coogan with deference as to his assessment of the credibility of the witnesses (*see Michael Morales; v.; Philadelphia Gas Works*, Pa. PUC

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<sup>6</sup> PPL filed fact and expert witness testimony from 13 witnesses; the JSPs filed fact and expert witness testimony from 15 witnesses. PPL cross-examined only 4 of the JSP witnesses and none of the other Intervenors' witnesses. The JSPs cross-examined 10 PPL witnesses.

Docket No. C-2018-3002466 (Opinion and Order dated May 21, 2020) and evidence presented (*see Margaret Collins; v.; Pennsylvania-American Water Company*), Pa. PUC Docket No. F-2017-2628770 (Opinion and Order dated August 29, 2019). *See also See Application of Pennsylvania-American Water Company to Furnish or Supply Water Service to the Public in an Additional Portion of Derry Township, Dauphin County, PA*, Pa. PUC Docket No. A-2024-3048364, n. 10 (“*Dauphin County*”) (“While the Commission is the ultimate fact finder, we shall give significant deference to the ALJ’s determination of witness credibility here, as it is based on direct exposure to the witnesses. The ALJ’s consideration of the evidence and testimony in this matter was the result of firsthand, on-the-record experience assisting her to assess witness candor, intelligence, interest, bias and credibility.”)

Accordingly, based on the foregoing, it is incumbent upon this Commission to adopt the RD’s recommendation that the Commission deny PPL’s Petition, which recommendation was based upon Judge Coogan’s well-founded conclusion that “the parties opposing PPL Second DER Management Plan have presented evidence of greater weight than PPL.” RD, p. 46.

### **III. JOINT SOLAR PARTIES REPLIES TO PPL’S EXCEPTIONS**

- a. Joint Solar Parties’ Reply to PPL’s Exception No. 1: The RD correctly determined that the scope of PPL Electric’s Second DER Management Plan was neither reasonable nor necessary.**

PPL’s first exception claims that “[t]he RD errs in finding that ‘PPL has not demonstrated why the scope of its proposed active monitoring and control of DER devices is reasonable or necessary.’” PPL Exc. p. 6. PPL’s proposed plan would expand its three-year Pilot Program to make the Program permanent and pervasive.<sup>7</sup> The RD’s finding that the proposed scope is unreasonable and unnecessary was amply supported and should be adopted.

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<sup>7</sup> Since January 1, 2023, PPL’s Pilot Program has required that new DERs interconnecting with PPL’s distribution system use smart inverters approved by PPL as meeting IEEE 1547-2018, and certified to UL 1741 SB using IEEE

**PPL's Exception No. 1.1** argues that “the RD predominantly relies on other parties’ arguments that PPL Electric is the first electric utility to make a DER management proposal of this scale and that other jurisdictions have higher levels of penetration.” *Id.*

PPL misses the boat with its argument and fails to highlight for the Commission the real crux of the matter. The “other parties” (the JSPs, the Office of Consumer Affairs (“OCA”), the Office of Small Business Advocate (“OSBA”) and the Sustainable Energy Foundation (“SEF”) (collectively, the “Intervenors”)) did not oppose PPL’s Plan simply because of its First-in-the-Nation status or because they believe utility action is warranted only when solar penetration exceeds a certain threshold, as argued by PPL at PPL Exc. pp. 6 – 9. To the contrary, the Intervenors argued, and Judge Coogan agreed, “that PPL has not demonstrated why the scope of its proposed active monitoring of DER devices is reasonable or necessary,” RD p. 43, based on the draconian nature of the proposed Program, not because the Program is First-in-the-Nation or early.

Citing directly to the Intervenors’ briefs, which in turn summarize the evidence they presented and he assessed, Judge Coogan concludes:

The JSPs demonstrated that PPL’s proposal contains extreme, first-in-the-nation features and other jurisdictions with higher rates of solar penetration rely on an array of tools, e.g., custom smart inverter setting profiles, grid modernization investments, voluntary flexibility interconnection options, and compensation for customers and non-utility service providers who both provide and receive grid services, without causing power quality or reliability issues. JSPs MB at 20-22. The OCA similarly established that it is unaware of any other utility that mandates full monitoring and control of DERs as proposed by PPL, and that other jurisdictions, which are ahead of PPL in terms of DER deployment and penetration levels, use other more effective and economical management strategies. OCA MB at 13-19. As the JSPs explain, if PPL’s proposal is approved as designed, customers will be subject to a level of utility control they may not have envisioned.

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1547.1-2020, and meet PPL’s DER Lab’s testing requirements “to ensure that [the inverters] are compatible with PPL Electric’s DER Management Devices...”. RD ¶ 31 (citing PPL St. 2, pp. 9 – 10). Under the Pilot, PPL is authorized to purchase and install DER Management devices on all new DERs with inverters up to an annual cap of 3,000 DER Management devices. RD ¶ 20 (citing PPL St. 1, p. 13.). PPL’s Second DER Management Plan would make the program permanent, remove the cap, and apply to solar photovoltaic systems interconnected before the Pilot Program started on January 1, 202; and (2) inverter-based DERs interconnected after the Pilot Program started without DER Management devices installed on them. RD ¶ 29 (citing PPL St. 1, p. 23).

RD, p. 43 (emphasis added).

