

**PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17105-3265**

Public Meeting held April 30, 2026

Commissioners Present:

Stephen M. DeFrank, Chairman
Kimberly Barrow, Vice Chair, Statement
Kathryn L. Zerfuss, Statement
John F. Coleman, Jr.
Ralph V. Yanora

Interconnection and Tariffs for Large
Load Customers

Docket Number:
M-2025-3054271

FINAL ORDER

BY THE COMMISSION:

The Pennsylvania Public Utility Commission (PUC or Commission) held an *En Banc Hearing In re: Interconnection and Tariffs for Large Load Customers* on April 24, 2025, at Docket No. M-2025-3054271 in response to recent impacts of data center growth within the Commonwealth of Pennsylvania, the PJM Interconnection, LLC (PJM) region, and nationally, with data centers, utilities, and ratepayer advocates discussing the value of new load, economic incentives and jobs, infrastructure, and rates. On November 6, 2025, the Commission issued, for comment, a Tentative Order with a proposed model tariff for Large Load Customers. The Commission appreciates the testimony, exhibits, and comments we received from the public to this above-captioned proceeding

addressing the complex and evolving nature of regulating Large Load Customers in Pennsylvania's energy market.

Overall, there was broad consensus regarding the fundamental principle of cost causation and the need to protect ratepayers from unreasonable cost shifting. There was general agreement that Large Load Customer guidance is needed in the areas of interconnection costs, interconnection studies, minimum contract terms, exit fees, and collateral, among other areas. Upon due consideration of the record evidence in this case, we issue this Final Order and model tariff in the attached Appendix.

BACKGROUND

On April 12, 2025, the Commission issued the *Notice of En Banc Hearing Concerning Interconnection and Tariffs for Large Load Customers* at Docket No. M-2025-3054271, designed to culminate in a proposed model tariff for Large Load Customers. The Commission sought and received testimony and comments on topics such as:

- Appropriate MW size designations for large load tariffs.
- Deposits or financial security from Large Load Customers.
- Appropriate calculations of contributions in aid of construction.
- Minimum contract terms.
- Maximum times for interconnection studies and agreements.
- Monthly demand charge.
- Appropriate fees or expenses for interconnection studies.
- Load ramping schedules for customers that may phase in their usage.
- Exit or early termination fees.
- Distinctions in tariff designs for firm service versus interruptible Large Load Customers.

- Large customers bringing primary or back-up generation to serve their load, and any prudent standby rates.
- Transparent cost structures for interconnection.
- Optionality for infrastructure upgrades to be made directly by prospective interconnecting Large Load Customers at their own expense.
- Best practices learned from other jurisdictions.
- Any other procedures, rules, or tariff designs that can facilitate the efficient and timely interconnection of this unique category of electric customers.

On April 24, 2025, the *en banc* hearing was held with Chief Administrative Law Judge Charles Rainey presiding. All Commissioners were present and received evidence directly.

Parties were notified that additional comments could be filed within thirty days of the *en banc* hearing and that reply comments could be filed within fifteen days of the conclusion of the comment period. Numerous comments and reply comments were filed.

On November 6, 2025, the Commission issued a Tentative Order. On November 22, 2025, the Tentative Order was published in the PA Bulletin and comments could be filed within thirty days.

Comments were filed by Advanced Energy United (AEU), Alliance of Nurses for Healthy Environments (Alliance), Alliance to Stop the Line (ASL), Amazon Data Services, Inc with its affiliate Amazon Web Services (Amazon), American Council for an Energy-Efficient Economy (ACEEE), American Transmission Systems, Incorporated, Better Path Coalition (BPC), Building Performance Architecture, Center for Coalfield Justice (CCJ), Citizens' Electric Company of Lewisburg, PA (Citizens'), Citizens for Pennsylvania's Future (PennFuture), Clean Air Council, Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), Columbia Gas of

Pennsylvania, Inc. (Columbia), Commonwealth Foundation for Public Policy Alternatives (CFPPA), Concerned Residents of Western PA, Constellation Energy Generation, LLC (Constellation), Consumer Advisory Council (CAC), Data Center Coalition (DCC), Dollar Energy Fund (DEF), Duquesne Light Company (Duquesne), Earthjustice, Emerald AI, Energy Association of Pennsylvania (EAP), Energy Efficiency Alliance, Energy Efficiency Empowerment (EEE), Environmental Defense Fund (EDF), Environmental Health Project, Evangelical Environmental Network (EEN), Exus Renewables North America (Exus), FirstEnergy Pennsylvania Electric Company (FirstEnergy), Google LLC (Google), Governor Josh Shapiro Administration (The Shapiro Administration), Industrial Energy Consumers of Pennsylvania (IECPA), Invenergy Wind Development North America LLC, Invenergy Solar Development North America LLC, Invenergy Storage LLC, Invenergy Thermal Development Holdings LLC (Collectively, Invenergy), Keystone Appalachian Transmission Company, Keystone Energy Efficiency Alliance (KEEA), Lehigh University's Institute for Cyber-Physical Infrastructure and Energy (I-CPIE), Mainspring Energy, Inc. (Mainspring), Manufacturer & Business Association (MBA), Marcellus Shale Coalition (MSC), Mid-Atlantic Interstate Transmission, LLC (MAIT), Moms Clean Air Force – PA Chapter (MCAF-PA), Natural Resources Defense Council (NRDC), Office of Consumer Advocate (OCA), Office of Small Business Advocate (OSBA), PECO Energy Company (PECO), Pennsylvania American Water Company (PAWC), Pennsylvania Stands Up, POWER Interfaith, PPL Electric Utilities Corporation (PPL), Protect Penn-Trafford (Protect PT), Schuylkill Community Action (SCA), Sierra Club, State Representative Danielle Friel Otten (Otten), State Senator Carolyn Comitta (Comitta), State Senator Katie J. Muth (Muth), State Senator Lindsey M. Williams (Williams), Tenant Union Representative Network (TURN), Trans-Allegheny Interstate Line Company, Vicinity Energy Inc and its subsidiaries including Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc. (Vicinity), Vistra Corp. (Vistra), Vote Solar, Walmart Inc. (Walmart), Wellsboro Electric Company (Wellsboro), York County Farm Bureau (YCFB) and various comments from the public.

Earthjustice's joint comments refer to comments filed by Earthjustice, Sierra Club, Pennsylvania Stands Up, Vote Solar, Clean Air Council, and POWER Interfaith. MCAF-PA's joint comments refer to comments filed by MCAF-PA, Clean Air Council, Energy Efficiency Alliance, Center for Coalfield Justice, Environmental Health Project, Alliance of Nurses for Healthy Environments, Clearesult, Energy Efficiency Empowerment, and Building Performance Architecture, with Center for Coalfield Justice (CCJ) and Energy Efficiency Empowerment (EEE) filing separate comments. FirstEnergy filed joint comments with its affiliates Mid-Atlantic Interstate Transmission, LLC, Keystone Appalachian Transmission Company, American Transmission Systems, Incorporated, and Trans-Allegheny Interstate Line Company. CAUSE-PA and TURN filed joint comments. Citizens' and Wellsboro filed joint comments. Amazon Data Services and its affiliate Amazon Web Services filed comments together. Vicinity Energy Inc and its subsidiaries including Grays Ferry Cogeneration Partnership and Vicinity Energy Philadelphia, Inc filed comments together. Invenergy Wind Development North America LLC, Invenergy Solar Development North America LLC, Invenergy Storage LLC, and Invenergy Thermal Development Holdings LLC filed comments together. Columbia expressed support for comments made by EAP.

DISCUSSION

Upon review of the record, including comments filed and through this Final Order, we announce the Commission's guidelines for a model large load tariff.

Appropriate MW Size Designation for Large Load Tariffs in Pennsylvania

In the Tentative Order, we proposed that a Large Load Customer should be defined as 50 MW individually or 100 MW in the aggregate. Individual megawatt large load refers to a single commercial or industrial load facility or aggregation of load facilities at a single site that poses a reliability risk to the grid due to its size and

operational characteristics. In contrast, aggregate megawatt large load refers to a group of individual large loads that together exceed the threshold for high impact large loads, which can lead to more significant reliability challenges.

With regards to grid impact reduction through the use of associated generation, we found that Large Load Customers that may not be using their full interconnection limit by having onsite generation may be entitled to lower stand-by charges or a lower minimum demand charge. However, for purposes of the large load definition in this tariff, behind the meter generation will not be considered as an offset to calculate total customer load.

Based on stakeholder comments, there is no consensus on a specific MW size designation for large load tariffs in Pennsylvania. Multiple parties have expressed support for the Tentative Order's proposal, while others recommend lowering or raising the proposed thresholds or utilizing utility discretion.

Environmental stakeholders and Large Load Customers generally support the Tentative Order's proposal of the MW threshold with disagreement over its implementation. Both parties state that the proposal appears to be reasonably calculated to appropriately capture Large Load Customers with a significant impact on the grid and its customers in a nondiscriminatory manner. Protect PT, Walmart, KEEA, PECO (only for the 50 MW individual threshold), and Duquesne also generally supports the Tentative Order's MW threshold proposal. Amazon Comments at 3. Google Comments at 2. Protect PT Comments at 3. Walmart Comments at 11. KEEA Comments at 2-3. PECO Comments at 3-4. Duquesne Comments at 7.

Many environmental stakeholders recommend that the thresholds should not be raised. NRDC argues that a threshold set higher than 50 MW would fail to capture all large customers whose consumption poses challenges to Pennsylvania's grid. Earthjustice's joint comments argue that increasing the threshold would likely miss many

large load facilities, like data centers, planned and already under construction in Pennsylvania. PennFuture Comments at 3. EDF Comments at 3. NRDC Comments at 2-3. Earthjustice Joint Comments at 10.

NRDC urges the Commission to reflect on the proposed threshold as projects continue to apply for and receive service and to be open to defining a lower threshold in the future. NRDC states that there is precedent for lower large load thresholds, such as are set by NYISO, AEP Ohio's data center tariff, Dominion's GS-5 Rate schedule, and the US Department of Energy. NRDC Comments at 2-3.

DCC recommends that the Commission treat the 50 MW and 100 MW values as baseline guidance in the model tariff, while allowing each electric distribution company (EDC) to propose higher thresholds, where justified by its system characteristics and planning needs. DCC argues that the Commission's proposed thresholds are directionally reasonable as a statewide starting point and that system size, load shape, and local network conditions can vary materially across utilities. DCC Comments at 3.

Some state officials, EEE, PECO (for aggregate threshold), and OCA support lowering certain of the proposed thresholds. State Senator Lindsey M. Williams, OCA, and EEE propose the threshold for a Large Load Customer to be 25 MW or greater for EDCs whose peak is equal to or exceeds 2,500 MW and a 1 MW threshold for all other EDCs. OCA states that a lower size threshold at or greater than 25 MW is further supported by the Department of Energy (DOE) and the North American Electric Reliability Corporation (NERC). OCA also states that by lowering its threshold, the Commission would be better aligned with proposed FERC policy and avoid the timely, potentially contentious issue of reviewing individual utility decisions that propose or do not propose differential rate treatment. Williams Comments at 1-2. EEE Comments at 1. OCA Comments at 16-19. PECO Comments at 3-4.

State Senator Katie J. Muth recommends defining Large Load Customers at 20 MW for larger EDCs ($\geq 2,500$ MW peak load) and 1 MW for smaller ones ($< 2,500$ MW peak load), consistent with the Pennsylvania Ratepayer Protection Act (Senate Bill 1114). Senator Muth argues that many load additions, including emerging data center requests, can impose significant strain on infrastructure even when they are below 50 MW, depending on the configuration and location. Senator Muth also states that nothing in the Public Utility Code requires the Commission to begin at such a high threshold or prevents the Commission from classifying customers in a more granular way based on system impact. Muth Comments at 1-2 and 5.

Regarding the aggregate threshold of 100 MW, OCA and EEE support a 25 MW threshold instead of 100 MW for the same reasons stated above regarding the threshold for a single data center. OCA argues that Large Load Customers like data centers should not be allowed to circumvent both the lower single-facility size threshold and the higher aggregate threshold by splitting a Large Load Customer into two or more aggregated facilities. OCA Comments at 19-20. EEE Comments at 1.

PECO recommends that the 50 MW threshold be applicable to both individual and aggregate large loads. PECO argues that utilizing a universal 50 MW threshold will (1) prevent interconnection applicants from structuring projects that circumvent approved large load tariff provisions; and (2) allow EDCs to apply large load tariff provisions to premises hosting multiple smaller loads and to premises on contiguous parcels developing large load projects that will collectively exceed any established large load MW threshold. PECO Comments at 3-4.

IECPA, PPL, FirstEnergy, and EAP support either raising the proposed thresholds or leaving the MW threshold to utility discretion. EAP argues that the threshold will capture other/existing customers that the Commission may not intend to include as part of this proceeding. IECPA Comments at 5 and 7. EAP Comments at 7.

PPL recommends that if the Commission keeps a MW threshold, it should either provide exceptions for certain large loads that meet the MW threshold or define Large Load Customers as having a threshold of 200 MW. PPL argues that using example tariffs from vertically integrated states like Indiana and West Virginia can be informative, but the analysis of stranded asset risk is fundamentally different in jurisdictions where the utility is also responsible for building the generation for the new Large Load Customers. PPL also states that a lower threshold is likely to also apply to other non-data center customers, which is not the intention of this proceeding, and would risk a chilling effect on economic development because it may capture customers who do not have socialized costs and set a security requirement that exceeds the amount of risk to the EDC's other customers. PPL Comments at 6-7.

FirstEnergy recommends that the Commission should raise the MW threshold to be no less than 200 MW individually or in the aggregate. FirstEnergy submits that the better approach is to adopt a threshold that is firmly based on not just the current state of the information computing industry, but where that industry is clearly headed over the next several years. FirstEnergy argues that this recommendation would be consistent with the trend towards larger-scale data centers and to avoid impacts on traditional industrial and manufacturing customers. FirstEnergy is also concerned that a 50 MW threshold applied to all Large Load Customers will capture a significant number of industrial and commercial organizations. FirstEnergy Comments at 3-6.

EAP also suggests that the guidelines and model tariff should clearly articulate that the thresholds apply to distribution-level interconnections under PUC jurisdiction, with recognition that transmission-level interconnections may trigger additional FERC-jurisdictional requirements regardless of whether the 50/100 MW thresholds are met. EAP Comments at 7.

Regarding utility discretion to apply the model tariff for Large Load Customers of less than 50 MW, PECO, Duquesne, and EAP support this provision. EAP argues that this is a particularly salient issue for smaller utilities where 50 MW would be too high a threshold to trigger these impacts and considerations. Duquesne argues that this provision will ensure the grid can accommodate the net realizable load and avoid potentially significant impacts to the entire system. PECO recommends that the Commission revise the “Availability” section of the model tariff to clearly indicate that EDCs, in their sole discretion, may apply large load tariff provisions to smaller loads on a case-by-case basis. EAP Comments at 7. Duquesne Comments at 8. PECO Comments at 3-4.

FirstEnergy urges the Commission not to foreclose the ability of utilities to negotiate individual arrangements with customers of varying sizes and configurations that are under any MW thresholds it adopts. FirstEnergy agrees with the Commission’s recognition that there may be future customers below the 50 MW threshold (including smaller data center customers) that have substantial grid impacts justifying differential tariff and rate treatment than existing similarly situated customers. FirstEnergy Comments at 6.

OCA also states that if the Commission intends to rely on utility discretion to determine whether a Large Load Customer of less than 50 MW should be subject to the provisions of the model tariff, it suggests that the Commission should at least establish clear criteria to guide the reasonable use of discretion by specifying the demand, operational characteristics, and other considerations that the utility should assess to determine whether the Large Load Customer would pose a substantial grid impact on the distribution system with respect to safety and/or reliability. OCA argues that without such criteria to apply for the purposes of classifying the Large Load Customer, the exercise of utilities’ discretion across the Commonwealth will vary, creating a patchwork of sub-50 MW large load enforcement that will become difficult to review and regulate and

could improperly incent utilities to adopt more favorable terms even if the risk of reliability concerns is clear. OCA Comments at 16-19.

Stakeholders also provided comments regarding the exclusion of behind the meter generation from the threshold calculation. State Senator Lindsey M. Williams, Protect PT, EDF, FirstEnergy, Duquesne, and DCC support the model tariff's proposal that behind the meter generation will not be considered an offset for the purpose of calculating the total customer load. FirstEnergy argues that load and generation should be studied separately in the event the system needs to accommodate the full amount of the on-site load and that failure to fully study load and generation could lead to adverse cost consequences to other retail customers. DCC also states that by excluding behind the meter generation, the applicability determination stays clear and administrable at the front end of the process. Williams Comments at 1-2. Protect PT Comments at 3. EDF Comments at 3. FirstEnergy Comments at 7. Duquesne Comments at 8. DCC Comments at 2-4.

Disposition

We proposed a threshold for a Large Load Customer of 50 MW individually and 100 MW in aggregate. Comments regarding the 50 MW and 100 MW threshold varied. Environmental stakeholders and Large Load Customers, as well as Walmart, KEEA, and Duquesne, generally support the Tentative Order's proposal of the MW threshold. Some state officials, EEE, and OCA support lowering the proposed thresholds, while IECPA, PPL, FirstEnergy, and EAP support either raising the proposed thresholds or leaving the MW threshold to utility discretion. We will maintain the proposed 50 MW and 100 MW levels as we find these levels to be reasonably calculated to appropriately capture Large Load Customers with a significant impact on the grid in a nondiscriminatory manner. We concur with NRDC and Earthjustice's joint comments asserting that a threshold higher than 50 MW may fail to capture customers whose consumption poses challenges to

Pennsylvania's grid. Comments in support of a lower threshold generally provide reasoning related to smaller EDC peak loads or potential federal, DOE and NERC levels. We recognize there may be variations based on EDC configuration, but we are setting guidance in this model tariff for the EDCs that serve the bulk of the jurisdictional electric customers in Pennsylvania. Further, federal or industry levels are still in the formation stage and do not provide us with definitive guidance at this time.

In addition, we proposed that utilities retain authority over applying the model tariff to customers below 50 MW. There appears to be stakeholder agreement over the Tentative Order's proposal for utilities applying the model tariff to customers below 50 MW. Therefore, we will maintain this guidance in the model tariff. We concur with EAP that this will allow smaller utilities, as well as other large utilities, a method to ensure the grid can accommodate the net realizable load and avoid potentially significant impacts on the entire grid.

Finally, we proposed the exclusion of behind the meter generation from the threshold calculation. As there were no adverse comments, we find that the exclusion of behind the meter generation in the threshold calculation to be reasonable.

General Definitions

Multiple parties suggest revisions and seek clarification regarding the Tentative Order's definition of a Large Load Customer. EAP requests the Commission clarify whether these provisions apply to new and existing Large Load Customers. The model tariff language indicates that "[c]ontact requests from existing Large Load Customers shall continue to be addressed by the Company consistent with the Company's existing requirements." However, this could be interpreted several ways, such as whether or not a customer will be considered a new or existing Large Load Customer if an existing Large Load Customer requests additional (new) service at a new location (not closely located to

their existing location) within the same EDC service territory or if a customer is currently taking service for a warehouse but wants to build a large data center in the same EDC service territory. EAP Comments at 7-8.

PECO, Duquesne, and DCC recommend that the Final Order should apply to new large load interconnections (new customers and incremental load of existing customers) after its effective date. Duquesne argues that grandfathering existing customers under current tariff rules and contract provisions is consistent with large load tariffs adopted in other jurisdictions. DCC argues that moving the goalposts after a customer has signed an Energy Service Agreement (ESA), funded interconnection work, and begun operation cuts against regulatory stability, will make future customers think twice about treating Pennsylvania commitments as durable. PECO also suggests that EDCs should have the ability to exempt an existing customer at the EDC's discretion. PECO Comments at 4-5. Duquesne Comments at 6-7. DCC Comments at 13.

IECPA recommends that the model tariff be applied to only incremental or new load growth reaching the Load Threshold within a defined period of time (e.g., 50+ MW of additional load within any 3-year period). IECPA states that subjecting manufacturers (who are trade-exposed, labor intensive, and price sensitive) and other institutional customers to requirements that are designed for the rapid, high-impact growth that is driving up prices will have significant practical and financial consequences—including damaging Pennsylvania's vibrant industrial sector. IECPA also argues that the power sector must address the implications of speed-to-market as a cost driver and planning constraint, and that industrial customers should retain the ability to build, expand, reshore, and operate without being hindered by rules designed for the substantial load growth seen today. IECPA Comments at 5 and 7.

DCC argues that the model tariff can make clear that existing customers may opt into a new large load structure—either for all of their load or for a defined increment—if

they and the utility agree and the Commission finds the arrangement reasonable, giving everyone flexibility without forcing a one-size outcome on parties that already bargained for different terms. DCC suggests that truly incremental capacity, above a defined threshold and driving new investment, can be evaluated under the model framework, while the original block of load remains under its existing terms unless the parties agree otherwise. DCC Comments at 13-14.

MSC urges the Commission to reconcile the references of “closely located” and “single site” and to clarify the definition of “Large Load Customer”. The term “Large Load Customer” references the phrase “multiple closely located customers”. The word “closely” is not defined but presumably references some distance of proximity of customers. Conversely, under the section entitled “Availability” the model tariff states that “large load refers to a single commercial or industrial load facility or aggregation of load facilities at a single site that poses a reliability risk to the grid due to its size and operational characteristics.” The reference to large load under “Availability” implies that the demand is situated at a “single site”, which may conflict with the definition of “Large Load Customer” and the use of “multiple closely located customers.” Additionally, some of the details included under “Availability”, such as references that customers are commercial or industrial in nature, may be more appropriately included within the definition of “Large Load Customer”. Otherwise, it appears that some of the criteria for “Large Load Customers” may be found in the term’s definition, and other criteria elsewhere in the model tariff. MSC Comments at 2.

Walmart recommends that the term "aggregate" should specifically refer to clustered sites in a common area and not apply to a single customer's load across an entire utility territory. Walmart Comments at 11.

Duquesne recommends establishing a minimum size for individual facilities that are part of an aggregation to ensure it is truly capturing Large Load Customers. Duquesne

proposes a 10 MW threshold for individual interconnections that become part of an aggregated large load interconnection. Duquesne argues that this recommendation would prevent capturing existing customers who are not truly “Large Load Customers,” or allowing customers to potentially aggregate load in order to meet the large load definition to avoid certain distribution costs. Duquesne Comments at 7-8.

FirstEnergy supports the ability of utilities to use reasonable discretion in applying an aggregate threshold based on various different factors, including common ownership and the local electrical infrastructure, and imposing appropriate application and disclosure requirements for customers. FirstEnergy Comments at 6.

DCC suggests that the final model tariff should make it clear that aggregation will not be applied so broadly that it sweeps together unrelated customers or distinct projects that happen to be located in the same general area. DCC states that clear, end-use-neutral criteria for when aggregation applies will help utilities and customers understand in advance if particular projects are likely to qualify as large loads under the model tariff framework. DCC Comments at 3.

Google recommends that the aggregation definition be refined to ensure it is based on electrical relevance rather than corporate structure. Specifically, Google suggests that aggregation should apply only to facilities located on contiguous property or served by the same primary substation. Google argues that aggregating facilities based solely on common ownership detaches the tariff from the physical reality of the grid and risks creating arbitrary classifications that do not reflect actual infrastructure requirements. Google Comments at 2.

OCA and EAP seek clarification regarding the terms “Contract Term,” “Initial Contract Term,” and “Load Ramp Period.” OCA notes that the contract period starts after the ramp-up period concludes, which in effect adds several years to the Large Load

Customer's commitment. However, OCA suggests that the ramp-up period should not be counted in the minimum period for contracting because during the Load Ramp Period the EDC is not fully recovering the distribution costs of network improvements that are identified and built to meet the Large Load Customer's full demand and are not otherwise recovered in Contributions in Aid of Construction (CIAC). EAP also proposes that the minimum contract term should begin when the customer reaches committed full load, not at initial energization. EAP argues that without this adjustment, a "five-year contract" with a three-year ramp provides only two years of full-load cost recovery. OCA Comments at 29. EAP Comments at 12-14.

