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April 23, 2025

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 Docket No. M-2025-3054271

Dear Secretary Homsher:

Enclosed for filing please find Duquesne Light Company's Testimony to be presented at the April 24, 2025 En Banc Hearing on Interconnection and Tariffs for Large Load Customers.

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

Sincerely,

Lindsay A. Baxter

Senior Manager, Energy Policy and Public Affairs

Enclosure



Testimony of C. James Davis, Director Rates, Energy Procurement, and Federal/RTO Affairs Duquesne Light Company April 24, 2025 Docket No. M-2025-3054271

I. Introduction

Good afternoon. My name is Jamie Davis, and I am the Director of Rates, Energy Procurement and Federal/RTO Affairs for Duquesne Light Company (DLC), the electric distribution company serving Pittsburgh and the surrounding region. It is my pleasure to participate in today's conversation on this important topic.

Duquesne Light has proudly served the Pittsburgh region for over 100 years, including serving as an important catalyst for economic growth and development through the height of heavy industry, the decline of the steel industry, the rise of higher education and world-renowned medical institutions, to the more recent evolution of the City as a hub for cutting edge technology in robotics, autonomous vehicles, and now artificial intelligence.

II. Background

As the region has transformed and continues to evolve, Duquesne Light stands ready to reliably and safely meet the needs of the community it serves. Data centers and specifically artificial intelligence, or AI, is transforming how we all live and work. But the extreme energy demands of data centers, if not managed correctly, could result in grid impacts and unintended shifting of costs to other customers.

To put this energy demand into perspective, consider that in 2024, DLC's Network Service Peak Load was nearly 2,700 MW¹. A hyperscale data center will commonly range from 60 MW to several hundred megawatts². There are a few examples within Pennsylvania where hyperscale data center have the potential to scale up to 900 to 1,000 MWs.³⁴ 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.

¹ https://www.pjm.com/-/media/DotCom/markets-ops/settlements/network-service-peak-loads-2025.pdf

² BenchMark | Hyperscale Data Centers and How to Power Them

³ 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.

⁴ For reference, Energy Harbor Corp. (Acquired by Vistra Corp.) seeks to directly connect to Beaver Valley nuclear

⁴ 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.

Duquesne Light is committed to supporting large load growth in the Pittsburgh region; while ensuring adequate generation supply, reliability, affordability and the safety of the electric grid. Equally important, Duquesne Light seeks to avoid unreasonable cost shifts to other customers. Adhering to long standing principles of cost allocation ensures affordability and fairness in electric service rates. In today's economy, it's more important than ever to focus on affordability for customers.

My comments today are intended to inform the Commission on how best to foster economic development and beneficial load growth while appropriately preventing unreasonable cost shifting. At the outset, it is important to note that large load may be served by the distribution or transmission system. Large load customers may also seek to co-locate at the site of the generation resource, bypassing both the distribution and transmission system. Depending on the point of interconnection and configuration, there are different procedures and cost implications. Duquesne Light will further expand on these issues in our written comments. Today, my testimony focuses on best practices related to serving large load at the distribution level. While I will offer insights into Duquesne Light practices, it is also important to maintain flexibility as we contemplate what works best for Pennsylvania's diverse grid and unique characteristics.

Today, I offer two recommendations for the Commission's consideration:

- 1. The Commission 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.
- 2. The Commission should ensure reliability of the grid by requiring large load customers to "bring their own generation"

III. Large Load Customers should Bear the Costs of Studies and Infrastructure Investment.

The cost of studies and infrastructure upgrades must be supported by large load developers when those cost are directly caused by the customer, and there is no material benefit to other customers within the class.