Thus, RD ¶¶ 38 and 41 found as a factual matter that PPL’s proposal to mandate, and fully, actively control small DERs has not been required in jurisdictions with higher penetration (*see* RD ¶¶ 33 – 38), and has not caused them DER related reliability issues. RD ¶¶ 32 and 40 found that no other utility in the country has conditioned permission to interconnect on the DER owner’s inverter being compatible with a utility-owned management device, a requirement that clearly exceeds national standards and state requirements. RD ¶ 40, and the RD at p. 36, found, and refer to the JSPs’ presentation of evidence, that the anti-competitive nature of PPL’s proposed program – in which the PPL-owned management Devices seize the grid services provided by customers’ DERs without compensating them, is also unique. RD ¶¶ 43 – 104 recite the litany of harms caused by PPL’s program requirements, including that compliance therewith has driven up the costs of projects, disrupted customers’ communications and power generation, blocked market entry for product developers, and blocked the development of a market for third-party aggregators.<sup>8</sup> RD ¶¶ 105 - 114 found that PPL’s installation of its Device in nearly 8,000 SolarEdge inverters in a manner not authorized by SolarEdge caused thermal damage and voided customers’ warranties. And RD ¶ 42, and ¶¶ 115 – 118 found flawed benefit analyses that did not comport with Commission requirements.

Indeed, PPL’s Exceptions Brief undermines PPL’s own arguments. Though PPL tries to damage the credibility of the JSPs’ expert witness Brian Lydic by pointing to instances in which Mr. Lydic applauds utilities for taking a proactive approach (PPL Exc. p. 9), PPL also admits that Mr. Lydic’s critique of PPL’s program is based on “the mandatory nature of PPL Electric’s proposal and the Company’s use of a utility-owned device to monitor DERs ...“ *Id.*, pp. 9 – 10.

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<sup>8</sup> The RD at ¶¶ 63, 74 and 90 gave weight to the JSPs’ evidence that PPL’s Program imposes barriers and costs they have not faced in any other place they do business.

Similarly, another JSP expert witness, Joan White, did not deny that a California demonstration project showed there were benefits to allowing a utility to actively control DERs. However, Ms. White testified that that project – occurring in a territory with far denser penetration than PPL’s, in which customer participation was voluntary, and in which the utility used software to manage the customers’ inverters rather than install its own device – concluded that the benefits of active control should flow at least in part to the DER owners. JSP St. No. 1-SR, pp. 5-6.

Moreover, PPL’s “first-in-the-nation” argument, specifically its argument that the reason other jurisdictions didn’t establish active management and monitoring programs is because when they started employing other measures, the technologies didn’t exist, PPL Exc. p. 8, is simply false. PPL’s Pilot Program has been underway for four-and-a-half years, but as the JSPs pointed out, still no other utility has emulated or even come close to requiring active management and monitoring of DERs over this four-and-a-half year period. JSPs MB, pp. 11 – 12.

Accordingly, based upon the foregoing, the RD clearly correctly concludes that determined that the scope of PPL Electric’s Second DER Management Plan was neither reasonable nor necessary.

The RD also does not ignore PPL’s testimony that safety and reliability challenges posed by DERs exist even at the current levels of penetration, as PPL asserts in **PPL Exception No. 1.2** (PPL Exc. p. 10). Rather, the RD found that jurisdictions with far higher rates of penetration have successfully met safety and reliability challenges without having to require mandatory active control of small DERs. *See, e.g.*, RD ¶ 38. *See also* RD, p. 39, which notes that “the OCA avers that other utilities with larger quantities of DERs than PPL do not need the control that PPL requests in its proposal;” and that “[t]he OCA asserts that PPL’s proposal is unnecessary to improve

the safety, reliability, adequacy and resiliency of PPL’s electric service beyond other reasonable alternatives.”

Indeed, it is PPL’s astonishing claim -- that under the Pilot, PPL has “lost out on the opportunity to mitigate or resolve approximately 604,000 voltage violations that were caused by interconnected DERs in the control and grandfathered groups,” PPL Exc. p. 12, that this Commission should ignore, as it is patently false. PPL has repeatedly acknowledged that the voltage violations for which the DERs are resolving are remote from the point of interconnection, and that PPL does not know the root cause of these voltage violations, meaning, by definition, the DERs in the program are resolving grid voltage problems for which they are not the cause. JSPs MB p. 25.

Nor did the RD disregard PPL’s testimony that active monitoring and management outperforms autonomous features, as PPL asserts at PPL Exc. p. 12.

Significantly, on p. 44, Judge Coogan concludes:

I agree with the JSPs that PPL failed to adequately provide analyses comparing the costs and benefits of active management of DERs with the use of inverter autonomous grid support functions. JSPs MB at 31 – 36. The OCA also demonstrated that PPL failed to provide a clear comparison of the value of autonomous smart inverter functions in comparison to active management benefits.” OCA MB at 28 – 29.

Further, the RD documents Judge Coogan’s consideration of the JSPs’ evidence that PPL generally failed to analyze the differences (RD p. 34), and that “when PPL did compare the use of autonomous smart meter inverter functions compared to active management in regard to the efficacy of voltage control, the analysis was notably unscientific.” *Id.* at p. 35 (*citing* JSPs MB at 31–36).

