PJM Manual 29:

Billing

Revision: 29

Effective Date: June 29, 2022

Prepared by

Market Settlement Operations

PJM © 2022





Table of Contents

Table of Contents

Approval	3
Current Revision	.Error! Bookmark not defined.
Introduction	.Error! Bookmark not defined.
About PJM Manuals	Error! Bookmark not defined.
About This Manual	
Using This Manual	Error! Bookmark not defined.
Section 1: Billing Overview	.Error! Bookmark not defined.
1.1 Billing Overview	
1.2 Payments from Net Buyers and to Net Sellers	Error! Bookmark not defined.
1.3 Default Allocation Assessment	
1.4 Billing Notifications	
1.5 Billing Adjustments	
Section 2: Monthly Billing Statement	4
2.1 Summary	4
2.2 Monthly Charges	
2.2.1 Operating Agreement Charges	
2.2.2 Open Access Transmission Tariff Charges	
2.3 Monthly Credits	
2.3.1 Operating Agreement Credits	
2.3.2 Open Access Transmission Tariff Credits	
	12
Section 3: Weekly Billing Statement	
3.1 Summary Page	
3.2 Weekly Charges	
3.3 Weekly Credits	
Section 4: Billing Support	
4.1 Support Overview	
4.2 Guide to Billing	
4.3 Market Settlements Reporting System (MSRS)	
Revision History	Lerror! Bookmark not defined.

Approval





Approval

Approval Date: 02/24/2018 Effective Date: 06/29/2022

Natasha Holter, Manager

Market Settlement Operations



Section 2: Monthly Billing Statement

Welcome to the Monthly Billing Statement section of the *PJM Manual for Billing*. In this section, you will find the following information:

- A description of the overall billing timeline and summary page of the monthly billing statement (see "Summary").
- A description of the charge billing line items on the monthly billing statement (see "Monthly Charges").
- A description of the credit billing line items on the monthly billing statement (see "Monthly Credits").

2.1 Summary

PJM Settlement issues monthly billing statements by the fifth (5) business day following the end of each month. Section 2 of this PJM Manual describes the billing line items included in the monthly billing statement. The monthly billing statement settles all activity within the month. The net amount due to or due from the PJM Member or Transmission Customer is adjusted for the amounts billed through the weekly billing statements for that same activity month. Payments from PJM Member or Transmission Customers with a net charge are due coincident with the due date of the first weekly bill issued for the activity in the month that the monthly bill is issued. For example, if the January billing statement is issued in the first week of February, then payments for the January billing statement will be due coincident with the due date for the first weekly billing statement issued for the month for February. If such due date is less than three (3) business days after the issuance of the monthly billing statement, then such payment will be due when the payment for the second weekly billing statement is due. PJM Settlement will make payments to the PJM Members and Transmission Customers with a net credit on the business day following the date that payments are due.

PJM Members and Transmission Customers are obligated to pay the amounts shown as due on the monthly billing statement.

The monthly billing statement summary page contains the following information:

- Name and address of PJM Settlement, Inc.
- Invoice number
- Name of the PJM Customer Account being invoiced
- PJM Customer Shortname and Organization ID (Org ID)
- Billing statement creation date and time
- Period covered by the billing statement
- Monthly billing total, previous weekly billing total and total net amount due to PJM Settlement or to the PJM Customer Account
- Payment terms, including due date and instructions for wire transfer



- PJM contact information for banking and payment <u>custsvc@pjm.com</u>
- PJM contact information for billing line items mrkt_settlement_ops@pjm.com

2.2 Monthly Charges

Although charges typically represent amounts owned by the PJM Member for services provided to the PJM Member, occasionally the calculations result in negative charges which represents an amount due to the PJM Member for the particular service. Dollars seen on the billing statement under the 'Charge' heading as a positive number will be a charge to the PJM Member. Dollars seen on the billing statement under the 'Charge' heading as a negative number will be a credit to the PJM Member.

In addition to the identified services, miscellaneous items or special adjustments may appear on the billing statement. When such billing line items appear on the monthly billing statement, additional information may be provided in the BLI Adjustment Summary report in MSRS.

2.2.1 Operating Agreement Charges

The monthly billing statement lists the amount in dollars due from the Member for each of the services billed under the PJM Operating Agreement. For more detail about how these charges are calculated, see the PJM Manual 28: Operating Agreement Accounting.

