Duquesne Light Company

Determination of Capacity Peak Load Contributions (PLC) and Network Service Peak Loads (NSPL)

This supplemental document becomes effective on October 27, 2025.

Overview - Capacity Peak Load Contribution (PLC)

PJM requires certain information to calculate an Electric Generation Supplier's (EGSs) Unforced Capacity Obligation (UCAP) in accordance with requirements of PJM's Reliability Assurance Agreement (RAA), Operating Agreement, and Open Access Transmission Tariff (OATT), where applicable. One of those components is an EGS's aggregated customer Peak Load Contribution (PLC). This manual provides a detailed explanation of the process used to determine each retail customer's PLC for Duquesne Light Company (DLC).

Company-specific information, combined with certain information provided by PJM, is used to determine each retail customer's PLC. Relevant information, such as customer profiles and loss class details, used in determining the PLC can be found on the Company's website, Tariff Resources | Duquesne Light Company.

This document does not describe processes used to determine the final EGS financial UCAP. Information of this nature can be found on PJM's website.

Determination of EGS's Capacity Peak Load Contribution

Each year, PJM assigns a **weather-normalized** Capacity PLC to each Transmission Zone. The basic framework for determining the EGS's PLC consists of allocating the Zonal PLC to its individual customers and then using the EGS's portfolio of customers for any given day to determine the EGS's PLC. The customer-assigned PLCs are aggregated for each EGS and uploaded to PJM daily. An EGS's PLC varies daily with customer enrollments and drops.

PJM rules require each EDC to revise its customers' PLCs annually. Customer PLCs are calculated each November and made available on January 1st of the following year. However, updated PLCs are effective from June 1 to May 31, respectively, for the PJM planning year.

This framework is implemented using the available customer data. Consequently, several different algorithms are required to calculate the customer PLC.

The calculation of the customer's PLC is a two-step process:

1. Calculation of the customer's PLC using the algorithms based on the usage data available for the customer.

2. Reconciliation of the sum of the customer's PLC to the Zone PLC as assigned by PJM.

Calculation of the Customer Capacity Peak Load Contribution: PJM

calculates Zone PLC

PJM determines the DLC Zone's capacity obligation in accordance with various agreements, including the RAA, Operating Agreement, and OATT, where applicable.

The Zone PLC determined by PJM is based on the various transmission zone loads at the time of the five PJM Pool peak hours. Furthermore, the process used by PJM results in summer forecasted Zone PLCs that are weather-normalized values and unrestricted loads (i.e., including applicable curtailed load(s) as determined by PJM). PJM publishes Zone PLCs along with the five PJM summer peak hours each October.

PJM - Load Forecast Development Process

EDC allocates Zone PLC to its customers

The general algorithm for a customer's PLC is:

CAP_PLC	=	CUST_PLC	*	RECON_FACTOR

a. CAP_PLC is the customer capacity kW value (seven decimals) used in applicable publications (e.g., the customer eligibility file, EDI transactions, the value to be used in determining a supplier's capacity PLC posted to PJM, etc.).

b. CUST_PLC is the individual customer's average peak load contribution to the PJM five peak summer hours.

c. Note: CUST_PLC is not a weather-normalized value. It is unrestricted (it includes curtailed load) when applicable.

d. RECON_FACTOR is the reconciliation factor. It is a constant used to scale the customer data, which is based on "as-metered" customer data, to the zone PLC assigned by PJM. It is calculated as:

RECON_FACTOR For all Customers	=	The Zone's Summer Forecasted Weather Normalized Unrestricted PLC	/	The Zone's Average unrestricted as-metered load at the time of the five PJM Peaks

e. CUST PLC is calculated as:

CUST_PLC	=	(	CUST_LOAD	+	CUST_CL	)	*	LOSSES_ FACTOR by Service Level	*	CUST_ FACTOR

f. CUST_LOAD and CUST_FACTOR datasets are based on the most recent summer's data. For example, the PLC, effective June 1, 2025, captured usage data from June 1, 2024, through September 30, 2024.

g. CUST_CL is the customer's actual curtailed load at the time of the PJM peaks when applicable.

h. LOSSES_FACTOR is the distribution and transmission system losses.