The JSPs also presented evidence that PPL's claims that active monitoring and management outperforms autonomous features were based on limited data analysis (JSPs MB at 32). In fact, the JSPs' evidence showed that PPL's active management resulted in no change to the number of voltage violations 63% of the time; increased voltage violations 27% of the time; and reduced voltage violations only 10% of the time. *Id.*

Finally, the RD also did not disregard PPL's claim that its program resolves concerns with anti-islanding, as PPL alleges at PPL Exc. p. 13. Rather, Judge Coogan was able to consider also the JSPs' evidence that concerns with anti-islanding were overstated, as anti-islanding capability is already built into inverter-based systems certified to IEEE 1574 standards and tested in accordance with UL 1741. JSPs MB at 18-19 (*cited* in RD, p. 32). Further, Judge Coogan was able to consider both PPL's presentation of a purported "real-life example" of the need for on/off functionality occurring in Ontario, Canada, as well as PPL's admission, presented by the JSPs, that to date, PPL has "not yet" accessed the remote on/off capability in its own territory. *Id.*, *citing* PPL St. No. 3, p. 55. Indeed, the JSPs presented evidence that the reason PPL had not done so yet was because out of the numerous outage events PPL observed that impacted actively managed DERs, none caused an unintentional island event. *Id.*

Thus, the RD was not flawed for failing to conclude that PPL's Proposal is necessary to improve the safety, reliability, adequacy and resilience of its electric service.

Judge Coogan also did not disregard PPL's claim that the purported increases in hosting capacity yielded by PPL's program will aid in addressing Pennsylvania's concerns about resource adequacy (**PPL Exception No. 1.3**, PPL Exc. p. 14), as well as climate change and sustainability (**PPL Exception No. 1.4**, PPL Exc. p. 16). Rather, Judge Coogan concludes: "The JSPs convincingly argue that PPL's cost-benefit analyses presented in this proceeding ... overstat[e] the

amount of benefits PPL's program would provide from incremental hosting capacity." RD p. 46 (citing JSPs MB at 26 – 31).<sup>9</sup> See also RD ¶¶ 115 - 118, which found that PPL's present claim that the chief benefit of its Program is that it will increase hosting capacity, arose only after PPL backed off of its earlier analysis that then showed that the chief benefit of the Program was that it reduced the number of truck rolls needed to investigate customers' complaints of voltage violations. RD ¶ 118; RD p. 28.

Indeed, the RD's conclusion (RD p. 45), that PPL's program will deter, and outright block, the launch of Virtual Power Plant ("VPP") programs and third-party DER aggregations in PPL's territory, will itself make it more difficult to leverage DERs for resource adequacy purposes in either PJM-level or retail-level DER aggregations. The difficulty or impossibility of standing up such third-party aggregations in the face of PPL's program (discussed, *infra*) would make issues of resource adequacy, climate change, and stability *more* challenging down the line rather than alleviating them, because having DERs on the grid is of limited help if PPL's program ultimately prevents DER capacity from being leveraged when it is needed. As the JSPs showed, dozens of utilities around the U.S. are leveraging DER capacity to help provide resource adequacy and relieve grid stress, and none of these utilities have required utility monitoring and management of DERs. See JSPs MB p. 2, stating that Tesla has 95,000 Powerwall residential battery energy systems amounting to more than 500 MW of nameplate capacity enrolled in 50 VPPs in utility-level programs and wholesale electricity markets. See also the JSPs MB, p. 48, and JSP St. No. 8,

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<sup>9</sup> As discussed in more detail below, the JSPs presented evidence showing that PPL's witness Steven Wishart "likely double-counted some or all of the components comprising the benefits he ascribes to the increased 'incremental' hosting capacity." JSPs MB at 28. The RD's citation to this portion of the JSPs Main Brief suggests that Judge Coogan implicitly accepted the JSPs' thesis and rejected PPL's contention that Mr. Wishart was not double-counting the incremental hosting capacity benefits of "Avoided Distribution Infrastructure Investments" and "Avoided Energy from Incremental Hosting Capacity." PPL Exc. pp. 31 – 32. Notably, PPL's purported benefits related to incremental hosting capacity were by far its largest projected benefit in its cost-benefit analyses. Taking into account the double counting significantly decreases the potential benefit-to-cost ratio of PPL's proposed program. JSPs MB at 30.

pp. 6 – 12, cited in the RD at p. 45, in which the JSPs presented data showing that VPPs can provide wholesale market grid services (including provision of generating capacity, towards meeting resource adequacy needs) and utility-level grid services (including peak load shaving, which can reduce resource adequacy needs).

Accordingly, the RD is not flawed for failing to find that PPL’s Second DER Management Plan is necessary to aid in addressing the resource adequacy challenges facing, or the climate and sustainability concerns of, the Commonwealth.

**b. Joint Solar Parties’ Reply to PPL’s Exception No. 2: The RD correctly found that PPL Electric’s Requirements for Interconnecting DERs Have Resulted in Credible Harms**

In a rather high-handed fashion, PPL derides Judge Coogan’s finding that the JSPs’ presented evidence of credible harms, placing quotation marks around the Judge’s use of the phrase “credible harms.” *See, e.g.*, PPL Exc. p. 18. However, the RD concludes:

The JSPs in particular ... raised a number of credible harms resulting from the Second DER Management Plan standards. Commission regulations provide standards for interconnecting DERs. 52 Pa. Code § 75.22. However, as explained by the JSPs, PPL requires additional requirements from interconnecting DERs. JSPs MB at 11-20. As a result of the standards imposed by PPL, the JSPs demonstrated harm to the JSPs, other solar customers and companies, and the public interest generally. Specifically, the JSPs demonstrated:

- lost sales resulting from PPL’s program restrictions;
- failure to account for additional losses to Pennsylvania businesses and customers;
- blocked or limited market entry;
- failure to account for the interference with customers’ communications and power generation;
- blocked or impeded competition from third-party grid services providers; and
- failure to account for its device installation voiding customers’ warranties and causing thermal damage.<sup>10</sup>

JSPs MB at 36-60.