Constellation and PECO note that there is apparent inconsistency between the notice period described in the "Terms of Contract" section of the model tariff and the notice period in the "Exit Fee" section of the model tariff. Specifically, the language in the "Terms of Contract" section of the model tariff requires three years' notice to terminate the contract or modify the contract capacity. In contrast, the "Exit Fee" section of the model tariff requires 42 months' notice to terminate the contract or reduce the contract capacity. Constellation states that a 42-month notice period is consistent with the Commission's explanation in the Tentative Order that "[b]y requiring notice of a load reduction three-and-a-half years in advance allows PJM to account for this load reduction in determining its resource adequacy requirements to be acquired in the Base Residual Auction (BRA) [*sic*]." Constellation suggests that the Commission either modifies these provisions to refer to a consistent notice period or clarifies in its final order why these periods differ. PECO states these notice periods, if retained, should be uniform in the model tariff. Constellation Comments at 4. PECO Comments at 16.

Disposition

We proposed that this tariff be applicable to Large Load Customers based on individual and aggregate MW thresholds with existing Large Load Customer contracts

continuing to be addressed using the EDC's existing tariff requirements. Multiple stakeholders have suggested revisions and/or sought clarification regarding the Tentative Order's definition of a Large Load Customer. We are persuaded by the viewpoints of stakeholders that additional language of the tariff's applicability is necessary. We agree with comments filed by PECO, Duquesne, EAP, and DCC, clarifying that the Final Order will be applied to new large load interconnections (new customers and new incremental load of existing customers) after its effective date. We assert that "grandfathering" existing Large Load Customers under the EDC's current tariff requirements is consistent with large load tariffs adopted in other jurisdictions. However, we also note that existing Large Load Customers should have the option to enter into this tariff's provisions under EDC discretion on a case-by-case basis.

Numerous stakeholders have also suggested revisions and/or sought clarification regarding various terms and definitions within the model tariff in the Appendix. We are persuaded by the viewpoints of stakeholders that additional language within the Appendix is necessary.

We proposed an aggregate definition based on factors including, but not limited to, premises sharing one or more of the following: common owner(s), a common parent company, common local electrical infrastructure, and common control. Comments from state officials, Earthjustice's joint comments, FirstEnergy, and DCC have generally expressed support for the Commission's aggregation definition proposal. However, PennFuture, OCA, Walmart, Duquesne, FirstEnergy, DDC, and Google have suggested modifications to the aggregation definition. We find the comments constructive; however, we maintain that the model tariff should provide broad guidance. The items suggested are specific in nature and better suited to be vetted in an actual EDC tariff filing or rate proceeding.

In the Tentative Order, we proposed that the contract term includes the load ramp period and the initial contract term, in which the initial contract term begins after the completion of the load ramp period. We agree with OCA and EAP that clarification is warranted regarding the terms “Contract Term,” “Initial Contract Term,” and “Load Ramp Period.” We will modify our proposal to clarify that the minimum initial contract length, which was proposed to be 5 years in the Tentative Order, should begin after the ramp-up period concludes. This revision allows EDCs to conduct a revenue review of at least five years during which the large load is at its Contract Capacity. We note that we expect a sufficient amount of collateral, CIAC, and/or exit fee to cover the costs resulting from the addition and/or exit of the Large Load Customer, protecting customers from cost-shifting.

In addition, we proposed a contract notice period of no later than three years and an exit fee notice period of at least 42 months in the Tentative Order. We acknowledge comments filed by Constellation and PECO and will clarify that the notice period described in the “Terms of Contract” section of the model tariff refers to the terms and conditions of the tariff after the initial contract length of five years, in which the Large Load Customer will still be connected to the grid after leaving or modifying its contract, such as adjusting its Contract Capacity. The notice period in the “Exit Fee” section of the model tariff refers to the scenario when the Large Load Customer disconnects or leaves the grid. While we acknowledge the differences between the two notice periods, we propose that both notice periods should be set at 48 months. We find it prudent to align both notice periods with the PJM load forecast for the delivery year. We also concur that this provides an adequate amount of time necessary to inform any relevant parties and conduct any required engineering studies.

Deposits, Financial Security or Collateral from Large Load Customers

In the Tentative Order, we found there was widespread agreement on the necessity of collateral and cash deposit requirements for Large Load Customers. We proposed that financial security should be graduated based upon the proposed size of load and partially refunded as load ramps up until fully refunded when load has reached its maximum. We determined that a financial security should be sufficient to cover the cost of any Large Load Customers share of network upgrades for which the Large Load Customer is the majority beneficiary and that will be partially allocated to other customers of the EDC and that any financial security or collateral provided should be reduced or refunded over time as load ramp milestones are met and facility costs are paid.

Constellation, EAP, DCC, and Google support the proposal for graduated financial security. EAP states that this approach aligns with current EDC practices and appropriately balances customer financial burden with ratepayer protection. Google also states that this approach protects utilities and existing ratepayers while recognizing a project's maturing credit worthiness. DCC argues that heavy collateral early in the process, before the utility is spending material capital, can lock out projects that are finishing site control, land-use approvals, or PJM studies. No stakeholders have expressed opposition regarding this topic. Constellation Comments at 3. EAP Comments at 8. DCC Comments at 9. Google Comments at 1.

CFPPA, Earthjustice's joint comments, OCA, Constellation, Duquesne, and DCC generally support the Tentative Order's proposal regarding guidelines for collateral requirements with some parties proposing various changes. CFPPA and Constellation argue that collateral requirements on Large Load Customers will mitigate risk of shifting costs to existing ratepayers by deterring speculative projects and insulating ratepayers against project failures. CFPPA Comments at 1. Earthjustice Joint Comments at 11. OCA

Comments at 20-21. Constellation Comments at 3. Duquesne Comments at 8. DCC Comments at 10.

ASL, CAUSE-PA, and TURN oppose the Tentative Order's reliance on credit rating. CAUSE-PA and TURN argue that initial credit ratings do not provide safeguard against longer-term risks. ASL argues that these guidelines should be applied equally to any Large Load Customer. ASL Comments at 2. CAUSE-PA and TURN Comments at 40-41.

NRDC states that a guarantee from a parent company does not always ensure cost recovery in the case of financial instability or bankruptcy of a guarantor. NRDC argues that the longevity of a data center customer's energy demand is often contingent on the financial stability of its parent company. NRDC Comments at 3.

Constellation warns that the financial security requirements should not be burdensome and that they discourage Large Load Customers from seeking to locate mature projects. Constellation Comments at 3.

PECO and EAP recommend that discretion regarding collateral requirements should remain between the EDCs and the customer for individual case-by-case determinations. PECO states that if discretion is not permitted, EDCs may lack the mechanisms to secure the additional collateral necessary to protect other customers from the risk of absorbing stranded costs. PECO Comments at 13-14. EAP Comments at 8-9.

FirstEnergy recommends that any collateral requirement should correspond to costs within the Commission's jurisdiction, namely "Interconnection Facilities costs" rather than "Network Improvements Costs" (which FirstEnergy does not believe are within the Commission's jurisdiction). FirstEnergy Comments at 25.

DCC recommends that the Commission affirm that guarantees, letters of credit, surety bonds, and cash-equivalent instruments are all acceptable. DCC argues that a model tariff that insists on cash-only collateral will tend to drive up financing costs for projects without improving protection for existing ratepayers. DCC Comments at 10.

I-CPIE states that the use of collateral requirements covering “Network Improvements Costs and Interconnection Facilities costs” is a mechanism that may allow for the filtering of speculative projects. However, many Large Load Customers may not be budget-constrained due to the amount of funding interest in this area. I-CPIE Comments at 4.

Many environmental stakeholders and I-CPIE oppose the Tentative Order’s proposal of identifying the “majority beneficiary.” Of the comments addressing this topic, Constellation expresses support. Constellation states that the risk-based flexibility reflected in the draft guidelines is an important component of the collateral requirements, allowing a lower collateral percentage for less risky Large Load Customers with investment-grade credit ratings. Constellation Comments at 3.

EDF and NRDC recommend that Large Load Customers must secure revenues sufficient to cover the costs of all facilities that serve them, establishing an irrebuttable presumption that Large Load Customers are the primary beneficiaries of such facilities. The costs of all such facilities and any other socialized cost attributed to the Large Load Customer would be included in Large Load Customers’ secured revenue guarantee. EDF argues that the Tentative Order’s proposal would (1) require an unreasonable degree of utility discretion, (2) incentivize Large Load Customers to influence the utility’s assessment, such as by manipulating their project plans or by applying political or legal pressures, and (3) would likely produce unpredictable, non-uniform, and unjust outcomes. EDF states that their recommendation (1) is transparent and straightforward, reducing administrative burden and aid enforceability, (2) will help deter speculative or

duplicate large load interconnection requests, (3) creates additional incentives for Large Load Customers to site, design, and operate their facilities efficiently to minimize grid costs, and (4) holds other customers harmless for most of the incremental utility expenditures that would not have occurred but for the Large Load Customer's interconnection. EDF Comments at 4-7. NRDC Comments at 3.

CAUSE-PA and TURN recommend that financial security requirements should be based on the full cost of necessary upgrades. They argue that costs associated with large load interconnection should only be socialized to other customers to the extent there is substantial and quantifiable evidence that the upgrades were otherwise necessary to serve other customers and would have been pursued in the absence of the large load interconnection or required for unrelated regional reliability purposes. CAUSE-PA and TURN Comments at 40.

EDF also recommends that if the Commission chooses to rely on a benefit-quantification methodology, the Commission should establish a rebuttable presumption that Large Load Customers are the sole beneficiaries of network upgrades they trigger. EDF also suggests the Commission issue guidance that sets a high bar to rebut this presumption, where the utility must show that the project's benefits to non-large-load customers are cheaper, on a unit cost basis, than the benefits an alternative project would have delivered to those customers absent the Large Load Customer. EDF Comments at 4-7.

I-CPIE proposes that the customer that triggers the need for investment pays its full marginal cost or bases the CIAC on the percentage of use estimated to be needed rather than a majority beneficiary criterion for financial security. I-CPIE argues that if the Large Load Customer receives just below the majority (e.g., 49% of the benefits), the investment is placed into the rate base and the other customers, not the cost-incurring Large Load Customer, pay for the investment. I-CPIE Comments at 2-3.

PennFuture and EAP state that the term “major beneficiary” in the guidelines requires further definition. PennFuture shares concerns that without a clear and transparent process for determining how “majority beneficiary” is defined, the proposal invites utilities and Large Load Customers to avoid full responsibility. EAP suggests that the Commission’s guidelines and model tariff should explicitly indicate that the benefit analysis being done is distribution-level only; that is, the EDC determines whether upgrades primarily benefit the interconnecting customer or provide broader system benefits using established engineering and planning criteria subject to regular oversight by the Commission. EAP also questions who determines “majority beneficiary” when transmission and distribution are separate entities under different regulatory jurisdictions. PennFuture Comments at 4. EAP Comments at 8.

Regarding financial security reductions and exemptions in the Tentative Order, stakeholders largely support or propose additional requirements or clarification. Of the comments addressing this topic, PECO and EAP express opposition. PECO argues that waiving a portion of the deposit requirement introduces two risks that may lead to costs for the EDC that are shifted to other customers: (1) exemptions ignore the possibility that customer creditworthiness can change over time, and (2) in the event that a Large Load Customer prematurely discontinues operations prior to the end of its minimum contract term, the collateral exemption introduces the risk of EDCs having to undertake legal action to collect outstanding obligations from such customers that would have otherwise been covered by the portion of collateral covered by the exemption. EAP argues that mandating collateral exemptions removes EDC discretion in fundamental risk management decisions. PECO Comments at 14. EAP Comments at 8-9.

OCA, Constellation, and Amazon express support for the Tentative Order’s proposal to refund financial security. Amazon agrees that this approach will minimize risk on customers and mitigate potential overcollection from EDCs. OCA Comments at 40. Constellation Comments at 3. Amazon Comments at 3.

FirstEnergy suggests that the security should be reduced by 20 percent of the total security amount per year at the end of each of the last five years of a ten-year minimum contract term, arguing that it is more protective of customers than the Tentative Order's proposal. FirstEnergy Comments at 8.

CAUSE-PA and TURN recommend that the Commission tie the release of financial securities to timely payment and ongoing credit indicators – not construction timelines and load growth. CAUSE-PA and TURN Comments at 40-41.

DCC suggests that the amount of collateral should decrease as a project performs. DCC argues that once a customer has taken service, ramped load, and paid its bills on time for several years, the risk that drove the original collateral requirement is no longer the same. DCC also argues that a structure that is clear at the outset with defined triggers for reduction gives utilities and customers a shared road map and avoids perpetual “maximum” collateral for projects that are already proving themselves. DCC Comments at 9.

Duquesne seeks clarification that the proposal to reduce and refund collateral “as construction and load ramp milestones are achieved” refers to the point at which projects are operational and returning revenue to the EDC, thus minimizing any risk to other customers. Duquesne argues that construction milestones alone do not necessarily reduce risk. Duquesne Comments at 8.

Various stakeholders share additional proposals addressing deposits, financial security, and collateral from Large Load Customers for the Commission to consider:

OCA, CAUSE-PA, and TURN recommend that the cost of non-payments by the Large Load Customers for distribution facilities should not be charged to ratepayers, whether in rates or any other fees or payments. OCA argues that by making the EDCs

financially liable for non-payments for distribution facilities instead of ratepayers, EDCs have the financial interest to implement sound financial guarantees and diligently monitor the financial status of Large Load Customers. OCA Comments at 21. CAUSE-PA and TURN Comments at 41.

To provide a fair playing field and adequately protect against stranded costs, NRDC urges the Commission to provide guidance on what constitutes a sufficient deposit or fee to cover the costs incurred before energization, including costs of engineering and interconnection studies. NRDC states that the Tentative Order does not provide guidance on how or when these should be collected (or whether they should be refunded). NRDC also states that requiring non-refundable deposits would have a tangible impact on the accuracy of utility-reported load forecasts, as well as on expediting interconnection for customers committed to developing in the Commonwealth. NRDC Comments at 8.

Earthjustice's joint comments, Protect PT, and KEEA recommend that the Commission should ensure that any required deposit by the Large Load Customer be large enough that it covers up-front costs, such as the costs of interconnection studies, infrastructure upgrades that primarily benefit the Large Load Customer, or utility-side administrative costs associated with bringing the Large Load Customer online. KEEA argues that it is essential that none of the costs associated with the interconnection process be passed along to ratepayers. Earthjustice's joint comments also suggest that the Commission should consider augmenting the draft model tariff to require EDCs to adopt a tariff structure where a deposit is required for the costs of these sorts of interconnection studies. Earthjustice Joint Comments at 11-12. Protect PT Comments at 3. KEEA Comments at 3.

KEEA, Constellation, and DCC recommend that the Commission should ensure that the financial commitment required is commensurate to the risk of the project. KEEA argues that Large Load Customers that are less creditworthy or have unique

characteristics that may pose greater dangers to the overall grid should be required to invest more capital than safer projects. DCC argues that when a Large Load Customer drives specific upgrades that would not be built but for that project, it is reasonable to set collateral at a defined share of the at-risk investment or a capped portion of the minimum billing demand over the minimum term rather than collateral that simply mirrors 100 percent of all future minimum charges. KEEA Comments at 3. Constellation Comments at 3.

DCC recommends that the model tariff should direct utilities to explain how their proposed collateral levels fit with the rest of the package and to show that the combined effect is proportional to the real risk to the system. DCC argues that this kind of integrated, risk-based approach will give the Commission a solid basis to protect existing customers, while still leaving room for serious large-load projects to commit, build, and serve as long-term contributors to the grid. DCC Comments at 10-11.

Earthjustice's joint comments suggest that the Commission include a term in the Final Order that acknowledges the potential that a Large Load Customer's financial condition can change. Earthjustice's joint comments recommends that the Commission should incorporate the following language: "If the financial condition of the customer or guarantor changes (including ownership and structural changes) – or market conditions change – over the term of the contract, the Company may request updated information to reevaluate the customer and its collateral requirements, which may be adjusted accordingly." Earthjustice Joint Comments at 11.

PECO observes that neither the Tentative Order nor the model tariff address the possibility that security may be required at different times, and potentially in different forms, to support different phases of Large Load Customer analysis and construction. PECO recommends that the model tariff should not include any provisions restricting EDC flexibility in these areas. PECO Comments at 14.

KEEA urges the Commission to consider establishing a fund, to be paid into by the Large Load Customers, that would recover any stranded costs caused by a project that does not come to fruition. KEEA also recommends that the Commission ensure that non-discriminatory access to the grid be assured and that any deposit structure should reflect that overarching goal. KEEA Comments at 3.

Constellation proposes that the Commission should provide additional incentives for projects that impose minimal or no network transmission upgrades beyond reduced collateral. Constellation argues that such incentives, which can include expedited interconnection processes and flexible ramp schedules, would further encourage new large load to locate in the most efficient areas on the grid – where upgrade needs are minimal. Constellation Comments at 3.

PECO seeks to resolve the conflict between the collateral provision’s “ultimate parent or a corporate affiliate” and the Large Load Customer provision’s “financial sponsor.” PECO states that a financial sponsor could be a non-affiliated third party that is willing and able to provide a guarantee similar to that of a parent or corporate affiliate. PECO Comments at 13.

DCC suggests that the model tariff should recognize the difference between a well-capitalized parent with strong credit metrics and a thinly capitalized special-purpose entity with no track record by allowing reduced or zero incremental collateral when a customer meets objective tests, such as a minimum credit rating, a minimum tangible net worth threshold, or a demonstrated ability to self-fund obligations of the size at issue. DCC also suggests that for other customers, enhanced collateral can still be reasonable, but it should be calibrated to that higher risk, not to an abstract worst case. DCC Comments at 10.

Disposition

We proposed that financial security should be sufficient to cover the cost of any Large Load Customer's share of network upgrades for which the Large Load Customer is the majority beneficiary and that will be partially allocated to other customers of the EDC. The proposal for the financial security was not opposed. Therefore, we find the proposed collateral requirement reasonable and maintain the requirement in the model tariff we are adopting.

Many environmental stakeholders and I-CPIE oppose the Tentative Order's proposal of identifying the "majority beneficiary." Only Constellation expresses support for the proposal, advocating for the use of risk-based flexibility. Some stakeholders propose a presumption that the Large Load Customer is the majority beneficiary, stating that determining the majority beneficiary requires an unreasonable degree of utility discretion. I-CPIE proposes that financial security should be based on the percentage of use estimated to be needed rather than a majority beneficiary criterion, arguing that the provision will not align with cost causation principles and will lead to cost shifting if the Large Load Customer receives just below the majority. We agree with the comments that characterize the "major beneficiary" proposal as uncertain, difficult to quantify and in need of greater stakeholder vetting. We agree that such a proposal would be better resolved in a rate proceeding or formal tariff filing instead of being addressed in the model tariff.

Finally, we proposed that any financial security or collateral provided should be reduced or refunded over time as load ramp milestones are met and facility costs are paid. OCA, Constellation, and Amazon support the Tentative Order's proposal, agreeing that the proposal will minimize risks on customers and potential overcollection from EDCs. PECO and EAP express opposition, stating that the proposal introduces risks due to changing creditworthiness and premature exits that may lead to costs that are shifted to

other customers. We are not persuaded by stakeholder comments to modify our proposal. We find that the proposal reasonably promotes economic development and reduces risks on customers and potential overcollection from EDCs. While we acknowledge the concerns of PECO, NRDC, and KEEA regarding stranded costs, if the reduced or refunded collateral is properly calculated by the EDC, there should be little or no stranded costs. Therefore, we expect that if there is not enough remaining collateral, CIAC, and/or exit fees to cover the costs resulting from the entrance and/or exit of a Large Load Customer, it is the responsibility of the utility to address these costs in a way that reduces the chance that there will be stranded costs.

Contributions in Aid of Construction (CIAC)

In the Tentative Order we proposed that Large Load Customers should bear interconnection costs that solely benefit the interconnection customer through CIAC, consistent with cost causation principles and that EDCs should handle CIAC for Large Load Customers in the same manner that CIAC is implemented for all other EDC tariff customers. Beyond facilities which solely benefit the new large load, we further found that given the nature of large loads, they may receive most of the benefits from facilities that would have historically benefited the system. That is, very large loads may cause network upgrades which benefit the system, but large loads themselves still use up most of the benefits. We found that a Large Load Customer should make a CIAC contribution to offset the cost of the line if they receive more than half of the benefit of this line. Additionally, we requested comments concerning voluntary CIAC and the validity and appropriateness of a mechanism whereby voluntary CIAC contributions entail supported projects moving up in the construction queue or expediting interconnection times.

The Shapiro Administration, Protect PT, Earthjustice's joint comments, CAUSE-PA, TURN, and KEEA recommend that, in an abundance of caution, it should be made explicitly clear in the Final Order that utilities should not be permitted to earn a

return on CIAC. The Shapiro Administration states that it is common practice not to include CIACs in a utility's rate base. No stakeholders have expressed opposition regarding this topic. The Shapiro Administration Comments at 5. Protect PT Comments at 3. Earthjustice Joint Comments at 15-16. CAUSE-PA and TURN Comments at 31-32. KEEA Comments at 3.

If the Commission determines to reverse the long-standing principle that utilities may not earn a return on CIAC, CAUSE-PA and TURN submit that the Commission must ensure those new utility revenues are borne solely by the large load class and are not in any way allocated to other classes. CAUSE-PA and TURN Comments at 32.

There is consensus supporting CIAC requirements that ensure that Large Load Customers pay the full cost for interconnection, including dedicated facilities and upgrades, which solely benefit the new large load. Constellation states that this approach (1) is consistent with cost causation principles, (2) will help ensure ratepayers are not on the hook for the costs of facilities from which they do not benefit, and (3) incentivize designs and configurations that have the least impact on the grid and other customers. Constellation Comments at 2. The Shapiro Administration Comments at 4-5. OCA Comments at 21-22. MBA Comments at 3. FirstEnergy Comments at 8. Citizens' and Wellsboro Comments at 4. Google Comments at 1.

For facilities that solely benefit the new large load, Earthjustice's joint comments suggest the Commission consider directly assigning dedicated facilities costs to the customer without the opportunity to offset some or all of the up-front costs via a CIAC contract. Earthjustice's joint comments submit that customers requesting service must complete payment or arrange installment payments before construction can commence. Earthjustice Joint Comments at 16.

The Shapiro Administration, Protect PT, Mainspring, and Google generally support the Tentative Order's findings that the triggering Large Load Customers who receive more than half of the benefit from the network upgrade should make a CIAC payment. Mainspring supports the Commission's focus on aligning cost responsibility with cost causation. The Shapiro Administration Comments at 4-5. Protect PT Comments at 3. Mainspring Comments at 7. Google Comments at 1.

Protect PT (if Large Load Customer benefits more than 50%) and OCA (if Large Load Customer is a cost causer and benefits less than 51%) propose that the degree of CIAC payment contribution be equivalent to the degree of benefit that the Large Load Customer receives. OCA argues that under the <51% scenario in the Tentative Order, the Large Load Customer would not be directly assigned any of the costs for that Network Improvement, which would heighten risk for stranded costs and be unreasonable because all ratepayers would be financially obligated to pay for that network improvement predominately caused by the cost-causer – the Large Load Customer. Protect PT Comments at 3. OCA Comments at 25-26.

OCA recommends that if a Large Load Customer is the but-for cause of distribution or transmission Network Improvements – i.e., but for the Large Load Customer, those upgrades would not have been needed – then the Large Load Customer should be responsible 100% of the cost of those upgrades. While OCA applauds the Commission for requiring a portion to be paid up-front in a CIAC that can equal the portion of benefits to be received by the Large Load Customer, as for the remaining portion of the distribution Network Improvements recovered from the Large Load Customer in minimum distribution demand charges, the utility should credit the recovered share against the utility's revenue requirement to the benefit of all consumers. OCA Comments at 23-24.

In all scenarios, OCA recommends that the Commission requires the utility to conduct and file with the Commission an incremental cost of service study for all Large Load Customers and to serve it on the Statutory Advocates. OCA argues that the results of the incremental cost study will be able to support the utility's claim of the extent to which the Large Load Customer benefits from the Network Improvements. OCA Comments at 26.

