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VIA ELECTRONIC FILING

Matthew Homsher, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
2nd Floor, Room-N201
400 North Street
Harrisburg, PA 17120

**Re: En Banc Hearing on Interconnection and Tariffs for Large Load Customers
M-2025-3054271**

Dear Secretary Homsher

Enclosed for filing please find Duquesne Light Company's Comments in the above referenced proceeding.

If you have any questions regarding the information contained in this filing, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "L.A. Baxter".

Lindsay A. Baxter
Senior Manager, Energy Policy and Public Affairs

Enclosure

cc:

James A. Mullins, jamullins@pa.gov
Scott J. Thomas, sjthomas@pa.gov

comments to be due June 6, 2025, and reply comments due June 23, 2025. The Company hereby submits these comments for consideration.

II. BACKGROUND

Duquesne Light Company (“Duquesne Light” or “Company”) is a public utility as the term is defined under Section 102 of the Public Utility Code, 66 Pa.C.S. § 102, and is certificated by the Commission to provide electric distribution service in portions of Allegheny and Beaver Counties in Pennsylvania. Duquesne Light provides electric service to approximately 605,000 customers in and around the City of Pittsburgh. As an electric distribution company (“EDC”), delivering safe, reliable, and affordable energy to customers is the Company’s primary mission.

III. COMMENTS

Duquesne Light appreciates the opportunity to provide comment on this important topic. The Company recognizes the potential benefits to the Commonwealth of growing large load customers, which may include large manufacturers, data centers, or other technology applications. This development may provide economic benefits to the Commonwealth and local communities through increased taxes, employment opportunities, and associated development co-located near the large load customer. These benefits must be balanced with appropriate protections to ensure continued safety, reliability, and affordability of electric utility service.

The Company commends the PUC for taking on this issue, while also acknowledging that the state cannot fully address this topic alone. Preventing large load impacts to other customers will also require action by the Federal Energy Regulatory Commission (“FERC”) and PJM.²

² FERC Docket EL25-49

Duquesne Light encourages Pennsylvania leaders to continue engaging in these forums to represent the interests of Pennsylvania utility customers.

Duquesne Light Company provided testimony at the April 24th *en banc* hearing.³ As an initial matter, the Company’s testimony discussed the scale of potential data center load, compared to the existing load served by Duquesne Light:

“To put this energy demand into perspective, consider that in 2024, DLC’s Network Service Peak Load was nearly 2,700 MW⁴. A hyperscale data center will commonly range from 60 MW to several hundred megawatts⁵. There are a few examples within Pennsylvania where hyperscale data center have the potential to scale up to 900 to 1,000 MWs.⁶⁷ A single data center could account for as much as 30% of the current peak load in our entire service area in Allegheny and Beaver counties.”

With this context, the Company then presented two points for the Commission’s consideration. First, Duquesne Light asserted the PUC “should minimize unreasonable cost shifting by adhering to cost allocation rules to protect existing customers from bearing the costs to support new large load customers.” Best practices include clear and transparent tariff rules and cost allocations, which provides transparency to the prospective customer, while discouraging speculative “load shopping,” whereby a large load customer is seeking the most advantageous interconnection across multiple service territories. Further, the Company requires the interconnecting customer to pay for any needed upgrades, limiting the risk to other customers of

³ Testimony of Duquesne Light Company, filed April 23, 2025. En Banc Hearing on Interconnection and Tariffs for Large Load Customers. Docket No. M-2025-3054271

⁴ PJM Network Service Peak Loads (NSPL) for 2025. <https://www.pjm.com/-/media/DotCom/markets-ops/settlements/network-service-peak-loads-2025.pdf>

⁵ BenchMark, Burns McDonnell. *Hyperscale Data Centers and How to Power Them*. <https://info.burnsmcd.com/benchmark/article/hyperscale-data-centers-and-how-to-power-them>

⁶ For reference, the Amazon Web Services data center seeking to directly connect to Talen’s Susquehanna nuclear plant in Pennsylvania has a load of 960 MW.

⁷ For reference, Energy Harbor Corp. (Acquired by Vistra Corp.) seeks to directly connect to Beaver Valley nuclear facility in Shippingport, Pennsylvania and would plan to purchase between 200-300 MWs of electricity which could scale up to 900 MW in subsequent phases.

projects that do not ultimately move forward. Duquesne Light builds on this point throughout these comments with references to the Company's current tariff and practices.

Second, Duquesne Light's testimony recommended the Commission "ensure reliability of the grid by requiring large load customers to 'bring your own generation'" or "BYOG."