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<sup>10</sup> The RD did not respond to PPL’s argument (on p. 27 of its Exceptions Brief) that the Commission lacks authority to declare whether warranties (i.e., contracts) were breached. Nevertheless, the RD found that SolarEdge voluntarily replaced customers’ damaged inverters. RD ¶ 107.

RD pp. 44 – 45.

Thus, Judge Coogan did not disregard PPL’s argument (PPL Exc. p. 19, **PPL Exception No. 2.1**) that AHC’s estimates of lost sales due to PPL’s Program were overstated because, per PPL, AHC included in its list of lost sales 6 addresses located outside of PPL’s service territory. Rather, the RD found that AHC “based its information on the location of the sites where sales were lost on, *inter alia*, copies of the customers’ utility bills” RD ¶¶ 45, 46 (*citing* JSP St. 2-SR, pp. 9-10), which indicates that the 6 customers were in fact PPL customers. More importantly, the RD also found that “AHC provided evidence showing it denied sales to at least 52 customers because the customers requested products that were not on PPL’s Approved List,” RD, ¶ 43, which supports the RD’s conclusion that “the JSPs demonstrated ... lost sales resulting from PPL’s program restrictions.”

Judge Coogan also did not disregard PPL’s argument that Sun Directed’s claims it had to deny certain projects because it could not use inverters that were “best value” were based on flawed cost analyses that failed to accurately compare similar inverter system setups. PPL Exc. p. 19. Rather, the RD found in ¶¶ 50 that “in Sun Directed’s experience, PPL-approved products are higher priced.” Thus, the RD cited JSP St. No. 3, p. 4, in which Sun Directed testified that it could not compare “similar inverter system setups,” because its suppliers don’t carry PPL-approved inverters; because of the increased labor and equipment costs required for PPL-approved inverters; because of the approved inverters’ non-American origins; and because the PPL-approved inverters’ lack of proven performance record or comparable brand recognition, render comparison with so-called “similar system set-ups” illusory.

Judge Coogan also did not disregard PPL’s argument that Trinity Solar overstated the amount of time it has had to spend coordinating with PPL in arranging inverter service visits, which

in turn has driven up Trinity's costs of doing business in PPL territory. (PPL Exc. p. 19). Specifically, PPL charged that Trinity erroneously included in its tally visits to locations without a PPL Device. *Id.* However, the RD found that Trinity coordinates with PPL in *all* instances when it performs service visits because it does not know in which inverters PPL has installed its Device. RD ¶ 53 (emphasis added).<sup>11</sup> The RD also finds that such delays "increased Trinity's costs due to additional days of field techs' time and the costs associated with its hiring an additional staffer to coordinate service visits." RD ¶ 51.<sup>12</sup>

Judge Coogan also did not disregard PPL's wholly unsubstantiated claim that Green Way Solar overstated the delays in project start-up attributable to PPL's program. PPL Exc. p. 19. PPL argued (but never showed) that the reason for delays experienced by Green Way customers (sometimes up to 47 days following the date of the electrical inspection) was due to signatures missing from the customers on the certificates of electrical inspection. RD ¶ 55. Rather, the RD found that the certificates of inspection contained all required signatures. RD ¶ 58.

Nor did the RD misstate evidence presented by the JSPs pertaining to the costs to Green Way customers resulting from their delays in obtaining PPL's "permission to operate," or "PTO," as PPL alleges in PPL Exc. pp. 20 – 21. PPL argues that the RD mistakenly found that a Green Way customer -- a farmer, missed out entirely on receiving a government grant due to his having to await 38 days to receive PTO. *Id.*, p. 21.

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<sup>11</sup> Trinity testified that delay occurs because PPL reserves for itself the exclusive right to physically install or remove its Device from a customer's inverter. Thus, Trinity's ability to even begin servicing customers' inverters depends upon PPL's making itself available to first remove its Devices therefrom. JSP St. 5, p. 5 (*cited* at RD ¶¶ 50 - 53).

<sup>12</sup> Trinity stated in testimony cited in the RD that its increased costs were necessitated by its having to hire an additional employee to manage the pipeline of the additional service work necessitated (uniquely) by PPL's program, and to its having to dispatch additional truck roll-outs. JSP St. 5, p. 7; JSP St. 5-SR pp. 5 – 7. Trinity testified further that PPL's Program was costing Trinity its reputation, "due to customers' significant dissatisfaction with the delays the customer is enduring," and "costs to the customers who are deprived of the use of their systems while awaiting PPL's coordination." JSP St. 5-SR, p. 7.

PPL errs. The RD correctly found that the farmer’s failure to timely receive the government grant, which would allow him to repay a loan, meant he had to pay an additional 38 days of unanticipated interest on the loan out of his own pocket. The farmer did so by selling a cow. JSP St. No. 10, pp. 5 – 6, *cited* in RD ¶ 56.

Judge Coogan also did not disregard PPL’s argument that Enphase was denied market entry because Enphase failed to produce appropriate documentation. PPL Exc. p. 20. Rather, Judge Coogan correctly found<sup>13</sup> and cited to<sup>14</sup> the JSPs’ evidence showing that the four-month delay Enphase experienced in obtaining PPL’s approvals on its inverters was not due to *Enphase* failing to provide “appropriate” documentation; rather, it was due to *PPL’s* then being technically incapable of making use of such documentation.