- Duquesne Light's existing interconnection requirements require large load developers to bear the cost of studies and infrastructure investment needed to serve that customer, so that those costs are not socialized to other customers. Doing so is consistent with long-standing cost-causation principles in ratemaking. Where cost causation is clear and can be directly allocated to a customer, it is appropriate to do so.
- Under the existing tariff, DLC requires a deposit in order for a large load developer to be assigned a position in the queue. This deposit pays for engineering and interconnection studies and is fully refundable if the customer decides not to move forward, less any costs already incurred. These large load developers also pay the actual costs of construction. Referred to as "open book" costs, these include direct and indirect costs, plus applicable taxes. This practice ensures that Duquesne Light existing customers are protected from paying for projects that never come to fruition.
- The tariff provides clarity on the process to prospective customers, as compared to negotiating individual contracts with each potential large-load customer.
- Rule 4 of Duquesne Light's tariff allows customers to pay over time through an adder on the bill with interest. This is another tool the Company has to encourage investment and economic development while ensuring that costs are not shifted to other customers.

• DLC maintains that consideration for contract size minimums and contract duration can ensure customers pay their fair share over a longer duration, regardless of their actual load. For example, provisions allowing for "ramp-up" considerations or "minimum charges" can be used by a utility; however, it should be noted that minimum charges may change how individual customer's Network Service Peak Load tags are assigned. Some examples include minimum charges based on a percentage of the customer's highest monthly billing demand in the past number of months, or a percentage of the customer's contracted demand.

IV. Bring Your Own Generation

Within the context of potential generation shortfalls in the PJM region, DLC recommends that large load customers be required to supply primary generation in order to reduce the impact the large load has on current customers and the larger grid. While the idea of "bring your own generation" has promise, the specifics of how this may be implemented should be well-defined to ensure that there are not unintended impacts on other customers and the larger grid. For example, considerations for further dialogue should include:

- What is a "large load" and can guidelines be established that sufficiently apply across all EDC service territories?
- Should the power supplied be new generation that is added to the grid, rather than a power purchase agreement (PPA) pulling generation from an existing source? For example, this new generation could be new construction, restarting retired generation, or additional capacity at an existing generating source. It is DLC's view that new generation should be added to the system to offset the demand of the new large load.
- Is the availability of generation matched up with the energy demand of the large load? For example, a PPA with an intermittent solar facility that produces during daylight hours cannot offset the demand of a 24-7 data center. While DLC supports the growth of new, clean, renewable generation, which benefits the grid, for the purposes of today's discussion we are focused on generation that is available to push electrons onto the grid anytime the data center is pulling electrons from it.
- Should there be operational considerations for whether the generation is: solely dedicated to serving that large load; already on the grid under a PPA; or on-site and available to feed back onto the grid?
- Should rules and operational controls be put in place to dictate what happens if companion generation is offline? For example, does that load go offline too, or is the grid expected to serve it? At the distribution voltage level, Duquesne Light has a standby rate to cover the costs of maintaining infrastructure to be ready to serve that load if and when needed. It does not currently have a similar rate for large load customers interconnected at the transmission voltage level.
- Should the large load be required or incentivized to shed load at peak periods?

In closing, the Duquesne Light Company commends the PUC for initiating this proceeding and looks forward to further engagement on the best practices that can be implemented in the Commonwealth to guide large load development.

Thank you for the opportunity to participate at today's hearing and I look forward to answering your questions.

Appendix A – Retail Tariff References Duquesne Light Company April 24, 2025 Docket No. M-2025-3054271

Duquesne Light Company Electric Service Retail Tariff References

Contracts, Deposits and Advance Payments – Rule 4 Contracts

The Company reserves the right to require non-residential customers to sign a written contract indicating the rate for electric service and to require a contract term which, in the judgment of the Company, is sufficient to justify the cost of any facilities installed for the exclusive use of the customer and to compensate the Company for other incremental costs of Nonstandard Service. Customers who have facilities extended for their exclusive use will be permitted to purchase electricity from an EGS according to the provisions of direct access and 66 Pa.C.S. § 2807. Extension of such facilities will not be conditioned on the customer's agreement to purchase supply from the Company. Receipt of electric service by any entity, however, shall constitute the receiver a customer of the Company, subject to its rules and regulations, whether service is based upon contract, agreement, accepted signed application or otherwise. The customer shall notify the Company, in advance of receipt of electric service, of the customer's name, address to which the electricity is to be delivered, the address to which the bill is to be mailed, the date delivery of electricity is to commence, and provide information requested by the Company regarding the customer's credit standing. The customer shall notify the Company to cancel electric service and the customer shall be responsible for payment for all electric charges until the customer has so notified the Company to cancel electric service.