CAUSE-PA, TURN, Mainspring, FirstEnergy, PPL, and EAP seek clarification regarding the definition of how benefits are defined and calculated. FirstEnergy states that it is unclear what the standard is for determining "benefit," or over what time period. CAUSE-PA and TURN recommend that the term "benefits" should be defined to include improved affordability, enhanced reliability, expanded capacity, increased congestion relief, and improved operational flexibility. Mainspring recommends that the Commission should direct that "benefit" be quantified based on a customer's incremental contribution to the constrained distribution peak (i.e., incremental coincident peak distribution import), rather than nameplate site load, so that Large Load Customers that make verifiable peak import-cap commitments through onsite generation and/or controllable load are not assigned distribution upgrade costs for capacity they do not require. Mainspring argues that if the Commission were to instead base the "benefit" on nameplate size load, it would ignore the significant opportunities presented by non-firm service. EAP recommends that benefits should be calculated based on capacity basis, energy basis, contingency scenarios, and study parameters. CAUSE-PA and TURN Comments at 27 and 30. Mainspring Comments at 10-12 and 15. FirstEnergy Comments at 8-12. PPL Comments at 8-9. EAP Comments at 9-11.

The Shapiro Administration recommends that the Commission should be more specific about the appropriate methods for determining beneficiaries based on the reliability issue triggering the network upgrade. The Shapiro Administration Comments at 4-5.

PennFuture recommends that the Final Order should provide a clear and transparent process for determining how “more than half of the benefit” is defined. EAP also recommends clarifications regarding exactly what “more than half” means (>50.0%? ≥50.0%? >50% with some tolerance band?). PennFuture Comments at 4. EAP Comments at 9-11.

CAUSE-PA and TURN state that the Commission does not offer any factors for consideration in determining whether “more than half of the benefit” will inure to other customers. They recommend that the model tariff includes explicit parameters to guide application of its benefits-driven socialization threshold and that for each claimed benefit type, the Commission should identify quantifiable factors to assess whether the claimed benefits are necessary, prudent, affordable, and reasonably certain to materialize. CAUSE-PA and TURN Comments at 27-30.

If the Commission includes the “more than half of the benefit” standard in its Final Order, Duquesne recommends the Commission clarify whether usage allocation is to be based on a one-time calculation or updated on a certain cadence. Duquesne argues that these projects are not conducive to a hard and fast threshold and that the percentage of an asset used by a single customer may not be static, as customers establish, stop, or modify service. Duquesne also shares concerns about the methodology used to calculate what constitutes using 50% of an asset. Duquesne Comments at 9-10.

EAP recommends critical clarifications including whether initial determinations are fixed or subject to adjustment, how parties will resolve disagreements about benefit calculations, how PUC determinations interface with FERC-jurisdictional transmission cost allocation, and whether/how customers receive credit if their benefit percentage declines. EAP Comments at 9-11.

DCC suggests that the Final Order should clarify CIAC treatment, so customers pay once for incremental facilities and receive appropriate credits if facilities later serve other customers. DCC Comments at 13.

Various parties disagree with the Tentative Order’s “more than half of the benefit” standard. State Senator Katie J. Muth, PennFuture, CAUSE-PA, and TURN share concerns that the Commission’s proposal leaves substantial room for manipulation from both utilities and Large Load Customers and allows them to avoid full responsibility for built facilities. FirstEnergy argues that (1) the Commission lacks jurisdiction over transmission facilities and allocation of their costs to customers, as applied in *Appalachian Power Co. v. Pub. Serv. Comm’n of W. Va.*, and (2) the Commission’s tentative proposal is flawed on the merits. EAP argues that determining “more than 50% benefit” for each large load interconnection would require an undue study and analysis burden on EDCs, causing potential disputes to arise between customers, EDCs, transmission owners, and regulators about how to calculate benefits as well as significantly extend interconnection timelines. Muth Comments at 2. PennFuture Comments at 4. CAUSE-PA and TURN Comments at 28-30. FirstEnergy Comments at 8-12. EAP Comments at 9-11.

State Senator Lindsey M. Williams, PennFuture, CAUSE-PA, and TURN recommend adopting a rebuttable presumption within the model tariff that assumes all costs associated with the interconnection of a Large Load Customer are solely for the benefit of that customer—and require that triggering customer to cover the entire cost of necessary system upgrades through CIAC. CAUSE-PA and TURN argue that costs associated with large load interconnection should only be socialized to other customers to the extent there is substantial and quantifiable evidence that the upgrades were otherwise necessary and would have been pursued in the absence of the interconnection large load or required for unrelated regional reliability purposes. Senator Williams argues that a public utility shall not be permitted to assign costs to non-large load ratepayers based on

generalized, ancillary, or theoretical benefits to those ratepayers absent of actual, quantifiable evidence demonstrating that such costs incurred were necessary for a purpose other than the electricity demand of the Large Load Customer. PennFuture argues that a rebuttable presumption will not only ensure that costs are borne by those who benefit from them but will also incentivize transparency and information sharing from Large Load Customers who wish to show why costs for particular upgrades should be shared. Williams Comments at 3. PennFuture Comments at 4. CAUSE-PA and TURN Comments at 28-30.

NRDC suggests that the Commission should instead require costs to be covered in full, then provide refunds in an appropriate manner and on a case-by-case basis. NRDC argues that the mechanism to collect payments is up to the Commission's discretion—CIACs and Advances would similarly protect other customers from financial risks, but Advances may provide more flexibility under certain conditions, such as if future customers connect to the same facility. NRDC also argues that it falls within the Commission's jurisdiction to require retail customers to pay for their interconnection costs, as this is a retail service need regardless of whether it is classified by utilities as transmission, citing the Initial Brief of the JNGO group in the active case regarding Commonwealth Edison's large load tariff in Illinois. NRDC Comments at 3 and 6.

Earthjustice's joint comments, CAUSE-PA, TURN, and OSBA recommend that the customer should make a CIAC payment that is proportionate to the assessed customer benefit of the line, even if they receive less than half of the total benefit of a given grid asset. OSBA argues that this recommendation attempts to avoid an "all or nothing" scenario whereby a 1% or 2% variance in attributed benefit near the 50% threshold could trigger or avoid a large payment, which parties may interpret as inequitable, particularly in cases where a CIAC is not triggered despite a significant (albeit under 50%) benefit attributed to the applicant. Earthjustice's joint comments argue that this will ensure that

the fundamental principle of cost causation is maintained. Earthjustice Joint Comments at 15-16. CAUSE-PA and TURN Comments at 28-30. OSBA Comments 3-4.

PPL suggests that if the Commission adopts a CIAC rule, it should reflect (or at least permit) PPL's practice, where PPL evaluates necessary system upgrades and segregates the costs into customer-specific costs which will be paid through CIAC and costs that will be socialized through rates. This is done on a case-by-case basis with a focus on whether "the specific upgrade provides reliability benefits to the grid as a whole or if it only benefits the new customer." PPL argues that this analysis ensures that CIAC charged to Large Load Customers is sufficiently tied to that specific customer's costs rather than based on an arbitrary determination. PPL also shared concerns over the Commission's jurisdiction over the recovery of investment in transmission network upgrades, which PPL argues is a ratemaking question regulated by FERC. PPL Comments at 8-9.

Duquesne recommends that the Commission strike the suggestion to assign CIAC to a customer for a shared asset, arguing that it may not be appropriate and may add more burden and complication than benefit. Duquesne states that in most cases, the scale of these large users will make it clear if an asset is constructed primarily for the use of the Large Load Customer. Duquesne Comments at 10.

FirstEnergy suggests the Commission should follow the rolled-in rate treatment approach, which is supported by precedent and achieves equity among all transmission customers over time, rather than CIAC. FirstEnergy states that FERC policy has long favored rolled-in rate treatment for transmission network upgrades, meaning that the costs are added to the utility's rate base and recovered from all customers (generally proportionally based on the wholesale transmission customers' respective loads, which means that larger customers pay more). FirstEnergy also states that the Commission has previously found CIAC treatment appropriate for "service lines" (akin to the Tentative

Order’s “facilities which solely benefit the new large load”) but inappropriate for “supply lines” (akin to the Tentative Order’s “network upgrades which benefit the system as a whole”) in *Kossman v. Pa. Pub. Util. Comm’n*. FirstEnergy Comments at 10-13.

State Representative Danielle Friel Otten, State Senator Katie J. Muth, CCJ, EEE, PennFuture, Invenergy, and PAWC recommend strengthening cost-allocation requirements to ensure that the full cost of infrastructure (upgrades, facilities, generation, etc.) required to serve Large Load Customers is paid for by those Large Load Customers. Representative Otten argues that these costs can run into hundreds of millions of dollars, and that without regulatory or legislative safeguards in place, they are spread across all utility customers, leaving families, seniors, and small businesses to subsidize costs created by the largest energy users. Invenergy recognizes the clear emphasis on cost causation and the protection of existing customers, which is essential to maintaining public confidence in large-load growth and in the generation and transmission investments required to serve it. Otten Comments at 2. Muth Comments at 5. CCJ Comments at 2. EEE Comments at 1. PennFuture Comments at 2-4. Invenergy Comments at 4. PAWC Comments at 4.

State Senator Carolyn Comitta, CCJ, EEE, EEN, PennFuture, CAUSE-PA, TURN, and PAWC encourage the Commission to ensure that the tariff strictly enforces the fundamental principle of cost causation and does not involve shifting the cost of powering large loads like data centers onto existing ratepayers. PennFuture further suggests that these shifting costs include not only direct subsidies, but also indirect subsidies resulting from the assumption of risks. CCJ also suggests that cost-causation principles should be binding and uniform across the Commonwealth. Senator Comitta raises various concerns, such as limited information and rapid evolution of AI, ongoing confusion and chaos at the federal level, attempts to cut programs, economic uncertainty, increasing electricity demand, and extreme weather. Senator Comitta, EEN, CAUSE-PA, and TURN argue that Pennsylvania’s families are already struggling to keep up with the

pace of increasing energy costs. CAUSE-PA and TURN also state that the Commission should not look at merely protecting existing customers from undue burdens as there is no “due” burden for residential consumers to bear. Comitta Comments at 1-2. CCJ Comments at 2. EEE Comments at 1. EEN Comments at 1-2. PennFuture Comments at 2-4. CAUSE-PA and TURN Comments at 5 and 12. PAWC Comments at 4.

State Senator Carolyn Comitta and State Representative Danielle Friel Otten advocate for the assurance that (1) residential and small business ratepayers in Pennsylvania will not absorb any additional costs created by Large Load Customers, and (2) Large Load Customers—not residential ratepayers—are liable for any stranded costs if a facility closes or ends up needing less energy than it asked the utility to supply. Representative Otten also advocates for requiring Large Load Customers to bear the full cost of system impacts they create. Comitta Comments at 2. Otten Comments at 1-2.

The Shapiro Administration recommends that the Commission provide additional guidance on cost allocation methodology when ratepayer funding is used to recover network upgrade costs triggered by large load interconnection. The Administration also suggests that the Commission should address cost allocation methods when project beneficiaries extend beyond one EDC service territory. The Shapiro Administration Comments at 5.

MBA and AEU recommend that the cost allocation methodology should fairly allocate costs caused by Large Load Customers across the system, ensuring that each customer class is paying its full cost of service. MBA understands allocating these costs poses a significant challenge when distinguishing between the costs that are associated with Large Load Customers and the costs that benefit all users, which arose because the energy infrastructure needs additional investment. MBA Comments at 3. AEU Comments at 2.

Concerning voluntary CIAC, the Shapiro Administration and OCA both express support agreeing that voluntary CIAC could be one of many criteria used to qualify for expedited load queue consideration and/or load interconnection. Regarding this expedited process, OCA recommends that (1) all reliability studies and standards are completed and abided by, (2) existing interconnection requests prior to the establishment of this mechanism are not adversely affected, and (3) a comprehensive mechanism is proposed, reviewed, and commented upon by all stakeholders. The Shapiro Administration encourages the Commission to provide clearer regulatory guidance on expedited load queue and interconnection processes that ensure maintenance of reliability. The Shapiro Administration Comments at 5. OCA Comments at 26-27.

KEEA, some EDCs, and EAP express opposition regarding voluntary CIAC. KEEA argues that allowing projects to be pushed back in the queue due to another Large Load Customer's contributions would add a level of uncertainty to the process that could disincentivize these projects from happening at all. Citizens' and Wellsboro argue that expediting some projects may delay the completion of other projects that were submitted earlier. PECO and EAP argue that special treatment for projects able to make a voluntary CIAC contribution would be both a departure from the Commission's long-standing commitment to non-discriminatory service and would likely lead to disputes that would frustrate any efficiency goals the Commission may have in advancing such a policy. PECO also notes that the expanded use of CIAC, especially in the context of large load interconnections, is often not as protective of other customers as there are other structures that ensure a contribution to both incremental and embedded costs and revenue requirements. PPL and EAP state that the issues that determine customer interconnection project timelines (including site selection, permitting, and Right-of-Way acquisition) are unique to each project and cannot be accelerated through additional monetary consideration. KEEA Comments at 3-4. Citizens' and Wellsboro Comments at 4. PECO Comments at 15. PPL Comments at 9. EAP Comments at 11-12.

Earthjustice's joint comments suggest that a determination of CIAC contributions that relies on an anticipated usage level and associated revenue should contain a provision requiring an alteration of assigned rates or an additional construction contribution in the event that anticipated usage levels do not materialize, or the project is terminated before completion. Earthjustice Joint Comments at 15-16.

EDF suggests the following principles to guide the Commission's resolution of the issue involving CIAC:

- Any costs triggered by a Large Load Customer that are not included in its secured revenue guarantee should be recovered through CIAC.
- To the extent a customer's secured revenue guarantee does not fully offset the rate base and associated ratemaking impacts of the customer-triggered facilities, the amount of such shortfall should be recovered through CIAC. For example, EDF agrees with EAP's initial comments that any CIAC for customer-triggered facilities should be subject to tax gross-up, to avoid inappropriate socialization of the utility's tax expense.
- While CIAC can recover some of a utility's incremental costs triggered by a Large Load Customer, it is not a suitable tool for ensuring the customer's contribution toward the utility's embedded costs, which should be secured through other means.

EDF expects that a combined approach – through which the utility recovers interconnection facility and associated up-front costs through CIAC, and the remainder of its incremental costs through a secured revenue guarantee – may constitute a balanced and efficient solution. EDF Comments at 7-8.

Disposition

Regarding Contributions in Aid of Construction, our Tentative Order sought input on the allocation of costs for network upgrades. The questions of CIAC and cost allocation for network upgrades are fairly settled with respect to investments that solely benefit a single customer – the beneficiary pays. Network Improvements that have broader benefits to the grid as a whole are generally socialized across the rate base, at least in part. And when upgrades occur on the transmission rather than the distribution system, questions of state versus federal jurisdiction arise.

The FERC established a seven-factor test to differentiate between distribution and transmission system assets in FERC Order 888. Transmission tariffs and rates fall under federal jurisdiction and are the purview of FERC. Regulation of retail customers, however, falls under state jurisdiction. As NRDC noted in its comments, the Commission has jurisdiction over interconnection for retail customers within the Commonwealth, regardless of whether the interconnection is to the distribution or transmission system. NRDC Comments at 6.

Several commenters, including members of the General Assembly and the OCA, suggested that the Commission take a broader view of cost causation principles when allocating costs. Specifically, the OCA suggested the use of a “but-for” cause test. By this standard, if a Network Improvement would not have been needed “but for” the interconnection of the Large Load Customer, then the costs of the upgrade would be allocated to that customer irrespective of whether other customers would benefit from it. OCA Comments at 16.

We would also note that while it was specifically on the issue of increased capacity and generation costs, this but-for test would also align with the statement of principles agreed to by the governors of the thirteen states that comprise PJM

Interconnection, which stated that state utility commissions should use their authority to allocate all costs necessitated by new large loads to those customers and to protect existing ratepayers.¹ Other commenters, including Senator Lindsey Williams, PennFuture, CAUSE-PA, and TURN recommend adopting a rebuttable presumption that assumes all costs associated with interconnecting a Large Load Customer are solely for that customer's benefit.

However, Large Load Customers may be concerned about paying costs of current planned improvements that are needed for an aging grid. Yet, these same customers have also indicated their support for paying for infrastructure improvements they are requiring, or CIAC.

We believe both sides have a valid argument, however we are ultimately persuaded by the arguments of the OCA and others regarding cost causation. Therefore, if a Network Improvement would not have been needed “but for” the interconnection of the Large Load Customer, then the costs of the upgrade should be allocated to that customer irrespective of whether other customers would benefit from it. In such instances, the EDC should assess a CIAC for Large Load Customer additions to recover all distribution and transmission costs necessary to interconnect the new Large Load Customer. The only exception to this should be for any upgrades or additions that were already planned by the EDC pursuant to a Commission-approved Long-Term Infrastructure Improvement Plan (LTIIP) before the Large Load Customer requested service. Future network improvements made to interconnect these Large Load Customers that would not have been made but for the interconnection of these customers should be paid by the Large Load Customer in the form of CIAC. Given the unprecedented nature of this load growth, we find that the Commission's approach to cost allocation must adapt to shield ratepayers from socialization of costs that are properly attributed to Large Load

¹ Statement of Principles Regarding PJM

Customers while protecting the Large Load Customer from paying for previously Commission-approved LTIP planned improvements.

Additionally, we requested comments concerning voluntary CIAC as well as its validity and appropriateness. We agree with PECO and EAP that special treatment for projects able to make a voluntary CIAC contribution in exchange for expedited load queue consideration and/or load interconnection would be a departure from the Commission's long-standing commitment to non-discriminatory service and would likely lead to disputes. Therefore, the model tariff will not include language that Large Load Customers provide voluntary CIAC contributions in exchange for expedited load queue consideration and/or load interconnection.

Minimum Contract Terms

In the Tentative Order we found there is broad consensus supporting minimum initial contract terms and exit fees to ensure cost recovery and system stability. We have proposed additional contract terms for Large Load Customers that intend to ramp-up load requirements over time. We invited comments on the five-year minimum initial contract length tentatively selected, as well as the proposed contract terms for a ramping customer.

There is consensus from commenters opposing the Tentative Order's proposed five-year minimum contract length. State Senator Lindsey M. Williams, State Senator Katie J. Muth, PennFuture, EDF, NRDC, Protect PT, OCA, IECPA, and I-CPIE share concerns that the proposal is too short to ensure that utilities and customers will be protected from stranded costs, highlighting other large load tariffs with longer contract terms. Duquesne and FirstEnergy also share concerns that a minimum contract length of five years could set an expectation for customers and hinder the EDCs' ability to set a longer length when appropriate. IECPA also argues that the Commission's proposed exit

provision provides additional support for a longer contract term, as it allows for a “softer landing” for a Large Load Customer who exits early if another organization is found to step into the departing customer’s shoes by stepping in to use the previously utilized interconnection. Multiple parties have proposed increased minimum contract lengths, while others advocate for retaining/strengthening utility discretion. Williams Comments at 2. Muth Comments at 3 and 5. PennFuture Comments at 3. EDF Comments at 8 and 10. NRDC Comments at 7. Protect PT Comments at 3. OCA Comments at 28-29. IECPA Comments at 8. I-CPIE Comments at 3-4. Duquesne Comments at 11. FirstEnergy Comments at 13-14.

The two most common recommendations propose a minimum contract length of 12 years and 20 years. State Senator Lindsey M. Williams, CAUSE-PA, TURN, IECPA, and KEEA support a minimum contract term of 12 years. They argue that this recommendation would align with the contract term in other PJM states, keeping Pennsylvania competitive in relation to neighboring states while providing better assurance against stranded costs. State Senator Katie J. Muth, Protect PT, Earthjustice’s joint comments, and I-CPIE support a minimum contract term of 20 years. They argue that this recommendation would align with the useful life and cost recovery periods of the infrastructure constructed to serve Large Load Customers. Williams Comments at 2. CAUSE-PA and TURN Comments at 37-39. IECPA Comments at 8. KEEA Comments at 4. Muth Comments at 3 and 5. Protect PT Comments at 3. Earthjustice Joint Comments at 16-17. I-CPIE Comments at 3-4.

There are other recommendations suggesting different minimum contract lengths, with some offering a range of years:

- OCA and FirstEnergy recommend 10 years. FirstEnergy argues that ten years strikes a more reasonable balance between customer protection and data center commercial needs and viability and is more consistent with industry trends

towards more and larger data center facilities, greater investments in infrastructure additions, and the corresponding need for increased customer protection. OCA argues that a ten-year minimum contract would help EDCs to structure contracts with its suppliers and contractors. OCA Comments at 28-29. FirstEnergy Comments at 13-14.

- EDF and NRDC recommend 15 years. EDF also suggests that these 15 years should include a revenue guarantee period designed to recover the utility's incremental costs, plus an additional period designed to secure the customer's contribution toward embedded costs. EDF Comments at 8 and 10. NRDC Comments at 7.
- CAUSE-PA and TURN recommend 10 years for loads exceeding 50 MW and 20 years for loads exceeding 100 MW. They state that according to the Rocky Mountain Institute, "large load tariffs feature minimum term lengths ranging from 1 to 20 years, and longer-term lengths have become more common in recent proposals." They also state that while the average minimum contract term was 5 years in 2024, the average term is now 10.9 years. CAUSE-PA and TURN Comments at 37-39.
- DCC and Duquesne recommend 5-10 years. DCC states that a reasonable range framework, subject to case-specific justification and Commission review, is more likely to produce outcomes that reflect the actual mix of distribution and transmission investments needed to serve a particular project. DCC Comments at 4. Duquesne Comments at 11.
- OSBA recommends 8-10 years. OSBA notes that other jurisdictions have imposed ranges from 5 years (Georgia) up to 15 years (Michigan), and many within that range, for instance Oregon at 10 years and Indiana and Ohio at 12 years. OSBA Comments at 4-5.
- Amazon recommends 8-12 years. Amazon argues that this offers secondary benefits to more accurately forecast and plan for long-term energy needs. Amazon Comments at 3.

- Google recommends 10-15 years. Google argues that infrastructure upgrades for loads of 50 MW or greater are significant capital undertakings with depreciation schedules spanning decades and that longer terms ensure that Large Load Customers remain contributors to the system for a substantial period. Google also states that this approach is consistent with emerging regulatory frameworks, such as the Ameren Missouri Large Load Rate Plan (effective December 2025), which established a 12-year standard. Google Comments at 2-3.

Exus, some EDCs, and EAP recommend that the Commission adopt a flexible approach that clearly allows EDCs to have discretion to determine minimum contract terms based on each customer's individual characteristics on a case-by-case basis. While the model tariff concerns guidelines and not requirements, Exus emphasizes the importance of protecting existing negotiated contractual arrangements between large loads and electric utilities with respect to new service applications and interconnection requests. PPL argues that the Commission should focus its analysis on the time required to recover costs paid by network customers for projects constructed because of the interconnection load. PPL and EAP also argue that having a set minimum contract term may result in the customer having load obligations that far exceed the cost of interconnection. Exus Comments at 9. PECO Comments at 16. Duquesne Comments at 11. PPL Comments at 11. EAP Comments at 12-14.

The Shapiro Administration, Duquesne, and EAP recommend that the Commission adjust the final model tariff to emphasize that the contract terms should be based on the time until the cost of utility investment to serve the Large Load Customer has been fully repaid to prevent cost shifting to other customers. The Shapiro Administration states that the principles of cost causation and avoidance of cost shifting and cross subsidization should serve as the regulatory standard. The Shapiro Administration Comments at 5-6. Duquesne Comments at 11. EAP Comments at 12-14.

Exus recommends that the individualized contract terms between the Large Load Customer and the EDC should be based on the particular large load or data center application, load study, construction service agreement, energy service agreement, and particular customer profile. Exus Comments at 9.

OCA suggests that EDCs that sign contracts with Large Load Customers that are less than 20 years of duration should be required to inform the Commission and provide justification for why such a contract will not result in stranded investment. OCA also suggests that the Commission should make clear that EDCs, not ratepayers, are responsible for stranded investments that should have been paid by the Large Load Customer but were not because the utility did not sign a contract of sufficient duration. OCA Comments at 30.

DCC suggests that utilities should be expected to explain why a proposed term is appropriate in light of asset lives, planning horizons, and the degree of customer-specific risk involved. DCC Comments at 4.

