



August 20, 2020

Via Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Buildings
400 North Street
Harrisburg, PA 17120

Re: Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2021 through May 31, 2025 (Docket No. P-2020-3019290)

Dear Secretary Chiavetta,

Enclosed for filing in the above-referenced proceeding, please find the Environmental Stakeholders' Main Brief. As evidenced by the attached Certificate of Service, all parties to the proceeding are being served with a copy of this document. Should you have any questions, please do not hesitate to contact me. Thank you.

Sincerely,

/s/ Devin McDougall

Staff Attorney

Earthjustice

1617 John F. Kennedy Blvd., Suite 1130

Philadelphia, PA 19103

dmcdougall@earthjustice.org

(917) 628-7411

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PECO Energy Company for	:	
Approval of Its Default Service Program	:	Docket No. P-2020-3019290
for the Period from June 1, 2021 through	:	
May 31, 2025	:	
	:	
	:	
	:	

MAIN BRIEF OF THE ENVIRONMENTAL STAKEHOLDERS

August 20, 2020

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I. INTRODUCTION

Pursuant to 52 Pa. Code § 5.501, Sierra Club, PA Chapter, Clean Air Council, and the Philadelphia Solar Energy Association (collectively, the “Environmental Stakeholders”) respectfully submit this Main Brief in support of their positions in the above-captioned proceeding (“Proceeding”) of the Pennsylvania Public Utility Commission (the “Commission”) regarding the proposed default service program (“DSP”) of PECO Energy Company (“PECO”) for the period between June 1, 2021 and May 31, 2025 (“DSP V”).

This Proceeding represents an important opportunity to better align PECO’s default service procurement with current market realities and stakeholder preferences, both of which support a redesign to remove barriers to renewable energy supply. PECO has maintained essentially the same default service procurement approach, exclusively comprised of short-term and spot market contracts for supply, for over a decade.

However, this exclusion of long-term contracts functions as a *de facto* structural barrier to the incorporation of renewable energy into the default service supply mix. Since renewable energy resources are characterized by a lack of reliance on fuel and very low marginal costs, renewable energy resources are able to offer long-term fixed price contracts at competitive prices. But PECO’s exclusively short-term procurement structure precludes incorporating such contracts into the default service supply mix.

PECO’s refusal to incorporate long-term contracts into its default service supply procurement is also inconsistent with stakeholder preferences in its service territory. The Public Input Hearing in this Proceeding featured approximately six hours of public testimony which overwhelmingly called for PECO to find ways to incorporate more renewable energy into its default service supply mix. A modification to PECO’s default service procurement process that incorporates long-term contracts, and allows renewable energy resources to compete on a level

playing field to win those contracts, would be a simple and prudent way of accommodating those stakeholder preferences.

Long-term supply contracts, and particularly long-term renewable supply contracts, are perfectly aligned with the statutory mandates of the Electricity Generation Customer Choice and Competition Act (“Competition Act”) and Act 129.¹ One of the competitive advantages offered by long-term renewable supply contracts is that due to the lack of fuel price variability, such contracts can lock in a favorable price over a long-term contract tenor. This is an ideal way of helping ensure default supply service at “least cost to customers over time.”² Moreover, sourcing supply from renewable energy resources, including distributed renewable energy resources, offers a prudent means of helping ensure “adequacy and reliability of service”³ despite “outages”⁴ and “emergencies,”⁵ since renewable facilities are characterized by high availability rates and a lack of dependence on fuel supply chains, and distributed renewable facilities can be sited close to customer load, with less reliance on transmission infrastructure.

In order to determine the most prudent way to incorporate long-term contracts into the default service supply mix, PECO should be required to perform a study of current market opportunities and the advantages and disadvantages of incorporating different levels of long-term contracts into their default service portfolio. This study should include robust stakeholder engagement in order to gather information about market opportunities and stakeholder

¹ ELECTRICITY GENERATION CHOICE FOR CUSTOMERS OF ELECTRIC COOPERATIVES ACT, TAXICABS, ELECTRICITY GENERATION CUSTOMER CHOICE AND COMPETITION ACT, 1996 Pa. Legis. Serv. Act 1996-138 (H.B. 1509) (PURDON'S). The Competition Act was codified at 66 Pa. C.S. §§ 2801, *et seq.*

² 66 Pa. C.S. § 2807(e)(3.4)(ii); PUBLIC UTILITY CODE (66 Pa. C.S.) – OMNIBUS AMENDMENTS ACT OF OCT. 15, 2008, P.L. 1592, No. 129 (H.B. 2200), as passed.

³ 66 Pa. C.S. § 2807(e)(3.4)(i).

⁴ *Id.* § 2803.

⁵ *Id.*

preferences. The Commission should set a deadline for the completion of the study, and it should be filed with the Commission upon completion.

Such a study would have multiple important functions, both for PECO's service territory and for the broader Commonwealth. First, the Commission should, upon review of the study, order PECO modify its procurement plan for DSP V as warranted by the findings of the study. Since DSP V is comprised exclusively of short-term and spot market contracts, this could be done midway through the DSP V service period. Second, the Commission should use the study as a starting point for a statewide proceeding to develop more refined guidance on long-term contracts in default service procurement. As the Commission recently noted, "long-term contracts need to be carefully considered and . . . we need to consider this topic further in upcoming DSP proceedings."⁶ A study of the type proposed here would provide an ideal factual foundation for such consideration, which would be of benefit to default service providers around the Commonwealth.

PECO's proposed time of use ("TOU") rate for DSP V should also be improved. To start, PECO should be required to perform a rigorous cost-benefit analysis in order to determine if the rate as proposed is appropriately designed to incentivize positive customer behaviors, and to modify its proposed rate accordingly. Given growing market trends toward increased electrification, PECO should also be required to perform a cost-benefit analysis of potential tailoring of its TOU rates to support medium and heavy duty electric vehicles ("EVs") and building electrification, and should use this analysis to develop proposals for TOU rate pilots directed at these opportunities. While PECO's proposed TOU rate does include some basic tailoring towards EVs, which is a positive step, PECO can and should do better by its customers.

⁶ Secretarial Letter, *Investigation into Default Serv. and PJM Interconnection, LLC Settlement Reforms*, Docket No. M-2019-3007101, at 8 (Jan. 23, 2020) ("January 2020 Secretarial Letter").

II. PROCEDURAL HISTORY

On March 13, 2020, PECO filed a Petition requesting Commission approval of its proposed Default Service Program for the Period from June 1, 2021 through May 31, 2025.⁷ Included with the Petition were PECO Statements 1–4, which consisted of Direct Testimony of PECO witnesses John J. McCawley, Joseph A. Bisti, Carol Reilly, and Scott G. Fisher, as well as exhibits to their testimony.⁸ Therein, PECO explained its proposed DSP V, including its proposed procurement plan, implementation plan, and contingency plan for default service supply; its proposed TOU rate options; its proposal for solicitation of new ten-year contracts for Solar Alternative Energy Credits (“Solar AECs”); and a proposed plan to facilitate shopping by low-income customers enrolled in the Company’s Customer Assistance Program (“CAP”).

The Office of Small Business Advocate (“OSBA”) and the Office of Consumer Advocate (“OCA”) filed Answers to PECO’s Petition on April 2, 2020 and April 3, 2020 respectively. The following additional parties intervened in this proceeding by May 8, 2020: Philadelphia Area Industrial Energy Users Group (“PAIEUG”); the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”); the Tenant Union Representative Network (“TURN”) and Action Alliance of Senior Citizens of Greater Philadelphia (“Action Alliance”), Calpine Retail Holdings, LLC (“Calpine”); Statewise Energy; NRG Energy, Inc., Direct Energy Services LLC, Interstate Gas Supply Inc., d/b/a IGS Energy, Vistra Energy Corp., Shipley Choice LLC, ENGIE Resources LLC and WGL Energy Services, Inc. (collectively, the “Electric

⁷ *Pet. of PECO for Approval of its DSP for the Period from June 1, 2021 through May 31, 2025*, Docket No. P-2020-3019290 (Mar. 13, 2020) (“Petition”).

⁸ *Direct Test. of John J. McCawley, P.E.*, Docket No. P-2020-3019290 (Mar. 13, 2020) (“McCawley Direct”); *Direct Test. of Joseph A. Bisti*, Docket No. P-2020-3019290 (Mar. 13, 2020) (“Bisti Direct”); *Direct Test. of Carol Reilly*, Docket No. P-2020-3019290 (Mar. 13, 2020) (“Reilly Direct”); *Direct Test. of Scott G. Fisher*, Docket No. P-2020-3019290 (Mar. 13, 2020) (“Fisher Direct”).

Supplier Coalition” or “ESC”); and Sierra Club, PA Chapter, Clean Air Council, and the Philadelphia Solar Energy Association (collectively, the “Environmental Stakeholders”).⁹

A Prehearing Conference was held telephonically by Administrative Law Judge (“ALJ”) Eranda Vero on May 5, 2020, following which a Prehearing Order was adopted setting the discovery and hearing schedule for the proceeding.¹⁰ At the request of multiple stakeholders, including interfaith group POWER, Earth Quaker Action Team, and the Environmental Stakeholders, and supported by OCA, ALJ Vero scheduled a videoconference Public Input Hearing on June 9, 2020.

Prior to the Public Input Hearing, PECO filed a motion in limine seeking to prohibit members of the public from testifying about the benefits of renewable and distributed generation resources, environmental justice, and climate change.¹¹ TURN *et al.*, CAUSE-PA, and the Environmental Stakeholders filed responses objecting to the motion in limine,¹² ALJ Vero denied PECO’s motion in limine on May 19, 2020.¹³ At the Public Input Hearing on June 9, 2020, elected officials from PECO’s service territory and dozens of PECO customers delivered roughly six hours of testimony, overwhelmingly in favor of changes to PECO’s default service procurement plan to facilitate the incorporation of more renewable energy.¹⁴

Parties filed Direct Testimony on June 16, 2020, Rebuttal Testimony on July 9, 2020, and Surrebuttal Testimony on July 23, 2020, in accordance with the Prehearing Order.¹⁵ An

⁹ *Prehearing Order*, Docket No. P-2020-3019290 (May 8, 2020) (“Prehearing Order”).

¹⁰ Prehearing Order.

¹¹ *PECO’s Mot. In Limine to Establish the Scope of the Public Input Hr’g*, Docket No. P-2020-3019290 (May 11, 2020) (denied by Order Regarding Motion in Limine, May 19, 2020).

¹² *Order Regarding Mot. in Limine*, Docket No. P-2020-3019290, at 3 (May 19, 2020).

¹³ *Id.* at 4.

¹⁴ *Telephonic/Videoconference Public Input Hr’g Transcript*, Docket No. P-2020-3019290 (June 9, 2020) (“Public Input Hearing Tr.”); *See also infra* at Section IV.D.2.