Specifically, although national standards require that inverters be able to follow one of three communications protocols,<sup>15</sup> in the early stages of its Program, PPL had not yet completely integrated one of the protocols into its own server network. Indeed, PPL was only able to complete integrating the third protocol (IEEE 2030.5) because of Enphase’s assistance to PPL, which involved *Enphase’s* sending free equipment to PPL’s lab and providing remote support to PPL, while PPL performed three months of lab work, and both PPL and Enphase engaged in another month of troubleshooting and debugging tasks to ensure that command were working as intended.

Similarly, Judge Coogan also did not erroneously disregard PPL’s evidence purportedly demonstrating that SolarEdge overstated the costs it sustained in obtaining PPL’s approval of its inverters, as PPL alleges at PPL Exc. p. 21. Rather, the RD found credible the JSPs’ evidence as to the barriers and additional costs SolarEdge incurred in entering the PPL market. RD ¶¶ 64-67.

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<sup>13</sup> See RD ¶¶ 59 – 63.

<sup>14</sup> See *Id.* See also JSPs RB at p. 22 (*cited* at RD p. 37).

<sup>15</sup> 1547-2018 requires that inverters be able to follow IEEE Std 1815 (DNP3) *or* SunSpec Modbus *or* IEEE Std. 2030.5. See JSP RB n. 54, *citing* PPL Electric St. No. 2-RJ at 37.

Nor did the RD erroneously disregard PPL’s evidence purportedly demonstrating that SolarEdge’s costs incurred in enabling its inverters to be connected to a DER Management Device “were largely due to *SolarEdge’s preferred* method for enabling its inverters to be connected to a DER Management device, which required inverters to be enabled individually and upon request,” as alleged by PPL at PPL Exc. p. 20 (emphasis added). To the contrary, the RD found that SolarEdge incurred costs because it *had* to customize a solution for its customers who had purchased SolarEdge inverters that did not yet meet the not-yet effective UL 1741 SB Standard that PPL’s Program was requiring as a condition of receiving PTO. RD ¶¶ 64 – 65, 67.

Judge Coogan also did not err in finding that PPL Electric has “blocked or limited market entry for third-party aggregation and blocked or impeded competition from third-party grid service providers.” PPL Exc. p. 21 – 22 (**PPL Exception No. 2.2**). Specifically, PPL charges that the RD erred by relying on the JSPs’ allegations of harms, which PPL characterizes as speculative, since, PPL claims, no market for the service performed by PPL currently exists (PPL Exc. p. 21),<sup>16</sup> and because PJM will not have completed the tariff enabling aggregation in PPL territory until 2028. PPL Exc. pp. 21 – 22. To the contrary, the RD found that:

PPL’s ability to assert primary control of a customers’ inverter will be a significant blocker for third-party aggregators of battery energy storage in PPL’s territory and will block the provision of wholesale market grid services from aggregated DERs by creating unique and

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<sup>16</sup> PPL claims (PPL Exc. pp. 21 – 22) that its Program will have no impact on aggregation because its active DER management will operate principally through reactive power production or absorption, for which PPL claims no market currently exists, and therefore cannot materially affect DERs’ ability to contract with aggregators or participate in third-party aggregation. The RD disagreed. RD ¶ 96 found that PPL’s ability to update reactive power setpoints in fact has the effect of reducing the active power potential of resources such as solar and batteries, which can otherwise be controlled by manufacturers’ cloud Application Programming Interfaces for participation in grid services programs. On RD p. 33, Judge Coogan documented his awareness that:

...[T]he JSPs assert that PPL’s tacit claim of exclusivity over reactive power overreaches. The JSPs claim that PPL disregarded evidence put forth that the JSPs have participated in programs involving their management of customers’ reactive power. The JSPs also claim that PPL misunderstands the implications of its demands that the manufacturer design an inverter large enough to produce sufficient reactive power to meet PPL’s needs, as well as the customer’s interest in real power. The JSPs underscore that the Commission has the responsibility to determine who shall manage reactive power capability. JSPs MB at 16-18.

excessive risk and complexities for aggregators, which *ultimately* will dissuade them from aggregating Pennsylvania-based DERs.

RD ¶ 92 (emphasis added) (*citing* JSP St. 8, pp. 6-12). *See also* RD ¶¶ 93 – 97. The RD also noted that the JSPs presented evidence that they had in fact participated in programs involving their management of customers’ reactive power. RD p. 33.

The RD also found that “[a]ccommodating the utility control alongside a [Virtual Power Plant, or] “VPP” program would require third-party aggregators to “create novel technical solutions that would be unique to the PPL territory, and would need to be capable of managing multiple points of communication and control,” driving up costs of participation, and “creat[ing] an entirely new risk and complexity that is difficult for aggregators to assess and quantify, causing a significant deterrent to market entry.” *See* RD, ¶¶ 93 – 97. *See also* RD, ¶¶ 101 – 103 (*citing* Tesla’s and SolarEdge’s testimony that PPL’s physical occupation of an inverter’s communications port by itself renders third parties unlikely to be able to conduct aggregation services, which rely upon access the same port).

Judge Coogan also did not disregard PPL’s claims that the JSPs’ complaints of interference with systems’ communications were overstated, flawed, and outdated, as PPL alleges at PPL Exc. pp. 22 - 23 (**PPL Exception No. 3.3**). Rather, he found that “[t]he JSPs in particular also raised a number of credible harms resulting from Second DER Management Plan Standards. RD, p. 44. Thus, he found that during the time it took to devise fixes, Tesla, Enphase, SolarEdge and Sun Directed incurred losses, their customers lost the full uses of the systems they had purchased, and the Commonwealth lost out on the customers’ systems’ ability to generate clean energy, due to PPL’s Device disrupting communications and power production *in PPL-approved inverters*. *See* RD ¶¶ 68–91.