Disposition

We proposed a five-year minimum initial contract length in the Tentative Order. There is consensus from commenters opposing the Tentative Order's proposed five-year minimum contract length with the two most common recommendations being 12 years (to align with the contract term in other PJM states) and 20 years (to align with the useful life and cost recovery periods of the infrastructure constructed to serve Large Load Customers). Other stakeholders recommended minimum contract lengths ranging from 5 to 15 years, while Exus, some EDCs, and EAP advocate for utility discretion to determine minimum contract terms based on each customer's individual characteristics on a case-by-case basis.

We maintain our decision to require a five-year minimum initial contract length. We note that some comments for longer contract terms may be addressing the general contract term, including the ramp period, and not just the initial contract length. We find that this minimum initial contract length is reasonable given recent industry trends. Our proposal allows EDCs to conduct a five-year revenue review during which the large load is at its Contract Capacity. This also aligns with the principles of cost causation and avoidance of cost shifting and cross subsidization. However, we are persuaded by the viewpoints of the Shapiro Administration, Duquesne, and EAP that the Commission should emphasize that actual contract terms should be based on the time until the cost of utility investment to serve the Large Load Customer has been fully repaid to prevent cost shifting to other customers. Therefore, we adopt this recommendation in addition to the minimum initial contract length of 5 years.

Interconnection Studies and Interconnection Agreements

In the Tentative Order we discussed EDCs' interconnection queues, queue management, interconnection requirements and load ramping requirements. We noted that utilities should have some flexibility for determining study timelines, ensuring high-quality results; however, we encouraged utilities to give additional transparency to customers looking to interconnect and found that six months is a reasonable maximum time to complete interconnection studies unless there are exigent circumstances and that after six months, independent studies conducted by approved contractors at the Large Load Customers' expense should be an option. We also proposed that failure of an EDC to complete the required studies in a timely manner should result in a refund to the applicant. We proposed that 50% of the application fee be refunded to the applicant for each 90-day period beyond the six-month completion deadline.

Additionally, we proposed that biannually (2 times per year), during a specified Network Open Season, Large Load Customers may apply for interconnection studies,

which will be analyzed as cluster studies and that the costs for the studies will be allocated to the Large Load Customers requesting the interconnection studies in a pro rata share. Finally, we proposed that EDCs make available on their public websites a list of Large Load Customer interconnection applications by zip code listing the date accepted, the MW interconnection amount sought, and the stage of interconnection study process.

The discussion on a maximum timeframe for interconnection studies reveals significant disagreement over the Tentative Order's proposal. While multiple stakeholders express support, others suggest a higher timeframe or submit that the Final Order should not prescribe a maximum study time.

CFPPA, Mainspring, Invenergy, Constellation, Vistra, Amazon, and DCC support the Tentative Order's proposal that EDCs complete interconnection studies within six months absent exigent circumstances. CFPPA agrees that this principle aligns with recent efforts to improve regulatory certainty. Amazon submits that delivering these studies in appropriate and predictable timelines helps remove speculative loads while protecting interconnection queues from gridlock and bloat. CFPPA Comments at 1-2. Mainspring Comments at 6 and 15. Invenergy Comments at 3. Constellation Comments at 2. Vistra Comments at 4-5. Amazon Comments at 3-4. DCC Comments at 12.

OCA, many EDCs, and EAP disagree with the proposed maximum interconnection timelines. OCA, PECO, Duquesne, PPL, and EAP argue that the range of complexity makes it impractical to determine what these timelines should be, meaning there is no "one-size-fits-all" approach to studying these projects. OCA highlights the importance of conducting comprehensive and technically sound studies for interconnections to the interstate transmission system, and that NERC is reviewing and revising its study requirements, which should be heeded. Duquesne also highlights the potential need to collaborate with Transmission Owners or neighboring EDCs as well as the potential need to consider new right-of-way access and agreements to enable delivery

of power to customer sites. In addition, EAP submits that other states do not apply a mandated maximum timeline for interconnection, highlighting that Indiana (Indiana Michigan Power) utilizes a reasonable diligence standard, West Virginia (Appalachian Power) has timelines tied to complexity, and Virginia's proposal contemplates 9-12 months for large loads timelines. OCA Comments at 31-32. PECO Comments at 6-8. Duquesne Comments at 12-14. FirstEnergy Comments at 15. PPL Comments at 13. Citizens' and Wellsboro Comments at 4-5. EAP Comments at 14-16.

PECO suggests that if a maximum study period is adopted, the average study period should be approximately eighteen months or beyond, subject to a variety of factors. PECO Comments at 6-8.

Duquesne recommends the Commission establish an expectation that EDCs report any studies exceeding twelve months, with an explanation of the reasons for the review period length. Duquesne argues that this proposal not only serves to provide insight to the Commission for the reasons why studies may require more time, but also ensures EDCs have motivation to adhere to expedient timelines when possible. Duquesne Comments at 12-14.

EAP recommends the Commission establish general principles for timely, transparent interconnection study processes while preserving EDCs' discretion to establish reasonable timelines based on project complexity and system-specific factors. EAP also suggests that the Commission can ensure adequate performance through case-by-case review of alleged unreasonable delays rather than one-size-fits-all mandates that ignore the unprecedented complexity of large load interconnections. EAP Comments at 16-17.

Mainspring, some EDCs, and DCC seek clarification regarding application completeness and the start/stop of the "clock" associated with any imposed maximum

study period. Duquesne, PPL, and DDC emphasize the importance of guidance with clear and objective criteria on when an application is deemed complete when setting a firm time limit. Mainspring Comments at 15. PECO Comments at 7. Duquesne Comments at 15-16. PPL Comments at 13-14. DCC Comments at 12.

PECO submits that any request initiated by an applicant within that study to modify its required load must immediately “stop the clock” associated with any imposed maximum study period. PECO states that it may find it necessary to restart the entire study given customer’s updated requirements, which PECO suggests would require a “clock restart” on any imposed maximum study period. PECO argues that it should not be penalized for doing so, particularly if the cause is related to the customer’s changing requirements. Duquesne also seeks clarification on the opportunity to pause the clock for challenges outside of the EDC’s control. PECO Comments at 7. Duquesne Comments at 15-16.

PECO also argues that to be “complete,” all large load interconnection study requests require, at a high-level, (i) a viability assessment, including availability of land or rights of way that may be required for construction of infrastructure; (ii) local system planning; (iii) finalizing and delivering study results to the customer and obtaining customer approval to proceed; and (iv) regional coordination, review, and analysis by PJM to ensure reliability of the transmission system. PECO Comments at 6-8.

PPL seeks clarity on how the maximum study period would work with the proposed preferential queue position proposal. PPL states that if EDCs are forced to review applications out of order it may be difficult, if not impossible, to meet the proposed review deadlines. PPL Comments at 13-14.

Regarding the Tentative Order’s provisions addressing failure to meet the deadline, there is no consensus among stakeholders. While some parties express support

over the refund mechanism and studies funded by Large Load Customers and conducted by independent contractors, others disagree or seek clarification.

CFPPA, OCA, OSBA, Mainspring, Invenergy, and DCC support the Tentative Order's proposal. CFPPA states that developers should have clear recourse protocols when utilities fail to complete a timely review of their projects. Invenergy submits that this proposal will increase schedule discipline and reduce uncertainty for projects that must meet commercial deadlines while preserving the rigor appropriate for large-load application reviews. CFPPA Comments at 1-2. OCA Comments at 31. OSBA Comments at 5-6. Mainspring Comments at 6 and 15. Invenergy Comments at 3. DCC Comments at 12.

If EDCs are financially liable for interconnection studies that they are unable to complete within six months, OCA further suggests that Commission must ensure that EDCs are not conducting incomplete interconnection studies to avoid rebating study fees to Large Load Customers. OCA Comments at 31.

If the Commission does retain the refund concept, PECO recommends that the Final Order terms should be revised to provide the flexibility necessary for EDCs to enlarge the maximum time period as necessary to accommodate external factors, the actions of third parties, and the necessity for additional studies. PECO Comments at 8.

Multiple EDCs and EAP oppose these independent study and refund provisions. Citizens, Wellsboro, FirstEnergy, and EAP argue that refunds deny the utility its opportunity to recover prudently incurred costs, in violation of basic utility ratemaking precedent. PECO and EAP argue that providing detailed system models, proprietary system information, and critical energy infrastructure information to third parties raises serious security risks, NERC Critical Infrastructure Protection compliance issues, and liability concerns. PECO, FirstEnergy, and EAP also argue that EDCs must review the

independent study for accuracy, which means EDCs and therefore ratepayers will incur costs. PECO and FirstEnergy submit that the imposition of such penalties is outside the scope of this proceeding and model tariff provisions. In addition, Duquesne argues that EDCs do not need further incentives to interconnect these large users, as EDCs already experience significant financial and reputational motivation, as well as significant political pressure to support and enable data center development. PECO Comments at 8-9. Duquesne Comments at 13-14. FirstEnergy Comments at 15-16. Citizens' and Wellsboro Comments at 5. EAP Comments at 17-19.

If the Commission finds that refund matters are best left to individual contracts, OSBA recommends that the model tariff clearly states that any refund costs arising from utility's fault are not eligible for rate recovery. OSBA Comments at 5-6.

Duquesne recommends that the Commission should be encouraging thorough, rigorous assessments for reliability, not adding financial penalties based solely on a time clock. Duquesne Comments at 13-14.

EAP recommends that the ultimate model tariff and associated guidelines should affirm EDCs' commitment to completing interconnection studies with reasonable diligence given project complexity and circumstances. If a customer believes an EDC is unreasonably delaying an interconnection, EAP suggests that the process should operate such that (1) the customer retain the ability to file a complaint with the Commission documenting timeline commitments made by the EDC, actual timeline experienced, evidence of delay, and alleged harm; (2) the EDC can then demonstrate whether the timeline was met per agreed-to milestones, any delays were justified (customer changes, transmission-owner delays, queue position, etc.) and whether the company exercised reasonable diligence under the circumstances; and (3) the Commission can determine an appropriate penalty at that time, should it be warranted. EAP Comments at 17-18.

OSBA notes several unresolved, important implementation questions:

- Definition of “exigent circumstances”: The proposal allows extensions for exigent circumstances, but the term is not defined. A clear, objective definition (or illustrative examples) is needed to prevent subjective interpretation and delay.
- Dispute resolution: What happens if the utility and the applicant disagree on whether an exigent circumstance occurred or who was responsible for the delay? Without a defined process, such disagreements could lead to prolonged disputes, further delaying energization and creating uncertainty for all parties.
- Cost allocation: If a refund is triggered, should the cost ultimately be borne by the utility’s shareholders (for matters within the utility’s control) or socialized among ratepayers? Consumers should not be forced to subsidize refunds caused by controllable utility delays.
- Risk of open-ended timelines: Absent clear boundaries and consequences, repeated invocations of “exigent circumstances” across multiple projects could effectively nullify the six-month deadline, leading to a chaotic backlog of partially completed interconnections and diminished effectiveness of the overall framework.

OSBA urges the Commission to address these issues explicitly in the Final Order either by tightening the definition and dispute-resolution process or by clarifying that refunds triggered by delays within the utility’s reasonable control will not be recoverable in base rates. OSBA argues that this will protect small business ratepayers from both prolonged uncertainty and inappropriate cost shifts while preserving the intended discipline of the six-month timeline. OSBA Comments at 5-6.

Mainspring and EAP seek clarification on how a contractor would be deemed “approved.” EAP also states that the Commission’s proposal does not offer a way for the utility to supervise, control, audit, approve, review, or object to the independent

contractor's work, while protecting critical transmission and distribution system information. Mainspring Comments at 6 and 15. EAP Comments at 18-19.

Concerning the proposal for a biannual Network Open Season for cluster studies, the majority of commenters support the concept with many proposing additional requirements or seeking clarity and guidance. However, PPL and EAP requests that there be flexibility as to the appropriate use and timing of cluster studies. PPL and EAP state that there is a risk that by mandating cluster studies, it will have the effect of slowing down certain interconnection applications and projects. PPL also states that cluster studies are location specific, will be different for EDCs, and may even be different for EDCs within its own service territory. PPL Comments at 14. EAP Comments at 19-20.

In opposition, Duquesne recommends the Commission postpone the Network Open Season recommendation and revisit via a working group. Duquesne argues that there is no track record of how project implementation following cluster studies has worked for projects of this scale and complexity. Duquesne also states that because of the scale and size of these proposed projects, one or two projects deciding not to move forward could impact the validity of the results, potentially requiring additional assessment. Duquesne Comments at 14.

Earthjustice's joint comments, Mainspring, PECO, and DCC support the proposed Network Open Season concept. PECO argues that cluster studies are better suited to identifying the aggregate impact of multiple large load projects on systems and necessary upgrades than individual project studies, creating efficiencies and reducing overall costs while allowing EDCs to continue allocating costs based on project impacts. Earthjustice Joint Comments at 11-12. Mainspring Comments at 6. PECO Comments at 9. DCC Comments at 11-12.

OCA supports establishing a transparent and innovative process that accelerates the interconnection of Large Load Customers, such as the Network Open Season Planning Studies and the Large Load Customer interconnection queue, so long as all required interconnections and other studies are conducted in a comprehensive and technically rigorous manner and that service reliability to existing consumers served by the grid is assured. OCA Comments at 31-32.

FirstEnergy supports the proposal that the “costs for the studies will be allocated to the Large Load Customers requesting the interconnection studies in a pro rata share,” assuming that the pro rata share is based on the amount of the customer’s load. FirstEnergy Comments at 14-15.

The Shapiro Administration, Mainspring, and Invenergy recommend additional guidance and guardrails for the design of Network Open Season cluster studies. The Shapiro Administration recommends including phases of study, applicant modification and study retooling opportunities, determination of network upgrade beneficiaries, EDC coordination with the transmission owners and transmission operators, etc. Mainspring recommends including cluster boundaries, withdrawal/restudy rules, assumptions, and sequencing. Invenergy requests that the Commission (a) adopt clear, publicly available Network Open Season standards that specify the study methodologies to be used, clearly defined study deposits (including amounts, timing, and refundability), the load and resource assumptions to be applied, and the criteria for determining needed upgrades; (b) establish firm timelines for each stage of the Network Open Season process, including defined windows for request submission, study initiation and completion (with maximum study durations), and milestones for customer decisions; (c) expressly authorize the use of qualified third-party study providers operating under the same Commission-approved principles and subject to Commission oversight; and (d) require objective, published standards for evaluating and prioritizing competing requests, including how costs will be allocated among participating customers and how associated contracted new generation

will be jointly modeled and coordinated in interconnection treatment to avoid inconsistent assumptions or double-counting. The Shapiro Administration Comments at 7-8. Mainspring Comments at 9. Invenergy Comments at 11.

The Shapiro Administration encourages the Commission to adopt an expediting mechanism that would similarly allow for an expedited load interconnection study track without creating conflicts with simultaneous load interconnection cluster studies. The Shapiro Administration submits that the implementation requirements for the 6-month timeline for semi-annual load interconnection cluster studies are unclear and could create conflicts with an expedited load interconnection track unless the timelines and parameters of each are given careful consideration. The Shapiro Administration Comments at 7-8.

Emerald AI recommends the Commission direct that when a Large Load Customer elects Flexible Load Service, the project receives prioritized study sequencing within a Network Open Season cluster. Mainspring also recommends that the Final Order explicitly consider whether verified flexibility or voluntary CIAC commitments can reduce system risk and justify prioritization for cluster studies, while avoiding undue discrimination. Emerald AI Comments at 6. Mainspring Comments at 9.

PECO seeks clarification over how the Commission's proposal for biannual Network Open Seasons (which PECO supports), analyzed as cluster studies, would work in tandem with any rigid maximum study period (which PECO opposes). Since PECO would designate individual applications as complete at varying times throughout a Network Open Season's application window, this would result in staggered time periods for analysis based on such varying acceptance dates, undermining the fundamental premise of cluster studies that individual interconnection applications submitted within the same application window be evaluated collectively. PECO also states that to initiate a cluster study, PECO must have all of the information that it needs in order to perform that study, including both the results of the preceding cluster study and all interconnection

applications designated as complete within the related Network Open Season. PECO Comments at 9-10.

EAP states that it is not clear how pro rata is defined (e.g., by MW capacity, connection costs, equal share as to number of applicants) and that determining each customer's specific impact within a cluster study is complex. EAP Comments at 19-20.

DCC generally supports customer payment for incremental study costs that do not benefit the broader system, such as for the biannual Network Open Season process but states that the Final Order should require transparent study scopes and budgets before customers commit to pay. DCC Comments at 11-12.

The discussion regarding the public listing of Large Load Customer interconnection applications reveals significant disagreement among parties.

NRDC, Earthjustice's joint comments, Mainspring, Invenergy, KEEA, and DCC support the public queue transparency requirements. Invenergy states that a consolidated, regularly updated view of pending large-load projects will provide clearer insight into where and when major new demands may materialize, supporting more efficient infrastructure planning and investment decisions, as well as better alignment with PJM and local planning processes. KEEA submits that public-facing transparency is essential to informed stakeholder engagement, and this proposal would ensure that the public at-large has the ability to effectively engage with EDCs. NRDC Comments at 11. Earthjustice Joint Comments at 11-12. Mainspring Comments at 6-7. Invenergy Comments at 3-4. KEEA Comments at 4. DCC Comments at 12.

Earthjustice's joint comments submits that the model tariff should include requirements for timely posting of interconnection applications and impose uniform

standards to facilitate comparison of data across EDC websites. Earthjustice Joint Comments at 11-12.

Multiple EDCs and EAP oppose the Tentative Order's proposal for the public website disclosure of applications. Duquesne fails to see the value in positing this information publicly because (1) the status of an application impacts a relatively small number of customers and is not relevant to the general public; (2) it adds administrative burden, when the focus should instead be on identifying efficiencies; and (3) it is inappropriate due to the early nature of these projects. EAP and Duquesne argue that premature disclosure can trigger community opposition, generate public relations challenges, and complicate local permitting processes that can jeopardize the development. While PECO, Duquesne, PPL, and EAP shares concerns that this proposal may trigger confidentiality concerns that would benefit competitors of a Large Load Customer and harm economic development, DCC supports the timing and transparency provisions for the interconnection processing, including the public interconnection queue. PECO Comments at 10. Duquesne Comments at 14-15. PPL Comments at 14. EAP Comments at 20-22. DCC Comments at 12.

PPL requests clarification on the benefits of such disclosure of applications so it may better attempt to comply with the spirit of the Proposed Requirements while also maintaining customer confidentiality. PPL Comments at 14.

Various parties have other proposals for the Commission to consider regarding interconnection studies/agreements.

The Shapiro Administration submits that the Commission should set minimum standards for interconnection studies and agreements that will ensure maintenance of system reliability and consumer protection. The Shapiro Administration states that the voluntary approaches of having utilities meet with stakeholders to discuss process and

implications of large load interconnections and having EDCs make a good faith effort to implement reasonable improvements offers too much flexibility with an EDC-by-EDC determination of important details, because this process is time consuming, balkanizing, and does not provide sufficient guidance on reliability. The Shapiro Administration avers that if EDCs are competing to attract large loads, this flexibility could result in a “race-to-the-bottom” that could sacrifice grid reliability and affordability for consumers. The Shapiro Administration Comments at 6.

The Shapiro Administration submits that the Commission should encourage jurisdictional EDCs to comply with NERC’s level 2 alert recommendations, require similar data submission requirements to the Commission, regularly monitor EDCs compliance with NERC’s recommended actions and guidelines, and/or develop similar requirements for Pennsylvania’s EDCs that are not NERC registered entities. The Shapiro Administration also submits that for the benefit of reliability, and in the interim while NERC is developing its regulatory approach, the Commission should track NERC’s interim actions and establish reliability requirements that reflect NERC’s guidance. The Shapiro Administration avers that PJM cannot manage risk without better information and coordination with the state jurisdictional utility with large load interconnection responsibility, and that enhanced coordination between large retail loads and bulk power system operators is an important step to avoiding reliability risks. The Shapiro Administration Comments at 6-7.

The Shapiro Administration states the Commission should provide more guidance on interconnection study requirements, especially in light of NERC’s large load risk observations. The Shapiro Administration suggests that the Commission should begin an investigation of the EDCs system interconnection data collection, modeling, and analysis to determine if required enhancements should be made to better assess and understand the potential impacts of large load interconnections. The Shapiro Administration argues that while NERC’s recommendations may not be suitable for EDCs, it is clear that NERC has

identified critical gaps it is aiming to fill in the existing interconnection study regime. The Shapiro Administration Comments at 7.

CCJ calls for the assurance that mandatory system impact studies fully identify required upgrades before service commitments are made. CCJ Comments at 2.

OCA states that the Commission require that the model tariff include language making it explicitly clear that the EDC must postpone or otherwise condition the approval of the Large Load Customer's interconnection to the distribution system unless and until the governing Regional Transmission Organization (RTO) determines that the Large Load Customer's interconnection to the transmission system can be commenced on the basis that sufficient resource adequacy, grid reliability, and distribution service continuity exist. OCA states that the Commission clearly has the existing statutory authority and duty to prescribe the conditions under which new Large Load Customers are permitted to interconnect to the distribution system as new retail load while ensuring the utility's continued provision of electric utility service to existing customers that is adequate, reasonable, reasonably continuous, without unreasonable interruptions or delay and reliable. OCA Comments at 32-35.

Emerald AI recommends the Commission to direct that when a Large Load Customer elects Flexible Load Service and commits to a meter-verifiable operating envelope, the utility should reflect that committed operating envelope in distribution planning and interconnection studies to the extent consistent with applicable standards, so that flexibility can help defer or avoid upgrades and thereby support faster and/or larger interconnections through interconnection studies that explicitly model loads as flexible. Emerald AI Comments at 2 and 6.

KEEA states that it is essential that the cost of the interconnection studies should not be borne by other ratepayers. KEEA Comments at 4.

SCA and KEEA recommend that the Commission require an emissions impact assessment as part of the interconnection study process, as well as transparency and public input related to the siting of any proposed Large Load Customer facility. SCA Comments at 2. KEEA Comments at 4.

DCC recommends that the Commission address symmetry in delivery obligations. For example, if customers must commit to long terms, minimum demand, and collateral, the model tariff should require EDCs to provide reasonable upgrade and energization milestones and periodic status updates, and it should provide practical adjustments if delays within the EDC's control prevent timely service (for example, aligning the start of minimum demand obligations with the date capacity is actually available). DCC Comments at 12.

Disposition

We proposed a maximum timeframe of six months to complete interconnection studies unless there are exigent circumstances. CFPPA, Mainspring, Invenergy, Constellation, Vistra, Amazon, and DCC support the Tentative Order's proposed six-month timeframe, because the proposal removes speculative loads and improves regulatory certainty for developers. OCA, many EDCs, and EAP disagree with the proposal, arguing that the complexity of these studies may require a longer timeframe to provide comprehensive and technically sound studies. We are not persuaded to modify our Tentative Order proposal regarding the six-month timeframe. We find our proposal to be reasonable, providing an appropriate amount of accountability for EDCs while removing speculative loads from the interconnection queue.

We proposed a 50% application fee refund to the applicant for each 90-day period beyond the six-month completion deadline as well as the option for the applicant to seek independent studies conducted by approved contractors at the applicant's expense if the

EDC fails to complete the interconnection study after six months. CFPPA, OCA, OSBA, Mainspring, Invenergy, and DCC support the Tentative Order's proposal because it reduces uncertainty for project developers. Multiple EDCs and EAP oppose the proposal, stating that refunds deny the utility its opportunity to recover prudently incurred costs, that independent studies raise serious security concerns, and that EDCs must review the independent study for accuracy. We agree with PECO and EAP that allowing interconnection studies conducted by third-party contractors after an EDC fails to meet the interconnection study deadline may raise serious security risks, compliance issues, and liability concerns. Therefore, we will remove the third-party contractor provisions from the model tariff. In addition, we acknowledge the OCA's concerns regarding cost liability if the EDCs are unable to complete the studies within six months. Therefore, we expect that EDCs may be solely responsible for the costs associated with the refunds, which should not be allocated to other customers.

We proposed a biannual Network Open Season for cluster studies at the Large Load Customer's expense. The majority of stakeholders accept the proposal for a biannual Network Open Season for cluster studies due to its efficiencies and reductions in overall costs, with many proposing additional requirements or seeking clarity and guidance. As we received few comments in opposition, we adopt the Network Open Season process as proposed in the Tentative Order.