¹⁵ Prehearing Order.

evidentiary hearing was held on July 30, 2020.¹⁶ A Joint Petition for Partial Settlement among some of the parties was filed on August 13, 2020.¹⁷

III. LEGAL STANDARDS

A. Default Service Procurement Plan Requirements

1. Statutory Framework

PECO's proposed procurement plan for DSP V must fully comply with the applicable provisions of the Public Utility Code, 66 Pa. C.S. §§ 101 *et seq.*, Commission regulations, orders, and policy statements. The basic legal framework for default service was created by the Competition Act, passed in 1996, which re-structured Pennsylvania's electricity industry.¹⁸ Prior to the Competition Act, electric utilities were responsible for generating, purchasing, and delivering electricity to customers.¹⁹

However, in passing the Competition Act, the General Assembly declared its finding that “[b]ecause of advances in electric generation technology and Federal initiatives to encourage greater competition in the wholesale electric market, it is now in the public interest to permit retail customers to obtain direct access to a competitive generation market, as long as safe and affordable service is available at levels of reliability that are currently enjoyed by the citizens and businesses of this Commonwealth.”²⁰

¹⁶ *Telephonic Evidentiary Hr'g Notice*, Docket No. P-2020-3019290 (July 7, 2020), <http://www.puc.state.pa.us/pcdocs/1668966.docx>.

¹⁷ *Joint Pet. for Partial Settlement*, Docket No. P-2020-3019290 (Aug. 13, 2020), <http://www.puc.state.pa.us/pcdocs/1673271.pdf>.

¹⁸ Competition Act.

¹⁹ *Final Rulemaking Order, In Re Implementation of Act 129 of Oct. 15, 2008, Defaul Serv. And Retail Elec. Mkts*, Docket No. L-2009-2095604, at 2 (Sept. 22, 2011) (“*Second Default Service Rulemaking Order*”).

²⁰ Competition Act.

Consequently, the Competition Act separated electricity generation and electricity distribution, and allowed customers to choose their electricity generation supplier (“EGS”).²¹ Electric distribution companies (“EDCs”), responsible under the Competition Act for the distribution of electricity, were required under the Competition Act to serve as “default service provider[s]”²² responsible for acquiring and delivering electricity to customers who did not purchase electricity from an EGS.²³

In 2008, the General Assembly passed Act 129, which included a number of provisions amending the framework for default service laid out in the Competition Act, including a requirement that default service providers design a “prudent mix” of contracts to ensure “adequate and reliable service” at “least cost over time.”²⁴ In the preamble to Act 129, the General Assembly stated its finding that the public interest is served by “the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at least cost, taking into account the benefits of price stability over time and the impact on the environment.”²⁵ The General Assembly further found that “[i]t is in the public interest to...implement energy procurement requirements designed to ensure that electricity obtained reduces the possibility of electric price instability, promotes economic growth and ensures affordable and available electric service to all residents.”²⁶ Finally, the General Assembly also found that “[i]t is in the public interest to expand the use of alternative energy[.]”²⁷

²¹ 66 Pa. C.S. § 2806(a); Second Default Service Rulemaking Order at 2.

²² 66 Pa. C.S. § 2803.

²³ Second Default Service Rulemaking Order at 2.

²⁴ Act 129.

²⁵ *Id.* at preamble at 1.

²⁶ *Id.* at preamble at 2.

²⁷ *Id.* at preamble at 3.

2. A Default Service Procurement Plan Must Include a Prudent Mix of Contracts

The current statutory requirements for default service, as codified in the Public Utility Code, provide that default service providers must provide “electric generation supply service” to customers “pursuant to a commission-approved competitive procurement plan.”²⁸ This procurement plan must include a “prudent mix” of “[s]pot market purchases”; “[s]hort-term contracts”; and “[l]ong-term purchase contracts” (defined as contracts “of more than four and not more than 20 years”).²⁹ The “prudent mix” of contracts in the procurement plan must be designed to ensure “adequate and reliable service” at the “least cost to customers over time.”³⁰

Additionally, in its Second Default Service Rulemaking Order, the Commission concluded that the “prudent mix” requirement should be “interpreted in a flexible fashion” that enables default service providers to meet their obligations to achieve least cost over time, ensure price stability, maintain adequate and reliable service, and incorporate stakeholder input.³¹ As such, the “prudent mix” requirement does not mean that a procurement plan needs to include any set amount of either spot market, short-term contracts, or long-term contracts, but rather that the default service provider must consider all three categories and make a factually-based determination of what combination of contracts is prudent for their service territory.³² As the Commission has emphasized, the “least cost over time” standard creates “an affirmative obligation to assess which products will produce the lowest cost to customers.”³³

B. A Default Service Program Must Include a Time-Of-Use Rate

²⁸ 66 Pa. C.S. § 2807(e)(3.1).

²⁹ *Id.* § 2807(e)(3.2).

³⁰ *Id.* § 2807(e)(3.4).

³¹ Second Default Service Rulemaking Order at 60.

³² *Popowsky v. Comm’n*, 71 A.3d 1112, 1117 (2013); Second Default Service Rulemaking Order at 60.

³³ Second Default Service Rulemaking Order at 39.

Under the Public Utility Code, default service providers with 100,000 or more customers are required to offer TOU rates to all customers that have been provided with smart meter technology.³⁴ In 2015, the Commonwealth Court confirmed that the statute expressly requires default service providers to offer the TOU rates directly, and that default service providers may not pass on their responsibility to offer TOU rates to EGSs in their service territory who may also offer TOU rates.³⁵ Subsequently, the Commission has provided guidance to default service providers regarding the design of TOU rates, including an example design from which EDCs are granted flexibility to deviate if their modifications comply with applicable law and are “supported by facts.”³⁶

Notably, the Commission’s example design does not lay out specific details of a default service provider’s final, implementable rate offering, but rather commits the default service provider to “design” and “address” various elements of the TOU rate’s goals, including “appropriately motivat[ing] shifting of consumption from on-peak to off-peak periods.”³⁷ Because the TOU rate is offered as a part of default service, such design processes on the part of the default service provider should still meet the statutory standards for default service, namely, providing adequate and reliable service at the least cost to customers over time.³⁸

C. Burden of Proof

³⁴ 66 Pa. C.S. § 2807(f)(5); *Dauphin Cty. Indus. Dev. Auth. v. Pennsylvania Pub. Util. Comm’n*, 123 A.3d 1124, 1134 (Cmmwth. Ct. 2015) (“*DCIDA*”) (“There is no ambiguity in the Competition Act’s mandate. It provides, plainly, that ‘[t]he default service provider shall offer the time-of-use rates . . . to all customers that have been provided with smart meter technology.’”).

³⁵ *DCIDA*, 123 A.3d at 1134.

³⁶ Secretarial Letter, *Pet. of PPL Elec. Utils. Corp. for Approval of a New Pilot Time-of-Use Program*, Docket Nos. P-2013-2389572 and M-2016-2578051, at 4 (Apr. 6, 2017) (“April 2017 Secretarial Letter”).

³⁷ April 2017 Secretarial Letter at 3–4.

³⁸ 66 Pa. C.S. § 2807(e)(3.4).

Under the Public Utility Code, “the proponent of a rule or order” from the Commission “has the burden of proof” in that proceeding.³⁹ As the Commission has explained, this means that the “Applicant or Petitioner has the burden of proving its case by a preponderance of the evidence, or evidence which is more convincing than the evidence presented by the other parties.”⁴⁰ As the Supreme Court of Pennsylvania has held, “The term ‘burden of proof’...imports the duty of ultimately establishing any given proposition” and marks “the peculiar duty of him who has the risk of any given proposition on which parties are at issue—who will lose the case if he does not make this proposition out, when all has been said and done.”⁴¹

In order to bear the burden of proof, a party must both “come forward with evidence to support a particular proposition,” and persuade the Commission that it has “produce[d] sufficient evidence to meet the applicable standard of proof.”⁴² As the Commission has noted, “any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence, which is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.”⁴³

IV. ARGUMENT

A. PECO’s Proposed Procurement Plan Continues PECO’s Exclusive Reliance on Short-Term and Spot Market Contracts for Supply

³⁹ *Id.* § 332(a).

⁴⁰ Op. and Order, *Pet. of PPL Elec. Utilities Corp. for Approval to Implement A Reconciliation Rider for Default Supply Serv.*, No. ID174440, 2012 WL 3042064 (July 19, 2012).

⁴¹ *Se-Ling Hosiery v. Margulies*, 70 A.2d 854, 856 (1950).

⁴² *Supra* note 39.

⁴³ *Id.*

PECO's proposed DSP V will govern the provision of default service to customers in PECO's service territory from June 1, 2021 to May 31, 2025.⁴⁴ As noted above, a default service program must include a competitive procurement plan determining how the default service provider will procure electric generation supply for default service customers.⁴⁵ This competitive procurement plan must contain a "prudent mix" of spot market, short-term, and long-term contracts.⁴⁶ Short-term contracts are defined as up to four years in length, and long-term contracts are defined between four and twenty years in length.⁴⁷

PECO's plan to procure supply for DSP V consists exclusively of short-term contracts and spot market purchases.⁴⁸ For the Residential Class, approximately 61% will be met by 2-year FPFR contracts, approximately 38% of load will be met by 1-year fixed-price full requirements ("FPFR") contracts, and approximately 1% of load will be met by spot market purchases.⁴⁹ For the Small Commercial Class, approximately 50% of load will be met by 1-year FPFR contracts and 50% of load will be met by 2-year FPFR contracts.⁵⁰ For the Consolidated Large Commercial and Industrial Class, 100% of load will be met with spot-priced full-requirements contracts with 1-year delivery periods.⁵¹

PECO's DSP V procurement plan is also subject to the requirements of the Alternative Energy Portfolio Standards Act (the "AEPS Act").⁵² Under the AEPS Act, PECO must obtain

⁴⁴ Petition at 1.

⁴⁵ 66 Pa.C.S. § 2807(e)(3.1).

⁴⁶ *Id.* § 2807(e)(3.2).

⁴⁷ *Id.* § 2807(e)(3.2)(iii).

⁴⁸ Petition at 12; *Direct Test. of Karl R. Rábago on Behalf of Environmental Stakeholders*, Docket No. P-2020-3019290, at 15:11–15 (June 16, 2020) ("Rábago Direct"); *Call In Evidentiary Hr'g Transcript ("Tr.")*, Docket No. P-2020-3019290, Fisher Cross at 99:3–6 (July 30, 2020).

⁴⁹ Petition at 9.

⁵⁰ *Id.* at 10.

⁵¹ *Id.* at 12.

⁵² 73 P.S. § 1648.3(a)(1); Petition at 4.

solar alternative energy credits (“SAECs”) proportional to 0.5% of its total default service load.⁵³ For DSP V, PECO proposes to procure new ten-year SAEC contracts to replace existing ten-year SAEC contracts that will be expiring by the end of DSP IV.⁵⁴ However, although this represents a use of long-term contracts for the procurement of a portion of the SAECs that PECO is required to obtain under the AEPS Act, as noted above, PECO’s proposed procurement plan does not include any use of long-term contracts to supply customer load, 100% of which is met through a combination of short-term contracts and spot market purchases.⁵⁵

PECO’s overwhelming reliance on short-term contracts reflects a continuation of a pattern that has characterized PECO’s default service procurement approach for over a decade.⁵⁶ Similar to the proposed DSP V, DSP IV, which covers the period from June 1, 2017 to May 31, 2021, relies exclusively on short-term contracts and spot market purchases.⁵⁷ Under DSP IV, for the Residential Class, approximately 96% of the load is supplied by a mix of two-year and one-year FPCR contracts, and approximately 4% of the load is supplied by a mix of two-year FPCR contracts and spot market purchases.⁵⁸ For the Small Commercial Class, approximately 50% of load is supplied by 1-year FPCR contracts and 50% of load will be met by 2-year FPCR contracts.⁵⁹ For the Consolidated Large Commercial and Industrial Class, 100% of load is supplied with spot-priced full-requirements contracts with 1-year delivery periods.⁶⁰ The design of DSP V and IV’s reliance on short-term contracts and spot market contracts to supply load is

⁵³ 73 P.S. § 1648.3(b)(2)(xv); Petition at 4; *Direct Test. of John J. McCawley, P.E.*, Docket No. P-2020-3019290, at 28:18–19 (Mar. 13, 2020) (“McCawley Direct”).