Requiring large users to BYOG can be beneficial to all parties. It can help a large user ensure reliable power supply for its operations, with the potential to control costs and/or generation source, for example clean or renewable power. BYOG also has potential to reduce potential reliability and affordability impacts to other customers and helps to address concerns about energy security by adding additional generation and capacity to offset the customer's retail load. To ensure BYOG provides benefits to the grid and other users, it must be new generation added to the grid, rather than existing generation. The Company discusses this concept in more detail below, in response to the topics listed in the Motion.

Reflecting on the testimony and discussion at the April 24th *en banc* hearing, the Company offers these preliminary thoughts, prior to addressing the topics posed in the March 27, 2025 Motion:

a. Commission guidance should balance transparency and flexibility

At the April 24, 2025 *en banc* hearing, there was significant discussion of the need for transparency, with Vice Chair Barrow calling for "radical transparency." A tariff that clearly defines the rules and procedures for all customers is the best way to be transparent. Such tariff provisions provide certainty to prospective customers and developers, while making this information available to the regulator, other customers, and interested stakeholders.

The Company recognizes the evolving nature of large load demand. For example, the technology around data centers and artificial intelligence (“AI”) are quickly evolving, which may allow for efficiency gains. Additionally, each large load customer has diverse attributes and unique operations. Further, each service territory and distribution system also has unique characteristics, including the design of its distribution and/or transmission system; voltages operated; load patterns; and demographics, including population density and urban or rural characteristics.

For example, larger systems may be designed to transport power *through* their territory to reach other utility service territories in the Commonwealth. In contrast, Duquesne Light’s relatively small system is largely designed to deliver power to end users. It may be easier for Duquesne Light to identify upgrades that are solely to the benefit of certain customers. For these larger systems that are transporting power across the system to other areas, it may be more difficult to discern which specific customers benefit from certain upgrades, in order to assign costs. Thus, what works for DLC’s territory may not be appropriate for other EDCs.

For these reasons a one-size-fits-all tariff is not necessarily conducive to achieving the goals laid out in the Motion. The Company recommends the Commission provide guidance on the topics EDC tariffs should address without stipulating specific tariff provisions. Being overly prescriptive could have the unintended effect of stifling innovation.

The Company supports the Commission establishing guidance on this important topic but emphasizes it must be guidance, and not a real or perceived mandate. PPL discusses in its testimony the merits of a Policy Statement as compared to a model

tariff.⁸ While both mechanisms theoretically set guidance, not mandates, it is the Company's perception that historically there has been a higher bar for justifying deviation from a model tariff. In the case of the Distribution System Improvement Charge ("DSIC") specifically, Title 66 § 1353 requires EDCs to adopt a tariff that complies with the model tariff produced by the PUC.

In a verbal response at the April 24th hearing, Bureau of Investigation and Enforcement Director Kaster articulated that regulatory guidance can lead to fewer issues of contention in litigated proceedings. Duquesne Light agrees that regulatory guidance can provide more certainty to both EDCs and other interested stakeholders, leading to potentially more efficient proceedings. PPL, in its written testimony, expresses "Having a policy statement that outlines minimum requirements can provide boundaries that offer direction for developers while ensuring the right level of consumer protections."

While Duquesne Light prefers a Policy Statement that provides guidance, regardless of the mechanism used, the Commission must ensure any next steps allow for flexibility over time and across service territories within the Commonwealth. Doing so not only allows for flexibility today but "future-proofs" Commission guidance. As PPL states in its testimony, "While data centers are driving the most investment in the near term, this may not always be the case – technological innovations and advancements in the manufacturing sectors may contemplate other needed solutions that we aren't contemplating at the moment." The Commission must be careful not to issue guidance that becomes dated or obsolete in the near future.

⁸ Testimony of PPL Electric Utilities Corporation, filed April 23, 2025. En Banc Hearing on Interconnection and Tariffs for Large Load Customers. Docket No. M-2025-3054271

b. The potential for cost reductions to other customers may be overstated

While much of this conversation focuses on the initial interconnection and infrastructure upgrade costs, there was discussion at the April 24th *en banc* regarding whether the growth of large users can create downward pressure on rates, by spreading fixed costs across a larger number of customers, potentially reducing rates for other users. Unfortunately, Duquesne Light does not expect this to be the case. Cost allocation studies—the method by which it determines what customers benefit from certain assets, and thus what their proportion of costs should be—are completed at the voltage level at which the customer is served. Consider an individual residential customer who receives service at the lowest voltage. Before that electricity reaches their premise, it moves through equipment from the transmission level down to the individual distribution feeder. Thus, that customer uses, and therefore pays into the costs of, the full system. In contrast, in Duquesne Light’s service territory, a large user is likely to receive service at the transmission level. This means they are not using, and thus will not pay for, equipment used to deliver electricity through the sub-transmission and distribution levels. While there may be certain fixed costs—for example maintaining a contact center and a customer billing system—that the large user pays into, potentially reducing the share to other customers, any potential savings to other customers is not expected to be meaningful.

c. Responses to prompts in March 27, 2025 Motion:

With these overarching thoughts in mind, Duquesne Light responds to the specific topics posed by Chairman DeFrank's March 27, 2025 Motion.