We proposed a public listing of Large Load Customer interconnection applications by zip code listing the date accepted, the MW interconnection amount sought, and the stage of interconnection study process on the EDCs' websites. NRDC, Earthjustice's joint comments, Mainspring, Invenergy, KEEA, and DCC support the public listing of Large Load Customer interconnection applications, stating that the proposal is essential for informed stakeholder engagement and efficient infrastructure planning and investment decisions. However, multiple EDCs and EAP oppose the proposal because of potential confidentiality concerns for Large Load Customers as well as potential

community opposition due to environmental, health, safety, climate, quality of life, energy, economic, and ethical impact concerns. We agree with the concerns raised by the EDCs and EAP regarding confidentiality of customer information. Accordingly, while we find our proposal for the public listing to be reasonable, we are adding a requirement that the list be posted on the website in a manner that protects the identity of the Large Load Customer, to provide an appropriate amount of transparency for engagement between infrastructure planners, Large Load Customers, the community, and other relevant stakeholders.

Minimum Demand Charges

In the Tentative Order, we tentatively adopted approximately 80% of contracted demand as an opening position for the minimum demand charge. There is no consensus regarding the minimum demand charge. Some parties support the Tentative Order's proposal regarding the 80% minimum billing demand, while others support a higher minimum demand charge or specific revisions to the requirement itself.

Protect PT, EDF, NRDC, and KEEA support the Tentative Order's 80% minimum demand charge. Protect PT states this proposal is in alignment with Indiana, Ohio, West Virginia, and Michigan. KEEA argues that it is critical that applicants are incentivized to provide accurate load projections and to establish a baseline for the electric distribution companies to ascertain the efficacy and appropriateness of this percentage. NRDC urges that the minimum demand charge should not be lowered while noting there is strong precedent for a higher minimum charge of 85%. Protect PT Comments at 4. EDF Comments at 10. NRDC Comments at 8. KEEA Comments at 4.

Protect PT, PennFuture, Earthjustice's joint comments, CAUSE-PA, TURN, and OCA, call for a minimum demand charge of 90%. PennFuture argues that this recommendation ensures the recovery of capacity investments, prevents cost shifting, and

reduces volatility. CAUSE-PA, TURN, and OCA also argue that higher minimum monthly demand charges better protect residential ratepayers from stranded costs. Protect PT Comments at 4. PennFuture Comments at 3. Earthjustice Joint Comments at 17-18. CAUSE-PA and TURN Comments at 44. OCA Comments at 38.

FirstEnergy recommends a minimum demand charge of 85%, arguing that it strikes the best balance between protecting customers against the risks of transitory load and providing reasonable flexibility for data center customers. FirstEnergy argues that both Ohio and Virginia Electric Power Company's ("VEPCO") service territory has adopted an 85% minimum demand provision. FirstEnergy Comments at 16-17.

PennFuture suggests that the minimum billing demand should be the highest of (a) the customer's on-peak contract capacity (b) the customer's highest previously established monthly billing demand during the past 11 months or (c) the customer's maximum demand created during the billing month. PennFuture Comments at 3.

IECPA submits that if the final model tariff applies to existing industrial large load, it recommends that the Commission remove the ratchet provision, which is the "80% of the customer's highest Monthly Billing Demand during the last 11 months" portion of the Monthly Billing Demand calculation. IECPA argues that including the ratchet will provide an additional strain on existing industrial customers, which may require them to execute new contracts and conform to other provisions of the model tariff. However, if the model tariff is applied only to substantial (e.g., 50+ MW) new and incremental load, IECPA does not object to the ratchet provision. IECPA Comments at 10.

Invenergy and Duquesne recommend that language be inserted to expressly allow EDCs discretion to establish a different minimum demand charge when appropriate to meet the unique characteristics of an individual customer contract. Invenergy specifically

recommends articulating guiding principles, such as the standard that minimum billing demand should reflect a customer's expected contribution to system costs, considering onsite generation and contracted new generation, while allowing each EDC to propose detailed tariff language consistent with those principles. Duquesne argues that the highlighted tariffs from other states may not be suitable for an "apples to apples" comparison, since some EDCs bill all customers for transmission charges rather than have transmission charges follow a customer's load. Duquesne also argues that cost allocation methodology is approved by FERC, not the Pennsylvania PUC, stating that Duquesne is open to revisiting the methodology associated with transmission costs, if directed to do so by the Commission, but questions if the potential benefits justify the costs and complications that will be caused. Invenenergy Comments at 10. Duquesne Comments at 16-17.

PPL supports an 80% minimum load guarantee, arguing that Network Integrated Transmission Service (NITS) charge at the minimum contract demand will have the same intended effect as a minimum demand charge – to ensure that they are paying for their share of the costs incurred to serve them and that those costs are not being unfairly socialized to the Company's other customers. PPL states that similar to LP-5 customers, some Large Load Customers would only be using the transmission system, having costs that are allocated using the NITS charges. PPL Comments at 15.

DCC recommends that the model tariff frame minimum billing demand as a range rather than a fixed number. DCC argues that the right minimum billing demand depends on various factors, and that a single percentage risks setting the bar higher than the actual risk and can discourage projects that would otherwise bring net benefits. DCC suggests that within the minimum billing demand range, each utility should explain why its proposed level is reasonable, using quantitative analysis where possible, and should show how the minimum works together with contract term, ramping, exit fees, and collateral. In addition, DCC advocates that the Commission should make clear that utilities do not

need to push every element of the framework to the most conservative end of the spectrum at the same time. DCC submits that when minimum billing demand, contract length, and collateral are all set conservatively, the combined effect can go well beyond what is needed to protect existing customers. DCC Comments at 5-6.

Amazon supports a minimum demand charge that is supported by appropriate data to ensure Pennsylvania utilities can meet existing and growing demand without impacting other rate classes. Amazon Comments at 3.

I-CPIE advocates for mechanisms that elicit flexibility from demand, offering two possible alternatives to minimum demand charges and arguing that the adoption of fixed price contracts will possibly, or even likely, insulate Large Load Customers from the real-time Locational Marginal Prices, costs of ramping up and down, or other forms of prices. These alternatives are to: (1) expose Large Load Customers to dynamic pricing that gives them signals to internalize the overall state of the electric network at any time and (2) design proxies to the incentives provided by dynamic prices that encourage flexibility and are reflective of the marginal costs of serving an additional unit (e.g., kWh) of energy, a ramping event over a set period, or avoid having to curtail other demands. I-CPIE Comments at 3.

The Shapiro Administration encourages the Commission to further specify that demand charges reflect system peak periods (e.g., seasonal, on/off peak periods, time-of-use) to incentivize load shifting, and that these peak periods be reevaluated regularly to align with evolving system conditions. The Shapiro Administration agrees with the application of demand charges to large loads, as these charges are meant to recover costs associated with meeting peak usage and to incent shifting demand to lower cost periods. The Shapiro Administration Comments at 8.

Invenergy recommends that the model tariff should adopt a clear netting and standby methodology that explicitly accounts for onsite generation in the minimum demand charge unlock Bring Your Own Generation (BYOG) benefits while preserving the integrity of the minimum-billing construct. Invenergy Comments at 5.

Invenergy recommends the Commission direct EDCs to file standardized, objective methodologies in their compliance filings describing how they are treating onsite generation and contracted new generation for purposes of minimum demand charge and related capacity charges, including at a minimum:

1. how they are measuring net load;
2. the conditions under which they are allowing netting against onsite generation or contracted new generation;
3. how they are structuring standby charges when onsite generation is expected to serve a portion of the Large Load Customer's load but maintains higher interconnection capacity for redundancy; and
4. how, consistent with Commission-approved cost-causation principles, they will reflect contracted new generation that demonstrably reduces a Large Load Customer's contribution to system peaks or defers specific upgrades in minimum demand charges, standby charges, and capacity-related charges, including through clearly defined credits attributable to, and limited to, its contribution to resource adequacy and to the deferral or downsizing of specific upgrades.

Invenergy Comments at 9-10.

KEEA suggests allowing advocates and EDCs to petition the Commission to adjust that percentage upward or downward after a two-year introductory period if deemed necessary. KEEA Comments at 4.

PPL requests clarification on whether the Commission is referring to distribution demand charges. If so, PPL would find it difficult to implement this provision, since PPL primarily serves Large Load Customers at transmission level voltages (i.e., 69 kV and above), and the LP-5 rate schedule does not have a distribution demand charge. PPL is concerned that to comply with the minimum demand charge proposal, it would need to alter its FERC regulated transmission formula rate, which is outside the Commission's jurisdiction. PPL Comments at 15.

EAP advocates for clarification that the suggested threshold applies only to the distribution part of the large load system, as that is the only portion under Commission's jurisdiction. EAP states that minimum demand charges on the transmission side are handled separately and not implicated by an EDC distribution-level tariff. EAP Comments at 22.

DCC suggests that if the Commission keeps an "11-month lookback" ratchet, the Final Order should clarify how it works during the Load Ramp Period and after customer-driven curtailments, so the ratchet does not turn a short-term operational spike into a permanent obligation that does not match the contract-capacity commitment. DCC Comments at 6.

DCC recommends that the model tariff acknowledge that minimum billing demand may change over the life of a project. DCC states that a structure that ties minimum billing demand to practical considerations such as project stage (ramp years and full build-out) and components of service (distribution, transmission, and generation), and evaluates it alongside the rest of the toolkit, is more likely to protect existing customers while still keeping Pennsylvania attractive for new large load investment. DCC Comments at 6.

Disposition

We proposed an 80% minimum billing demand charge, and that any demand charge should be tied to the actual need for the utility to recover fixed costs associated with serving that particular customer's load. Protect PT, EDF, NRDC, and KEEA support the Tentative Order's proposal of an 80% minimum demand charge. Protect PT, PennFuture, Earthjustice's joint comments, CAUSE-PA, TURN, and OCA, call for a minimum demand charge of 90%, arguing that it ensures the recovery of capacity investments, prevents cost shifting, and reduce volatility. We are not persuaded by stakeholders to modify our minimum demand charges proposal. We find an 80% minimum demand charge reasonably incentivizes accurate load projection and reasonably aligns with other state tariffs within the PJM region.

Load Ramp Schedule

In the Tentative Order, we found minimum contract lengths have been established as a key piece of many large load tariff structures and were mentioned by almost all testifying witnesses during the hearing. We encouraged the EDCs to include a multi-year ramp of 3-5 years as the default, with specific milestones worked out case-by-case.

Protect PT, NRDC, Earthjustice's joint comments, Mainspring, Constellation, Duquesne, FirstEnergy, and Amazon support the Tentative Order's proposal of a load ramp period of 3-5 years. Amazon argues that this proposal offers secondary benefits to more accurately forecast and plan for long-term energy needs. Mainspring states that it also provides standardized contract provisions that protect ratepayers against stranded costs. NRDC also suggests that implementation should require advanced reporting of the customer's load ramp schedule. Protect PT Comments at 4. NRDC Comments at 8. Earthjustice Joint Comments at 16-17. Mainspring Comments at 8. Constellation

Comments at 4. Duquesne Comments at 17. FirstEnergy Comments at 17. Amazon Comments at 3.

Protect PT, Earthjustice's joint comments, and Constellation specifically advocate for a five-year cap for a Large Load Customer's load ramp period. Duquesne recognizes that adjustments may be required as additional development occurs, and more is understood about this evolving industry, suggesting consistency with load ramps used by PJM in its forecasting, which may be up to 10 years. Protect PT Comments at 4. Earthjustice Joint Comments at 16-17. Constellation Comments at 4. Duquesne Comments at 17.

CAUSE-PA, TURN, and OCA propose a four-year load ramping schedule. This proposal details a ramping schedule of 50% in Year 1, 65% in Year 2, 80% in Year 3, and 90% in Year 4 of the Contract Capacity. CAUSE-PA and TURN argue that adopting this specific load ramping schedule would ensure statewide consistency, improve transparency, facilitate resource adequacy planning, and enhance consumer protection. OCA is concerned that if the Commission does not specify both the duration of the ramping schedule and the minimum annual demand as part of that schedule, the Commission will have to review and potentially contest each ramping schedule agreed to by the EDC and Large Load Customer. OCA states that all such agreements must be filed with the Commission, with appropriate confidentiality provisions, and subject to review by the Statutory Advocates under Section 508 of the Public Utility Code for potential revisions. CAUSE-PA and TURN Comments at 45. OCA Comments at 38-39.

PECO and EAP propose providing EDCs with flexibility to contractually identify load ramps on a case-by-case basis. PECO argues that for some projects, studies may necessitate a longer period due to procurement and/or buildout of the customer's requested capacity. EAP recommends the Commission establish a principle that load ramp schedules should be reasonable, reflect realistic project development timelines, and

include appropriate protections ensuring infrastructure cost recovery. PECO Comments at 15-16. EAP Comments at 23.

I-CPIE suggests having ramp schedules reflective of the marginal costs (and marginal benefits) of bringing up an additional MWh of demand per period. I-CPIE argues that a standard guideline for the schedule improves predictability and can help to lower the cost of entry for qualified Large Load Customers and improve long-term resource planning. I-CPIE Comments at 4.

DCC recommends that the model tariff should articulate expectations at a general level—for example, that a ramp period on the order of three to five years is often appropriate for very large new loads—while leaving the specific ramp shape and milestones to be negotiated in individual service agreements. DCC argues that those ramp provisions should be coordinated with other elements of the framework, including when minimum billing demand obligations begin to apply, how collateral steps down as the project enters service, and how utility construction milestones are sequenced. DCC also suggests that if the Commission retains long notice periods (for example, 3 years), the final model tariff should also require EDCs to provide early, complete drafts of key agreements and to state interconnection milestones and delivery dates with enough specificity that customers can plan site development and financing. DCC Comments at 4-5.

Disposition

We proposed a multi-year load ramp period of 3-5 years as the default, and that EDCs have discretion to work out the specific milestones on a case-by-case basis. Protect PT, NRDC, Earthjustice’s joint comments, Mainspring, Constellation, Duquesne, FirstEnergy, and Amazon support the Tentative Order’s proposal of a load ramp period of 3-5 years because the proposal enhances customer protection, energy planning, and load

forecasting. One alternative proposal includes a specific four-year load ramping schedule of 50% in Year 1, 65% in Year 2, 80% in Year 3, and 90% in Year 4 of the Contract Capacity filed by CAUSE-PA, TURN, and OCA. CAUSE-PA, TURN, and OCA argue that their proposal ensures statewide consistency and further enhances customer protection, energy planning, and transparency. Another alternative proposal suggests providing EDCs with the flexibility to identify load ramps case-by-case filed by PECO and EAP. PECO and EAP aver that their proposal allows EDCs to establish reasonable and realistic timelines for the procurement and buildout of the customer's requested capacity. We maintain our Tentative Order proposal for a 3-5-year load ramp period. We agree with Amazon and Mainspring that a 3–5-year load ramp period will reasonably improve load forecasting and energy planning as well as ensure that investments do not result in stranded costs.

Exit or Early Contract Termination Fees

In the Tentative Order, we found examples which demonstrate that 42-month notice periods are being implemented as a standard practice in Large Load Customer contracts across multiple jurisdictions, primarily as a mechanism to provide utilities with adequate planning time for capacity adjustments while limiting the financial impact of customer load reductions. As such, we tentatively adopted a similar 42-month notice period. We invited comments on whether a 48-month notice period would be appropriate to align with the PJM load forecast for the delivery year in which the Large Load Customer contract would terminate. We recognized that an exit fee should account for what has already been paid by a Large Load Customer and the costs that have yet to be recovered by the utility.

Protect PT, EDF, NRDC, and KEEA support the Tentative Order's proposal for a 42-month notice. EDF argues that a 42-month notice period is the latest a customer could give notice of its retirement without adversely affecting PJM's applicable BRA. Protect

PT Comments at 4. EDF Comments at 11. NRDC Comments at 8-9. KEEA Comments at 5.

The Shapiro Administration, Protect PT, NRDC, CAUSE-PA, TURN, and FirstEnergy support the 48-month notice period, which the Tentative Order requested comments on. They argue that implementing a 48-month notice period would better align with PJM load forecast for the delivery year in which the Large Load Customer contract would terminate as well as better safeguard consumers from increasing capacity prices in the PJM region. The Shapiro Administration Comments at 8-9. Protect PT Comments at 4. NRDC Comments at 8-9. CAUSE-PA and TURN Comments at 45. FirstEnergy Comments at 26.

OCA and Walmart propose a 60-month notice period. OCA backs its position using the Commission's comments that it would help ensure the notification period is sufficiently long to align with the PJM load forecast for the delivery years in which the Large Load Customer contract would terminate. Walmart argues that this would provide greater and more reasonable risk mitigation as well as better aligning customer flexibility with a utility's investment cycle and depreciation schedules. Walmart submits that this revision would strike a more appropriate balance between accommodating future load uncertainty and maintaining the fundamental cost-causation principle that customers who drive system investments should remain responsible for the costs of those investments over a reasonable period. OCA Comments at 39-40. Walmart Comments at 13-14.

PPL, EAP, DCC, and Amazon oppose the 42-month notice period, believing that it should be shortened. PPL and DCC argue that this is to provide a more workable window and accommodate a variety of circumstances impacting a Large Load Customer's decision to terminate. EAP argues that the Tentative Order's proposal may be an overcorrection as the EDC's associated costs have likely already been recovered. PPL

Comments at 17. EAP Comments at 23-24. DCC Comments at 8. Amazon Comments at 4.

DDC suggests a notice period of 24-36 months. Amazon suggests a notice period of 18-24 months. Amazon avers this timeline would allow EDCs to properly reallocate existing capacity which promotes more responsible grid use while minimizing the risk of stranded assets built to meet new load that could otherwise be served with reallocated capacity. DCC Comments at 8. Amazon Comments at 4.

Duquesne and EAP submit that the notice period would be better left to case-by-case implementation. EAP argues that current practices vary across EDCs, and the Commission's proposed uniform approach would unduly constrict EDCs as they account for other factors. Duquesne Comments at 17-18. EAP Comments at 23-24.

PPL submits that rather than setting a firm notice period, the Commission and the EDCs should focus on cost recoupment. PPL Comments at 17.

Constellation supports the Commission's proposal to require EDCs to mitigate the exit fee amount owed by a Large Load Customer that reduces its contracted capacity requirement by more than 20%. While Constellation understands EDCs' concerns regarding the risks associated with Large Load Customers drastically reducing their contracted capacity requirements, EDCs should be required to make reasonable efforts to minimize the financial impact of load reductions. Constellation Comments at 5-6.

Earthjustice's joint comments support the Tentative Order's proposal that reductions of contracted capacity should be prohibited during the first five years of the contract; however, they suggest that this prohibition should not depend on the total contract length. Specifically, they recommend the Commission remove the "or the initial

contract term, whichever is greater” portion of the Exit Fee section’s first paragraph (pg. 53) of the Tentative Order. Earthjustice Joint Comments at 13-14.

FirstEnergy supports the model tariff’s 20% safe harbor threshold for capacity reductions, with the caveat that the appropriate minimum contract term should be ten years rather than five years. FirstEnergy Comments at 26.

Walmart recommends a reduction allowance of up to 20% of contract capacity after at least 15 years. Walmart argues that allowing significant contract capacity reductions after only five years creates a risk that utility investments (transmission, distribution, and related system upgrades) made to serve that contracted load will not be fully recovered through the customers that caused those costs to be incurred. Walmart submits that this revision would provide greater and more reasonable risk mitigation and strike a more appropriate balance between accommodating future load uncertainty and maintaining the fundamental cost-causation principle that customers who drive system investments should remain responsible for the costs of those investments over a reasonable period. Walmart Comments at 13-14.

CAUSE-PA and TURN suggest that the Commission should lower the allowed reduction to 10% and update the Final Order, accordingly, including the exit fee calculation. CAUSE-PA and TURN Comments at 45-46.

DCC recommends that the model tariff specify that customers should have a right to reduce a defined share of their contract capacity with advance notice and no penalty. DCC argues that any charges associated with capacity reductions should be time-limited, not open-ended, which gives both utilities and customers a way to manage change without undermining the core protections the framework is meant to provide. DCC Comments at 8.

KEEA, Constellation (some portions of the calculation), and FirstEnergy support the Tentative Order's proposal on how to calculate the exit fee. However, some stakeholders suggest alternative proposals and considerations to include in the Final Order. KEEA Comments at 5. Constellation Comments at 5. FirstEnergy Comments at 18.

Earthjustice's joint comments and EAP recommend additional factors to consider within the exit fee formulas. EAP suggests that exit fee formulas should account for system-specific factors. Earthjustice's joint comments suggest that the first proposed calculation methodology should include the cost of cleanup, site remediation, and/or land and investment repurposing, along with all study, planning, and administrative costs incurred by the utility, as part of the "cost of Network Improvements and Interconnection Facilities." Earthjustice's joint comments argue that this recommendation ensures that the Exit Fee provides compensation for the costs incurred to serve a Large Load Customer. Earthjustice Joint Comments at 13-14. EAP Comments at 23-24.

The Shapiro Administration submits that if the large load chooses to exit or terminate before the completion of the initial term, the exit fee should be calculated on a case-by-case basis and should allow the utility to fully recover its planned fixed costs of serving the contracted capacity. The Shapiro Administration Comments at 8-9.

EDF suggests an exit fee amount that would offset the capacity cost impacts of a Large Load Customer's noncompliance, protecting customers from costs. EDF states that the amount of such damages can be reasonably approximated by assessing the noncompliant customer's load's impact on the BRA clearing price. EDF Comments at 11.

NRDC suggests that the exit fee should be sufficient to cover any stranded costs of a Large Load Customer's reduced or terminated capacity. NRDC Comments at 8-9.

Protect PT avers that the exit fee for early contract termination should cover the remaining minimum bill charge for the terminated portion of the contract's duration. Protect PT Comments at 4.

Constellation supports an exit fee calculated as “the difference between the costs placed into rates less the revenues received from the Large Load Customers” and urges the Commission to remove its proposed alternative method for calculating exit fees “as the nominal value of the remaining Minimum Charge for the reduced capacity in excess of the 20% allowed reduction for each year of the exit fee period.” Constellation argues that the proposed alternative exit fee results in unjust and excessive customer payments. Constellation Comments at 5.

PPL submits that the Commission and the EDCs should charge the difference between the cost of socialized upgrades and the amount paid by the Large Load Customer through the transmission portion of its utility bills. PPL states that if the exit fee equals the unrecovered socialized costs, then a notice period is unnecessary and potentially burdensome. PPL Comments at 17.

DCC states that the model tariff should focus on clear principles rather than a single detailed formula. DCC also states that exit charges should be tied to unrecovered, prudently incurred costs or foregone revenues that are reasonably attributable to the large load, after taking into account the utility's ability to remarket capacity to other customers. DCC further states that the goal should be to address genuine stranded-cost risk, not turning exit fees into a second source of earnings or a deterrent to any change over the contract term. DCC Comments at 7-8.

Regarding the “capacity reassignment” principle, the Shapiro Administration, NRDC, Constellation, DCC, and Google agree that the utility could attempt to mitigate the exit/early termination fee by assigning the stranded capacity to another large load and

should prohibit large loads from assigning obligations without the utility's consent. By requiring EDCs to evaluate opportunities to allocate freed transmission capacity to other customers, Constellation submits the proposed model tariff promotes efficient use of available capacity and avoids unnecessarily penalizing Large Load Customers who make business decisions to reduce contracted capacity after the initial term of the contract. Google states that this requirement prevents a windfall and aligns with emerging regulatory standards, such as Google's recent July 2025 settlement with Indiana Michigan Power. The Shapiro Administration Comments at 8-9. NRDC Comments at 9. Constellation Comments at 5-6. DCC Comments at 8. Google Comments at 1-2.

NRDC and DCC submit that these reductions should occur in standardized processes with clear rules, sufficient oversight, and stakeholder input (not behind closed doors). NRDC avers that the Commission's current proposal is vague, leaving room for the benefit of any cost-cutting measures from utilities to be given to a departing Large Load Customer. NRDC Comments at 9. DCC Comments at 8.

