Met-Ed, Penelec, Penn Power, and West Penn Power Pennsylvania Default Service Programs Data Series Overview: General Descriptions As of March 2019

I. DESCRIPTION OF SUPPLY TO BE PROCURED IN THE PA DEFAULT SERVICE PROGRAM SOLICITATIONS

Default Service Load is the load associated with Met-Ed, Penelec, Penn Power, and West Penn Power's (jointly the "Companies," each a "Company") retail customers who have not elected to receive service from an alternative supplier or an Electric Generation Supplier ("EGS"). A customer who elects not to procure retail electric supply from an EGS is a non-shopping or Default Service customer for their Company. Each Company's Default Service Load is computed by subtracting the load served by EGSs in each rate schedule from the total retail load for that rate schedule and then aggregating the load by Customer Class.

The data items posted to the "Load and Other Data" page under Documents on the FEPA Auction Information Website and referenced in this document were assembled in conjunction with and are consistent with the Pennsylvania Default Service Programs ("PA DSP") referenced at Pennsylvania Public Utility Commission Docket Nos. P-2011-2273650, P-2011-2273668, P-2011-2273669, and P-2011-2273670.

II. GENERAL INFORMATION

A. DATA FORMATS AND PERIOD COVERED

The goal of the Companies is to provide adequate historical time series data, to the extent that such data can reasonably be made available within the data file size limitations for wholesale suppliers looking to participate in the PA Default Service Program Auctions. Older data will be removed entirely from the data files as these files reach their size limits to accommodate new data. As hourly load data are reconciled by PJM, primary reconciled load data will be overwritten with secondary reconciled data.¹

Each of the Companies' loads are located within PJM Interconnection, LLC ("PJM").

Data files will be posted to the "Load and Other Data" page as Excel spreadsheets.

B. CUSTOMER CLASSES AND RATE SCHEDULES

A "Customer Class" or "Class" is a grouping of customers on each Company's existing rate schedules. There are three Classes for each Company: Residential ("R"), Commercial ("C"), and Industrial ("LI"). The specific rate schedules for each Class and for each Company are shown in Table 1 with a brief description of the customers included within each Class.

¹ In the hourly data files "P" represents "Primary" load data used by PJM for primary or initial financial settlements. These data may contain estimated load data. "S" represents "Secondary" load data used by PJM for reconciled financial settlements, which are settled 60 days after the primary financial settlements.

Table 1. Rate Schedules for Each Customer Class

Customer Class	Rate Schedules		
Met-Ed Residential	Residential Service ("ME RS") Volunteer Fire Company & Non-Profit Ambulance Service, Rescue Squad & Senior Center Service Rate ("ME GS Vol. Fire Co.")		
Met-Ed Commercial	Small – General Service & Medium – General Service (PTC) ("ME GSS", "ME GSM") Municipal Service ("ME MS") Borderline Service ("ME BRD") Street Lighting Service & Ornamental Street Lighting ("ME STLT") Outdoor Lighting Service ("ME POL")		
Met-Ed Industrial	Medium – General Service ("HP") Large – General Service ("ME GSL") General Primary ("ME GP") Transmission Power Rate ("ME TP")		
Penelec Residential	Residential Service ("PN RS") Volunteer Fire Company & Non-Profit Ambulance Service, Rescue Squad & Senior Center Service Rate ("PN GS Vol. Fire Co.")		
Penelec Commercial	Small – General Service & Medium – General Service (PTC) ("PN GSS", "PN GSM") All Electric School, Church and Hospital Rate ("PN H") Borderline Service ("PN BRD") High Pressure Sodium Vapor Street Lighting Service, Municipal Street Lighting Service ("PN STLT"), and Outdoor Lighting Service ("PN POL")		
Penelec Industrial	Medium – General Service ("HP") Large – General Service Secondary ("PN GSL") General Service – Primary Rate ("PN GP") Large Primary Rate ("PN LP")		
Penn Power Residential	Residential Service ("PP RS") GS Special Provision for Volunteer Fire Companies, Non-Profit Senior Citizen Centers, Non-Profit Rescue Squads, and Non-Profit Ambulance Services ("PP GS Vol. Fire Co")		