- **Appropriate MW size designations for large load tariffs:** Duquesne Light recommends the Commission consider both a megawatt size designation as well as operational and load characteristics. A size designation alone may not fully capture the cost to serve a customer. The Company's existing tariff characterizes customers by the voltage at which they take service. It is expected that most data centers and other large users will interconnect at 69 kV or greater, which falls under Duquesne Light's High Voltage Power Service ("HVPS").
- **Deposits or financial security from large load customers:** Duquesne Light requires a paid deposit to initiate an interconnection study. This deposit is fully refundable less actual costs incurred. By requiring this upfront payment, the Company limits the risks associated with a project not moving forward. This practice may also limit speculative proposals, reducing the number of duplicate prospective projects in multiple EDC territories and jurisdictions.
- **Appropriate calculations of contributions in aid of construction:** Duquesne Light requires interconnecting customers to pay the full costs of any upgrade, including direct costs, indirect costs, and any applicable taxes. During the April 24th *en banc* there were questions about whether EDCs earn a return on infrastructure funded by contributions in aid of construction ("CIAC"). Although the Company recovers the costs associated with maintaining these assets through base rates, it does not earn any return on plant supported by CIAC for the lifetime of the assets. Therefore, there are little to no infrastructure costs caused by large load interconnections that are spread to other customers under Duquesne Light's existing tariff.
- **Minimum contract terms:** The Company currently utilizes minimum contract terms, generally ranging from five to ten years. The terms are based on load size and other characteristics.
- **Maximum times for interconnection studies and agreements:** Duquesne Light strongly opposes establishing a maximum time for completion of interconnection studies for large load projects. Each interconnection is unique and can be very complex. While a one-size-fits-all timeline may be appropriate for less complex projects, such as residential solar interconnections, it would be inappropriate to set an arbitrary timeline for

these large load projects. The Company believes it is best practice to provide a standard timeline for the process to set customer expectations, but it would be imprudent to set an arbitrary maximum time to apply to all large load projects independent of their characteristics. Doing so risks forcing EDCs to pull resources from projects serving the larger customer base.

- **Appropriate fees or expenses for interconnection studies:** Duquesne Light requires the prospective customer or developer to pay the actual costs of the interconnection study. This practice is consistent with the accepted practice of requiring the cost-causer to pay. The Company is not supportive of establishing flat fees for studies, as the true cost can vary greatly depending on the project. The practice of requiring the interconnecting customer to pay the actual cost of the study upfront ensures that costs are not spread to other customers and protects customers from paying for projects that never come to fruition.
- **Load ramping schedules for customers that may phase in their usage:** The Company cautions that EDCs may not uniformly have operational technology in place today to reliably accommodate ramping and interruptible loads. The Commission should be cautious not to require or encourage a one-size-fits-all solution.
- **Exit or early termination fees:** Duquesne Light does not currently utilize exit fees as the prospective customer assumes all costs for studies and infrastructure. The Company addresses this topic further in response to the supplemental questions.
- **Distinctions in tariff designs for firm service versus interruptible large load customers:** Duquesne Light does not currently provide an interruptible service offering. It looks forward to reviewing the input of other commenters on this topic. The Company notes that this topic is closely related to the topic of demand response, as both involve the grid operator, either the EDC or PJM, requesting that the customer curtail load. Duquesne provides more insight on demand response in reply to the supplemental questions, below.
- **Large customers bringing primary or back-up generation to serve their load, and any prudent standby rates:** As discussed in the Company's April 24th testimony, BYOG requirements should be considered, particularly in the context of generation resource adequacy. It is the Company's opinion that this generation must be new generation added to the grid, rather than a PPA to offtake energy from an existing grid resource. This new generation could be new construction, added capacity at an existing source, or restarting a shuttered generator. Further, to benefit the grid, the timing and size of

generation must align with the large user's energy demand. Importantly, operational considerations and controls are needed to limit grid impacts if the companion generation is offline.

There is also a timing consideration with regard to construction. While a new data center may be able to be constructed and in operation relatively quickly, construction of new generation, including clearing the PJM interconnection queue, may take five years or more. To limit potential impacts to other customers, BYOG large loads should postpone operation until the accompanying generation is online.