PPL recommends that the "capacity reassignment" principle should be explicitly defined to provide procedural guidance for circumstances in which termination occurs before and after the cost of socialized upgrades have been recovered through rates from the Large Load Customer, justifying the Company's capital investment. PPL maintains that upgrades to the grid associated with load growth can be a legitimate and prudent basis for investment by the Company, where they will benefit all customers. PPL argues that even where benefits initially/primarily accrue to one customer, if the investment is recovered fully by revenues received from that customer, it provides yet another basis supporting the prudence of the EDC's investment in that infrastructure. PPL Comments at 18.

PPL also seeks clarification on how the EDC's responsibility "to assign the terminated/reduced capacity to serve new Large Load Customers" should be calculated,

and whether there are time limits to mitigate the terminated or reduced capacity. PPL further requests clarification that the Commission is referring only to the transmission capacity necessary to reliably deliver power to a Large Load Customer and is not imposing mandates on the EDCs to mitigate or otherwise manage the power supply obligations associated with a Large Load Customer. PPL Comments at 18.

DCC suggests that the Commission should update the assignment restriction to allow transfers to lenders, investors, affiliates, tenants or successors in interest upon notice, provided that the EDC consent is not unreasonably withheld. DCC Comments at 8.

Various parties recommend additional provisions to prevent shifting stranded costs to other customers. The Shapiro Administration recommends that contract terms and exit/early termination fees should allow for full recovery of interconnection costs and should prevent stranded costs to serve large loads from being shifted to other ratepayers. EDF suggests including the amount of the exit fee in the Large Load Customer's required financial security. OSBA's position is that if early exit or termination is triggered and early exit or termination fees leave residual stranded cost for the EDC, the EDC should be solely responsible for the recovery of those stranded costs from its shareholders or the exiting Large Load Customer. The Shapiro Administration Comments at 8-9. EDF Comments at 11. OSBA Comments at 6-7.

CAUSE-PA and TURN recommend the Commission to strike the phrase "or otherwise secure offsetting expected revenues" and expressly forbid utilities from mitigating exit fees by shifting costs to residential ratepayers. They argue that this phrase opens the door for cost shifting onto other ratepayer classes, which would defeat the whole purpose of the exit fee provision. They state that utilities should only be able to mitigate exit fees by assigning terminated/reduced capacity to new or existing Large Load Customers. CAUSE-PA and TURN Comments at 46.

PECO is unclear on what is meant by the model tariff's reference to mitigation via a reasonable effort to "otherwise secure offsetting expected revenues." PECO argues that loss of load connected at one point on the grid (and the associated revenues) are not necessarily offset by independent load growth (and revenues) at some other location. PECO requests that the Commission explain its expectations and the potential source(s) of the revenues referenced here. PECO Comments at 17.

Earthjustice's joint comments agrees with the Tentative Order's definition of the Exit Fee Period. However, they recommend that the Commission revise its definition, removing the provision that the Exit Fee Period should not exceed five years. Earthjustice Joint Comments at 13-14.

PPL requests clarification on whether the Commission intends on having a 42-month Exit Fee Period indefinitely for Large Load Customers. PPL states that the current proposal appears to require a rolling automatic 3.5-year extension after the initial 5-year term, and an Exit Fee Period that would go on indefinitely. PPL argues that having a Large Load Customer pay an Exit Fee after taking service for many years, and having covered the cost of socialized network upgrades, does not seem consistent with the goal of designing an Exit Fee to mitigate stranded cost risk. PPL Comments at 17-18.

State Senator Katie J. Muth advocates for assurances that minimum revenue obligations and enforceable exit-fee provisions are incorporated into large-load tariffs and contracts. Muth Comments at 2.

NRDC also suggests that there must be an additional penalty for providing less notice than required in order to, at a minimum, cover costs incurred because of the late notice. NRDC Comments at 8-9.

OSBA's position is that the Commission and EDC, to any extent possible and pursuant to its authority, trigger a formal review in the event of early exit or termination, to ensure the Large Load Customer complies with and fulfills all vendor contract terms, to protect the economic interests of Pennsylvania small businesses. OSBA Comments at 7.

Duquesne suggests that the model tariff should be revised to recommend all EDCs include discussion of exit and early termination fees with the goal of minimizing cost impacts to other customers when demand is reduced, rather than a one-size-fits-all provision. Duquesne Comments at 17-18.

EAP states that it is not clear from the model tariff or associated guidance how the utility is supposed to collect these fees or how they are to be used and/or applied. EAP Comments at 23-24.

DCC suggests that the tariff should encourage utilities to use transparent methods, show their assumptions, and provide simple examples that customers can understand at the time they are making siting and investment decisions. DCC Comments at 7-8.

I-CPIE suggests that exit fees should be aligned with the depreciation schedule of the assets invested in connecting the Large Load Customers. I-CPIE Comments at 3-4.

Disposition

We proposed a 42-month notice period for an exit or early contract termination. Protect PT, EDF, NRDC, and KEEA support the Tentative Order's proposal for a 42-month notice because it is the latest a customer could give notice of its retirement without adversely affecting PJM's applicable BRA. The Shapiro Administration, Protect PT, NRDC, CAUSE-PA, TURN, and FirstEnergy support a 48-month notice period to appropriately align with the PJM load forecast for the delivery year in which the Large

Load Customer contract would terminate. Other stakeholder proposals included such variations as a 60-month notice period, shortening it, or leaving it as a case-by-case basis. We agree with the Shapiro Administration, Protect PT, NRDC, CAUSE-PA, TURN, and FirstEnergy and find it is prudent to align the notice period with the PJM delivery year and as such, will adopt the 48-month notice period.

We proposed that if a Large Load Customer reduces its contract for capacity by no more than 20% after the initial term of the contract and the Large Load Customer provides notice of this reduction at least 42-months in advance of the PJM Delivery Year for when the reduction is sought, no exit fee is required. Constellation supports the proposal, arguing that EDCs should be required to make reasonable efforts to minimize the financial impact of load reductions. Other stakeholders provided alternative proposals, such as allowing the reduction after a certain number of years rather than the initial term of the contract, reducing the percentage of capacity reduction to 10%, or allowing customers to determine the percentage with advance notice. Given the lack of supporting analysis to justify modifications, we maintain our Tentative Order proposal regarding the exit fee mitigation for a Large Load Customer reducing their Contract Capacity by 20% but revise the notice period to 48 months as stated previously. We concur with Constellation that EDCs should make reasonable efforts to minimize losses.

We proposed guidance on the exit fee calculation in the Tentative Order. As we reviewed the volume and complexity surrounding the exit fee calculation comments, we submit that the suggestions regarding specific exit fee calculation components are outside the scope of the model tariff and should be vetted in an actual EDC tariff filing or rate proceeding. Therefore, we will maintain our level of guidance regarding the exit fee calculation as stated in the model tariff in the Appendix. In addition, we acknowledge comments filed by the Shapiro Administration, OSBA, CAUSE-PA, and TURN regarding stranded costs and cost shifting. We note that if the exit of a Large Load Customer results in costs not prudently covered by collateral, CIAC, the exit fee, or other

contractual agreements, the EDC may be responsible for the recovery of these costs from its shareholders and be prohibited from allocating these costs or mitigating exit fees to other customers.

Interruptible Service and Standby Rates for Large Load Customers

In the Tentative Order, we found it beneficial to develop guidance such that large load grid service may be interrupted under certain prescribed conditions. Additionally, we proposed that lower rates or minimum demand charges for Large Load Customers willing to take interruptible service could be enacted in the model tariff.

Environmental stakeholders, OCA, Emerald AI, IECPA, and KEEA generally support encouraging interruptible load programs to be developed by EDCs. Protect PT submits that interruptible service for large loads like data centers has the potential to decrease strain on the grid, reduce the amount of system upgrades needed, and reduce costs for residential ratepayers. IECPA avers such programs could, if well-designed, bolster onsite generation investment. KEEA argues that interruptible strategies can and should become the norm for Large Load Customers. Protect PT Comments at 4. PennFuture Comments at 4. EDF Comments at 12-13. Earthjustice Joint Comments at 19-22. OCA Comments at 41-42. Emerald AI Comments at 1-2. IECPA Comments at 9. KEEA Comments at 5.

EDF recommends that the Commission direct utilities to develop at least one interruptible service option for Large Load Customers and propose such option no later than their next base rate filing. EDF argues that while large load flexibility can significantly streamline their interconnections and reduce the system costs, the Commission's proposal would not apply to utilities that do not have interruptible tariff provisions or obligate those utilities to develop them. EDF also suggests that the Commission should consider implementing an ongoing process to support this

requirement, such as a series of technical conferences, to explore the technical and ratemaking implications of interruptible service, monitor relevant developments in other jurisdictions, and produce model principles and/or language for interruptible service tariffs. EDF Comments at 12-13.

Earthjustice’s joint comments avers that the provisions in the Tentative Order related to interruptible power are inadequate and recommend that (1) the Final Order should require Large Load Customers like data centers to accept interruptible power as a default, and (2) customers receiving interruptible service should have Automatic Load Control devices at their point of interconnection. They argue that managing demand can help avoid the costly investment systemwide to the benefit of all customers, and that the goal should be to have as many Large Load Customers participating in such measures as possible. Earthjustice Joint Comments at 19-22.

Emerald AI recommends two key improvements to the Commission’s proposal: (1) ensuring the model tariff recasts the current “Interruptible Power” option as a clearly defined, contract-enforceable “Flexible Load Service” option that utilities can study, dispatch, and verify; and (2) making clear that achieving larger and faster interconnections—as essential elements of a tariff that also can reduce bills—is essential to incentivizing large loads like data centers to make the investments required to provide verifiable flexibility. Emerald AI Comments at 1.

Citizens, Wellsboro, PPL, EAP, DCC, Amazon and Google recommend that any interruptible service should remain voluntary. Citizens and Wellsboro argue that smaller utilities are not in the position to administer any such service options. PPL shares concerns that requiring EDCs to implement mandatory interruptible rates or providing an interruptible rate only to a certain class of customers conflicts with customer choice principles codified in the Public Utility Code and the Competition Act. PPL also states that the Commission should recognize that a wide variety of interruptible service and

load reduction programs are available to Large Load Customers, with retail suppliers and Conservation Service Providers actively competing to offer tailored solutions. Citizens’ and Wellsboro Comments at 5. PPL Comments at 19-20. EAP Comments at 24-25. DCC Comments at 12-13. Amazon comments at 4. Google Comments at 3.

EAP suggests that the Commission should instead establish broad principles and requirements for distribution-level interruptible service and allow each EDC to determine whether and how to offer interruptible service based on operational feasibility. EAP argues that system planning requirements may not differ significantly whether service is firm or interruptible, limiting infrastructure cost savings and justification for rate reductions. EAP avers that practically all Large Load Customers take supply directly from electric generation suppliers (“EGSs”), so the Commission should not mandate that EDCs offer customers interruptible distribution or default service. EAP Comments at 24-25.

PECO recommends that the provision requiring EDCs to negotiate interruptible rates “upon request” from a Large Load Customer should be removed. PECO argues that this provision (1) could operate as a “back door” to force EDCs without tariffed interruptible rates, like PECO, to offer such rates, and (2) does not include any guardrails to ensure such negotiated rates are in the public interest or do not result in unjust and unreasonable cost shifts to other customers. PECO Comments at 11-12.

PECO and Duquesne suggest removing the “Interruptible Service and Standby Rates for Large Load Customers” section from the Final Order. PECO avers that guidance on the components and execution of EDC interruptible and standby rates is best deferred to EDC-specific base rate proceedings. Duquesne suggests that the Commission convene a meeting of EDC subject matter experts given its complexity. Duquesne notes that it would be difficult, for an EDC, to establish a meaningful interruptible service rate

recognizing that it only has visibility of system conditions within its service territory. PECO Comments at 11-12. Duquesne Comments at 18.

Emerald AI recommends retaining and strengthening the Commission's core policy that large loads can be an asset to reliability and affordability when they are operationally flexible, that flexibility can merit economic incentives (including reduced minimum demand charges), and that verifiable flexibility should also be rewarded—where feasible and consistent with reliability—with what large loads value most: larger and faster interconnections (time-to-power and capacity). Emerald AI Comments at 1-2.

Google recommends that customers who opt into these programs should be eligible for expedited interconnection because their ability to curtail load reduces the immediate need for costly and time-consuming network upgrades. Google states that while the Commission tentatively finds that interruptible service can help protect ratepayers from stranded costs and reduce system upgrade requirements, many data center customers support essential infrastructure that requires absolute firm power. Google Comments at 3.

NRDC recommends that customers should receive credit based on the actual system value of their flexibility instead of lowering minimum demand charges for customers that participate in demand response programs. NRDC suggests the appropriate methodology used to define the benefits of flexibility should be explored by the Commission in a future proceeding. NRDC argues that while demand response could lower a customer's monthly maximum capacity and costs, it is not the proper incentive mechanism, as reducing the minimum demand charge would undermine its intended function, which is to ensure revenues are sufficient to cover the large customer's full costs in case their load does not sustain at contracted levels. NRDC Comments at 10.

Google and ACEEE recommend the Commission establish a formal capacity accreditation mechanism that treats interruptible load as a reliability asset equivalent to a physical power plant. Google argues that by recognizing interruptible load as a formal capacity resource rather than a simple tariff discount, the Commission can incentivize large-scale users to serve as a critical reliability buffer, lowering procurement costs for all Pennsylvania ratepayers while avoiding redundant investments in peak-generation infrastructure. Google Comments at 3. ACEEE Comments at 5.

Earthjustice's joint comments recommend that if customers do not have service automatically interrupted but instead can choose whether or not to curtail demand when called upon, the penalty for failing to comply with interruptible service contracts must be severe. More specifically, they suggest that the penalty should be some significant multiple of the difference between the rate charges under the interruptible versus firm rates over the contract term, and/or should include an adder calculated from the instant market price of capacity during the interruption directive period. Earthjustice's joint comments also recommend that the failure of a Large Load Customer to comply with an interruption directive should not result in the defaulting of that customer to a firm service contract. Earthjustice Joint Comments at 19-22.

FirstEnergy supports the provisions that will apply a monetary penalty based on the difference between the interruptible and non-interruptible rate, as well as requiring the customer's removal from interruptible service, if the customer fails to curtail or interrupt load when directed. FirstEnergy Comments at 19 and 29.

DCC suggests that if an EDC offers interruptible service, the tariff should avoid punitive 'one strike' penalties. DCC Comments at 12-13.

State Senator Katie J. Muth, NRDC, and OCA support requiring curtailment programs for Large Load Customers during grid emergencies. NRDC argues that it is a

reasonable and necessary measure that is not unduly discriminatory and is within the Commission's jurisdiction. NRDC also notes that other states PUCs have already taken steps in this direction, including in Ohio, and that the Commission must maintain reliability and cost-effectiveness for all customers while having unquestionable authority over retail electric service, including the terms and conditions under which service is provided. Muth Comments at 5. NRDC Comments at 9. OCA Comments at 49-52.

State Senator Katie J. Muth advocates adopting explicit emergency curtailment rules requiring noncritical large loads be curtailed before any residential or small business customers and should ensure that utilities can isolate and shed these loads without compromising broader service. Muth Comments at 5.

CAUSE-PA and TURN urge the Commission to develop an explicit load-shedding prioritization schedule for inclusion in its model large load tariff that will take effect in a grid emergency. They share concerns that the Commission has not included any mandatory load shedding provisions within its model tariff in the event of a grid emergency. CAUSE-PA and TURN Comments at 42-43.

OCA recommends that the Commission should require that new large loads be interruptible or curtailable during PJM- or utility-directed emergency conditions, including as a condition of interconnection, with clear performance expectations and consequences for noncompliance. OCA argues that the Commission and the EDCs have not asserted that Large Load Customers will be treated differently from other customers, and that a failure to differentiate is not aligned with the scale of risk created by rapid large load growth, such as manual load shed events under the EDCs' current tariffs or Emergency Load Control Procedures. OCA Comments at 49.

OCA also suggests that the Commission should require the EDCs' tariffs and Emergency Load Control Procedures to subject Large Loads to differentiated treatment

during manual load shed/emergency curtailment events. OCA argues that reliability related service conditions should be reflected in enforceable tariff language, and EDCs should be directed to update their tariffs Emergency Load Control Procedures to implement the Commission-approved priority and curtailment framework for large loads in a transparent and administrable manner. OCA Comments at 50.

OCA recommends that the Commission require utilities' curtailment plans be updated to make clear that the non-critical load of Large Load Customers be curtailed before and to the extent of preventing curtailments of residential customers. OCA also recommends that large loads should be required to support implementation measures that make curtailment workable and verifiable, including: (1) service on dedicated or otherwise segregable feeders where practicable; (2) clear identification of any "critical" load segments, with those segments separated behind the meter to the extent the customer seeks higher continuity of service; and (3) telemetry and communications capability sufficient for EDCs to execute and confirm curtailment actions during emergency operations. OCA argues that if new large loads increase the probability or severity of emergency operating actions, then it is appropriate that they face differentiated service conditions designed to mitigate the incremental reliability risk they introduce. OCA also argues that existing customers should not bear increased outage exposure as a result of accommodating a subset of exceptionally large new loads. OCA Comments at 51-52.

DCC suggests that curtailment language should apply in a non-discriminatory manner to similarly situated large loads, not a single industry category. DCC Comments at 12-13.

Emerald AI recommends the Commission clarify that "flexible service" is not limited to binary on/off interruption but may also include partial reductions and planned peak shaping. Emerald AI argues that the Commission's own discussion indicates

flexibility can be partial, measured as a share of interruptible service or a number of hours per year. Emerald AI Comments at 2 and 5-6.

Mainspring recommends that the Commission should establish a permanent flexible/non-capacity-backed service option—separate from PJM emergency demand response participation—that provides a standardized retail product for customers willing to commit to defined flexibility (e.g., peak import caps, ramp limits, curtailment availability). A bankable, scalable flexible service product should specify (i) operational triggers and limits, (ii) measurement and verification standards (telemetry, baselines, performance testing), (iii) penalty structure, and (iv) how flexibility commitments translate into reduced infrastructure requirements, CIAC, or study prioritization. Mainspring Comments at 4 and 9.

Google recommends that the Commission maintain a clear distinction between interruption policy and cogeneration/standby rate policy, as they serve different technical functions. Google states that standby rates or non-firm service should be specifically developed for customers with co-located generation who require grid access for limited hours or emergency backup. In contrast, interruptible customers should be encouraged to participate in economic and emergency demand response as grid assets, provided that interruptions are limited to a specific number of hours per year to maintain commercial viability. Google Comments at 3.

Disposition

We proposed that interruptible service programs will be available to Large Load Customers based on the EDC's existing interruptible tariff provisions. Environmental stakeholders, OCA, Emerald AI, IECPA, and KEEA generally support encouraging interruptible load programs to be developed by EDCs due to the program's potential to enhance generation investment and reduce costs for other ratepayers. Citizens,

Wellsboro, PPL, EAP, and Large Load Customers recommend that any interruptible service should remain voluntary because requiring such programs violate customer choice principles. Considering that few comments oppose the proposal, we adopt the provision as proposed that interruptible service programs are based on the EDC's existing interruptible tariff provisions. We agree with the EDCs that requiring such programs only to a certain class of customers may be considered discriminatory.

We proposed that Large Load Customers that are not using their full interconnection limit may be offered lower minimum demand charges and/or standby rates. Some alternative proposals include expedited interconnection because curtailing load would reduce upgrade requirements or treating interruptible load as a reliability asset to lower procurement costs for all ratepayers and avoid redundant investments in peak -generation infrastructure. We are not persuaded by commentors to modify our proposal regarding lower minimum demand charges and/or standby rates for interruptible load. We find our proposal to sufficiently incentivize Large Load Customers to consider interruptible service.

We proposed a penalty for Large Load Customers refusing to curtail or interrupt as directed by the EDC. Alternative proposals include increasing the monetary penalty to adequately incentivize Large Load Customers to comply with interruption directives, or removing the requirement that defaults the customer to firm service if the customer fails to interrupt as directed because the Commission should avoid "one strike" penalties. We are not persuaded to modify our proposal. We find our proposal to sufficiently encourage Large Load Customers to comply with interruption directives from EDCs.

We proposed requiring EDCs to provide Large Load Customers with their emergency response customer requirements, including required actions by the Large Load Customer necessary to respond to an emergency load shed event called by PJM. State Senator Katie J. Muth, NRDC, OCA, and PAWC support requiring curtailment

programs during grid emergencies, stating that it is within the Commission’s authority to maintain reliability and cost-effectiveness for all customers. CAUSE-PA, TURN, and DCC generally support voluntary load curtailment programs because a voluntary program may prevent the need for additional infrastructure. We are not persuaded by stakeholders to modify the Tentative Order’s proposal regarding curtailment programs. We find our proposal to sufficiently maintain system reliability and cost-effectiveness across the electric grid.

Infrastructure Upgrades by Large Load Customers

In the Tentative Order, we proposed a self-construct option for customers willing to fully fund infrastructure upgrades. We agreed that existing utility standards may be imposed on customer funded construction, even in instances of infrastructure connected to the transmission system.

EDF, NRDC, OCA, OSBA, Mainspring, Invenergy, Constellation, and Large Load Customers support the Tentative Order’s proposal for a voluntary self-construct option for customers willing to fully fund infrastructure upgrades. NRDC avers that customer-constructed infrastructure could reduce financial risks associated with a project by avoiding the potential of stranded costs and cost shifts entirely, and that prohibiting customer-funded infrastructure would be a disservice to all customers. Invenergy submits that this recommendation will accelerate the deployment of needed facilities, better align costs with beneficiaries, and reduce the risk of delay for critical load-serving and generation investments. Invenergy states that the self-construct option recognizes that serving Large Load Customers will require significant transmission and distribution upgrades, and that those upgrades must be planned and funded in a way that preserves reliability and fairly allocates costs, providing a practical foundation for utility–customer collaboration on long-term infrastructure that supports the grid and the Commonwealth’s economic-development goals. Constellation argues that self-construction provides Large

Load Customers with more control and certainty during the design and construction phases of the interconnection process, and that Large Load Customers may be able to self-construct upgrades more quickly and at a lower cost than the EDC. Constellation and Google submit that self-construction will enable speed to market while maintaining safety and reliability and preventing socialization of construction costs to existing customers. EDF Comments at 13. NRDC Comments at 10-11. OCA Comments at 43. OSBA Comments at 7. Mainspring Comments at 8. Invenergy Comments at 4. Constellation Comments at 2-3. DCC Comments at 13. Amazon Comments at 4. Google Comments at 2.

NRDC suggests a self-construct option process similar to PG&E's Electric Rule 30's Applicant Build Option. NRDC Comments at 10-11.

OCA states that Large Load Customers should be liable for self-construction and have sufficient insurance or equivalent commercially acceptable financial guarantees to cover the costs of any damages resulting from their facilities not being built to the EDC's requirements. OCA also states that under no circumstances should ratepayers be held financially responsible for the failure of the self-constructed facilities of Large Load Customers. OCA Comments at 43.

OSBA's position is that the Large Load Customer must pay for any incremental work that self-constructed infrastructure causes the Utility to incur, including but not limited to compliance and integration activities. OSBA Comments at 7.

If the Commission determines that Large Load Customers should be permitted to make system upgrades directly, PPL urges the Commission to permit a "build your own option" only if the EDC is not meeting interconnection deadlines as prescribed by the parties' agreement. PPL Comments at 20-21.

PAWC, the EDCs, and EAP oppose the Tentative Order's self-construct provision. PAWC, PECO, FirstEnergy, and EAP argue that allowing third parties to do their own upgrades to the broader electric grid can compromise safety and reliability standards as well as compliance responsibilities for transmission owners. FirstEnergy, PPL, Citizens', and Wellsboro also argue that EDCs are best positioned to efficiently and cost-effectively construct necessary system upgrades associated with large load interconnections. In addition, EAP shares concerns over potential disputes between EDCs and the Large Load Customer. Duquesne submits that any infrastructure in front of the meter, in the public utility right-of-way, and/or under PUC jurisdiction should be constructed, owned, and maintained by the EDC. PAWC Comments at 4. PECO Comments at 10-11 Duquesne Comments at 19. FirstEnergy Comments at 20-22. PPL Comments at 20-21. Citizens' and Wellsboro Comments at 5. EAP Comments at 25-26.