Customer Class	Rate Schedules		
Penn Power Commercial	General Service ("PP GS") (Excluding PP GS- Hourly Pricing GSDS customers) General Service Medium ("PP GM") (Excluding PP GM-Hourly Pricing GMDS customers) Public or Non-Profit Organization Rate ("PP PNP") Private Outdoor Lighting Service ("PP PLS") Street Lighting Services ("PP SV," "PP SVD," and "PP SM")		
Penn Power Industrial	General Service ("PP GS") Hourly Pricing GSDS customers General Service Medium ("PP GM") Hourly Pricing GMDS customers GS-Large ("PP GSL") ³ General Service – Primary Rate ("PP GP") General Service Transmission ("PP GT")		
West Penn Power Residential	Schedule 10 Residential Service ("WP 10")		
West Penn Power Commercial	Schedule 20 General Service ("WP 20") Schedule 30 General Power Service – Small ("WP 30S") Street and Area Outdoor Lighting Schedules 51, 52, 53, 54, 55, 56, 57, 58 and 71 ("WP STLT") and 72 ("WP LED")		
West Penn Power Industrial	Schedule 30 General Power Service – Large ("WP 30L") Schedule 35 General Power Service ("WP 35") Schedule 40 Primary Power Service ("WP 40") Schedule 44 Interruptible Primary Power Service ("WP 44") Schedule 46 Primary Power Service ("WP 46") Tariff No. 37 Pennsylvania State University – University Park Campus ("WP PSU")		

 $^{^2}$ Effective June 2019 for customers with demand greater than 100 kW for 12 consecutive months 3 Effective June 2019

III. DESCRIPTIONS OF DATA SERIES

A. HOURLY LOAD (ENERGY) DATA 1

1. Description

Category name on Website: "Hourly Load by Class".

Hourly energy of Default Service customers for each Customer Class of each Company (i.e., those customers not taking service from an EGS) is provided in these data files.⁴ Hourly load data files are provided in Eastern Standard Time and are shown as "Hour Ending" values. For instance, Hour 1:00 pertains to the hour ending at 1:00 between 12:00 a.m. EST and 1:00 a.m. EST. Daylight Saving Time (DST) is <u>not</u> explicitly accounted for in the hourly energy data files and each day both in the Fall and Spring DST periods will always contain exactly 24 consecutive hours.

The Companies allocate Unaccounted-for-Energy ("UFE") each month to all Load Serving Entities in each Company zone (i.e., to EGSs and Default Service Load Serving Entities) for each Customer Class based on load-ratio share. The hourly energy values posted to the auction Information Website do not include UFE. Hourly UFE values are provided separately as described in section E of this document.

All hourly energy values include both distribution and transmission system losses and are not de-rated for marginal transmission losses. Hourly marginal loss deration factors are provided separately and are further described in section G of this document.

2. Available Data

Hourly Energy for the Met-Ed, Penelec, Penn Power, and West Penn Power Zones (includes aggregated totals for all three Customer Classes and totals for non-shopping and shopping load).

B. PEAK LOAD CONTRIBUTIONS ("PLC")

Category name on Website: "Capacity and Transmission PLC by Rate".

1. Description

These files provide historical Daily Capacity Peak Load Contributions ("PLCs") or "Cap PLC" for each Customer Class for Default Service customers as well as for shopping customers being served by an EGS in the Companies' service territories. PLCs are calculated by first assigning each customer account an individual PLC and then totaling all account PLCs for a given day to produce aggregate PLC results; this is known as a "bottom-up" calculation. The PLC data reflect actual values before application of the Daily Zonal Scaling Factors as further described in section C of this document.

⁴ The total hourly energy for shopping and non-shopping customers was provided by rate schedule up to October 1, 2010. More recent data are provided only by Customer Class.

2. Available Data

Daily Met-Ed, Penelec, Penn Power, and West Penn Power Zones PLC (includes aggregated totals for all three Customer Classes and totals for non-shopping and shopping customers).

C. PJM RELIABILITY PRICING MODEL ("RPM") DAILY ZONAL SCALING FACTORS

Category name on Website: "Daily Zonal Scaling Factor".

The Daily Zonal Scaling Factor information as provided is determined by the Companies in accordance with PJM protocols. As described in PJM's "Manual 18: PJM Capacity Market," section 7, PJM adjusts the daily PLCs submitted by the Companies to a zonal RPM load target by calculating and applying a Daily Zonal Scaling Factor.

In practice, the PLCs that the Companies submit to PJM already have been scaled by the daily zonal scaling factors provided in the Data Room. Therefore, the PJM's Zonal Scaling Factors as posted in PJM's eRPM eSuite are equal to one (1).

For more information on PJM's eRPM eSuite please refer to the PJM eRPM User Guide: https://pjm.com/~/media/markets-ops/rpm/erpm-user-guide.ashx.

D. PEAK LOAD SHARE (TRANSMISSION)

Category name on Website: "Capacity and Transmission PLC by Rate".

1. Description

Daily Network Transmission Service Peak Loads ("NSPLs" or "Trans PLS") are provided by Customer Class for both Default Service customers and shopping customers.

NSPLs are calculated by first assigning each account an individual NSPL and then totaling all account NSPLs for a given day to produce aggregate NSPL results; this is also a "bottom-up" calculation. All Electric Distribution Companies ("EDCs") within PJM are required to update NSPL data annually, by January 1, with those NSPLs effective during January 1 through December 31.