Currently at the distribution level, Duquesne Light offers a standby rate to recover the costs of being ready to serve that load if and when needed. It does not currently have a similar offering for large load customers interconnected at the transmission level. The Company questions whether this would be a cost-effective offering for a customer due to the cost of investing in both generation and transmission infrastructure.

- **Transparent cost structures for interconnection:** Duquesne Light supports transparency in interconnection costs. Upon completion of the interconnection study, the customer is provided with a cost to move forward, allowing for informed decision-making. If the customer moves forward, the Company charges true costs plus indirect costs and taxes, often referred to as “open book costs.”
- **Optionality for infrastructure upgrades to be made directly by prospective interconnecting large load customers, and appropriate tariff subcategories to accommodate such option—**See following response.
- **Expedited interconnection for users willing to construct infrastructure or system upgrades at their own expense—** Duquesne Light does not currently allow for infrastructure upgrades to be made by interconnecting customers. Duquesne Light understands the desire from some developers to construct infrastructure directly, but in practice has found several challenges with this approach. First, if new lines are required, and particularly if those cross multiple properties, the customer or developer lacks the same tools an EDC has to be able to secure and maintain rights of way. Second, the same supply chain challenges that impact EDCs will impact customer developers. In fact, the EDC may have more secure supply-chain options available to it to source materials and equipment than an individual customer, making it potentially difficult for a customer-built project to move more quickly than one constructed by the utility. Third—and significant—this infrastructure is directly connected to the bulk electric system. Infrastructure constructed and

ultimately owned and operated by the utility ensures compliance with North American Electric Reliability Council (“NERC”) standards. Individual customers are not subject to these same requirements. It would have to be determined how NERC compliance is achieved if infrastructure in front of the meter is constructed and/or owned by a customer.

To the extent the Commission wishes to consider this option further, Duquesne Light believes it should consider limiting what aspects of a project a customer can build. For example, a customer may be able to construct a substation that only serves its own needs, but not a line extension that may serve other customers. Additionally, EDCs must have the ability to establish technical specifications as well as approved contractors, to ensure interoperability of equipment once in service.

- **Best practices learned from other jurisdictions:** The Company looks forward to reviewing the comments of others on this topic and responding as appropriate in reply comments.
- **Any other procedures, rules, or tariff designs that can facilitate the efficient and timely interconnection of this unique category of electric customers.** Duquesne Light is open to evaluating all potential options but emphasizes that any policies or practices must preserve or enhance safety, reliability, and affordability.

IV. DUQUESNE LIGHT RESPONSES TO MAY 2, 2025 SUPPLEMENTAL QUESTIONS

On May 2, 2025, Vice Chair Barrow submitted a set of supplemental questions to the docket. Duquesne Light has limited its responses to questions seven through twelve, which are specifically directed to electric transmission and distribution utilities. With regard to the questions posed to developers regarding the role of demand flexibility, load-shifting, and behind-the-meter generation and storage, the Company believes these options will become increasingly important tools for addressing generation constraints. It is important to note, though, that Duquesne Light studies and plans its system to accommodate the maximum load a customer may

require at any given time. This conservative approach ensures the system is prepared to not only serve the interconnected customer, but to also prevent grid impacts to other customers, and is standard practice in the electric utility industry. The Company discusses this topic in more detail in response to question 11 below. The Company reserves the right to further respond to the topics directed to other stakeholders in the future.

7. How should costs be allocated when a data center triggers a major upgrade—should it be directly assigned, shared by the EDC, or spread across the TO zone, and under what criteria? Should existing methods be re-examined for these customers? Should they be re-examined for all customers?

As a preliminary matter, the Company does not establish rules or practices related to certain industry types. Rather, the Company classifies customers based on energy needs, then implements standard practices based on transparent tariff rules, regardless of the customer's industry.

As described in its testimony for the April 24th en banc hearing, the Company follows a “cost causer” model, by which the customer triggering an upgrade bears the costs. For customers receiving service at transmission voltage, which would likely include most data centers, Rate Schedule High Voltage Power Service (HPVS) includes a facilities charge provision that states: “Customer must pay for all new or additional facilities installed with the exception of meters and metering equipment.”

Rule 8.2 of Duquesne Light's tariff addresses the large load study deposit, stating that new load 300 kW or greater may require a load study. This rule states, "The applicant is responsible for, and must pay, all actual load study costs," and requires receipt of a deposit before the study can commence.

Transmission projects whose costs are spread across multiple TO zones are administered by PJM and under the jurisdiction of FERC.