PECO requests that the Commission specify in its Final Order in this proceeding that EDCs have discretion to incorporate related provisions into their future large load tariffs. PECO recognizes the potential benefits of Large Load Customers purchasing long-lead equipment at a reasonable cost and in strict compliance with utility technical standards. PECO Comments at 11.

If the Commission wishes to explore allowing customers to self-construct infrastructure, Duquesne recommends that the Commission should do so via separate proceedings or a working group, rather than a model tariff. Duquesne argues that construction of facilities that potentially impact the transmission system should be restricted to organizations under FERC and NERC oversight, which excludes data center customers and developers. Duquesne Comments at 19.

Of those who commented on whether utilities should earn returns on customer-funded infrastructure, there is an overwhelming consensus in opposition. EDF, NRDC, CAUSE-PA, TURN, and OCA recommend that EDCs should not be allowed to

earn a return on any facilities self-constructed by Large Load Customers. EDF, CAUSE-PA, TURN, and OCA argue that utilities did not finance the cost of such facilities, which means the investment comes without risk of recovery to the EDC. OCA avers that there is no need for such a provision, and if allowed, it would open the door to numerous possible non-investments for which EDCs would request returns. NRDC also argues that if allowed, it would mark a radical shift in current regulatory practices. EDF Comments at 13. NRDC Comments at 10-11. CAUSE-PA and TURN Comments at 31-32. OCA Comments at 43-44.

CAUSE-PA and TURN state that the Commission's response to the question regarding utilities earning a rate of return for customer-funded infrastructure is fundamental, and should not be punted to some future, unidentified proceedings. CAUSE-PA and TURN Comments at 31-32.

If the Commission does not adopt clear self-construct guardrails, Mainspring recommends initiating a scoped follow-on proceeding with a defined schedule on utility return and cost allocation for customer-funded upgrades. Mainspring argues that this proceeding will ensure that uncertainties do not stall projects. Mainspring Comments at 10-11 and 16.

Multiple parties share additional suggestions regarding infrastructure upgrades by Large Load Customers for the Commission to consider.

State Senator Lindsey M. Williams advocates for requiring the use of local union labor in the event of customer-funded infrastructure. Senator Williams states that the best way to ensure that the work meets existing engineering and Commission standards is to have it done by workers who have the experience, safety standards, and worker protections that come with union labor. Williams Comments at 3.

AEU recommends that the tariff should specify the resource characteristics that large-load customers are seeking, including transmission and distribution resources that are sourced or supported via utility procurements, bilateral or trilateral contracting, behind the meter and front of meter co-location arrangements, or other sourcing processes. AEU Comments at 2.

Mainspring recommends that the Final Order establish near-term minimum standards for contractor qualification, technical standards, oversight, acceptance/commissioning, and dispute resolution for self-construct. Mainspring Comments at 10-11 and 16.

PECO seeks clarification on the future ownership or control of such infrastructure once construction is completed. PECO highlights that the maintenance of the distribution system and the obligation to provide safe, reliable service to all customers are core responsibilities of each EDC, and PECO is not aware of any way those responsibilities can be legally shifted to non-utility third parties. PECO Comments at 10.

Disposition

Our Tentative Order suggested Large Load Customers should be permitted to self-construct infrastructure upgrades, even if those upgrades would be network upgrades impacting the broader grid rather than infrastructure on the customer side of the meter. We recognize that this was an out-of-the-box proposal. Network infrastructure will affect ratepayers on the system beyond the Large Load Customer. Our EDCs apply stringent and uniform standards to maintain a safe and reliable system. We would never propose any action that we felt would erode those standards.

In the current environment, however, with serious constraints on workforce and supply chains, we find it is warranted to allow Large Load Customers to directly

construct infrastructure upgrades if they have the resources to do so. Some of the developers of large load projects are large, sophisticated companies that may have their own access to equipment that is difficult to acquire quickly due to high demand. Constellation and Google commented that self-construction may improve speed to market for Large Load Customers while reducing costs to other ratepayers. Any self-construction would be required to meet all EDC standards for safety and reliability. Those upgrades would also have to comply with all applicable FERC and NERC regulations.

We appreciate the concerns raised by some commenters, including many of the EDCs. Nevertheless, we find that on balance our Commonwealth would be better served by allowing self-construction. Several commenters, including the OSBA and OCA, pointed out that customer construction can reduce costs for the overall system and protect ratepayers, as any assets constructed by the customer would not be included in utility rate bases. In our opinion, a policy that makes Pennsylvania a more attractive place for investment and economic development while simultaneously insulating ratepayers from stranded costs is in the public interest.

Universal Service Cost Allocation

In the Tentative Order, we agreed with CAUSE-PA and TURN that the addition of Large Load Customers has an impact on the rates all customers pay for electricity, especially in relation to capacity and transmission rates. As such, we proposed a requirement that Large Load Customers contribute to the utility's hardship fund annually, with the minimum amount to be contributed based on the Large Load Customer's peak demand. We were seeking comments on whether there should be a required contribution to a utility's low-income program and whether the utility's hardship fund is the appropriate program and whether the amounts proposed are appropriate.

The discussion revealed no agreement over the inclusion of universal service cost allocation. While multiple parties suggest expanding the contribution to universal service programs and/or implementing a volumetric charge, others expressed opposition to the contributions within the Final Order.

State Senator Carolyn Comitta, State Senator Lindsey M. Williams, the Shapiro Administration, SCA, CAC, EDF, NRDC, Earthjustice's joint comments, CAUSE-PA, TURN, OCA, KEEA, Duquesne, FirstEnergy, and EAP recommend that contributions to a utility's low-income program should be expanded to universal service programs such as customer assistance programs. The Shapiro Administration, EDF, CAUSE-PA, TURN, OCA, Duquesne, FirstEnergy, and EAP submit the universal service programs are more appropriate than the hardship fund based on the greater reach of the former program, benefiting all customer classes. Senator Williams, CAC, EDF, NRDC, OCA, and KEEA submit that by requiring contributions to universal service programs, the model tariff can help ensure that Large Load Customers are doing their part to offset rising energy costs. Duquesne, FirstEnergy, and EAP find that expanding to universal service programs may be more fair and more administratively feasible, reducing the impact of fluctuating annual contributions. EAP shares concerns over how the current Tentative Order requirement would increase some current hardship fund budgets by over 100%, causing utilities and their community partners to possibly struggle to distribute this level of funds and negatively impacting the contributions' goal of helping to offset any impact the addition of Large Load Customers has on rates. Under the Commission's current proposal, Duquesne highlights that (1) contributions may shift year to year as data centers open, close, and adjust usage; (2) the plan administrator charges administrative fees based on the volume of grants provided; and (3) these administrative charges are paid by all residential customers via the universal service surcharge. Earthjustice's joint comments highlight that the need for new revenues to meet increased universal service program needs is more urgent than ever in light of cuts to federal funding for basic needs programs. CAUSE-PA and TURN note that there is no indication that imposing a

requirement to contribute to universal service and energy conservation program costs would place the Commonwealth at any disadvantage and that such a requirement would bring Pennsylvania into closer alignment with its peer states, like New Jersey, New York, and Ohio. Comitta Comments at 2. Williams Comments at 2-3. The Shapiro Administration Comments at 9. SCA Comments at 1. CAC Comments at 3. EDF Comments at 13-14. NRDC Comments at 11. Earthjustice Joint Comments at 14-15. CAUSE-PA and TURN Comments at 16, 19, and 26. OCA Comments at 44-47. KEEA Comments at 5. Duquesne Comments at 20-21. FirstEnergy Comments at 22-23. EAP Comments at 26-28.

State Senator Lindsey M. Williams, the Shapiro Administration, DEF, EDF, NRDC, Earthjustice's joint comments, CAUSE-PA, TURN, KEEA, and I-CPIE recommend including an ongoing volumetric charge (per kWh) in addition to a flat up-front fee (based on the Commission's tiered pricing structure). DEF argues that this approach would align with Commissioners Barrow and Zerfuss's statements, ensuring system beneficiaries bear fair responsibility while strengthening affordable service for vulnerable households. EDF argues that this recommendation would allow for a more dynamic and equitable assignment of costs based on relative size of the large user. Earthjustice's joint comments and I-CPIE state that eliminating arbitrary tiers in the payment structure will prevent the gaming of facility design to remain under a threshold. I-CPIE also states that fixed schedules do not reflect the marginal cost impacts or provide incentives for improving demand management. Williams Comments at 2-3. The Shapiro Administration Comments at 9. DEF Comments at 2-3. EDF Comments at 13-14. NRDC Comments at 11. Earthjustice Joint Comments at 14-15. CAUSE-PA and TURN Comments at 16-17, 20, 22-23, and 26. KEEA Comments at 5-6. I-CPIE Comments at 1-2.

Regarding the volumetric fee component, various proposals suggest how it should be calculated:

The Shapiro Administration and Earthjustice's joint comments recommend that the minimum amount should not be contributed based on the Large Load Customer's peak demand, but on actual electricity consumption. They state that using a volumetric formula proportionate to actual electricity consumption will incentivize load flexibility, which reduces total system costs. The Shapiro Administration Comments at 9. Earthjustice Joint Comments at 14-15.

I-CPIE suggests that contributions should be related to actual system costs, including performance-based contributions and dynamic pricing that is reflective of the marginal impacts on the level and the changes (ramping) of the demand. The volumetric components can be implemented through various forms of dynamic pricing, including rates indexed to the Locational Marginal Prices (LMPs) calculated at the specific interconnection node and ramping costs for large variations in a period of time. I-CPIE argues that this recommendation can create conditions that will make the Large Load Customers active participants in the energy market and encourage flexibility that can support the electrical system in times of stress. I-CPIE Comments at 1-2.

CFPPA, Duquesne, FirstEnergy, and EAP disagree with addressing the hardship requirement in the Final Order. Duquesne, FirstEnergy, and EAP recommend that the Commission should instead consider this matter in a separate regulatory proceeding, the next Universal Service and Energy Conservation Plans ("USECPs") proceeding, or case-by-case review in base rate cases. FirstEnergy argues that USECP filings and rate case proceedings are established regulatory processes that detail company level funding decisions and allow for stakeholder input. EAP states that it is not aware of other jurisdictions imposing large fixed annual contributions specifically on Large Load Customers, which may create a cumulative burden that disadvantages Pennsylvania.

CFPPA Comments at 2. Duquesne Comments at 20-21. FirstEnergy Comments at 22-23. EAP Comments at 28-29.

Regarding the Commission’s authority to implement these contributions, CFPPA argues that the contribution is well beyond the statutory authority of the Commission and will certainly lead to litigation. CFPPA avers that singling out Large Load Customers is unfair and sets a dangerous precedent for forced contributions unrelated to the costs the entity will impose. CFPPA Comments at 2.

CAUSE-PA and TURN submit that the Commission has clear authority to require both the universal service contributions and an ongoing volumetric charge, as (1) the Commission has a statutory obligation to ensure energy is “available to all customers on reasonable terms and conditions” and to support energy affordability measures benefitting low-income Pennsylvanians, (2) mandated contributions to utility hardship funds are perfectly legal and well-precedented under the Electric Choice Act, and (3) the Commonwealth Court in *Lloyd v. Pa. PUC* has clarified that “there is no statutory requirement that the funding for special programs come only from those who benefit from the programs,” which means the Commission has discretion in determining which customer classes should pay for public purpose programs—whether or not those classes benefit from the programs—and has the authority to assign costs accordingly. In addition, CAUSE-PA and TURN state that to their knowledge, Pennsylvania is the only state that limits cost recovery of universal service programming to the residential ratepayer class, in which the Commission may revoke or modify this exemption for non-residential ratepayers at the Commission’s discretion. CAUSE-PA and TURN Comments at 16-17, 20, 22-23, and 26.

State Senator Lindsey M. Williams and OCA submit that the proposed monetary amounts are too low and recommend increased contributions to a utility’s low-income program. Williams Comments at 2-3. OCA Comments at 44-47.

The Shapiro Administration suggests that the universal service rate for large loads should be calculated and periodically adjusted to offset or eliminate residential customer contributions to universal service program funding while increasing or holding steady the level of service provided by the universal service program. The Shapiro Administration Comments at 9.

EDF suggests the Commission adopts, or provides a roadmap for adopting, a more nuanced fee structure. EDF Comments at 13-14.

CAUSE-PA and TURN recommend that the Commission require any EDC with a universal service and energy conservation program to address cost recovery and allocation of universal service costs in the first 1308(d) general base rate case filed after issuance of the order in this proceeding. They suggest that the model tariff does not need to determine the appropriate allocation of fees and costs at this juncture, and that the model tariff should instead include specific parameters, including expected rate design, to guide those future proceedings and ensure consistent application across the Commonwealth. They argue that this recommendation allows for more flexible and equitable assignment of universal service costs, which can be scaled to the energy demand of each Large Load Customer. CAUSE-PA and TURN Comments at 26-27.

OCA recommends that (1) the monetary amounts in the proposed schedule should be tied to inflation with the base year being 2026, and (2) the monetary amounts collected under the proposed schedule should be allocated across all utilities' hardship funds, not just to the utilities with Large Load Customers. OCA Comments at 44-47.

IECPA recommends requiring contributions to EDCs' hardship funds, if adopted, be directly connected with cost-causation principles. In other words, IECPA suggests limiting mandated hardship fund contributions by Large Load Customers to a defined period of time (e.g., the minimum contract period) to ensure the contributions are roughly

matched with the cost drivers, particularly the speed-to-market demands of high-impact load growth. IECPA states that it is crucial that the true cost drivers – that is, the high-impact loads that rapidly change the cost and market factors – are the ones that require contribution, and that any mandated hardship contribution must not encompass existing industrial and institutional customers who are not driving the increased costs. IECPA Comments at 8-9.

DEF suggests that such contributions could be structured as supplemental tariff-based charges. DEF Comments at 2-3.

CAUSE-PA, TURN, and KEEA urge the Commission to include a provision that equitably and proportionately assigns universal service and energy conservation program costs through a non-by passable, volume-based rider. CAUSE-PA and TURN Comments at 16-17. KEEA Comments at 5-6.

OCA urges the Commission to include a non-by passable “system benefits charge” for Large Load Customers to contribute to the costs of universal service programming in its model tariff. OCA Comments at 44-47.

Duquesne recommends utilizing a universal surcharge. Duquesne Comments at 20-21.

If the Commission would include a contribution towards low-income programs provision to Large Load Customers in the model tariff, FirstEnergy submits that an allocation of the overall costs of the Universal Service Cost Rider would be more effective and easier to administer than hardship fund contributions, providing a greater benefit to customers. FirstEnergy Comments at 22-23.

DEF recommends that the Commission's Final Order explicitly support the development or adoption of funding mechanisms through which Large Load Customers could voluntarily, or be compelled to, directly contribute to Hardship Programs. DEF Comments at 2-3.

EDF suggests that the Commission clarify that Large Load Customers' contribution to universal services programs should increase those programs' total budgets, rather than effecting a reallocation of existing budgets. EDF Comments at 13-14.

In addition to contributions to the Universal Service Fund, KEEA suggests establishing a fund dedicated to promoting energy efficiency that would be paid into by the Large Load Customers as part of the interconnection process. KEEA Comments at 5-6.

EAP avers that utilities will likely have other operational concerns should this be put into place such as how this contribution should be collected, what happens if a customer fails to pay, how is this charge reflected, and at what point in the process it should be collected (at the beginning of the contract year, included as a part of financial security requirements, other). EAP Comments at 26-28.

EAP seeks further clarification on several implementation questions to ensure that any universal service contribution requirements are equitable, legally sound, and administratively workable. EAP suggests that the Commission should clearly specify whether this suggested requirement would apply to existing customers and, if so, provide appropriate transition mechanisms. EAP submits that the Commission should specify how peak demand will be measured; whether the peak demand is based on contracted or actual demand; whether there is impact based on a ramping schedule; and if or when peak demand should be reassessed for purposes of this contribution. EAP Comments at 26-28.

Disposition

We suggested that Large Load Customers contribute to the utility's hardship fund annually, with the minimum amount to be contributed based on the Large Load Customer's peak demand. Of those supporting these contributions, there are two main recommendations. The first recommendation is that contributions to a utility's hardship fund should be expanded to universal service programs, including the Customer Assistance Programs (CAPs), which was proposed by State Senator Carolyn Comitta, State Senator Lindsey M. Williams, the Shapiro Administration, SCA, CAC, EDF, NRDC, Earthjustice's joint comments, CAUSE-PA, TURN, OCA, KEEA, Duquesne, FirstEnergy, and EAP. The second recommendation was that an ongoing volumetric charge (per kWh) should be adopted in addition to a flat up-front fee (based on the Commission's tiered pricing structure), which was proposed by State Senator Lindsey M. Williams, the Shapiro Administration, DEF, EDF, NRDC, Earthjustice's joint comments, CAUSE-PA, TURN, KEEA, and I-CPIE.

CFPPA, Duquesne, FirstEnergy, and EAP disagree with addressing the hardship fund requirement in the Final Order, with Duquesne, FirstEnergy, and EAP recommending that the Commission should instead consider this matter in a separate regulatory proceeding, the next Universal Service and Energy Conservation Plan ("USECPs") proceedings, or on a case-by-case bases in rate cases. We agree with parties that suggested that EDC rate cases and Universal Service Plan proceedings are the appropriate venue for addressing Universal Service total funding levels, structures, eligibility requirements, enrollment procedures, and other program features. However, this does not preclude us from addressing the appropriateness of having Large Load Customers contribute to these programs in this proceeding and the EDC tariff filings that will result.

CAUSE-PA and TURN have stated that to their knowledge, Pennsylvania is the only state that limits cost recovery of universal service programming to the residential ratepayer class, in which the Commission may revoke or modify this exemption for non-residential ratepayers at the Commission's discretion. We agree with CAUSE-PA and TURN that the Commission has the authority to require other customer classes, not just the residential class, to contribute to the costs of universal service programs and that we do have an obligation to ensure that electric service is available to all customers on reasonable terms and conditions. We point to the Commission's long-standing Policy Statement on Customer Assistance Programs at 52 Pa. Code §§ 69.261 – 69.267; specifically, 69.266 (relating to cost recovery) that declares "No rate class should be considered routinely exempt from CAP and other universal service obligations." We agree with comments made by State Senator Carolyn Comitta, State Senator Lindsey M. Williams, the Shapiro Administration, SCA, CAC, EDF, NRDC, Earthjustice's joint comments, CAUSE-PA, TURN, OCA, KEEA, Duquesne, FirstEnergy, and EAP and modify our guidance to allow EDCs to propose in their tariff filings that Large Load Customers provide contributions to universal service programs generally, not limited to the utility's hardship fund. We agree with the comments from many of the EDCs, advocates, and the Shapiro Administration that this would be administratively feasible and in the public interest.

Contributions to utility universal service programs would not only help ameliorate the impact of rising energy prices for low-income universal service program participants but will also help all residential customers by relieving some of the cost burden of these programs, which are currently borne solely by residential electric customers. However, while EDCs are free to propose what they think best in this regard, we are inclined to favor a flat fee model based upon the Large Load Customer's peak demand as opposed to a volumetric charge. Such a fee structure would be simpler for the EDCs to assess and administer and provide greater predictability and transparency for both the utility and the Large Load Customer.

Reporting Requirements

The Commission tentatively determined that certain reporting requirements related to Large Load Customers would be informative. We requested comments on the following:

- (a) An EDC should report to the Commission on a semiannual basis the information identified below subject to the protection of confidential and competitively sensitive information ("Confidential Information") in the report. The reported Confidential Information should be exempt from public disclosure. The confidential portions of the report should not be provided to the Large Load Customers or other competitively interested stakeholders. The confidential portion of the report will be provided to the statutory advocates subject to agreed procedures (or, in the absence of agreement, Commission ordered procedures) for the protection of the Confidential Information.
- (b) The confidential report should include the following with respect to Large Load Customers:
 - i. The number of executed ESAs and transmission letters of agreement ("LOAs") (semi-annual additions and cumulative total);
 - ii. Contract Termination Fees assessed (number of fees assessed and dollar amount of each);
 - iii. Notices of reduction to contract capacity with each MW reduction separately identified;
 - iv. Status update on prospective Large Load Customers providing the number of customers and total load at the following development stages: (1) expressed interest; (2) undergoing Transmission Planning internal analysis; (3) Executed LOA; (4) executed electric service agreement; (5) site in service;
 - v. Summary information regarding aggregate investments made by EDC to serve Large Load Customers including, but not limited to, direct connect facilities, local network upgrades, other transmission investment, and other distribution system investment (if applicable) as quantified in executed LOAs;
 - vi. Aggregate Large Load Customer MW in service; and
 - vii. Aggregate Large Load Customer MWh in service.
- (c) The first semi-annual report will be filed within six months of a Commission Final Order approving this guideline requirement. Upon Commission request following

the filing of any semi-annual report, copies of executed Energy Service Agreement (ESAs) and transmission Letter of Authorization (LOAs) should also be provided to the Commission, the Office of Small Business Advocate (OSBA), Office of Consumer Advocate (OCA) and the Commission's Bureau of Investigation and Enforcement (BI&E) subject to agreed upon or, in the absence of agreement, Commission ordered terms of protection of the Confidential Information.

Additionally, we propose the following annual reporting requirement:

On or before March 31 of each year, the Company shall file with the Commission, on a confidential basis, a compliance report covering the prior calendar year. The report shall include:

- Revenue vs. Forecast – Actual revenues collected from Large Load Customers compared to forecasted revenues under approved tariff rates.
- Distribution System Impacts – Identification of any significant distribution system upgrades, reinforcements, or operational issues attributable to Large Load Customers, and the extent to which such costs were directly assigned or recovered from those customers.
- Curtailment Enforcement – A record of any Company-initiated distribution-level curtailments or interruptions applicable to Large Load Customers, including any failures to comply and penalties assessed.
- Equity and Outreach – A description of measures undertaken to mitigate potential impacts of Large Load Customer rates on low-income or disadvantaged communities, and a summary of customer education and outreach efforts.

Multiple stakeholders shared differing opinions regarding the reporting requirements, with some supporting the Tentative Order's proposal and others proposing additional requirements or opposing the proposed requirements.

The Shapiro Administration, EDF, NRDC, OCA, and Vistra support the confidential reporting requirements outlined in the Tentative Order. The Shapiro Administration submits that collecting and tracking the data proposed by the Commission are critical to monitor and further notes the importance of collecting certain specific information relevant for system reliability, such as ride-through capabilities, expected load per-minute ramp rates, and the size and ramping capabilities of anticipated backup

generation and storage systems. NRDC anticipates this information will better enable the Commission and other government bodies to regulate large load additions in a reasonable and effective manner. EDF recommends the Commission preserve the proposed reporting requirements, including the Equity and Outreach reporting requirements, in its Final Order. The Shapiro Administration Comments at 9-10. EDF Comments at 14. NRDC Comments at 11. OCA Comments at 47. Vistra Comments at 5.

State Senator Carolyn Comitta suggests having Large Load Customers provide transparent reporting on energy procurement and usage, water usage, and environmental impacts. Comitta Comments at 3.

State Senator Katie J. Muth advocates for expanding transparency and reporting requirements to include annual reporting on large load development and infrastructure impacts, so that advocates, lawmakers, and the general public can monitor cumulative effects across the Commonwealth. Senator Muth avers that without stronger tariff requirements and reporting obligations, communities may continue to bear the consequences of decisions made through confidential agreements. Muth Comments at 3 and 5.

CCJ advocates for incentivizing or requiring Large Load Customers to provide transparent reporting on load profiles, energy procurement, and system impacts. OCA also recommends that hourly load profiles of Large Load Customers be collected, subject to confidentiality provisions. OCA argues that such hourly load profiles are critical for evaluating resource adequacy, assessing transmission and distribution upgrades, and determining cost allocations. CCJ Comments at 2. OCA Comments at 47.

EDF, CAUSE-PA, and TURN recommend that the Commission should strengthen public disclosure requirements and revise the Tentative Order to direct utilities to file public versions of such annual reports. CAUSE-PA and TURN also suggest that the

Commission should require EDCs to include a public-facing summary of each report written at a sixth-grade level with all reports available on a dedicated publicly accessible webpage. EDF argues that it is not clear why aggregated data regarding forecast versus actual revenues, distribution system impacts, or customer outreach efforts should be confidential. CAUSE-PA and TURN also argue that the Commission provided no basis for the blanket grant of confidentiality for the required reports. EDF states that much of those data are presumptively subject to disclosure in utilities' base rate proceedings anyway. EDF Comments at 14. CAUSE-PA and TURN Comments at 33-34 and 36-37.