2. Available Data

Daily Met-Ed, Penelec, Penn Power, and West Penn Power Zone NSPL (includes aggregated totals for all three Customer Classes and totals for non-shopping and shopping customers).

E. ZONAL UNACCOUNTED FOR ENERGY ("UFE")

Category name on Website: "Unaccounted for Energy".

1. Description

Unaccounted for Energy (UFE) represents the hourly Mega-Watt ("MW") variance between the Companies' total retail hourly energy (system load) and the sum of (i) the estimated hourly customer loads (both interval metered and profiled) and (ii) associated electrical losses. The hourly UFE values are in Eastern Prevailing Time (EPT).

2. Available Data

Hourly UFE for the Met-Ed, Penelec, Penn Power and West Penn Power Zones.

F. CUSTOMER SHOPPING STATISTICS AND COUNTS

Category name on Website: "Shopping Statistics".

1. Description

Total number of customers in a particular Class as of the last calendar day of the previous month, including counts for Default Service customers and shopping customers. These data will be updated by the tenth business day of each month.

2. Available Data

Monthly Counts for Met-Ed, Penelec, Penn Power, and West Penn Power non-shopping and shopping Customers in the R, C and LI Classes.

G. HOURLY PJM DERATION FACTORS

Category name on Website: "Deration Factor".

1. Description

Hourly loss factors are applied by PJM to de-rate the zonal energy schedules, which include both distribution and transmission losses by the amount of marginal transmission losses that are already accounted for in PJM's Locational Marginal Prices ("LMPs"). Deration factors are applied to the hourly energy values to determine PJM settlement energy volumes using aggregated Company Customer Class load data that include both distribution and transmission losses.

A single hourly deration factor is used for all load classes. Note that the hourly deration factors are in Eastern Prevailing Time (EPT).

2. Available Data

Hourly deration factors for the Met-Ed, Penelec, Penn Power, and West Penn Power Zones

IV. USE OF DATA (DISCLAIMER)

The data items posted on the "Load and Other Data" page are provided by the Companies for informational purposes only. The Companies have compiled the data in good faith from sources believed to be reliable but do not warrant the accuracy of the data. Further, there is no representation that these data are indicative of future outcomes. By using these data, prospective suppliers and all other parties assume all risks associated with the data. Without limiting the foregoing, prospective bidders and all other parties should carefully assess the uncertainty associated with future load obligations, including variations in customer usage and migration to Electric Generation Suppliers, which the Companies cannot predict.

V. SUMMARY OF DATA ITEMS AND FREQUENCY OF UPDATES

The following table provides a summary of all the data that are currently provided on the "Load and Other Data" page and indicates the frequency with which the data will be updated. Note that some items may be updated more frequently if deemed necessary to conform to the requirements of the auction schedule.

DATA ITEMS	DATA ITEM DESCRIPTION	FREQUENCY OF UPDATE
Zone Hourly Loads	Total Zone Hourly Load by Company	Monthly (by fifth business day of every month)
(in Eastern Standard Time)	Non-Shopping Hourly Load by Customer Class and Company	
	Shopping Hourly Load by Customer Class and Company	
Historical Peak Load Contributions (PLC), Daily Network Transmission Service Peak Loads (NSPL)	Total Zone Cap PLC and NSPL	Monthly (by fifth business day of every month)
	Residential PLC and NSPL (Shopping and Non-Shopping)	
	Commercial PLC and NSPL (Shopping and Non-Shopping	
	Large Industrial PLC and NSPL (Shopping and Non-Shopping)	
Unaccounted for Energy ("UFE") (in Eastern Prevailing Time)	Met-Ed Zone UFE	Monthly
	Penelec Zone UFE	(by fifth business day of every month)
	Penn Power Zone UFE	
	West Penn Power Zone UFE	
Combined Customer Shopping	Shopping and Non-shopping Residential, Commercial and Large Industrial Customers for Met-Ed	Monthly (by tenth business day of every month)
Statistics	Shopping and Non-shopping Residential, Commercial and Large Industrial Customers for Penelec	
	Shopping and Non-shopping Residential, Commercial and Large Industrial Customers for Penn Power	
	Shopping and Non-shopping Residential, Commercial and Large Industrial Customers for West Penn Power	
PJM Hourly	Met-Ed Zone Hourly Deration Factors	Monthly
Deration Factors (in Eastern Prevailing Time)	Penelec Zone Hourly Deration Factors	(by fifth business day of every month)
	Penn Power Zone Hourly Deration Factors	
	West Penn Power Zone Hourly Deration Factors	
PJM Daily Zonal Scaling Factors	Met-Ed Daily Zonal Scaling Factors	Monthly
	Penelec Daily Zonal Scaling Factors	(by fifth business day of every month)
	Penn Power Daily Zonal Scaling Factors	
	West Penn Power Daily Zonal Scaling Factors	every monun)