Nor did Judge Coogan disregard PPL's argument that the numerous instances of interference claimed by Enphase resulted from Enphase having provided incorrect values that precluded PPL's Device from successfully communicating with the Enphase inverter, as PPL alleges at PPL Exc. p. 23. To the contrary, the RD found that "customer communications were disrupted because *PPL* was sending commands to the Enphase IQ Gateway in the wrong units." RD, ¶ 77 (emphasis added).

The RD also does not disregard PPL's claims its program has not interfered with data collection for SRECs, as alleged by PPL at PPL Exc. p. 24, because, per PPL, customer-generators could still pull the revenue-grade meter data required for the SRECs. Rather, PPL disregarded testimony from JSPs such as Tesla, stating that:

Tesla's business model and the scale that it operates at nationally means that Tesla relies on the ability to remotely pull data from customers' inverters via data communications over the course of years or decades. While a customer might have alternative ways to read onsite solar production and report it in order to monetize SRECs, Tesla cannot do so remotely if it does not have data communications and it is not feasible or scalable to send Tesla technicians to each customer's residence to collect inverter data on a monthly basis.

JSP St. No. 4, pp. 13 - 14.

Judge Coogan also did not disregard PPL's presentations that purportedly show: that its connection of its Devices to SolarEdge inverters did not cause thermal damage; that one of SolarEdge's witnesses on the topic lacked credibility; that another of SolarEdge's witnesses concluded he could not determine the source of three out of eight thermal events; that said witness did not conduct a proper (root cause) analysis; that in one instance where there was a thermal event, no PPL Device was installed; that PPL's Device installation did not reduce space; that PPL's method of installation passed safety tests; that PPL's method of installation does not need to comply with NEC requirements because its method was "approved" by this Commission; and that

SolarEdge’s voiding warranties due to the presence of the Device was inappropriate. PPL Exc. pp. 24 – 27 (**PPL Exception No. 2.4**).

Rather, the record cited by and before Judge Coogan contains credible evidence countering each of PPL’s claims.

Thus, the RD cites to the testimony of SolarEdge’s Failure Analysis Engineer (“FAE”), which concluded that PPL’s unauthorized connection to a SolarEdge inverter caused the inverter to start smoking, and a loss of generation, RD ¶¶ 108 – 112; and to the FAE’s opinion that in eight instances of thermal damage to inverters that have or had PPL’s Device installed:

All ... had clear evidence of thermal damage to the inverters arising from PPL’s installations reducing spacing; over-torquing, cross-threading, or not sufficiently tightening screws; leaving behind contamination; or leaving bare wire exposed and in contact or in proximity, all of which could cause thermal arcing. Alternatively, the thermal damage arose as a result of the installer causing mechanical damage to the components during installation, which can also cause thermal damage.

*See* RD ¶¶ 112, 113.

The RD also seems to find that PPL admitted it installed its Device in 8,000 SolarEdge inverters in a manner not authorized by SolarEdge. *See* RD ¶¶ 105 – 106, which cites pages 381 - 382 from the Hearing Transcript, recording a PPL witness’s testimony before Judge Coogan that:

The guide for SolarEdge’s inverter contains no instructions on installing a third-party device, such as PPL’s DER Management Device, to the inverter to power the third party’s Device.

Finally, the RD also found that “[a]lthough PPL’s connections of its wires voided the customers’ warranties, SolarEdge voluntarily replaced damaged customers inverters.” RD ¶ 107.

Thus, the RD concludes that the JSPs presented credible evidence that PPL “fail[ed] to account for its device installation voiding customers warranties and causing thermal damage.” RD, p. 45, *citing* JSPs MB at 36 - 60.

Moreover, the RD was not incorrect in finding that PPL's inverter testing erodes market certainty and uniformity, as PPL alleges at PPL Exc. p. 28 (**PPL Exception No. 2.5**). To the contrary, RD ¶¶ 32, 40 and 100 find that PPL's testing program exceeds Pennsylvania's and national standards, and that no other utility requires such testing; that PPL's imposition of additional testing requirements has blocked or impeded inverters' entry into PPL's market (RD ¶ 32); and that PPL's imposition of additional testing requirements is unreasonable, inasmuch as it is based on PPL's far-fetched position that Nationally Recognized Test Labs often get it wrong when they certify inverters as meeting national (and Pennsylvania) standards (Hrg. Tr. p. 342), or on PPL's unilaterally filling gaps in the national standards in a manner that excludes certain inverters from being used in PPL territory (RD ¶ 42; RD p. 33).

Thus, the RD has sound record support for concluding that:

As averred by the JSPs, no other utility requires that DERs be tested for compatibility with a utility-owned DER Management Device in order to receive approval to interconnect. JSPs MB at 12. I agree with the JSPs that PPL's additional requirements erode uniformity and the market certainty that the standards are intended to provide. *Id.* at 15. SEF similarly argues that a piecemeal approach to DER rules and procedures may cause inconsistencies and confusion in the Pennsylvania DER market. SEF MB at 9. The JSPs note that in other settings the Commission has put interpretations on existing standards through notice and comment in a state-wide proceeding. JSPs MB at 16 (citing *Standards for Electronic Data Transfer and Exchange Between Electric Distribution Companies and Electric Generation Suppliers*, Pa. PUC Docket No. M-00960890F0015 (Tentative Order entered Jan. 13, 2012)). SEF explicitly advocates for a state-wide proceeding to develop comprehensive state-wide DER policies and regulations. SEF MB at 9.