8. What tariff design features (e.g., minimum load factor, monthly demand floors) have proven most effective in ensuring reliable forecasts from large-load additions?

Duquesne Light recommends that the following tariff provisions may be effective:

- *Contract duration with a defined time period*
- *Contract demand provisions (allow the customer to ratchet up/down)*
- *Minimum charge provisions (e.g., X.X% of contract demand)*

Revenue guarantee provisions are another tool to help encourage reliable forecasts for large-load additions. EDCs could also consider modifying how peak load contributions and network system peak load tags are computed and assigned to customers on an annual basis.

9. One hearing commenter suggested that only load under contract should be used in demand forecasts. Do you agree?

It is unclear how "under contract" is defined or whether all EDCs are using a uniform definition. Regardless, Duquesne Light does not agree that demand forecasts

should only include load that is under contract. Forecasts must account for prospective load that is reasonably expected to come online in the planning period in order to ensure the grid is prepared to serve customers in the future. If there is concern that including prospective load not under contract could lead to overinflated forecasts, the Company suggests discount factors could be applied to prospective load based on its likelihood of coming online, rather than not including it at all.

10. How do you assess the risk of early termination, and what role do exit fees and collateral requirements play in mitigating that risk for your infrastructure investments?

Duquesne Light's tariff limits this risk by requiring the interconnecting customer to pay for system upgrades. This practice limits the risk to other customers; if the project does not come to fruition, or is sold and the energy use differs, the initial infrastructure investment was paid for by the interconnecting customer. There are not stranded costs spread to other customers. Other mechanisms that can be applied to manage risk include the use of contribution in aid of construction ("CIAC"); revenue guarantee contracts; minimum demand clauses; longer contract lengths; or a combination of these.

11. Would you be willing to trade off speed of interconnection in exchange for greater load flexibility commitments from data centers—and how would you quantify that tradeoff?

To protect the system and ensure reliability, load studies and engineering account for the maximum potential load from the customer. Duquesne Light cannot rely upon flexibility commitments; thus the system is designed to serve the maximum on-site load, or, in the case of a customer-generator, the maximum on-site generation.

The Company advises the Commission that, should it move forward with encouraging such tradeoffs, it must be cautious not to allow for potential discrimination between customer types, as more sophisticated customers may be able to make flexibility accommodations to “line jump” in the queue whereas other customers may not.

12. What technical and tariff design features, in your view, stand in the way of facilitating demand response programs for large loads?

An overarching challenge is the coordination between the retail and wholesale levels. If this question contemplates an EDC-administered demand response program, it is unclear how that interacts with PJM demand response. Under the existing demand response program, events are triggered by wholesale market and/or transmission conditions. If an EDC is to utilize demand response to mitigate large load impacts to the distribution system, it will need to stand up a separate program based on distribution level operating conditions. It is unclear how that program would align with PJM demand response.

From a technical perspective, Duquesne Light cannot rely on a customer’s demand response commitment to plan and operate reliably. The Company does not have

technology to allow it to enforce demand response provisions. If it plans for large load customers to curtail at designated times, and those customers do not comply, it could result in reliability impacts to other customers or damage to the system. Thus the Company must plan its system to carry maximum load. This conservative approach is designed to provide reasonable reliability for all users.

In addition to these supplemental questions, the article *Extracting Profits from the Public: How Utility Ratepayers Are Paying for Big Tech's Power*⁹ was also posted to the docket. Duquesne Light has not provided comment on this article; however, as a member of the Energy Association of Pennsylvania (“EAP”) the Company has participated in the drafting of EAP’s comments and supports EAP’s reaction to the article, specifically. Duquesne Light reserve the right to comment on the article in Reply Comments and other forums.

⁹ Peskoe, Ari and Eliza Martin. (March 2025). *Extracting Profits from the Public: How Utility Ratepayers Are Paying for Big Tech's Power*. Environmental & Energy Law Program, Harvard Law School. <https://eelp.law.harvard.edu/wp-content/uploads/2025/03/Harvard-ELI-Extracting-Profits-from-the-Public.pdf>

V. CONCLUSION

The Company appreciates the Commission's inquiry into this topic. Duquesne Light supports this economic and technological development and the associated benefits it can bring to Pennsylvania. It is imperative that guiderails and best practices are established to protect utility customers from unreasonable cost-shifting and reliability impacts. Should the PUC wish to move forward with the issuance of guidance on this topic, Duquesne Light urges it to allow for flexibility to meet the circumstances of individual interconnections and unique EDC territories, and the ability to evolve over time. The Company looks forward to participating in additional conversations on this important topic.

Respectfully submitted,



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