The following billing line items may appear on each month's billing statement:

- Spot Market Energy (Day-ahead) charges The sum of the PJM Member's day-ahead spot market energy charges (+/-) based on the member's billing account energy market injections and withdrawals for the applicable settlement interval.
- Spot Market Energy (Balancing) charges The sum of the PJM Member's balancing spot market energy charges (+/-) based on the member's billing account energy market injections and withdrawals for the applicable settlement interval
- Regulation charges The sum of the PJM Member's hourly regulation charges for all hours in which the PJM Member purchased regulation.
- Operating Reserve (Day-ahead) charges The sum of the PJM Member's daily dayahead Operating Reserve charges for all days.
- Operating Reserve for Load Response (Day-ahead) charges The sum of the PJM Member's daily day-ahead Operating Reserve charges for Load Response for all days.
- Operating Reserve (Balancing) charges The sum of the PJM Member's daily balancing Operating Reserve charges for all days.
- Operating Reserve for Load Response (Balancing) charges The sum of the PJM Member's daily balancing Operating Reserve charges for Load Response for all days.
- Synchronous Condensing charges The sum of the PJM Member's daily Synchronous Condensing charges for all days.
- Reactive Services charges The sum of the PJM Member's hourly Reactive Services charges for all hours in which a generator was instructed by PJM to alter its output to provide reactive services



- Synchronized Reserve charges The sum of the PJM Member's hourly Synchronized Reserve charges for all hours in which the PJM Member purchased Synchronized Reserve
- Non-Synchronized Reserve charges The sum of the PJM Member's hourly Non-Synchronized Reserve charges for all hours in which the PJM Member purchased Non-Synchronized Reserve.
- Secondary Reserve charges The sum of the PJM Member's hourly Secondary Reserve charges for all hours in which the PJM Member purchased Secondary Reserves.
- Transmission Congestion (Day-ahead) charges The sum of the PJM Member's or Transmission Customer's day-ahead transmission congestion charges (+/-) for all applicable settlement intervals in which the transmission system was congested (explicit and implicit).
- Transmission Congestion (Balancing) charges The sum of the PJM Member's or Transmission Customer's balancing transmission congestion charges (+/-) for all applicable settlement intervals in which the transmission system was congested (explicit and implicit).
- Transmission Losses (Day-ahead) charges The sum of the PJM Member's or Transmission Customer's day-ahead loss charges (+/-) for all applicable settlement intervals (implicit and explicit).
- Transmission Losses (Balancing) charges The sum of the PJM Member's or Transmission Customer's balancing loss charges (+/-) for all applicable settlement intervals (implicit and explicit).
- Inadvertent Interchange charges The sum of the PJM Member's hourly inadvertent interchange charges (+/-) for all hours.
- Emergency Energy charges The sum of the PJM member's or external pool's emergency energy purchase charges for all applicable settlement intervals in which PJM purchased or sold emergency energy.
- Economic Load Response (Day-ahead) charges The sum of the PJM Member's day-ahead charges for PJM Economic Load Response.
- Economic Load Response (Real-time) charges The sum of the PJM Member's realtime charges for PJM Economic Load Response.
- Emergency Load Response charges The sum of the PJM Member's charges for PJM Emergency Load Response.
- Financial Transmission Rights (FTR) Auction charges The sum of the FTR buyer's charges for the purchase of FTRs through the PJM FTR Auctions.
- Planning Period Congestion Uplift charges The sum of the FTR holder's charges for the cost of providing the Uplift on previously unfulfilled FTR Targets. Calculated at the end of each Planning Period.



- Meter Error Correction charges The sum of the PJM Member's charge adjustments (+/-) resulting from correction of meter errors.
- Unscheduled Transmission Service charges The charges associated with unscheduled transmission service according to the PJM agreement with NYISO.
- Fuel Cost Policy Penalty charges The sum of the PJM Members' charges for all hours associate with not complying with the Fuel Cost Policy for one or more of its resources.
- Load Reconciliation charges The sum of the PJM member's Spot Market
 Energy, Transmission Congestion, Transmission Losses, Inadvertent Interchange,
 Synchronized Reserve, Non-Synchronized Reserve, Secondary Reserve, Regulation,
 Operating Reserve, Synchronous Condensing, and Reactive Services charge
 adjustments (+/-) for a specified month due to a two-month after-the-fact reconciliation of
 kWh load responsibility for that member in that month.

2.2.2 Open Access Transmission Tariff Charges

The monthly billing statement also lists the amount in dollars due from the Transmission Customer for each of the services in the PJM Open Access Transmission Tariff. For more detail about how these charges are calculated, see the PJM Manual 27: Open Access Transmission Tariff Accounting.