⁵⁴ Petition at 6.

⁵⁵ Rábago Direct at 21:18–22:13.

⁵⁶ *Id.* at 17:14–17; McCawley Cross, Tr. at 59:23–60:1.

⁵⁷ *Direct Test. of Scott G. Fisher*, Docket No. P-2020-3019290, at 9:6–7 (Mar. 13, 2020) (“Fisher Direct”).

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

consistent with the design of DSPs I-III, which covered the period from January 1, 2011 to May 31, 2017, and which similarly relied overwhelmingly on short-term and spot market contracts to meet load needs.⁶¹

B. Incorporating Long-Term Contracts for Supply Would Be a Prudent Means of Ensuring Least Cost Over Time to Customers

1. A Prudent Mix Must Ensure Least Cost Over Time to Customers

A default service provider must also design its “prudent mix” of contracts to ensure “the least cost to customers over time.”⁶² This requirement was added as part of the Act 129 amendments in 2008.⁶³ Formerly, under the Competition Act, default service providers were instructed to procure supply at “prevailing market prices.”⁶⁴ Act 129 also added a provision permitting utilities to include long-term contracts (defined as more than four years and less than 20 years) for up to 25% of projected load, or more if the Commission determines that good cause exists for a higher percentage to achieve least cost procurement.⁶⁵ Taken together, the Act 129 amendments reflect a legislative intention to move away from a requirement that default service procurements track the short-term movements of the market, and towards an approach in which default service procurements ensure least cost over a longer span of time.

Act 129 did not define “least cost,” but it is clear that the concept of “least cost” cannot be reduced simply to “least price.” The preamble to Act 129 recognizes “the benefits of price stability over time”⁶⁶ and states that an objective of Act 129 is to implement energy procurement

⁶¹ *Id.* at 5:6–6:20; McCawley Cross, Tr. at 59:23–60:1.

⁶² 66 Pa. C.S. 2807(e)(3.4)(ii).

⁶³ Act 129; Second Default Service Rulemaking Order at 2.

⁶⁴ Second Default Service Rulemaking Order at 3; Competition Act.

⁶⁵ Second Default Service Rulemaking Order at 4; 66 Pa. C.S. §2807(e)(3.2)(iii).

⁶⁶ Act 129.

requirements that “reduc[e] the possibility of electric price instability[.]”⁶⁷ As such, “least cost” should be understood to incorporate consideration not only of price, but also price stability.⁶⁸

The Commission has also instructed that the “least cost over time” standard creates “an affirmative obligation to assess which products will produce the lowest cost to customers.”⁶⁹ As such, the “least cost over time” standard has a comparative dimension, and it is impossible to determine if a potential mix of contracts is “least cost” without affirmatively assessing other potential mixes of contracts.⁷⁰

2. Incorporating Long-Term Contracts Would Be a Prudent Means of Ensuring Least Cost to Customers Over Time

As noted above, least cost over time includes both least price and price stability over time.⁷¹ Long-term contracts, where they can be obtained at a favorable price, offer an ideal means of locking in both price and price stability benefits for customers over a long-term time period. This is directly aligned with the statutory mandate added by Act 129, which created a requirement to ensure least cost not simply in the short-term, but over time.⁷²

Long-term contracts for supply from renewable energy resources offer a prudent means of ensuring this mandate is met. As Mr. Karl Rábago, expert witness for the Environmental Stakeholders, has testified, one of the key market developments in the last ten years is that prices for renewable energy have plummeted.⁷³ Additionally, due to the low and stable marginal operating costs of renewable energy resources such as solar and wind, which are not dependent

⁶⁷ *Id.*

⁶⁸ Second Default Service Rulemaking Order at 60.

⁶⁹ *Id.* at 39.

⁷⁰ *Id.*

⁷¹ *Supra* notes 64, 65.

⁷² Competition Act; Act 129; Second Default Service Rulemaking Order at 4.

⁷³ Rábago Direct at 10:11–12.

on fuel that is subject to price volatility, renewable energy resources can offer fixed price (or known variable) long-term contracts on more attractive terms than fossil fuel resources.⁷⁴

As a result of these attributes, as part of a diverse supply portfolio, long-term contracts for renewable supply can offer a prudent and cost-effective hedge against rising prices and price volatility over time. PECO has noted that its reliance on 1 or 2 year contracts creates a risk of price volatility, but argues that this volatility can be partially managed through blending and overlapping short-term contracts.⁷⁵ While this design can help mitigate some short-term price volatility, it does not ensure protection against rising prices and price volatility over time, and adding long-term contracts into the supply mix would be a prudent means of ensuring against those risks.⁷⁶ As the Commission noted in its Second Default Service Rulemaking, “We do not endorse, at this time, the position of those parties that recommend solely a mix of just short and intermediate term contracts and spot purchases as that unduly limits the range of supply products available.”⁷⁷

PECO has stated that “the number of default service customers constantly fluctuates,”⁷⁸ and cited “uncertainty about default service load levels”⁷⁹ as a reason not to incorporate long-term contracts into the default service supply mix. However, the record reflects that the number of default service customers in PECO’s service territory has been remarkably stable over the past decade:

DSP	Time Period	Average Number of PECO Customers on Default Service	Average Percentage of PECO Customers on Default Service
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⁷⁴ *Id.* at 18:21–19:3.

⁷⁵ Petition at 10; Rábago Direct at 18:9–11; Fisher Cross, Tr. at 99:8–22.

⁷⁶ Rábago Direct at 18:18–19:3, 20:9–12.

⁷⁷ Second Default Service Rulemaking Order at 38.

⁷⁸ McCawley Rebuttal at 4:22.

⁷⁹ Fisher Rebuttal at 28:9.

DSP I	01/01/11- 05/31/13	1,236,830	75.15%
DSP II	06/01/13 - 05/31/15	1,054,861	66.18%
DSP III	06/01/15 - 05/31/17	1,040,558	64.4%
DSP IV	06/01/17 - present	1,117,044	67.68%

Source: Exhibit KRR-SR1

These figures have remained consistent with the Commission’s statement, in its *Retail Markets Investigation*, that “as of February 13, 2013, nearly two-thirds of Pennsylvania's electric customers still received electric generation supply from their EDCs.”⁸⁰

As Mr. Rábago has testified, a concern about fluctuations in default service customer numbers is no barrier to incorporating long-term contracts.⁸¹ Given the stability of default service enrollment, it is difficult to imagine a fluctuation of a magnitude large enough to rule out any incorporation of long-term contracts at all for fear of insufficient load to meet them.⁸² A prudent mix of both short-term and long-term contracts would be a practical means of addressing the concern about fluctuations in the number of default service customers over time, not the total exclusion of any long-term contracts at all.⁸³

PECO also cites the risk that a long-term contract’s price “is ultimately above market levels” as a reason not to incorporate long-term contracts.⁸⁴ As a starting point, as the Commission has recognized, price stability has its own value as a component of least cost over

⁸⁰ *Investigation of Pennsylvania’s Retail Elec. Market: End State of Default Serv.*, 303 P.U.R.4th 28 (Feb. 14, 2013); *See also* Second Default Service Rulemaking Order (“Even though the retail provision of electric generation service has been subject to competition for nearly a decade, the vast majority of residential customers continue to obtain their generation supplies from their default supplier, that is, their regulated electric distribution utility.”).

⁸¹ Rábago Surrebuttal at 9:23–10:3.

⁸² *Id.* at 10:1–2.

⁸³ *Id.* at 9:21–10:5.

⁸⁴ Fisher Rebuttal at 28:15–20.

time,⁸⁵ and even if a long-term contract may start out above market levels or may from time to time be above the prevailing market price, it can still be prudent means of adding price stability to the supply mix.⁸⁶

Next, insofar as it is possible that a long-term contract may lock in an above-market price, it is also possible that long-term contract may lock in an advantageous below-market price.⁸⁷ A prudent mix should contain both short-term and long-term contracts as a hedge against the future. As the Commission has instructed, the Act 129 amendments mean that default service suppliers are not to be “passive purchaser[s]” tracking the movements of the prevailing market price, but have an “affirmative obligation” to evaluate and develop “a mix of resources at ‘the least cost to customers over time.’”⁸⁸ This “affirmative obligation” means that PECO may not simply speculate that long-term contracts might have a higher price than the prevailing market price, and thereupon decide to totally exclude long-term contracts from the supply mix. On the contrary, PECO has an “affirmative obligation” to make a fact-based evaluation about the benefits and costs of different proportions of long-term contracts in its “mix of resources” for default supply.⁸⁹

In sum, although PECO describes a number of hypothetical risks that could characterize an unbalanced supply mix that is excessively reliant on long-term contracts, PECO has not explained why long-term contracts of any proportion should be totally excluded from the supply mix. It is also notable that PECO cites only potential risks, and has not actually performed a

⁸⁵ Second Default Service Rulemaking Order at 38 (The least cost standard “must give the DSP sufficient latitude to select contracts that constitute a ‘prudent mix’ which includes a sufficient variety of products that adequately take into consideration price volatility, changes in generation supply, customer usage characteristics and the need to assure safe and reliable service.”).

⁸⁶ Rábago Direct 17:4–12.

⁸⁷ *Id.*

⁸⁸ Second Default Service Rulemaking Order at 39.

⁸⁹ *Id.* at 35.

current and comprehensive market evaluation to gather the facts necessary for an informed evaluation of the benefits and costs of long-term contracts for PECO’s customers.⁹⁰ As discussed *infra* in Section IV.E, this “information gap” should be corrected.

C. Incorporating Long-Term Contracts for Supply Would Be a Prudent Means of Ensuring Adequacy and Reliability of Service

1. A Prudent Mix Must Ensure Adequacy and Reliability

As noted above, a default service provider’s “prudent mix” of contracts must be “designed to ensure...adequate and reliable service.”⁹¹ The term “reliability” is defined in the statute to include both “adequacy and security.”⁹² The term “adequacy” is defined as “the provision of sufficient generation, transmission and distribution capacity so as to supply the aggregate electric power and energy requirements of consumers, taking into account scheduled and unscheduled outages of system facilities.”⁹³ Finally, the term “security” is defined as “designing, maintaining and operating a system so that it can handle emergencies safely while continuing to operate.”⁹⁴ As such, reliability is the key concept, as it includes adequacy, and reliability means ensuring the provision of electricity needed by customers despite outages and emergencies.

As recognized in the statutory definition of reliability, transmission and distribution infrastructure have important roles in contributing to reliability.⁹⁵ However, the fact that transmission and distribution networks need to be maintained and operated in a way that supports

⁹⁰ Rábago Direct at 24:11–12; Rábago Surrebuttal at 9:1–14.

⁹¹ 66 Pa. C.S. § 2807(e)(3.4)(i).