The Electric Generation Supplier Tariff can be found here: Tariff Resources | Duquesne Light Company

i. The CUST_PLC for each of the PJM peaks (five in total) are averaged to produce the final CUST_PLC. PJM - Load Forecast Development Process

j. The CUST_LOAD is calculated in kW.

k. The CUST_LOAD and CUST_FACTOR are calculated to at least seven decimal points.

l. The customer CUST_LOAD and CUST_FACTOR are determined as follows:

Meter Type	CUST_LOAD	CUST_FACTOR
Hourly Metered Customer	Customer's Hourly Meter Readings at the time of the five PJM Peaks	n/a
Non-Hourly Metered Customer	The Load Profile Hourly Meter Readings at the time of the five PJM Peaks	Customers' Usage taken from monthly Meter Readings during the Summer Season Divided by the respective Class Usage

m. PJM defines the summer Season from June 1st through September 30th.

n. For monthly-metered customers, the customer's summer season usage (CUST_FACTOR) is derived from the customer's billing records, which occurred during the summer season.

o. Class_Usage is the aggregate of the hourly values of the Profile Load for the same time frame as the customer's monthly summer meter reads. Class_usage is only used in the Monthly Metered Customer calculation.

PLC Special Considerations

a. If a customer does not have data at the time all five PJM peaks occurred, the averaging of hourly-metered data will be based upon the existing readings. For monthly-metered customers, the usage data will be filled in from the applicable load profile. If a customer does not have data available during the five PJM peak periods, they will be assigned the class average Peak Load Contribution (PLC).

b. **New customers will be assigned the class average CAP_PLC for the applicable profile class**. If a forecast of the customer's demand is provided, it will be used if agreed upon by the customer and DLC.

- Note: Effective October 27, 2025, customers are encouraged to provide a 12-month forecast of their demand in kilowatts (kW). Duquesne Light will evaluate this forecast for its reasonableness and assess the feasibility of its use.
    - If the customer is unable to provide a forecast, the service will be allocated the class average or the contract demand, whichever is less.

c. Within the Zone there can be "load zones" (i.e., municipalities, cooperatives, etc.) which participate in retail choice. These zones will have their PLC determined consistent with the methodology described herein, unless an alternate method is agreed to by the Operating Company, the EGS and PJM. (For practical purposes, these customers are hourly-metered customers.)

d. The PLC for a Curtailable Load customer is based upon the "unrestricted" load of the customer. This requires adding back any applicable load reductions in accordance with PJM protocols.

e. The Reconciliation Factors associated with the determination of customer PLC are computed annually with the rollover to the current data set (e.g., the annual update once the previous summer's data is available).

Overview – Network Service Peak Load

PJM requires each EDC to provide an NSPL value for each active EGS serving load within its service territory on a daily basis, needed to allocate Zone transmission costs in accordance with the requirements of the PJM Operating Agreement and OATT. This manual provides a detailed explanation of the process used to determine each retail customer's NSPL for DLC.

Company-specific information combined with specific information provided by PJM is used to determine an individual customer's NSPL. Relevant information, such as customer profiles and loss class details, used in determining NSPL can be found on the Company's website, Tariff Resources | Duquesne Light Company.

This document does not describe processes used to determine an EGS's transmission financial obligation. Information of this nature can be found on PJM's website.

Determination of EGSs Network Service Peak Load

The Duquesne Light system load at the time of the DLCo's Network Transmission Service Peak Load Contribution Zonal peak is allocated to its individual customers, and then the EGS's portfolio of customers for any given day is used to determine the EGS's NSPL. The customer-assigned NSPLs are aggregated with respect to each EGS and uploaded to PJM daily. An EGS's NSPL can vary daily with customer enrollments and drops.