The following billing line items may appear on each month's billing statement:

- PJM Scheduling, System Control and Dispatch Service charges The PJM Member's monthly share of PJM's monthly operating expenses, allocated on an unbundled basis in accordance with Schedule 9: "PJM Administrative Services" of the PJM Open Access Transmission Tariff.
- Transmission Owner Scheduling, System Control and Dispatch Service charges The Transmission Customer's monthly share of the charges for operation of the TOs' control centers, allocated in proportion to the Transmission Customer's use of the transmission system in each transmission zone.
- Reactive Supply and Voltage Control from Generation and Other Sources Service charges — The Transmission Customer's monthly charges for reactive power support for transactions on the PJM Transmission System.
- Network Integration Transmission Service (NITS) charges The Transmission Customer's monthly transmission demand charge, based on applicable transmission zone rates.
- Network Transmission Service Offset charges All Network Integration Transmission Service Customers in the Allegheny Power transmission zone are provided with rebates applied as a negative charge based on their applicable wholesale or retail rate to hold them harmless from the network rate conversion.
- MTEP Project Cost Recovery charges After ATSI and Duke Energy Ohio and Duke Energy Kentucky's integration into PJM, remaining MISO transmission owners will continue to be obligated to construct certain projects in MISO and transmission customers serving load in the ATSI and DEOK Zones will continue to be obligated to pay a portion of the costs of those projects. A share of the costs associated with those



projects is allocated as MTEP Project Cost Recovery charges to ATSI and Duke Energy Ohio and Duke Energy Kentucky. DEOK zonal charges are then further allocated to that zone's network customers based on network service peak load ratio shares. Likewise, transmission customers serving load in the remaining MISO zones will continue to be obligated for the costs of previously identified MTEP projects that ATSI and Duke Energy Ohio and Duke Energy Kentucky have constructed or remain obligated to construct in the ATSI and DEOK Zones, respectively. The costs of these projects are allocated as MTEP Project Cost Recovery charges to MISO.

Direct Assignment Facilities charges – The monthly charge to a Network Customer for necessary transmission facilities to ensure firm or non-firm point-to-point transmission service can be provided.

- Transmission Enhancement (TEC) charges Approved RTEP project costs are allocated to responsible customers/zones in accordance with Schedule 12 of the PJM OATT with zonal charges further allocated to that zone's network customers based on network service peak load ratio shares.
- Other Supporting Facilities (OSF) charges The monthly charge to a Network
 Customer for low voltage facilities as specified in their service agreement and/or the
 applicable TO's Attachment H to the PJM tariff.
- Firm Point-to-Point Transmission Service charges The Transmission Customer's monthly firm transmission demand charge, based on applicable PJM border or transmission zone rates.
- Non-Firm Point-to-Point Transmission Service charges The Transmission Customer's monthly non-firm transmission demand charge, based on applicable PJM border or transmission zone rates.
- Black Start Service charges The Transmission Customer's monthly charges for black start service on the PJM Transmission System.
- PJM Settlement, Inc (PSI) charges The charge to collect operating costs associated with functions provided by PJM Settlement.
- Market Monitoring Unit (MMU) Funding charges The charge to collect operating costs associated with functions, as specified in Attachment M, provided to the PJM region.
- FERC Annual Recovery charges The charge to collect FERC fees based on MWh of energy delivered via network and point-to-point transmission service.
- Organization of PJM States, Inc. (OPSI) Funding The charge to collect OPSI's operating costs based on MWh of energy delivered via network and point-to-point transmission service.
- Consumer Advocates of PJM States, Inc. (CAPS) charges The charge to collect CAP's operating costs based on MWh of energy delivered via network and point-to-point transmission service.
- North American Electric Reliability Corporation (NERC) charges The charge to collect a share of NERC's operating costs based on MWh of energy delivered to load in the PJM Region (excluding Dominion and EKPC Zones).



- Reliability First Corporation (RFC) charges The charge to collect RFC's operating
 costs based on MWh of energy delivered to load in the PJM Region (excluding Dominion
 and EKPC Zones).
- Load Reconciliation charges PJM Scheduling, System Control and Dispatch Service, and TO Scheduling, System Control and Dispatch Service, 9-MMU, 9-FERC, 9-OPSI, 9CAPS, 10-NERC, 10-RFC charge adjustments for a specified month due to a two-month after-the-fact reconciliation of kWh load responsibility for that member in that month.
- RPM-related and FRR-related Capacity charges (details are included in the PJM Manual 18: PJM Capacity Market).