⁹² *Id.* § 2803.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

reliability does not in any way remove the express statutory obligation of a default service provider to design their procurement plan in a way that supports reliability.⁹⁶

Simply put, if the General Assembly did not intend for default service providers to make procurement choices based on ensuring reliability, they would not have included an express statutory mandate to do so. As the General Assembly clarified through its definition of “reliability,” this includes evaluating how procurement design can help minimize risks to service from generator and infrastructure “outages” and other “emergencies.”⁹⁷

It makes sense that the statute requires default service providers to consider how their procurement choices can help ensure reliability because default service providers function as a “reliable safety net.”⁹⁸ If a customer contracts with an EGS, and the EGS does not provide service, a customer has the right to receive default service from the default service provider.⁹⁹ If the default service provider fails to deliver, there is no further mandatory backstop; a customer may look to the market to see if an EGS can provide more attractive terms, but a customer has no right to service from an EGS. Accordingly, in a very real sense, default service providers are the providers of last resort for customers, which is why they must take their responsibilities to design their procurement in a way that ensures reliability seriously.

The requirement that a default service provider design its default service plan to ensure adequate and reliable service is also tied into the legislative objectives of Act 129. Act 129’s preamble states that “[i]t is in the public interest...to implement energy procurement requirements designed to ensure...affordable and *available* electric service to all residents.”¹⁰⁰

⁹⁶ *Id.* § 2807(e)(3.4)(i).

⁹⁷ *Id.* § 2803.

⁹⁸ *NRG Energy, Inc. v. Comm’n*, No. 58 C.D. 2019, 2020 WL 2843488, at *12 (Pa. Commw. Ct. June 2, 2020).

⁹⁹ 66 Pa. C.S. § 2807(e)(3.1).

¹⁰⁰ Act 129 (emphasis added).

As such, that default service procurement plans be designed to ensure reliable, affordable, and available electricity to all Pennsylvania residents was a central concern for the General Assembly.

2. Incorporating Long-Term Contracts for Supply Would Be a Prudent Means of Ensuring Adequacy and Reliability

In order to evaluate the prudence of a procurement design with respect to reliability, it is necessary to examine the reliability characteristics of different potential sources of generation supply.¹⁰¹ As Mr. Rábago testified, there are numerous ways in which the reliability characteristics of different sources of generation supply can be assessed.¹⁰² First, the availability of the resource can be assessed, which refers to the percentage of time that the resource is operational as projected.¹⁰³ As part of assessing availability, the vulnerability of the resource to fuel supply disruptions, as may occur in emergencies and extreme weather events, should be evaluated.¹⁰⁴ Second, the reliance of the resource on transmission infrastructure, which can also be disrupted by emergencies and extreme weather events, can be evaluated as part of a reliability assessment.¹⁰⁵ Such an approach to assessing the reliability characteristics of supply resources aligns closely with the statutory definition of reliability, which requires attention to how procurement choices can help maintain service despite “scheduled and unscheduled outages of system facilities” and “emergencies.”¹⁰⁶

As Mr. Rábago also testified, as assessed by these metrics, renewable energy resources tend to provide high reliability. Renewable resources tend to have high availability because they

¹⁰¹ Rábago Direct at 24:1–3.

¹⁰² *Id.* at 24:1–17.

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 26:6–16.

¹⁰⁶ 66 Pa. C.S. § 2803.

are mechanically simple in design and less subject to breakdown and maintenance downtime as compared to fossil fuel resources.¹⁰⁷ Renewable resources also do not rely on fuel supplies as fossil fuel resources do and thus offer advantages in maintaining reliability despite fossil fuel supply disruptions.¹⁰⁸ Finally, distributed renewable resources configured as microgrids can offer reliable supply through emergencies and extreme weather events that may impair transmission infrastructure, since they can be situated close to load and thus do not need to rely on transmission.¹⁰⁹

The incorporation of long-term contracts into a prudent mix of contracts can help ensure customers benefit from the reliability characteristics of renewable energy.¹¹⁰ One of the key competitive advantages of renewable energy resources like solar and wind is that they have very low marginal operating costs, as they are not reliant on fuel in the way that fossil fuel resources are.¹¹¹ Additionally, the marginal operating costs of renewable energy resources tend to be very stable, as they are not influenced by the volatility of changing fuel prices, supporting price stability. However, these price advantages of renewable energy resources emerge most fully over the term of a long-term contract (ie, longer than four years).¹¹² Accordingly, incorporating some long-term contracts into the default service supply mix is a prudent means of allowing customers to obtain the reliability benefits of renewable energy on favorable pricing terms.¹¹³ In a changing climate, with increased extreme weather events, such reliability benefits are significant.¹¹⁴

¹⁰⁷ Rábago Direct at 24:2–8.

¹⁰⁸ *Id.* at 24:8–11.

¹⁰⁹ Rábago Direct at 26:1–16; 30:3–10; McCawley Cross, Tr. at 55:12–56:1.

¹¹⁰ Rábago Direct at 24:12–14.

¹¹¹ *Id.* at 17:4–8.

¹¹² *Id.*

¹¹³ *Id.* at 20:15–17.

¹¹⁴ *Id.* at 24:8–11.

However, PECO has not evaluated the potential reliability benefits of long-term supply contracts.¹¹⁵ Instead, PECO relies solely on supply contract terms and conditions as means of ensuring reliability for customers.¹¹⁶ However, such measures do not necessarily shield customers from outages and emergencies affecting generation, transmission, or distribution infrastructure.¹¹⁷ Incorporating long-term contracts with utility-scale and distributed renewable energy resources would be a prudent way of meeting Act 129’s requirement to ensure against such risks to adequacy and reliability of service.

D. Incorporating Long-Term Contracts for Supply Would Be a Prudent Means of Ensuring the Procurement Plan Reflects Stakeholder Preferences

1. The Commission Has Held that Prudent Mix of Contracts Should Be Tailored to the Character of a Service Territory’s Customer Base

A continuing theme in the Commission’s guidance on default service procurement is the need for flexibility in interpreting the “prudent mix” standard in order to accommodate the character of a service territory’s customer base. Following the passage of Act 129, which added the “prudent mix” requirement to the Competition Act’s framework for default service,¹¹⁸ the Commission initiated a rulemaking proceeding to update its default service regulations to be consistent with Act 129 and to provide guidance for the preparation of default service programs.¹¹⁹

As the Commission observed, “one theme repeated throughout the responses” to its call for comments “was that the Commission should refrain from adopting a ‘one-size fits all’

¹¹⁵ Rábago Direct at 24:11–12; Rábago Surrebuttal at 9:1–14.

¹¹⁶ McCawley Rebuttal at 9:20–10:15; Rábago Surrebuttal at 5:2–6.

¹¹⁷ Rábago Surrebuttal at 5:2–6.

¹¹⁸ Act 129.

¹¹⁹ *Proposed Rulemaking Order*, Docket No. L-2009-2095604 (Jan. 14, 2010).

<http://www.puc.state.pa.us/pcdocs/1065843.docx>.

approach to reviewing default service plans and retain a more flexible ‘case by case’ approach which still adheres to those fundamental standards contained in the Competition Act and Act 129.’”¹²⁰

A critical reason for this flexibility, the Commission noted, is that default service providers “should be permitted the flexibility and latitude to accomplish the goal of achieving the ‘least cost’ standard in a manner that meets the need of their customers and service territories.”¹²¹ As the Commission emphasized, default service providers need to “design a procurement plan that best fits the character of the customer base and the service territory,” which the Commission will review on a “case by case basis.”¹²² This “case by case” review, the Commission has explained, is one in which consideration of “input from stakeholders is assured.”¹²³

2. Stakeholders in PECO’s Service Territory Have Expressed Strong Preferences for Increased Renewable Energy in the Default Service Supply Mix

At the Public Input Hearing in this Proceeding, held via videoconference on June 9, 2020, PECO customers testified overwhelmingly in favor of changes to PECO’s default service procurement plan that would facilitate the inclusion of increased amounts of renewable energy.¹²⁴ At the hearing, 35 witnesses provided approximately six hours of testimony.¹²⁵ Thirty-four out of 35 of the witnesses testified in favor of changes to PECO’s proposed default service procurement plan to incorporate more renewable energy, and the sole remaining witness testified that she did not feel qualified to assess the role of renewable energy in PECO’s default service

¹²⁰ Second Default Service Rulemaking Order at 8.

¹²¹ *Id.* at 38.

¹²² *Id.* at 44.

¹²³ *Id.* at 60.

¹²⁴ *See* Attachment 1.

¹²⁵ *See* Attachment 1.

plan.¹²⁶ In total, approximately 80 people signed up to testify, but many were unable to do so before time expired for the hearing.¹²⁷

For convenience of review, an index table listing all 35 testifying witnesses and summarizing their comments is attached hereto as Attachment 1. However, certain representative comments are discussed in greater detail below as they serve to illuminate stakeholder preferences.

a) Elected Officials

At the start of the Public Input Hearing, numerous elected officials testified. They were unanimously in favor of changes to incorporate increased renewable energy in PECO's default service supply mix. State Representative Carolyn Comitta, who represents the 156th Legislative District, testified that "[t]he people of my district and our County have demonstrated that they want to preserve the vitality and prosperity of our environment and are eager to embrace forms of clean renewable energy."¹²⁸ As such, Representative Comitta requested that PECO "prioritize clean and renewable energy such as solar to be included in PECO's Default Service Program for consumers."¹²⁹ Representative Comitta further testified that "[a] cleaner mix of energy sources in the DSP would not only help reduce greenhouse gas emissions and air pollution but also make available more local green jobs."¹³⁰

Commissioner Martin Miller, President of the Board of Commissioners in West Norriton Township, testified that residents of his township enthusiastically backed the township's commitment to transition to 100% clean energy and have repeatedly asked about ways to

¹²⁶ See Attachment 1; Public Input Hearing Tr. at 309:23–310:3.

¹²⁷ Public Input Hearing Tr. at 163:12–13.

¹²⁸ *Id.* at 85:1–4.

¹²⁹ *Id.* at 85:25–86:2.

¹³⁰ *Id.* at 84:12–15.

participate in making progress towards that goal.¹³¹ Accordingly, Commissioner Miller asked that PECO “chang[e] the mix of renewable energy currently proffered in this proposal to a much greater number.”¹³²

Mayor Philip Dague, Mayor of the Borough of Downingtown, noted the impacts of climate change and air pollution, and requested that PECO change its default service supply to renewable energy, which he noted, “would be doing the world a huge favor.”¹³³

Commissioner Josh Maxwell, a Commissioner of the County of Chester, testified, “I’m here today as a representative of Chester County knowing that our communities, my constituents are committed to cultivating clean energy including making solar a priority, and I would love to encourage PECO to respond to those priorities by increasing commitments to solar in its Default Service Program.”¹³⁴

Mayor Dianne Herrin, Mayor of the Borough of West Chester, testified that her municipality had teamed up with six other local municipalities to work towards a goal of 100% clean, renewable electricity by 2035.¹³⁵ Mayor Herrin asked PECO “to take this DSP5 filing as an opportunity to boost your clean renewable energy mix” and “join our constituents who are also your customers and join other utilities across the country who are very successfully exploiting renewables as key drivers of their growth for the good of everyone.”¹³⁶

State Representative Stephen McCarter, who represents the 154th Legislative District, testified, “[c]limate change is real. Its impacts can be seen wherever one looks. The impacts in

¹³¹ Public Input Hearing Tr. at 88:25–89:5.