The Company at its sole discretion may enter into special contracts for electric service with industrial or commercial customers to address changing business needs, operating conditions or less expensive competitive alternatives for energy. If requested by the Company, the customer shall provide to the Company, on a confidential basis, all information, records and financial analysis necessary to evaluate the customer's request for a special contract.

Terms and conditions of service will be mutually agreed upon by the Company and the customer and included in a signed contract, which will be filed with the Public Utility Commission. The Company at its sole discretion may request Public Utility Commission approval. The terms of the agreement will be confidential upon filing with the Commission. Rates established under special contracts will be sufficient to recover, at a minimum, all appropriate incremental costs. Any special contracts written to become effective on or after January 1, 2007, shall apply only to charges for the distribution service provided by the Company.

The contract shall contain all terms and conditions and the rates and charges to be paid for electric service.

The contract shall be for a period of no less than one (1) year and no greater than ten (10) years.

The contract will be terminated by the Company if the Company charges are not paid when due as specified in Tariff Rule No. 21, before the addition of the Late Payment Charge. Upon termination of the contract under these conditions, the regular electric tariff rates will be applied

to electric service rendered from that point forward. A new special contract will not be made available to a customer whose previous special contract was terminated because of failure to pay bills as specified in Tariff Rule No. 21.

For contracts that contain provisions governing the customer's rights under direct access, the Company will unbundle the customer's contract and the customer will be eligible to obtain electricity from an EGS only in accordance with the terms and conditions of the customer's contract. Upon expiration of their contract, special contract customers will default to Rider No. 9 – Day-Ahead Hourly Price Service.

Installation of Service Rule 8.2 Large Load Study Deposit

For a project to establish service to a new load of 300 kW or larger or to increase the load of an existing service by 300 kW or larger, the Company, at its discretion, may require a load study and report. The load study report will include high-level estimated timeline and costs associated with the project. The high-level estimated timeline and costs provided in the load study report are current as of the date the Company provides the load study report and are subject to change. The load study results are not binding on the Company. The Company will not commence work on the load study until it receives the following from the customer, applicant, or prospective customer: (a) a deposit for the load study, (b) proposed location of the project or potential project, and (c) sufficient technical details for the project or proposed project, including, but not limited to, the size of the project or proposed project in kW and estimated power factor. The applicant is responsible for, and must pay, all actual load study costs. The actual costs of the load study may exceed the deposit. If load study costs exceed the deposit, the Company will send the customer/applicant/prospective customer notification, and they must pay the additional costs in order for the study to proceed. If load study costs do not exceed the deposit, the Company will send the customer/applicant/prospective customer notification and the Company will return any unused funds to them. After receiving the aforementioned information and deposit, the Company will provide the load study report without unreasonable delay.

Rate HVPS – High Voltage Power Service Excerpt

Availability: Available to customers with Contract On-Peak Demands greater than or equal to 5,000 kilowatts (≥ 5,000 kW) where service is supplied at 69,000 volts or higher.

Contract Provision: Contracts shall be written for an original term of not less than five years for Contract Demand of 100,000 kilowatts or less, and not less than ten years for Contract Demands in excess of 100,000 kilowatts. Such contracts shall continue in force after the expiration of the original term until one year following the date of written notice of cancellation by either party. Such notice of cancellation may not be given earlier than one year before the expiration of the original term.

The Company reserves the right to refuse contracts hereunder if, in its judgment, its generating or transmission capacity is no more than adequate to meet the requirements of its existing customers

Facilities Charge: Customer must pay for all new or additional facilities installed with the exception of meters and metering equipment.