RD p. 45.

**c. Joint Solar Parties' Reply to PPL's Exception No. 3: The RD correctly concluded that PPL's Cost-Benefit Analyses do not support its Proposal**

The RD correctly concluded that PPL's Cost-Benefit analyses do not support its Proposal. *See* RD p. 46, citing numerous pages of the Intervenor's Briefs which in turn cite to voluminous evidence put on by them, in which Judge Coogan concludes:

I also find merit in the parties' criticisms that PPL failed to provide reliable or positive cost-benefit analyses to support its proposal. The JSPs convincingly argue that PPL's cost-benefit analyses presented in this proceeding are undermined by both changing analyses as well as overstating the amount of benefits PPL's program would provide from incremental hosting capacity. JSPs MB at 26 – 31. The OCA similarly asserts that PPL introduced a new cost-benefit analysis in rebuttal testimony that deviates from the analysis PPL presented in direct testimony. OCA MB at 26. In addition to criticizing the cost-benefit analysis introduced in PPL's rebuttal testimony, the OSBA also highlights PPL's changing cost-benefit analyses. OSBA MB at 5-7. PPL itself undermines confidence in its cost-benefit analyses where it asserts that even without benefits the rate impact is "minimal." PPL RB at 36.

RD p. 46. *See also* RD at p. 38, where Judge Coogan cites to OCA MB at 19 – 34, when documenting OCA's contention that:

PPL's proposal is not cost-effective if it is expanded to other non-solar DER, and PPL's proposal omits costs from the Pilot Program that should be included. The OCA also asserts PPL's active monitoring of DERs provides minimal benefit at a high cost and PPL's cost-benefit analysis is flawed. The OCA highlights that PPL introduced a new cost-benefit analysis in rebuttal testimony that significantly deviates from PPL's analysis presented in direct testimony. The OCA argues that the two cost-benefit analyses contradict each other, and the analysis introduced in rebuttal testimony exaggerates benefits and obfuscates the incremental benefits of its proposal over other alternative management strategies, such as autonomous settings.

Finally, *see* RD ¶¶ 115 – 118, where Judge Coogan documents the discrepancies between PPL's initial and rebuttal cost-benefit analyses; and RD p. 40, where the RD documents OSBA's argument that "there is insufficient evidence to indicate how well-performing or cost-effective the Company's Pilot Program was...OSBA MB at 2-8."

In particular, the RD highlights that PPL intentionally flouted an Order of this Commission, noting first that:

As a condition of approval of its Pilot program, the Commission required that PPL compare the costs and benefits of active management of DERs by PPL's Devices, to the benefits available through the use of inverter autonomous grid support functions. PPL St. 1, p. 13.

RD ¶ 42.

The RD notes PPL's explanation as to why it flouted the Order and did not evaluate the benefits of active management against the benefits from use of autonomous functions. *See* RD p. 31, which documents PPL's contention:

...that other parties incorrectly argue that PPL's cost-benefit analyses did not comply with the First DER Management Plan settlement. PPL states it did not analyze autonomous settings separately in a cost-benefit analysis because IEEE Standard 1547-2018 had been incorporated into the Commission's regulations for DERs since the Commission-approved the Settlement in the First DER Management Plan proceeding. PPL RB at 9-20.

Nevertheless, the RD concludes:

I also agree with the JSPs that PPL failed to adequately provide analyses comparing the costs and benefits of active management of DERs with the use of inverter autonomous grid support functions. JSPs MB at 31-36. The OCA also demonstrated that PPL failed to provide a clear comparison of the value of autonomous smart inverter functions in comparison to active management benefits. OCA MB at 28-29. Such analyses were one of the stated purposes of the Pilot Program where settlement terms provided for the testing and evaluation of "...the costs and benefits to distribution system operation of active management of DERs as compared to the benefits available through the use of inverter autonomous grid functions." *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, Recommended Decision at 16 (Order entered Dec. 17, 2020) (emphasis in original). Without such analyses, it is not possible to fully evaluate whether PPL's proposed Second DER Management Plan is either reasonable or necessary.

RD, p. 44 (emphasis added).

Thus, PPL's purported demonstration that its proposal will produce a projected \$65.5 million in net benefits over the 2025-2030 period (PPL Exc. pp. 29-30, **PPL Exception No. 3.1**) is essentially meaningless, as PPL has failed to provide anything against which to measure whether the benefits are meaningful.

Further, PPL's claims of \$ 65.5 million in net benefits and that the Program has a 1.8 benefit-to-cost ratio are overstated. The RD cites the JSPs MB at 26 – 31, in which the JSPs pointed out that PPL's program would have a benefit-to-cost ratio of somewhere between 0.25 and 1.05,

and more likely would result in net losses to ratepayers, when considering PPL's double counting and overestimation of benefits attributed to incremental hosting capacity. (JSPs MB p. 30).

Accordingly, the RD's conclusion that PPL failed to carry its burden, in particular, by refusing to perform the very analyses that the Commission ordered, was well-reasoned and well-supported.