¹³² *Id.* at 90:5–7.

¹³³ *Id.* at 98:1–18.

¹³⁴ *Id.* at 108:15–21.

¹³⁵ *Id.* at 115:12–20.

¹³⁶ *Id.* at 117:11–12, 20–23.

Pennsylvania are detailed in the last Climate Change Assessment Report of the Pennsylvania Climate Change Advisory Committee, and global impacts are documented in every respected scientific journal and international report over the past 20 years.”¹³⁷ Representative McCarter also testified that PECO’s proposed default service plan’s 0.5% solar energy commitment is “totally out of step with future needs and is socially and frankly economically irresponsible on the part of PECO at this time...The public strongly favors moving to alternative energy sources and ending our [reliance] on fossil fuels.”¹³⁸

State Representative Christopher Rabb, representing the 200th Legislative District, testified that PECO must make “an essential transition to more renewable energy in its portfolio” for default service, and that he “strongly advocate[s] for a default that moves toward renewable energy.”¹³⁹ Representative Rabb also testified that embracing renewable energy “will create good sustaining jobs and it will help our environment, and it will help all stakeholders in the short-term and the long-term.”¹⁴⁰

b) PECO Customers

After elected officials testified at the start of the hearing, 27 PECO customers testified, and the following is a discussion of representative topics raised by these witnesses. Rabbi Julie Greenberg, Director of POWER’s Multifaith Work for Racial and Economic Justice on a Livable Planet, testified that “PECO has talked the talk about energy leadership and listening to the public. But PECO has not listened.”¹⁴¹ Rabbi Greenberg testified that the negligible level of solar energy commitments in PECO’s default service plan is “shocking in a world in which many

¹³⁷ Public Input Hearing Tr. at 126:21–127:1.

¹³⁸ *Id.* at 128:5–7; 128:11–13.

¹³⁹ *Id.* at 143:14–15; 143:18–19.

¹⁴⁰ *Id.* at 144:18–20.

¹⁴¹ *Id.* at 179:23–24.

countries, states, and cities are moving towards 100 percent renewable energy driven by the needs of the communities that are devastated by the destruction of fossil fuel pollutants and especially black, brown, and low income communities[.]”¹⁴²

Christina Gosnell, a data analyst for Catalyst Cooperative, testified that “for solar and other renewable resources...the mix of capital versus operational costs for renewables skew much more heavily almost entirely on the capital side. Long-term contracts provide that clear, stable funding mechanisms which is how most solar developers finance their projects.”¹⁴³ Ms. Gosnell also testified that “[i]ncluding more long-term contracts...would not be favoring solar over other resources. It would be attempting to level the currently unlevelled playing field of the DSP -- of the current business-as-usual DSP that PECO is providing.”¹⁴⁴

Reverend Angela Brown-Vann, Minister at St. Mark A and E Zion Church in Newtown, PA, testified that “[a] large percentage of our congregation has respiratory illnesses. There are children with asthma, adults with sleep apnea, a plethora of other illnesses. All of these breathing problems are exacerbated by fossil fuel pollution.”¹⁴⁵ Reverend Brown-Vann also testified that “PECO’s proposed DSP does not protect our community, and it’s shocking that PECO’s choice of how to procure energy is to spend more money to pollute our families, our communities, and our planet[.]”¹⁴⁶ Reverend Brown-Vann further testified that, “We don’t need just a tiny fraction of one percent of PECO’s energy coming from solar. We need a substantial shift to solar.”¹⁴⁷

Dr. Steven Greenspan, a research scientist, testified that PECO’s proposed default service plan, “affects the future of energy production and jobs in Pennsylvania.”¹⁴⁸ Dr. Greenspan further

¹⁴² Public Input Hearing Tr. at 180:7–12.

¹⁴³ *Id.* at 206:12–18.

¹⁴⁴ *Id.* at 206:19–24.

¹⁴⁵ *Id.* at 273:16–20.

¹⁴⁶ *Id.* at 273:25–274:4.

¹⁴⁷ *Id.* at 274:13–16.

¹⁴⁸ Public Input Hearing Tr. at 234:6–7.

testified that “[i]f instead of an uninspiring half of one percent an improved DSP specified increases in local solar contracts to achieve 20 percent local solar by 2025, investors in energy production and local businesses would notice. Such action would raise the prominence of solar power and could increase investments and local jobs in impacted neighborhoods.”¹⁴⁹

Bill Sabey, a volunteer member of the Environmental Board of Plymouth Township, testified that Plymouth Township has signed a “Ready for 100” resolution committing the township to seek 100% renewable electricity by 2035.¹⁵⁰ Mr. Sabey also testified that “there are now over 30 Ready for 100 communities in the southeast area, including Philadelphia. So, if you took the population of all of those communities that committed to a hundred percent renewable electricity by 2035, it’s over 50 percent of the population represented.”¹⁵¹ Mr. Sabey further testified that PECO should “increase the renewable energy portion” of the default service plan and “make it a commitment to increase it as we go forward.”¹⁵²

3. Incorporating Long-Term Contracts for Supply Would Be a Prudent Way of Responding to Stakeholder Preferences for Increased Renewable Energy

Given these stakeholder preferences for increased amounts of renewable energy in PECO’s default service supply mix, a prudent way to respond to those preferences would be including more long-term contracts in the procurement plan, which would facilitate the procurement of renewable energy. As Mr. Rábago testified, one of the key competitive advantages of renewable energy resources like solar and wind is that they have very low marginal operating costs, as they are not reliant on fuel in the way that fossil fuel resources

¹⁴⁹ *Id.* at 234:9–15.

¹⁵⁰ *Id.* at 288:17–24.

¹⁵¹ *Id.* at 288:19–24.

¹⁵² *Id.* at 290:9–11.

are.¹⁵³ Additionally, the marginal operating costs of renewable energy resources tend to be very stable, as they are not influenced by the volatility of changing fuel prices, supporting price stability.¹⁵⁴

However, these price advantages of renewable energy resources emerge most fully over the term of a long-term contract (i.e., longer than four years).¹⁵⁵ As a result, as Mr. Rábago testified, PECO's proposed procurement plan, which requires bidders to bid based exclusively on prices for 1 or 2 year periods, functions as a discriminatory barrier to renewable energy resources that could offer significant price and price stability advantages over a longer period.¹⁵⁶ As Mr. Rábago also testified, the fact that PECO has never once received a bid submission that reflected 50% or more renewable energy content, given the explosive growth in renewable energy development in the last four years, likely reflects discriminatory barriers resulting from a procurement process based exclusively on short-term contracts.¹⁵⁷

Moreover, long-term supply contracts for renewable energy have the additional benefit of lowering overall costs of renewable energy in the market and supporting the financing of additional development, which is also aligned with stakeholder preferences.¹⁵⁸ As Mr. Rábago testified, "if the Company procured supply from renewable energy and distributed renewable energy facilities, the market for those resources would grow."¹⁵⁹ By providing revenue certainty, long-term contracts can decrease financing risk and enable developers to finance renewable

¹⁵³ Rábago Direct at 17:4–8.

¹⁵⁴ *Id.* at 17:4–12.

¹⁵⁵ Rábago Surrebuttal at 15:1–4.

¹⁵⁶ *Id.* at 15:1–5.

¹⁵⁷ Rábago Direct at 13:10–14; 14:1–3.

¹⁵⁸ *Id.* at 30:16–18; Public Input Hearing Tr. at 244:2–6 ("Substantially increasing PECO Energy's solar credit procurement over what is being proposed in the DSP will directly increase local solar project development . . .") (Testimony of Ron Celentano).

¹⁵⁹ Rábago Direct at 30:16–18.

energy generation at lower interest rates.¹⁶⁰ Since renewable energy costs are largely driven by capital, rather than fuel costs, the interest rates of project financing are paramount to the cost of energy.¹⁶¹

The market impacts of PECO's default service supply choices can be significant, as PECO has consistently supplied about 2/3 of its customers with default service over the past ten years, which represents a large procurement.¹⁶² As such, modifications to incorporate long-term contracts could have a substantial effect in helping develop the market for renewable energy supply in accordance with stakeholder preferences.

This would also be in alignment with the policies of municipalities in PECO's service territory and Commonwealth policies, which support decarbonization and increased renewable energy deployment, and which, as public policies, also represent stakeholder preferences and the public interest.¹⁶³ At the municipal level, this includes resolutions committing to achieve 100% renewable electricity by the City of Philadelphia and over 20 municipalities in Philadelphia's suburbs.¹⁶⁴

¹⁶⁰ *Id.* at 10:11–12 (“Over the past ten years, the costs of renewable energy . . . and financing have all plummeted” as a result of market growth.).

¹⁶¹ *Id.* at 17:4–10; Public Input Hearing Transcript 206:12-17 (“[For solar and other renewable resources], the mix of capital versus operational costs for renewables skew much more heavily almost entirely on the capital side. Long-term contracts provide that clear, stable funding mechanism which is how most solar developers finance their projects.”) (Testimony of Christina Gosnell).

¹⁶² *See supra* at 16 [the chart of DSP average numbers]; Rábago Direct at 13:4–5.

¹⁶³ Rábago Direct at 7:5–10:2 (discussing Executive Order 2019-01, committing the Commonwealth to an 80% reduction in greenhouse gas emissions by 2050; Executive Order 2019-07, directing the Commonwealth to begin the process of joining the Regional Greenhouse Gas Initiative; City of Philadelphia Resolution No. 190728, committing the City of Philadelphia to 100% renewable electricity by 2030); Public Input Hearing Tr. at 288:21–24 (testifying that 30 municipalities in the southeast area including Philadelphia have passed 100% renewable energy resolutions, and that over 50% of the population lives in a municipality that has passed a resolution to reach 100% renewable energy). As Mr. Rábago testified, Sierra Club maintains a website which hosts full versions of many of the 100% renewables resolutions adopted by municipalities in PECO's service territory. Rábago Direct at note 23.

¹⁶⁴ City of Philadelphia Resolution No. 190728; Public Input Hearing Tr. at 288:21–24; Rábago Direct at note 23.

At the Commonwealth level, this includes Executive Order 2019-01, committing the Commonwealth to an 80% reduction in greenhouse gas emissions by 2050 and Executive Order 2019-07, directing the Commonwealth to begin the process of joining the Regional Greenhouse Gas Initiative.¹⁶⁵ It is also notable that the General Assembly, in the preamble to Act 129, declared that “the health, safety and prosperity of all citizens of this Commonwealth are inherently dependent upon the availability of adequate, reliable, affordable, efficient and *environmentally sustainable* electric service at the least cost, taking into account any benefits of price stability over time and the *impact on the environment*.”¹⁶⁶ As such, identifying prudent means of removing barriers to fair competition by renewable energy resources in winning default service supply contracts is well-aligned with stakeholder preferences and the public interest as reflected in public policies.

E. PECO Should Be Required to Study the Potential Benefits to Customers of Long-Term Contracts for Supply

In light of the above considerations, PECO should be required to study the potential benefits to customers of long-term contracts for supply. Markets have changed significantly over the past ten years, but PECO’s short-term contracting approach has not.¹⁶⁷ Notably, while PECO has cited potential risks of long-term contracts, it has not actually engaged in a study of costs and benefits of long-term contracts under current market conditions.¹⁶⁸

A study that could correct this information gap should include a comprehensive and objective analysis of current market opportunities for supply and a rigorous fact-based

¹⁶⁵ Rábago Direct at 7:5–10:2.