OCA recommends that Commission staff develop a uniform data reporting methodology that is periodically revisited and updated so that data is collected efficiently, consistently, and in an accessible and useful format. FirstEnergy and EAP submit that the Commission should also provide a standardized template or format for semi-annual reports, ensuring consistency across EDCs and simplifying preparation, if the Commission proceeds to incorporate reporting requirements in the Final Order. OCA Comments at 47. FirstEnergy Comments at 23. EAP Comments at 30-31

Regarding Section (b) part iv of the proposed reporting requirements, OSBA proposes that the utility includes the number of customers and total load by year based on anticipated in-service date of the new large load, not just aggregate numbers. In addition, OSBA proposes a new Section (b) term, based on OSBA's proposed results of Section (b) part iv., intended for the utility to estimate a probable or likely number of customers and total load for each in-service year. OSBA suggests that the probabilistic methodology for analysis may be at the utility's discretion, provided that the methodology is filed with the report. OSBA also suggests that the methodology may be upgraded for accuracy in subsequent reporting periods based on historical results. OSBA argues that (1) this analysis may be used to inform a realistic forecast of Large Load Customer installations, by forecast year, for local and regional planning purposes and (2) planning scenarios will be useful for system planning purposes, and to prepare for local or regional procurement

requirements and related economic activity. As a practical matter, OSBA expects that the likelihood of a large load coming into service is lower the earlier it is in the development stage, with increasing probability of reaching the in-service stage as the project develops. OSBA Comments at 7-8.

Mainspring recommends that the Final Order add a confidential “co-located generation and flexibility” reporting module that can be used for both distribution planning and PJM coordination. Mainspring argues that the Tentative Order proposes useful pipeline and compliance reporting but does not yet require the specific operational data needed to forecast hybrid load shapes and flexibility availability (e.g., expected self-supply profiles, import ceilings, and ramp capabilities). Mainspring Comments at 10.

Should the Commission proceed with such Large Load Customer reporting requirements, EAP states that six months is insufficient for EDCs to develop associated reporting systems, templates, and processes. EAP asks that the Commission allow at a minimum 12 months for the first report. EAP Comments at 30-31.

PECO, FirstEnergy, and EAP request that the Tentative Order’s proposed reporting requirements be struck in its entirety as its associated risks and costs outweigh the benefits. EAP and FirstEnergy are concerned that the reported, highly detailed, customer-specific information even under confidentiality agreements could be inadvertently disclosed through summaries in public documents or inform advocates’ positions or arguments in ways that indirectly reveal confidential information. In addition, PECO and EAP are unsure what benefits such a report would have, other than to be “informative” to the Commission. In particular, EAP is also concerned with the requested information related to “equity and outreach,” as utilities (1) perform measures to protect other customers (inclusive of low-income customers) already defined by existing regulations and through basic cost-causation principles, (2) do not track the existence of or otherwise have a common definition of “disadvantaged communities” and

do not and would not offer different service to such communities, and (3) already routinely provide outreach on universal service programs and energy efficiency as a part of existing regulations and obligations governing those programs. PECO Comments at 17. FirstEnergy Comments at 23. EAP Comments at 30-31.

Duquesne states that the proposed Distribution System Impact reporting requirement involving “operational issues attributable to Large Load Customers” could be problematic to report, as it is not always easy to assign the cause of an issue to a single customer, particularly when generation resource constraints result in service impacts. Duquesne Comments at 21-22.

Duquesne recommends that the Commission strike the proposed Equity and Outreach reporting requirement. While Duquesne supports the perceived intent behind this reporting metric, it notes the challenge of separating what outreach activities are related to the potential impacts of Large Load Customers, as compared to other factors associated with the overall economic environment. Additionally, Duquesne already reports on these efforts through other mechanisms. Duquesne Comments at 22.

Due to the rapidly evolving nature of large load growth, Duquesne recommends the Commission establish reporting requirements via a Secretarial Letter or other mechanism that can be easily adjusted to reflect current needs. Duquesne notes that a model tariff is likely not the appropriate mechanism to establish new reporting obligations. Duquesne Comments at 21.

Disposition

We proposed a semi-annual confidential report from EDCs to the Commission, which will be provided to the statutory advocates subject to agreed procedures; the first semi-annual report to be filed within six months of a Commission Final Order approving

this guideline requirement; and an annual compliance report from EDCs filed with the Commission, on a confidential basis, covering the prior calendar year.

The Shapiro Administration, EDF, NRDC, OCA, and Vistra support the confidential reporting requirements outlined in the Tentative Order. Numerous stakeholders recommended additional reporting requirements. PECO, FirstEnergy, and EAP request that the proposal be struck in its entirety as its associated risks and costs outweigh the benefits.

As we review the volume and complexity of the comments regarding the recommended reporting requirements, we agree that more discussion is necessary regarding the proper scope and content of reporting requirements. Additionally, the timing and feasibility of compiling certain information is in question. Therefore, imposing reporting requirements at this time is premature and we will not adopt reporting requirements at this time.

Bring Your Own Generation (BYOG), Energy Efficiency, and Energy Storage

Multiple parties have shared their opinions regarding BYOG, energy efficiency, and energy storage with some supporting or opposing this concept and others proposing specific incentive considerations.

State Senator Carolyn Comitta, State Representative Danielle Friel Otten, CCJ, EEE, AEU, and KEEA support requiring or incentivizing Large Load Customers like data centers to implement energy efficiency measures and/or self-supply or procure clean, renewable energy and/or battery storage to mitigate environmental and grid-impact concerns. Comitta Comments at 3. Otten Comments at 2. CCJ Comments at 2. EEE Comments at 1. AEU Comments at 2. KEEA Comments at 5.

State Representative Danielle Friel Otten suggests requiring Large Load Customers to bring their own new generation as a condition of firm service. Otten Comments at 2.

YCFB recommends the Commission find ways in the model tariff to encourage co-location with new generation subject to local municipal approval. YCFB argues that new generation avoids issues of cost-shifting, and in fact can open up grid-stabilizing interconnection options. YCFB Comments at 2.

OCA supports large loads and hybrid facilities that interconnect to the system only if they bring sufficient capacity (either through generation and reserves or capacity-backed demand response) to offset the additional load brought onto the grid. OCA Comments at 35.

Protect PT, Exus, and Constellation oppose the inclusion of a BYOG requirement, with Protect PT specifically stating that the Commission's BYOG provision appears overly simplistic. Protect PT argues that on the long run, a BYOG strategy is likely to lead to separate-and-unequal energy economies, where large loads like data centers have the purchasing power to take what they want, while "captive" consumers get second-class status. Protect PT also argues that onsite generation doesn't really insulate utility customers from cost impacts and brings more complexity for electric network planners and operators. Constellation argues that requiring Large Load Customers to bring their own new generation would be unduly discriminatory and likely to exacerbate the very resource adequacy issues it purports to address. Exus also argues that mandating a BYOG requirement may interfere with the EDC's obligation to serve, raise undue discrimination concerns, and may require a legislative solution. Protect PT Comments at 4-5. Exus Comments at 4. Constellation Comments at 7.

IECPA and Exus recommend offering expedited treatment for loads with BYOG. IECPA argues that the expansion of generation provides significant benefits to the grid, including system-wide reliability improvements and enhanced resource adequacy, as well as help associated load to come online more quickly with less infrastructure investment. IECPA also states that any incentives for BYOG should avoid shifting costs to other ratepayers. IECPA Comments at 9-10. Exus Comments at 4-5.

IECPA proposes that the Commission should consider adding language to the model tariff that ensures BYOG will be considered by the EDCs when studying needed infrastructure upgrades to avoid overbuilding infrastructure where the customer has primary or backup onsite generation. IECPA Comments at 9-10.

Disposition

The Tentative Order entertained the potential for Large Load Customers to voluntarily bring their own generation as well as self-supply or procure their own energy efficiency or energy storage resources. At this time, we are not persuaded by stakeholders' comments that it is either timely or within the scope of this model tariff to require Large Load Customers to bring their own generation. Therefore, we will not add provisions to the model tariff at this time related to requiring Large Load Customers to bring their own generation or any other energy efficiency and energy storage resources.

CONCLUSION


Accordingly, pursuant to 66 Pa.C.S. §§ 501, 1301 and 1304 and with this Final Order, the Commission establishes a model large load customer tariff as set forth in the Appendix, attached hereto. We note that any issue, comment, request of a further change to the model tariff or objection to a possible change, which the Commission may not have specifically delineated herein, shall be deemed to have been duly considered and denied at this time without further discussion. The Commission is not required to consider expressly or at length each contention or argument raised by the parties. Consolidated Rail Corp. v. Pa. Pub. Util. Comm'n, 625 A.2d 741 (Pa. Cmwlth. 1993); see also, generally, U. of PA v. Pa. Pub. Util. Comm'n, 485 A.2d 1217 (Pa. Cmwlth. 1984); **THEREFORE,**

IT IS ORDERED:

1. That the Model Tariff for Customers with load at or over 50 MW individually or 100 MW in the aggregate as set forth in the Appendix is hereby adopted.
2. That a copy of this Final Order shall be served upon the Office of Consumer Advocate, the Office of Small Business Advocate, the Commission's Bureau of Investigation and Enforcement, the Energy Association of Pennsylvania, all jurisdictional electric distribution companies, and all parties that filed comments or testified at Docket No. M-2025-3054271.
3. That the Secretary shall deposit a Notice of this Final Order with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.

4. That this proceeding at Docket No. A-2025-3054271 be closed.

BY THE COMMISSION,



Matthew L. Homsher

Secretary

(SEAL)

ORDER ADOPTED: April 30, 2026

ORDER ENTERED: May 12, 2026

APPENDIX

**MODEL TARIFF
FOR CUSTOMERS AT OR OVER 50 MW INDIVIDUALLY
OR 100 MW IN THE AGGREGATE
(LARGE LOAD CUSTOMER)**

ISSUED: (Issued Date)

EFFECTIVE: (Effective Date)

BY: (Name and Title of Responsible Company Representative)
(Company Address)
(Company Telephone Number)

Issued: (Issued Date)

Effective: (Effective Date)

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Applicability

This tariff is applicable to customers at or over 50 MW individually or 100 MW in the aggregate. The Company shall have authority to apply this tariff to customers below 50 MW individually or 100 MW in the aggregate on a case-by-case basis. Behind the meter generation shall be excluded from the MW threshold calculation.

This tariff is applicable to new large load interconnections (new customers and new incremental load of existing customers) connecting to the electric distribution system. To clarify, an existing customer requesting to increase their load in which the site's total load is at or over the MW thresholds in this tariff will be subject to this tariff's provisions as a Large Load Customer.

Definition of Terms

The following words and phrases, when used in this tariff, shall have the meanings assigned below unless the context clearly indicates otherwise:

“Contract Capacity” means the mutually agreed amount of monthly peak load requirements for each month during the remaining term after the Load Ramp Period as set forth in the contract for service, whereby the Company agrees to provide all of the components of retail electric service subject to the terms and conditions in its tariffs and the customer agrees to purchase service at that level for the stated term of the contract under the same terms and conditions.

“Contract Term” is the Load Ramp Period plus the Initial Contract Term.

“Customer Installation” means all wires, meter sockets, breaker or fuse panels, switches, appliances and apparatus of every kind and nature used in connection with or forming a part of an installation for utilizing electric energy for any purpose, ordinarily located on Customer's side of point of delivery and including the service leads, whether such installation is owned outright by Customer or used by Customer under lease or otherwise.

“Exit Fee Period” is defined as the Large Load Customer's then remaining Initial Contract Term, or any agreed extension. The Exit Fee Period will not be less than one year and will not exceed five years.

“Initial Contract Term” is the period of time where the Large Load Customer is under maximum contract capacity and has completed its Load Ramp Period.

“Interconnection Facilities” means all facilities used for providing electric service to the Large Load Customer which solely benefit the Large Load Customer.

“Large Load Customer” means a customer connected to the electric distribution system with maximum Contract Capacity of over 50 MW individually or multiple closely located customers with maximum Contract Capacity of 100 MW in the aggregate. The Company has discretion to designate a customer below these thresholds as a Large Load Customer on a case-by-case basis.

“Load Ramp Period” is the later period of time from:

- (a) when electric service is available to the Large Load Customer; or
- (b) the Large Load Customer is scheduled to begin taking electric service, until the time the Large Load Customer's maximum contract capacity is billed.

“Network Improvements” means all incremental facilities needed to provide electric service to the Large Load Customer while maintaining reliable service to the remainder of the grid, if the Large Load Customer receives the majority of benefits from that incremental facility. The term does not include Interconnection Facilities.

“Network Improvement Costs” means the share of costs for Network Improvements that are allocated to Large Load Customers. Network Improvement Costs will be equivalent to the benefits received by the Large Load Customers multiplied by the costs of the Network Improvement facility.

Terms of Contract

A Large Load Customer’s Initial Contract Term should be made for a period of not less than five (5) years. The Company must ensure that the Initial Contract Term recovers the cost of the Company’s investment to serve the Large Load Customer, possibly subjecting a Large Load Customer to a longer Initial Contract Term determined by the Company on a case-by-case basis. A Customer may designate a Load Ramp Period, which should be at or between three (3) years and five (5) years. If the Large Load Customer designates a Load Ramp Period, the Initial Contract Term should commence after the Load Ramp Period ends. The Company has discretion to work out the specific milestones of the Load Ramp Period on a case-by-case basis.

After the Initial Contract Term, Contracts shall remain in effect unless terminated by either party by providing written notice to the other party at least 48 months prior to the requested date of termination. After the Initial Contract Term, either party may request a modification to the Contract Capacity by providing written notice to the other party at least 48 months prior to the requested modification date. During the Initial Contract Term,

(Company Name)

the customer will be financially responsible to pay the minimum charges regardless of the customer choosing to curtail, reduce, suspend, or terminate service.

The Company shall not be required to supply capacity in excess of the Contract Capacity except by mutual agreement.

To enter into a contract under this Schedule, the customer must designate a specific site at which its Large Load project will be constructed and served by the Company, and the customer must own or have the exclusive or shared right to use the land for this purpose.

Monthly Billing Demand

The Monthly Billing Demands for Large Load Customers in kW for each plant will be taken each month as the single-highest 15-minute integrated peak in kW, as registered at such plant during the month by a demand meter or indicator but the monthly demand so established should in no event be less than the greater of:

- (a) Eighty (80) percent of the Large Load Customer's contract capacity specified for the applicable period of the Contract Term; or
- (b) Eighty (80) percent of the Large Load Customer's highest previously established Monthly Billing Demand during the past 11 months. The Metered Voltage adjustment should not apply to the Large Load Customer's minimum Monthly Billing Demand.

Minimum Demand Charge

Large Load Customers will be subject to a minimum monthly demand charge equal to 80% of the contracted demand. Large Load Customers may be subject to higher monthly demand charges to allow the utility to fully recover fixed costs associated with serving the Large Load Customers' load.

Collateral Requirements

For purposes of the collateral requirements under this section, "Large Load Customer" shall include both the customer and the customer's financial sponsor if the sponsor is a co-signor on the contract with the Company.

Collateral requirements should be provided in sufficient amounts to fully cover Network Improvement Costs and Interconnection Facilities costs. As construction and load ramp milestones are achieved, collateral should be reduced and refunded to the Large Load Customer to reflect the reduced risk to other Company customers.

Large Load Customers with credit ratings of at least A- from Standard & Poor's ("S&P") Global Ratings and A3 from Moody's Corporation ("Moody's") and liquidity greater than ten times the collateral requirement may provide a guarantee from a parent or corporate affiliate for the collateral requirement.

Collateral Requirements shall be provided in one or more of the following forms:

- (a) A guarantee from the ultimate parent or a corporate affiliate of the Large Load Customer for the full collateral requirement, so long as the guarantor has both
 - i. a credit rating of at least A- from S&P Global Ratings and A3 from Moody's; and
 - ii. liquidity greater than ten times the collateral requirement; or
- (b) A standby irrevocable letter of credit ("Letter of Credit") for the full collateral requirement if the Letter of Credit is issued by a U.S. bank or the U.S. branch of a foreign bank, which is not affiliated with the Large Load Customer or its guarantor, with a Credit Rating of at least A- from S&P Global Ratings and A3 from Moody's. Such security must be issued for a minimum term of 360 days. The Large Load Customer must cause the renewal or extension of the security for additional consecutive terms of 360 days or more no later than 30 days prior to each expiration date of the security. If the security is not renewed or extended as required herein, the Company will have the right to draw immediately upon the Letter of Credit and be entitled to hold the amounts so drawn as security. The Letter of Credit must be acceptable to and approved by the Company; or
- (c) Cash for the full collateral requirement.

Contractual Flexibility

(a) Exit Fee

A Large Load Customer is permitted, without payment of an exit fee or any penalty to reduce its contract capacity after five years or the initial contract term, whichever is greater, by up to 20% in total by providing the Company at least 48 months written notice prior to the beginning of the PJM Delivery Year for which the reduction takes effect.

A Large Load Customer is permitted, subject to an Exit Fee, to terminate its contract or reduce its contract capacity beyond 20% at any time after the first five years of the contract by giving the Company at least 48 months written notice prior to the beginning of the PJM Delivery Year for which the reduction or termination takes effect, subject to

payment of a capacity reduction/termination fee payable to the Company upon the effective date of the termination of the contract or the effective date of the capacity reduction.

The Exit Fee will be calculated as the greater of (1) the difference between the cost of Network Improvements and Interconnection Facilities less the revenues received from the Large Load Customer, or (2) the nominal value of the remaining Minimum Charge for the terminated/reduced capacity in excess of the 20% allowed reduction for each year of the Exit Fee Period.

Following receipt of proper notice, through the Exit Fee Period, the Company will use reasonable efforts, consistent with its obligations as a public utility, to mitigate the Exit Fee amount owed or paid by the Large Load Customer by evaluating the opportunity to assign the terminated/reduced capacity to serve new Large Load Customers, to expand service to existing Large Load Customers, or otherwise secure offsetting expected revenues. A Large Load Customer may not assign any of its rights or delegate any of its obligations under the Contract without the written consent of the Company. An assignment or delegation in violation of this Section is null and void.

(b) Dispute Resolution

If there is a dispute concerning the calculation of the Exit Fee or mitigation amounts, either party to the contract may request escalation. Such request should be made in writing and within 14 business days of the Large Load Customer being notified regarding the Exit Fee calculation. In such instance, management representatives for the Company and the Large Load Customer will discuss and seek to resolve any issues. The management discussion should occur within 14 business days of a request, unless otherwise agreed to in writing by the Company and Large Load Customer. The Company and Large Load Customer agree to use this escalation process in good faith, escalating only those matters appropriate for management's consideration. This dispute resolution process does not limit or otherwise affect the ability of either Large Load Customer or the Company to file a formal complaint with the Commission to resolve the dispute.

Existing Large Load Customer Contracts

Contract requests from existing Large Load Customers shall continue to be addressed by the Company consistent with the Company's then existing tariff requirements. Existing Large Load Customers may request to enter into a new contract subject to this tariff's provisions. The Company has the discretion to grant the request for a new contract determined on a case-by-case basis.

Full Planning Studies

The costs for Full Planning Studies, including steady-state and dynamic studies and any cluster studies required because of the potential addition of a Large Load Customer will be paid by the Large Load Customer requesting to interconnect onto the Company's facilities.

Network Open Season Planning Studies

Biannually (2 times per year) during a specified Network Open Season, Large Load Customers may apply for interconnection studies, which will be analyzed as cluster studies. The costs of the studies will be allocated to the Large Load Customers requesting the interconnection studies based on their pro-rata load share.

Maximum Times for Interconnection Studies

Interconnection Studies will be completed within six (6) months from the date that an application for interconnection study is accepted by the Company as complete. The Company will provide confirmation of a completed application. If the Company has not completed the interconnection studies within six (6) months of receiving a complete interconnection application, the Company will refund the applicant 50% of the study fee for each 90-day period beyond the six-month completion deadline. The costs of these interconnection studies and the refunds will not be recovered from other ratepayers.

Public Interconnection Queue

The Company will make available on its public website, in a manner that protects the identity of the Large Load Customer, a list of Large Load Customer interconnection applications by zip code, date accepted, MW interconnection amount and stage of interconnection study process.

PJM Emergency Procedures

The Company will provide the Large Load Customer with its emergency response customer requirements, including required actions that would be necessary for the Company to respond to an emergency load shed event called by PJM Interconnection, LLC.

Contract for Interruptible Service

- (a) Contract Service for Interruptible Power will be available to Large Load Customer customers based on the Company's existing interruptible service tariff provisions.
- (b) The Company may offer eligible Large Load Customers an opportunity to receive service under options that provide mandatory capacity interruptions and discretionary energy interruptions pursuant to a contract agreed to by the Company and the Large Load Customer. Minimum interruption requirements will be the minimum requirements under the PJM Interconnection, LLC (PJM) Emergency Load Response Program for capacity purposes, or successor thereto.
- (c) Upon receipt of a request from the Large Load Customer for interruptible service not already expressly described within the tariff, the Company will provide a written offer containing rates and related terms and conditions of service. The contract will provide full disclosure of all rates, terms, and conditions of service and any and all agreements related thereto, subject to designation of confidentiality. The interruptible contract shall include penalties imposed on Large Load Customers that fail to curtail or interrupt its load when called to do so by the Company. The penalty shall be equal to the difference between the interruptible rate charges paid and the charges that would have applied under the otherwise applicable firm (non-interruptible) rate calculated for the entire contract term.
- (d) The Company reserves the right to test or otherwise verify a Large Load Customer's ability to curtail its load. Any test or verification may involve physical interruption or curtailment of service if required by PJM's Emergency Load Response Program.
- (e) If a Large Load Customer taking service under an interruptible tariff or contract fails or refuses to curtail or interrupt its load when directed to do so by the Company, the Customer shall be subject to the penalty detailed in the interruptible tariff schedule, or interruptible contract.

A Large Load Customer that fails to curtail or interrupt its load when called to do so by the Company shall be removed from the interruptible tariff schedule or interruptible contract and transferred to the applicable firm rate schedule for the remainder of the contract term and thereafter, unless and until otherwise authorized by the Company to receive service under the interruptible tariff schedule or new interruptible contract.

The Company reserves the right to manually curtail a Large Load Customer subject to this section in addition to the penalty described above.

- (f) Large Load Customers bringing their own onsite generation and not using their full interconnection service request may be offered lower minimum demand charges and/or standby charges at the Company’s discretion on a case-by-case basis. A Large Load Customer bringing onsite generation and using that generation to offset demand for the Large Load Customer’s grid services during a curtailment event will be treated as having curtailed.

Other Matters

(a) Universal Service Fund Contributions

Large Load Customers are to make an annual contribution to the Company’s universal service program based on the following peak demand schedule:

- (1) At least 25 megawatts but less than 75 megawatts: \$250,000.
- (2) At least 75 megawatts but less than 100 megawatts: \$400,000.
- (3) At least 100 megawatts but less than 500 megawatts: \$500,000.
- (4) 500 megawatts or more: \$1,000,000.

(b) Contributions in Aid of Construction (CIAC)

Large Load Customers are subject to a fee for Interconnection Facilities costs and Network Improvement Costs through CIAC. The Company will assess CIAC for Large Load Customer additions to recover all distribution and transmission costs necessary to interconnect the new Large Load Customer. If a Network Improvement would not have been needed “but for” the interconnection of the Large Load Customer, then the costs of the upgrade will be allocated to that customer irrespective of whether other customers will benefit from it.

An exception to cost-allocation is for any upgrades or additions that were already planned by the Company pursuant to a Commission-approved Long-Term Infrastructure Improvement Plan (LTIIP), before the Large Load Customer requested service.

(c) Infrastructure Upgrades by Large Load Customers

The Company will allow the construction of network integrated infrastructure by Large Load Customers. Any customer upgrades must be completed according to existing NERC and FERC rules, engineering standards of the Company and meet any standards in the Public Utility Code for the inspection, maintenance, and repair of the facilities.