PJM rules require each EDC to revise its customers' NSPLs annually. Customer NSPLs are recalculated each November and take effect on January 1 for the entire calendar year.

Calculation of Customer's Network Service Peak Load

Under the OATT, a transmission customer's daily NSPL requirement is based on its load at the time of its restricted (no adjustments for Demand Response programs) Zone peak, which occurs from November 1 of the prior year through October 31 of the current year.

The general algorithm for a customer NSPL is:

NSPL	=	CUST_NSPL	*	RECON_FACTOR

a. NSPL is the individual customer's load coincident with Duquesne's transmission system zonal load during the one peak hour of the previous year.

b. NSPL is the value used in applicable publications (e.g., EDI transactions, the value used determines a supplier's NSPL posted to PJM, etc.).

c. Note: NSPL is not a weather-normalized value, and it is a restricted value.

d. The NSPL is calculated in kW to at least seven decimal points.

e. RECON_FACTOR is the reconciliation factor. It is a constant used to scale the customer data, which is based on "as-metered" customer data to the Duquesne Light load value at the single DLCO Zone peak hour, which PJM uses to determine the transmission-related charges. It is calculated as:

RECON_FACTOR For all Duquesne Light retail Customers	=	Duquesne Light load at Zone's Restricted Peak	/	Sum of customer calculated NSPL values

f. The customer CUST_NSPL the Zone can peak in either the summer or winter season. Winter is defined as the period from December 1 to March 31. Summer is defined as the period from June 1 to September 30.

g. CUST_NSPL is calculated as:

CUST_NSPL	=	CUST_LOAD *	LOSSES_ FACTOR by Service Level	*	CUST_ FACTOR (only for monthly customers)

h. The customer's CUST_LOAD and CUST_FACTORS are based on the DLCO zone peak season data.

Meter Type	CUST_LOAD	CUST_FACTOR
Hourly Metered Customer	Customer's Hourly Meter Readings at the time of the five season peak hours for the DLCO Zone	n/a
Non-Hourly Metered Customer	The Load Profile Hourly Meter Readings at the time of the five season peak hours for the DLCO Zone	Customers' Usage taken from monthly Meter Readings during the peak season Divided by the respective Class_Usage.

i. LOSSES_FACTOR is the distribution and transmission system losses. The Electric Generation Supplier Tariff can be found here: Tariff Resources | Duquesne Light Company

j. The CUST_LOAD is the peak load at each of the seasonal system NSPL peak hour. For example, for the NSPL effective January 1, 2025, the usage data was captured from November 1, 2023, through October 31, 2024.

k. New NSPL values are calculated annually and are effective each January 1. The OATT defines the transmission planning period.

l. Class_Usage is the aggregate of the hourly values of the Profile Load for the same time frame as the customer's monthly season meter reads. Class_usage is only used in the Monthly Metered Customer calculation.

NSPL Special Considerations

a. If a customer does not have data at the time of Duquesne's transmission system zonal load during the one peak hour, the customer will be assigned the class average.

b. New customers will be assigned the class average NSPL for the applicable profile class. If a forecast for the customer's demand is provided, it will be used if agreed upon by the customer and DLC.

- Note: Effective October 27, 2025, Customers are encouraged to provide a 12-month forecast of their demand (in kW). Duquesne Light will review the forecast for reasonableness.
    - If the customer is unable to provide a forecast, the service will be allocated the class average or the contract demand, whichever is less.

c. Customer NSPL will be updated annually in accordance with PJM requirements and implementation schedule.

d. Within the Zone, there can and do exist "load zones" (i.e., municipalities, cooperatives, etc.) which participate in retail choice. These zones will have their NSPL determined consistent with the methodology described herein, unless Duquesne Light agrees to an alternate method.. (For practical purposes, these customers are hourly-metered customers.)