¹⁶⁶ Act 129 (emphasis added).

¹⁶⁷ Rábago Direct at 10:5–15.

¹⁶⁸ *Id.* at 17:13–17.

assessment of the full range of advantages and disadvantages offered by long-term contracts in light of cost over time, reliability, price stability, stakeholder preferences, policy trends, and other factors as appropriate.¹⁶⁹ This study should be informed by an active stakeholder process with formal mechanisms for soliciting information from stakeholders, such as a request for information and the solicitation of comments.¹⁷⁰ This stakeholder process should include measures designed to facilitate participation by environmental justice communities within PECO's service territory, including educational outreach, translation/interpretation as needed, and accessible locations and times of meetings.

Such a study could inform amendments to PECO's proposed DSP V procurement plan, and PECO should be required to phase in modifications to its procurement plan that are warranted by the study as soon as practicable after the completion of the study.¹⁷¹ Given the 1-2 year tenors of the contracts that PECO intends to rely upon for procurement in DSP V, this could be accomplished by midway through the DSP V period.¹⁷²

Such a study could also serve as a means of providing valuable data to the Commission to inform the further development of its default service program guidance. One of the issues considered by the Commission in its recent *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms* was "the prudence of long-term contracts in today's evolving marketplace."¹⁷³ After collecting comments reflecting different positions, the Commission concluded that "long-term contracts need to be carefully considered and that we need to consider this topic further in upcoming DSP proceedings."¹⁷⁴

¹⁶⁹ *Id.* at 37:22–38:6.

¹⁷⁰ *Id.* at 37:15–22.

¹⁷¹ *Id.* at 28:13–15.

¹⁷² *Id.*

¹⁷³ January 2020 Secretarial Letter at 7.

¹⁷⁴ *Id.* at 8.

Accordingly, a study on long-term contracts of the type proposed here is an ideal means of meeting this need and is precisely aligned with the Commission's interest in further examining the prudence of long-term contracts through the lens of a particular default service provider. As demonstrated by the wealth of testimony provided by PECO stakeholders at the Public Input Hearing in this Proceeding, there is a highly engaged stakeholder community in PECO's service territory that can help enrich the factual foundations of such a study.

Thus, while such a study could help investigate matters of particular interest to PECO's stakeholders, the process of doing so could help illuminate questions of statewide concern. Notably, the study could provide a basis for initiating a statewide proceeding that could lead to further developed guidance on default service procurement practices.

Moreover, now is the perfect time to start such a study. Doing so would provide sufficient time to complete the study and incorporate its findings into the procurement plan that is proposed for DSP VI. Waiting until the start of the litigation period for DSP VI to address such concerns would be waiting too long, for several reasons. First, the litigation period for a DSP is too short for the full development, including stakeholder participation, of a study of the type required. Second, as noted by many commenters at the Public Input Hearing, climate change is an urgent matter for Pennsylvanians, and it is not prudent to wait to study potential means of addressing stakeholder preferences for more renewables in their default service supply mix.¹⁷⁵

F. PECO Should Be Required to Improve Its TOU Rates by Performing a Cost-Benefit Analysis and by Further Tailoring Them to Support Heavy Electric Vehicles and Building Electrification

¹⁷⁵ *Supra* at Section IV.D.2.

Under the Public Utility Code, default service providers with 100,000 or more customers are required to offer TOU rates to all customers that have been provided with smart meter technology.¹⁷⁶ As the Commission recently noted, “[t]he Commonwealth of Pennsylvania has invested a significant amount of customer funded utility resources in smart meter technology.”¹⁷⁷ Well-designed TOU rates can help provide value for this investment by “rewarding customers in a timely manner for positive behaviors.”¹⁷⁸

The Commission has issued guidance on TOU rate designs and development, including an example TOU rate design from which EDCs are granted broad flexibility to deviate, provided such modifications comply with applicable law and are “supported by facts.”¹⁷⁹ Additionally, the Commission’s January 23, 2020 Secretarial Letter noted that “TOU rates, especially in the context of EV expansion, need[] to be explored further,” and urged “all parties participating in the upcoming DSP proceedings to consider how EV specific TOU rate offerings could be made available to consumers.”¹⁸⁰

However, PECO’s proposed TOU rate for DSP V fails to meet these requirements. Notably, PECO has completely omitted any cost-benefit analysis from its TOU rate development, making it impossible to determine whether the rate actually has any potential to advance the purposes for which it is required.¹⁸¹ PECO has stated that it based its proposed TOU rate in large part upon “lessons learned” from its previous Smart Time Pricing Pilot, which ran

¹⁷⁶ 66 Pa. C.S. § 2807(f)(5); *DCIDA*, 123 A.3d at 1134 (“There is no ambiguity in the Competition Act’s mandate. It provides, plainly, that ‘[t]he default service provider shall offer the time-of-use rates . . . to all customers that have been provided with smart meter technology.’”).

¹⁷⁷ *Order* at 2, Docket No. M-2019-3007101 (Jan. 17, 2019).

¹⁷⁸ *Id.* at 3.

¹⁷⁹ Secretarial Letter, *Pet. of PPL Elec. Utils. Corp. for Approval of a New Pilot Time-of-Use Program*, Docket Nos. P-2013-2389572 and M-2016-2578051 (Apr. 6, 2017) (“April 2017 Secretarial Letter”).

¹⁸⁰ January 2020 Secretarial Letter at 6.

¹⁸¹ *Rábago Direct* at 32:15–19; *PECO Response to ES-I-42*; *Bisti Rebuttal* at 19:5-18; *Bisti Cross, Tr.* at 89:21–25; *Rábago Surrebuttal* at 20:6–8.

for two months, seven years ago.¹⁸² Yet PECO does not dispute that the Smart Time Pricing Pilot also did not contain any cost-benefit analysis.¹⁸³

A well-designed TOU rate in this case should operate “as an incentive mechanism” to achieve the legislative goals of energy efficiency, energy conservation, and advancement of alternative energy sources mandated by Act 129.¹⁸⁴ A robust cost-benefit analysis is necessary to inform incentive levels, and to determine and encourage program participation and results worth the program’s expense.¹⁸⁵ This is particularly true in light of the overall mandate for default service providers to provide service at the “least cost over time.”¹⁸⁶ By failing to incorporate any meaningful cost-benefit analysis into its TOU rate development, PECO has failed to meet the mandate of Act 129, its general statutory duty to provide default service at the least cost to customers over time, and the Commission’s subsequent TOU rate guidance.

PECO asserts that its TOU rate is intended to respond to Commission guidance to explore ways to provide incentives for EV adoption by “encourag[ing] EV charging during overnight low-priced energy hours and, in turn, lower[ing] the overall total cost of EV ownership.”¹⁸⁷ However, in addition to its failure to include a cost-benefit analysis of the rate with regard to general EV incentives,¹⁸⁸ PECO also failed to analyze the TOU rate’s potential to advance adoption of medium- and heavy-duty EV fleets in light of their different needs.¹⁸⁹ As Mr. Rábago noted, the introduction of a TOU rate incentivizing EVs presents “a significant opportunity to secure direct and co-benefits from electrification medium- and heavy-duty vehicles like buses,

¹⁸² Bisti Direct at 11:10–13, 13:4–5.

¹⁸³ PECO Response to ES-I-17, ES-I-42.

¹⁸⁴ Rábago Direct at 31:23–32:2.

¹⁸⁵ Rábago Surrebuttal at 20:4–7.

¹⁸⁶ 66 Pa. C.S § 2807(e)(3.4).

¹⁸⁷ Bisti Direct at 13:19–14:9. *See also* Bisti Cross, Tr. at 90:16–20.

¹⁸⁸ PECO Response to ES-I-42; Bisti Cross, Tr. at 89:21–25.

¹⁸⁹ Rábago Direct at 35:11–14; Bisti Cross, Tr. at 92:8–9; 92:2–3.

garbage trucks, delivery and shuttle vans, and other fleet vehicles in the Company’s service territory.”¹⁹⁰

Since many medium- and heavy-duty fleet vehicles are currently powered by diesel, they often produce “significant local air pollution and health impacts, especially in low-income neighborhoods.”¹⁹¹ As such, electrification of these types of diesel-fueled fleets can provide significant air quality and public health benefits to the communities in which they operate and the individuals who spend the most time in or around the vehicles (e.g., drivers of buses and garbage trucks, bus commuters, etc.).¹⁹² As Mr. Rábago stated, a TOU rate design tailored to the needs of these fleet vehicles would incorporate “a thorough understanding of duties cycles, charging infrastructure, and other factors,” which are more complex and offer different potential benefits than those of individual passenger EVs.¹⁹³ A robust cost-benefit analysis could identify overlap between the needs of fleet electrification and individual passenger EV adoption. Such analysis could identify whether there would be higher rates of adoption and overall higher benefits if the TOU rate was tailored more toward medium and heavy-duty fleet EVs. It could ensure that the decarbonization benefits of EV adoption are equitably distributed rather than focused exclusively on individual passenger EV owners. This analysis is crucial both in meeting the requirements of Act 129 underlying the mandate to offer a TOU rate, while also meeting the requirement of the Competition Act to provide default service at the least cost to customers over time.

¹⁹⁰ Rábago Direct at 35:7–9.

¹⁹¹ *Id.* at 35:9–11.

¹⁹² *Id.* at 35:9–11 and Exhibit KRR-10: City of Philadelphia: Office of Sustainability, Powering Our Future: A Clean Energy Vision for Philadelphia (2018) at 55 (noting Philadelphia air quality being affected by transportation emissions), at 9 (noting that the city is developing a Clean Fleet strategy to address transportation emissions related to its vehicle purchasing), at 23 (referencing plans for “electrifying both personal vehicles and large fleets like the City’s and SEPTA’s”).

¹⁹³ Rábago Direct at 35:11–13.

Additionally, in service of the legislative purposes of Act 129, PECO should explore offering a TOU rate tailored to incentivize adoption of electric end-use technologies that would replace gas appliances for space and water heating and indoor cooking.¹⁹⁴ Adoption of building electrification measures such as distributed generation, heat pump water heaters, and behind-the-meter battery storage systems “can effectively reduce peak consumption or shift building consumption off-peak with minimal disruption to lifestyle,” while providing reductions in both indoor and outdoor air pollution and reducing societal reliance on fossil fuels.¹⁹⁵ These benefits serve another purpose for which TOU rates are required—providing a means of energy conservation—one of the underlying legislative purposes of Act 129.¹⁹⁶ Expanding the incentive potential of TOU rates beyond the realm of EV charging and compensation for customer-generators will ensure that the benefits of TOU pricing reach a much broader range of customers than those who own EVs or are sited appropriately for distributed generation. Accordingly, tailoring of the TOU rate to gain the most efficient energy conservation benefits, including potentially through adoption of building electrification measures, should be an integral part of TOU rate development.

By requiring PECO to conduct a robust cost-benefit analysis and better tailor its TOU rate offerings to support widespread advances in transportation and building electrification, the Commission can further the objectives of Act 129, as well as the Commission’s own objectives of safeguarding the public interest. The Environmental Stakeholders respectfully request that the Commission condition approval of the proposed TOU rate upon PECO’s commitment to performing a detailed and comprehensive evaluation of the results and impacts of the rate.

