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August 15, 2022

Via Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Keystone Bldg. 2nd Floor W
400 N. Street
Harrisburg, PA 17120

RE: Petition of Duquesne Light Company for a Finding That an Electrical Equipment Building Equipment at the Proposed Watson Substation in Allegheny County, Pennsylvania is Reasonably Necessary for the Convenience or Welfare of the Public Docket No. P-2022-3032356

Dear Secretary Chiavetta:

Enclosed please find Duquesne Light Company's responses to the Data Requests Propounded by the Bureau of Technical Utility Services ("TUS") Set I in the above-captioned proceeding.

Please contact me with any questions, comments, or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read "Emily M. Farah", is written over a faint, larger version of the signature.

Emily M. Farah
Duquesne Light Company
Counsel, Regulatory

cc: Jordan Van Order (jvanorder@pa.gov)

Duquesne Light Company
Docket No. P-2022-3032356

Bureau of Technical Utility Services
Data Requests

Set I

Witness: Jason Harchick

TUS A-1

Reference the Petition, Paragraphs 8 & 9. Please state the existing capacity without the proposed Watson Substation, the projected capacity needed, and the capacity after the proposed Watson Substation is placed into service.

Response:

While the Watson Substation will provide the necessary capacity to meet projected load growth in Pittsburgh's Downtown, Uptown, and Hill District neighborhoods, it is not the primary driver for the Project. By way of background, Pittsburgh's Uptown and Hill District neighborhoods are primarily supplied by 4-kilovolt ("kV") circuits. The 4kV load in the Hill District and Uptown neighborhoods totals approximately 12.5-megavolt ampere ("MVA"). At present, there is a single 23kV distribution circuit in the area with approximately 9.4MVA of load. The aforementioned load will ultimately flow through the Watson Substation for the Uptown and Hill District neighborhoods.

Additionally, Pittsburgh's Downtown neighborhood is primarily supplied by circuits that emanate from the Brunot Island and Forbes Substations. At present, the total load of the Downtown neighborhood is approximately 150MVA. Watson Substation will provide primary and back-up power to portions of the Downtown neighborhood.

In total, the Watson Substation will provide 200MVA of capacity to Downtown, Uptown, and Hill District neighborhoods.

Duquesne Light Company
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Bureau of Technical Utility Services
Data Requests

Set I

Witness: Jason Harchick

TUS A-2

Reference the Petition, Paragraph 12. Please state the anticipated increase in reliability in terms of the customer average interruption duration index, system average interruption duration index, and system average interruption frequency index.

Response:

Because of the unpredictable nature of outages, the Company cannot measure the anticipated increase in reliability in terms of customer average interruption duration index (“CAIDI”), system average interruption duration index (“SAIDI”), and system average interruption frequency index (“SAIFI”). One of the most important aspects of Watson Substation that cannot be expressed in outage index metrics is the resiliency that it provides to Downtown Pittsburgh.

As described in the petition, Watson Substation will be established significantly closer to the customers in the Downtown, Uptown, and Hill District neighborhoods.

For Downtown, the Watson Substation will provide a back-up electrical supply to Downtown Pittsburgh’s existing, sole 23-kilovolt (“kV”) source from Brunot Island Substation, which exists approximately 3 miles from the city on an island. Watson Substation is 1.5 miles from the city center with no river crossings that limit underground cable thermal ratings, like Brunot Island Substation. Additionally, 23/11kV transformers are to be installed at Watson Substation which will back-up downtown Pittsburgh’s sole 11kV supply from Forbes Substation.

Additionally, Watson Substation will unify significant portions of the Downtown network by providing a secondary source and back-up supply for four (4) of Pittsburgh’s five (5) downtown network areas. By establishing this back-up supply, the Watson Substation will reduce the restoration times to the Downtown neighborhood for events which impact the supply from the Brunot Island and Forbes Substations.

For the Uptown and Hill District neighborhoods, the Watson Substation will reduce circuit exposure to events that cause outages and will have a positive impact to reliability. Presently, there is a single existing 23kV distribution circuit in the Uptown and Hill District neighborhoods and this circuit does not have any circuit ties. The Watson

Substation will provide additional 23kV distribution circuits and circuit ties in these neighborhoods which enable faster restoration to unfaulted sections of 23kV distribution circuits through remote operation of these circuit ties.

Duquesne Light Company
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Bureau of Technical Utility Services
Data Requests

Set I

Witness: Jason Harchick

TUS A-3

Reference the Petition, Paragraph 20. Please state the approximate date Duquesne Light anticipates it will receive a PJM project number.

Response:

PJM Interconnection, LLC (“PJM”) has assigned the Project a supplemental project identification number of S2726, as reviewed with PJM stakeholders at the April 22, 2022, Western Subregional Regional Transmission Expansion Plan (“RTEP”) Committee meeting. By way of further response, the Project appears on PJM’s website at <https://www.pjm.com/planning/project-construction>.

Duquesne Light Company
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Bureau of Technical Utility Services
Data Requests

Set I

Witness: Jason Harchick & Meenah Shyu

TUS A-4

Reference the Petition, Paragraph 23. Please explain why Duquesne Light is using a ring-bus configuration as opposed to a breaker-and-a-half configuration or straight-bus configuration.

Response:

The Company selected a ring-bus configuration because, compared to a breaker-and-a-half configuration or straight-bus configuration, it provides an optimal mix of high resiliency, small footprint, and cost.

Duquesne Light Company
Docket No. P-2022-3032356

Bureau of Technical Utility Services
Data Requests

Set I

Witness: Lesley Gannon, Jason Harchick, & Meenah Shyu

TUS A-5

Reference the Petition, Paragraph 33. Please explain whether Duquesne Light considered any alternatives which would have met the project needs and conformed to the City of Pittsburgh's zoning ordinances.

Response:

With respect to Project location: the City of Pittsburgh ("City") does not contain any zones suitably close to the applicable load centers that would allow a substation without special exception or conditional use. Further, the proposed Project site is located on property entirely owned by Duquesne Light, which was purchased in 2009. Additionally, the City's zoning ordinances for the areas around these load centers prescribe area restrictions (e.g., setback, etc.) that are generally incompatible with project needs.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light Company :
For Finding that an Electrical : **Docket No. P-2022-3032356**
Equipment Building at the Proposed :
Watson Substation is Reasonably :
Necessary for the Convenience or
Welfare of the Public

VERIFICATION

I, Jason A. Harchick, hereby state that the facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).



Jason A. Harchick
Director, Grid Optimization and Strategy

Dated: August 12, 2022