Moreover, the RD essentially rejects PPL witness Wishart's conclusions as to the amount of projected benefits to be yielded by the program (*see supra*, n. 9 and surrounding text), despite PPL's efforts to contort Mr. Wishart's oral testimony. (**PPL Exception No. 3.2.**) Thus, PPL claims that the JSPs took Mr. Wishart's testimony about his "treatment of avoided energy costs" and "avoided infrastructure investments" out of context, PPL Exc. pp. 32 – 33, while the JSPs characterize Mr. Wishart's testimony as "evidencing significant double-counting."<sup>17</sup> *See* JSP MB at p. 29, which page was referenced by the RD on p. 46. As Judge Coogan himself heard Mr. Wishart's oral testimony and was able to observe his demeanor, the Commission should defer to his assessment and finding that the JSPs' presentation was more credible than was Mr. Wishart's. *McKeesport*, n. 3 ("Indeed, the Court may not reweigh the evidence 'since the Commission, as fact finding tribunal, is in a better position to discover the facts based upon the testimony and the demeanor of the witnesses.'")

The RD did not disregard PPL's explanation as to why its cost-benefit analyses utilized different methodologies, as alleged by PPL. PPL Exc. p. 34 (**PPL Exception No. 3.3**). To the

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<sup>17</sup> *See*, JSPs MB at pp. 28-30, in which JSPs explain that Mr. Wishart's analysis included \$61.3 million in projected benefits from "Avoided Distribution Infrastructure Investments" and \$64.6 million in projected benefits from "Avoided Energy from Incremental Hosting Capacity." The JSPs explain that counting both values for all 258 MW of DER interconnecting using incremental hosting capacity is inappropriate, because it blends two separate counterfactuals: one in which all 258 MW of DERs would have come online only due to PPL's program and therefore provided a potential new generation resource, and another in which the DERs would have come online despite PPL's program and therefore would have paid for grid upgrades associated with DER interconnection. However, it is unreasonable for Mr. Wishart to count both values for all DERs.

contrary, as indicated above, Judge Coogan instead found the JSPs' argument convincing that PPLs' cost-benefit analyses "are undermined by both changing analyses as well as overstating the amount of benefits PPL's program would provide from incremental hosting capacity." RD p. 46, citing JSPs MB at 26 – 31.

Similarly, the RD did not undervalue PPL's explanation as to why it did not separately analyze autonomous smart inverter functions (PPL Exc. p. 35 (**PPL Exception No. 3.4**)). See RD p. 31 (citing PPL RB at 9-20), where the RD documents that Judge Coogan considered and implicitly rejected PPL's explanation.

Finally, the RD did not err in stating that the cost-benefit analyses are undermined by PPL's statement that its proposal would have a minimal rate impact even after excluding all benefits. PPL Exc. p. 36 (**PPL Exception No. 3.5**). Importantly, the RD pointed to PPL's evidence on rate impacts as additional evidence that PPL's cost-benefit analyses are simply unbelievable. See RD p. 34, citing to the JSPs' contention that PPL offers no credible factual bases for its projections of future DER rates.

Based on the foregoing, the RD correctly concluded that PPL's cost-benefit analyses do not support its proposal.

**d. Reply to Exception No. 4: The Commission has no record before it upon which it might base modifications to PPL's proposal**

Finally, PPL asserts that the RD is flawed, insofar as it fails to consider reasonable modifications to PPL's program. PPL Exc. p 36. PPL's assertion is stunning, inasmuch as PPL vociferously objected throughout the course of the proceeding, to the very modifications it now argues should have been considered.

Thus, PPL asserts that the RD should have directed the Company to modify its program so as to fashion an appropriate threshold for determining when DERs must participate therein. PPL Exc. p. 37. However, the RD notes that PPL provided no record upon which to base a size limit for mandatory control. RD p. 39. Moreover, PPL strongly objected to such exemption, arguing that Mr. Wishart's analysis and rebuttal testimony demonstrate that . . . "the size limitation advocated by OCA witness Nelson would exempt 99% of DERs on the Company's system and essentially eliminate the benefits of the Second DER Management Plan." PPL Electric St. No. 1-R, p. 5.

PPL also asserts that the way to remedy the potential for its Device installation to be causing thermal events could have been to require that it use a different control device, such as cloud-based monitoring. PPL Exc. p. 37. However, the RD notes OCA's rejection of such offer, stating it was "not fully developed or supported in its filing." RD, p. 39.

PPL confusingly states that the RD could have extended the Pilot for a limited time pending PPL's production of an acceptable cost-benefit analysis. PPL Exc. p. 39. However, PPL undermines its own argument, admitting that during the proceeding, it rejected OSBA's recommendations to do so. *Id. See also* PPL Electric St. No. 1-R, p. 49, rejecting OSBA's argument that it would be prudent to postpone approval of the Second DER Management Plan until the Pilot Program is completed and thoroughly analyzed with a robust cost-benefit analysis, on grounds that its rebuttal analysis (that performed by PPL witness Wishart) was robust, rendering OSBA's argument moot.

Given the lack of a record upon which he could have based any modifications, Judge Coogan correctly denied PPL's Petition and did not attempt to fix it for PPL. Had he crafted modifications, he would have been doing so out of whole cloth and rendering the Program and his

recommended decision vulnerable to challenge. *See Cynthia Young-Nelson v. PECO Energy Company*, Pa. PUC Docket F-2019-3009953 (Opinion and Order entered Dec. 3 2020) (“It is axiomatic that this Commission based its decisions on evidence in the record, and we are prohibited from looking beyond the record for evidence not previously supplied to support a desired finding or conclusion of law.”).

#### **IV. CONCLUSION**

For the reasons stated here, the JSPs respectfully request that the Commission deny PPL’s Exceptions and issue an order adopting Judge Coogan’s RD, as well as incorporate the adjustments recommended in the JSPs’ Exceptions to facilitate the orderly wind-down of PPL’s Pilot Program.

Respectfully submitted,



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