¹⁹⁴ *Id.* at 34:20–35:4.

¹⁹⁵ *Id.* at 34:23–35:4 and Exhibit KRR-10: City of Philadelphia: Office of Sustainability, Powering Our Future: A Clean Energy Vision for Philadelphia (2018) at 8, 49; Public Input Hearing Tr. at 116:12–17; 121:24–122:4.

¹⁹⁶ *DCIDA*, 123 A.3d at 1135 (Cmmwth. Ct. 2015); *see also* 66 Pa. C.S. § 2802(17).

Additionally, the Environmental Stakeholders request that the Commission direct PECO to develop, informed by a cost-benefit analysis, proposals for additional TOU rate pilots directed at the electrification of medium- and heavy-duty EVs, including fleets, and at beneficial electrification of buildings, including direct thermal loads currently served by gas.

V. CONCLUSION

As noted above, the Environmental Stakeholders entered this Proceeding in order to help develop practical solutions to improve PECO's default service procurement practices by better aligning them with changing market realities and growing stakeholder preferences for renewable energy.¹⁹⁷ Modifying PECO's default service procurement plan to accept bids for long-term contracts will enable customers to benefit from the reliability, price, and price stability benefits that long-term renewable contracts can offer, all while meeting stakeholder preferences for renewable energy and progress on decarbonization. As noted above, sourcing supply from renewable energy resources, particularly local renewable energy resources, also advances other objectives highly valued by stakeholders, such as improving air quality, addressing environmental justice issues, and supporting green jobs.¹⁹⁸

As Mr. Rábago has testified, the ability of renewable energy resources to offer a lower price over the long-term, and to ensure price stability, is a perfect match for the statutory mandate of Act 129 to procure electricity at "least cost over time" while also "reduc[ing] the possibility of electric price instability."¹⁹⁹ As such, long-term renewables contracts should be allowed a chance to compete by ending PECO's longstanding exclusion of long-term contracts from its procurement process.

¹⁹⁷ *Supra*, at 1.

¹⁹⁸ *Supra*, Section IV.D.2.

¹⁹⁹ 66 Pa. C.S. § 2807(e)(3.4)(ii); Act 129; Rábago Surrebuttal at 4:7–13.

Accordingly, it is in the public interest that PECO comprehensively evaluate current market opportunities for procurement of default supply via long-term contracts and adapt its procurement practices accordingly. The Environmental Stakeholders respectfully request that the Commission order PECO to prepare such a study. Such a study should:

- Include a comprehensive and objective analysis of current market opportunities for supply and a rigorous fact-based assessment of the full range of advantages and disadvantages offered by long-term contracts in light of cost over time, reliability, price stability, stakeholder preferences, policy trends, and other factors as appropriate.
- Be informed by an active stakeholder process with formal mechanisms for soliciting information from stakeholders, such as a request for information and the solicitation comments. This stakeholder process should include measures designed to facilitate participation by environmental justice communities within PECO's service territory, including educational outreach, translation/interpretation as needed, and accessible locations and times of meetings.
- Be completed by a date set by the Commission and then filed with the Commission for its review.

Such a study should be used to:

- Determine if modifications to PECO's default service procurement plan for DSP V are warranted, and if so, to order such modifications.
- Provide a factual foundation to inform the development of PECO's default service procurement plan for DSP VI.
- Serve as a starting point for a statewide proceeding to further develop Commission guidance on the role of long-term contracts in default service procurement.

It is also in the public interest that PECO improve its proposed TOU rates for DSP V. The Environmental Stakeholders respectfully request that the Commission order PECO to:

- Conduct a detailed and comprehensive cost-benefit analysis of its proposed TOU rates for DSP V and file such analysis with the Commission for its review; and
- Conduct a detailed and comprehensive cost-benefit analysis of opportunities to use TOU rates to support electrification of medium- and heavy-duty transportation applications, including fleets, and building electrification, including electrification of direct thermal loads currently served by gas, and develop proposals for TOU rate pilots directed at these opportunities for inclusion in DSP VI.

In sum, as markets have evolved over the last ten years to feature increasing amounts of low-priced and price-stable renewable energy, and as stakeholders, mobilized by concerns about the urgency of climate change, as well as issues like air quality and green jobs, have grown increasingly interested in using renewable energy, a responsible and forward-looking utility should look for ways in which default service supply can be better aligned with these realities. Long-term renewable contracts offer an ideal “win-win” solution, providing both “least cost over time to customers” and the incorporation of renewable energy into the default supply mix. Similarly, a better-developed TOU rate is also a “win-win” solution, as it can provide properly aligned incentives for positive customer behavior to conserve or shift load when beneficial, an important benefit as market trends towards electrification continue.

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Respectfully submitted,

/s/ Devin McDougall

Devin McDougall
Staff Attorney
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
dmcDougall@earthjustice.org
(917) 628-7411

/s/ Logan Welde

Logan Welde
Staff Attorney & Director of Legislative Affairs
Clean Air Council
135 S 19th St, Suite 300
Philadelphia, PA 19103
lwelde@cleanair.org
(215) 567-4004

Attachment 1. Public Input Hearing Testimony Index Table

Number	Transcript Citation	Witness Name	Affiliation Information	Summary of Main Points
1	83:13–86:6	Representative Carolyn Comitta	General Assembly – 156 th District	<ul style="list-style-type: none"> • Representative Comitta’s constituents support actions combatting climate change, protecting the environment, access to clean energy, and renewable energy jobs. • She has sponsored legislation supporting clean energy advances in the Commonwealth.
2	88:4–90:12	Martin Miller	President of West Norriton Township Board of Commissioners	<ul style="list-style-type: none"> • Commissioner Miller’s township has passed a Ready for 100 Resolution, committing to switching to 100% renewable energy by 2035. • Residents are enthusiastic about renewables. • A higher mix of renewables in the DSP would help their community be safer and cleaner and would create local jobs.
3	97:9–99:9	Mayor Philip Dague	Mayor of Borough of Downingtown	<ul style="list-style-type: none"> • A greater percentage of renewable energy on the grid will help make electric vehicles a truly green option. • Many people trust PECO to responsibly provide default service, and if PECO adopted a default supply mix with more renewables, the change would be impactful and positive.
4	106:15–108:21	Josh Maxwell	Chester County Commissioner	<ul style="list-style-type: none"> • Chester County has taken several steps to promote clean energy. • Mr. Maxwell’s constituents want to make solar a priority. • PECO should increase its solar commitments in the DSP.
5	113:24–117:23	Mayor Dianne Herrin	Mayor of West Chester; VP of Practical Energy Solutions	<ul style="list-style-type: none"> • Demand for clean, renewable energy is on the rise. • Climate change is a crisis that has negative economic, social, and environmental impacts. • West Chester Borough has passed a Ready for 100 Resolution. • PECO should create a clear plan to put utility-scale renewables on the grid. • Support for the renewable energy market will promote the local economy and generate jobs.
6	125:18–130:9	Representative Stephen McCarter	General Assembly – 154 th District	<ul style="list-style-type: none"> • PECO should rethink its plan to mirror the changing realities of the energy market and to address climate change. • The climate crisis has tangible impacts in Pennsylvania and beyond.

				<ul style="list-style-type: none"> • Racial injustice is a critical component of addressing the climate crisis. • PECO is a subsidiary of the largest electric parent company by revenue in the United States, and as such, its plans must address the deeply embedded social inequities in our energy system. • PECO should add more renewable energy to its DSP mix.
7	143:5–155:9 (including substantial cross-examination testimony)	Representative Christopher M. Rabb	General Assembly – 200 th District	<ul style="list-style-type: none"> • Renewable energy is what is best for the Commonwealth. • Pennsylvania is one of only two states in the nation with environmental stewardship expressly mandated by the State Constitution. • The social externalities of fossil fuel dependence fall disproportionately on African American communities, and the public health costs of air pollution are severe. • PECO’s support for ambitious bills in the state legislature is not relevant to whether PECO could be taking steps toward clean energy on its own.
8	161:4–162:19	Mark Pinsley	Controller of Lehigh County	<ul style="list-style-type: none"> • Externalities of PECO’s procurement choices affect more than just the residents of its service territory. • Climate change is an urgent crisis.
9	167:11–169:14	Linnea Bond	Member of Earth Quaker Action Team (“EQAT”)	<ul style="list-style-type: none"> • Climate change is an urgent crisis with disastrous consequences. • PECO expects customers to bear the costs of climate change as it fails to address the crisis in its planning. • The costs of climate-related externalities borne by PECO’s customers and the next generation far outweigh any cost savings of reliance on fossil fuel in the near term.
10	179:3–181:18	Rabbi Julie Greenberg	Director of POWER’s Multifaith Work for Racial and Economic Justice on a Livable Planet	<ul style="list-style-type: none"> • PECO has not meaningfully incorporated stakeholder input into its planning processes. • Climate change is an urgent crisis, the burdens of which fall disproportionately on Black, Brown, and low-income communities. • PECO’s unrelated philanthropic activities do not excuse it from addressing the climate crisis directly in its planning processes. • PECO should add more clean energy to its default service supply mix.
11	190:11–191:23	Russell Hicks	Member of POWER	<ul style="list-style-type: none"> • PECO should include more renewable energy in its supply mix, including solar, wind, and hydro.

				<ul style="list-style-type: none"> • Future generations are depending on our generation addressing climate change. • Microgrids can add reliability and resilience to the local energy system. • PECO should work with communities to support economic growth through renewable energy and jobs.
12	195:23–196:10	Nora Elmarzouky	POWER	<ul style="list-style-type: none"> • PECO should strongly consider procuring locally generated energy in its DSP. • PECO should procure at least 20% renewable energy in its DSP.
13	198:22–200:3	Wendy Greenspan	Temple University Employee	<ul style="list-style-type: none"> • PECO outwardly states that its goals include providing clean energy, but largely sources its energy from nuclear, coal, and natural gas. • Natural gas is not a renewable or clean energy source. • Methane is a significant contributor to climate change. • PECO should provide its communities with clean energy, 20% solar by 2025.
14	202:19–204:7	Linda Clark	Physician	<ul style="list-style-type: none"> • Solar and wind prices are low and utilities across the rest of the country are taking advantage of that – PECO is falling behind. • Climate change has effects both on the environment and in the form of rapidly evolving climate-related policy and regulations. • Adopting renewable energy avoids investing in stranded assets when climate-related policies advance. • Renewable energy is prudent because it provides price stability. • PECO should procure 20% local solar.
15	205:9–208:14	Christina Gosnell	Data Analyst for Catalyst Cooperative	<ul style="list-style-type: none"> • PECO’s strategy for default service procurement through FPFR contracts outsources its responsibility for the prudence of its plan. • Solar and other renewable resources depend on long-term contracts to finance their projects and enter the market. • The playing field is not level under PECO’s existing plan, and including long-term contracts would level the field for renewable energy sources to compete, which will bring their prices down even further. • Climate change is an urgent crisis with disastrous consequences.
16	212:11–214:12	Dana Robinson	Lansdowne Borough	<ul style="list-style-type: none"> • Lansdowne Borough has passed a Ready for 100 Resolution.

			Environmental Advisory Councilmember	<ul style="list-style-type: none"> • PECO’s reliance on fossil fuels rather than renewable energy sources is excessive. • PECO should include long-term contracts in its DSP supply mix to allow solar developers to enter the market. • PECO should include more renewable energy in its default service supply mix.
17	216:4–218:20	Bruce Birchard	N/A	<ul style="list-style-type: none"> • PECO should support the growth of the renewable energy market in Pennsylvania to provide local jobs. • Solar job training programs are successful, but trainees often have to leave the state after training in Pennsylvania because the solar market in-state is lacking. • PECO should commit to at least 5% solar in its DSP by 2025, ideally generated in-state.
18	223:13–225:14	Nancy Boxer	Managing Director, Association for Climate Health	<ul style="list-style-type: none"> • PECO’s plan is not prudent because it includes too little renewable energy. • Solar is cost-effective. • Climate change is an urgent crisis and fossil fuel dependence exacerbates it. • Solar and wind power have different risk profiles than fossil fuels and can provide reliability benefits.
19	227:6–228:19	John Magee	Warminster Township Environmental Advisory Councilmember, EQAT member	<ul style="list-style-type: none"> • Climate change is an urgent crisis. • PECO should include more long-term contracts in its supply mix in the DSP. • PECO should include more solar power in its supply mix.
20	233:1–234:23	Steven Greenspan	Research scientist	<ul style="list-style-type: none"> • Climate change and air pollution are urgent issues, the impacts of which are felt disproportionately by Black and Brown communities. • PECO should include more local solar in its DSP supply mix.
21	242:8–246:4	Ron Celentano	Pennsylvania Solar Energy Industries Association	<ul style="list-style-type: none"> • PECO should purchase more SRECs. • Pennsylvania is lagging behind other states in installed solar capacity and capacity per capita, and is behind on solar jobs as well compared to other states. • Long-term contracts can support the solar industry in Pennsylvania.

22	260:21– 262:16	Marc Brier	PECO customer and Exelon shareholder	<ul style="list-style-type: none"> • –PECO should include more solar in its default supply mix. • Black, Brown, and low-income communities are disproportionately affected by pollution caused by fossil fuels. • The most affected stakeholders in energy issues often have less access to the stakeholder processes for input. • Many people have default service for a variety of reasons not necessarily reflective of their pure customer preferences in the market.
23	265:4–267:8	Liz Brunton	Institutional Review Specialist, U.S. Department of Education	<ul style="list-style-type: none"> • Climate change is an urgent crisis. • Many community members’ voices who are most affected by PECO’s decisions are not heard. • Many EGSs on the competitive market are greenwashed, and a lot of people stay on default service because they view it as a safe option. CAP customers cannot opt for renewable energy. Default service customers deserve to have clean energy too. • PECO should include more local solar in its DSP supply mix.
24	269:7–271:4	Gregory Holt	EQAT	<ul style="list-style-type: none"> • Renewable energy sources are abundant and predictable in the long run. • PECO should take advantage of these attributes by soliciting long-term contracts for renewable supply. • Climate change has severe financial costs on Pennsylvania taxpayers and disparate externalities on different communities.
25	273:14– 274:18	Reverend Angela Brown-Vann	Minister, St. Mark A and E Zion Church; community organizer with POWER	<ul style="list-style-type: none"> • Many members of Rev. Brown-Vann’s congregation suffer from respiratory illnesses as a result of air pollution. • PECO’s continued reliance on fossil fuels carries public health impacts and costs. • PECO should include more solar in its DSP supply mix.
26	276:15– 277:18	Carolyn McCoy	N/A	<ul style="list-style-type: none"> • We should apply the lessons learned from the COVID-19 crisis, and the failure of our nation’s slow and patchy response, to the climate crisis, and take the threat seriously before it is too late. • PECO should include more local solar in its DSP supply mix. • If PECO is serious about supporting a clean energy economy, it should take responsibility regardless of legislative action.

27	279:3–280:4	Joan Broadfield	N/A	<ul style="list-style-type: none"> • Ms. Broadfield agrees with earlier testimony from Ms. Clark, Rabbi Greenberg, Ms. Brunton, and Mr. Holt. • PECO should include more solar in its DSP supply mix. • PECO must take its corporate responsibilities to its communities seriously.
28	283:3–283:23	David Richards	N/A	<ul style="list-style-type: none"> • Mr. Richards supports the previous testimony of Ms. McCoy, Ms. Broadfield, Ms. Bond, and the legislators. • PECO’s insistence on discrediting its customers’ earnest attempts to engage in the public input process is disappointing.
29	284:25–285:12	Nancy Sleator	N/A	<ul style="list-style-type: none"> • Climate change is an urgent crisis. • In light of the severity of the climate crisis and the high unemployment rates in the community, the DSP should be rewritten with meaningful clean energy goals. • PECO should include more than 0.5% solar in its DSP supply mix.
30	288:11–290:11	Bill Sabey	Member, Plymouth Township Environmental Board	<ul style="list-style-type: none"> • Plymouth Township is a Ready for 100 Community. • The total population of all the Ready for 100 Communities in PECO’s service territory represents over 50% of the population. • PECO should include more renewable energy in its DSP supply mix. • If PECO incorporated more renewable energy into its DSP solicitations, it would help the renewable energy market develop in Pennsylvania, further lowering costs.
31	291:22–293:25	Lauren Brunsdale	Associate Developer, Community Energy	<ul style="list-style-type: none"> • Community Energy, a utility and community scale solar developer, has had a positive working relationship with PECO. • Community Energy has offered feedback to PECO on its AEC procurement process that PECO incorporated into its AEC procurement proposal. • High volumes of clean energy procurements are necessary to meaningfully reduce Pennsylvania’s carbon footprint. • Community Energy supports an increase in the AEPS to require 5% solar by 2025 and 10% solar by 2030.
32	298:25–302:3	Jonathon Ogle	N/A	<ul style="list-style-type: none"> • A default service program is not a neutral plan, because it represents PECO’s choices for the future of the region, who will profit, and who will bear the burdens.

				<ul style="list-style-type: none"> • Black, Brown, and low-income communities disproportionately bear the burdens of fossil fuel dependence in terms of climate change impacts, pollution, public health burdens, and unemployment. • PECO's role in apportioning that burden is not incidental. • PECO's plan should serve the public health, climate health, social health, and economic health of its communities. • PECO is granted monopoly status as a distributor in return for serving the public, and the public wants and needs cleaner energy sources. • PECO should procure 20% solar by 2025. • PECO's shareholders should bear the costs of the transition to clean energy.
33	304:11–305:21	Joy Bergey	Director of Environmental Justice Center of Chestnut Hill United Church	<ul style="list-style-type: none"> • A legacy of redlining and racist banking and real estate practices put African American communities on the front lines of dirty, fossil fuel-burning power plants, putting these communities at significantly higher risk of respiratory diseases and cancer due to the air pollution. • PECO can address this inequity by transitioning its default service procurement away from fossil fuel generation. • PECO should procure 20% local solar by 2025.
34	307:9-309:13	Kelly Herrenkohl	VP of Communications and Engagement, Natural Lands	<ul style="list-style-type: none"> • Natural Lands has successfully worked with PECO to maintain a network of 43 nature preserves and one public garden. • PECO has made major financial contributions through the PECO Green Region Program to support green initiatives in Southeastern Pennsylvania. • PECO and Exelon fund an outdoor education program for children to learn about environmental responsibility, nature, and science. • Did not feel qualified to assess the role of renewable energy in the DSP supply mix
35	314:8–317:21	Margaret Joan Urban	N/A	<ul style="list-style-type: none"> • PECO should include more solar in its DSP supply mix. • PECO should use long-term contracts to procure renewable energy. • PECO must make renewable energy accessible to low-income customers. • PECO shareholders must bear the cost of the transition. • Climate change is an urgent crisis that is not solvable by individual action.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of this electronically-filed document upon the parties, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

<p>Honorable Eranda Vero Administrative Law Judge Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2nd Floor Harrisburg, PA 17120 evero@pa.gov</p>	<p>W. Craig Williams, Esq. Anthony Gay, Esq. Jack Garfinkle, Esq. Exelon Business Services Company 2301 Market Street, S23-1 Philadelphia, PA 19101-8699 craig.williams@exeloncorp.com anthony.gay@exeloncorp.com jack.garfinkle@exeloncorp.com amy.botak@exeloncorp.com</p>
<p>Kenneth M. Kulak, Esq. Anthony C. DeCusatis, Esq. Catherine G. Vasudevan, Esq. Brooke E. McGlinn, Esq. Morgan, Lewis & Bockius 1701 Market Street Philadelphia, PA 19103 kkulak@morganlewis.com anthony.decusatis@morganlewis.com catherine.vasudevan@morganlewis.com bmcglinn@morganlewis.com</p>	<p>Aron J. Beatty, Esq. David T. Evrard, Esq. Office of Consumer Advocate 555 Walnut Street 5th floor, Forum Place Harrisburg, PA 17101-1923 abeatty@paoca.org devrard@paoca.org</p>
<p>Erin Fure, Esq. Daniel G. Asmus, Esq. Small Business Advocate Office of Small Business Advocate 300 North Second Street, Suite 202 Harrisburg, Pennsylvania 1710 dasmus@pa.gov efure@pa.gov</p>	<p>Richard Kanaskie, Esq. Director and Chief Prosecutor Bureau of Investigation & eEnforcement Pennsylvania Public Utility Commission PO Box 3265 Harrisburg PA 17105-3265 rkanaskie@pa.gov</p>
<p>Charis Mincavage, Esq. Adeolu A Bakare, Esq. Jo-Anne Thompson, Esq. McNees Wallace & Nurick LLC 100 Pine Street P.O. Box 1166 Harrisburg, Pennsylvania 17108</p>	<p>Deanne M. O'Dell, Esq. Karen O. Moury, Esq. Eckert Seamans Cherin & Mellott, LLC 213 Market Street, 8th Fl. Harrisburg, PA 17101 dodell@eckertseamans.com komoury@eckertseamans.com</p>

<p>cmincavage@mwn.com abakare@mwn.com lcharleton@mwn.com jthompson@mcneeslaw.com afriday@mcneeslaw.com</p>	
<p>Robert W. Ballenger, Esq. Josie B.H. Pickens, Esq. Joline Price, Esq. Community Legal Services 1424 Chestnut Street Philadelphia, PA 19102 rballenger@clsphila.org kscott@clsphila.org jpickens@clsphila.org jprice@clsphila.org</p>	<p>John F. Lushis, Jr., Esq. James Laskey, Esq. Norris McLaughlin PA 515 West Hamilton Street, Suite 502 Allentown, PA 18101 jlushis@norris-law.com JHLaskey@nmmlaw.com PUCDocket@nmmlaw.com</p>
<p>Gregory Peterson, Esq. Phillips Lytle, LLP 201 West Third Street, Suite 205 Jamestown, NY 14701 gpeterson@phillipslytle.com</p>	<p>Thomas F. Puchner, Esq. Kevin C. Blake, Esq. Phillips Lytle, LLP 30 South Pearl Street Albany, NY 12207-1537 tpuchner@phillipslytle.com kblake@phillipslytle.com</p>

Dated: August 20, 2020

/s/ Devin McDougall
Devin McDougall
Staff Attorney
Earthjustice
1617 John F. Kennedy Blvd., Suite 1130
Philadelphia, PA 19103
dmcdougall@earthjustice.org