Generation Deactivation charges – The charge to collect credits to generators requesting retirement where PJM studies find reliability issues that require the generation to continue operating. Cost allocations to zonal load and firm withdrawal rights are determined by PJM based on the beneficiaries.

2.3 Monthly Credits

Although credits typically represent amounts owed to the PJM Member for services provided by the PJM Member, occasionally the calculations result in negative credits which represents an amount due from the PJM Member for the particular service. Dollars seen on the billing statement under the 'Credit' heading as a positive number will be a credit to the PJM Member. Dollars seen on the billing statement under the 'Credit' heading as a negative number will be a charge to the PJM Member.

In addition to the identified services, miscellaneous items or special adjustments may appear on the billing statement. When such billing line items appear on the monthly billing statement, additional information may be provided in the BLI Adjustment Summary report in MSRS.

2.3.1 Operating Agreement Credits

The monthly billing statement lists the amount in dollars due to the Member for each of the services billed under the PJM Operating Agreement. For more detail about how these credits are calculated, see the PJM Manual 28: Operating Agreement Accounting.

The following billing line items may appear on each month's billing statement.

- Regulation credits The sum of the PJM Member's regulation credits for all settlement intervals in which the PJM Member provided regulation.
- Operating Reserve (Day-ahead) credits The sum of the PJM Member's daily dayahead Operating Reserve credits for all days for eligible pool-scheduled resources.
- Operating Reserve for Load Response (Day-ahead) credits The sum of the PJM Member's daily day-ahead Operating Reserve credits for Load Response for all days.
- Operating Reserve (Balancing) credits The sum of the PJM Member's daily balancing Operating Reserve credits for all days.
- Operating Reserve for Load Response (Balancing) credits The sum of the PJM Member's daily balancing Operating Reserve credits for Load Response for all days.



- Synchronous Condensing credits The sum of the PJM Member's daily Synchronous Condensing credits for all days.
- Reactive Services credits The sum of the PJM Member's Reactive Services credits for all settlement intervals in which the PJM Member's generation was instructed to alter its output to provide Reactive Services.
- Synchronized Reserve credits (Day-ahead) The sum of the PJM Member's daily dayahead Synchronized Reserve credits for all days in which the PJM Member provided Synchronized Reserve.
- Synchronized Reserve credits (Balancing) The sum of the PJM Member's balancing Synchronized Reserve credits for all Real-time Settlement Intervals in which the PJM Member provided Synchronized Reserve
- Non-Synchronized Reserve credits (Day-ahead) The sum of the PJM Member's daily day-ahead Non-Synchronized Reserve credits for all days in which the PJM Member provided Non-Synchronized Reserve.
- Non-Synchronized Reserve credits (Balancing) The sum of the PJM Member's balancing Non-Synchronized Reserve credits for all Real-time Settlement Intervals in which the PJM Member provided Non-Synchronized Reserve.
- Secondary Reserve credits (Day-ahead) The sum of the PJM Member's Secondary Reserve credits for all settlement intervals in which the PJM Member provided Non-Synchronized Reserve.
- Secondary Reserve credits (Balancing) The sum of the PJM Member's balancing Secondary Reserve credits for all Real-time Settlement Intervals in which the PJM Member provided Secondary Reserve.
- Transmission Congestion (Day-ahead) credits The sum of the PJM Member's or Transmission Customer's transmission congestion credits for all hours in which the transmission system was congested.
- Transmission Congestion (Balancing) credits The sum of the PJM Member's or Transmission Customer's transmission congestion credit for all hours in which the transmission system was congested.
- Transmission Losses credits The sum of the PJM Member's hourly transmission losses credits for all hours.
- Emergency Energy credits The sum of the PJM Member's or external pool's emergency energy sale credits for all settlement intervals in which PJM purchased or sold emergency energy.
- Economic Load Response (Day-ahead) credits The sum of the PJM Member's day-ahead credits for PJM Economic Load Response.
- Economic Load response (Real-Time) credits The sum of the PJM Member's real-time credits for PJM Economic Load Response.
- Emergency Load Response credits The sum of the PJM Member's credits for PJM Emergency Load Response.



- Financial Transmission Rights (FTR) Auction credits The sum of the FTR seller's credits for the sale of FTRs through the PJM FTR Auctions.
- Planning Period Excess Congestion credits The sum of ARR holder's credits for the excess of PJM congestion revenues. Calculated at the end of each Planning Period.
- Planning Period Congestion Uplift credits The sum of FTR holder's credits for the Uplift to satisfy any previously unfulfilled FTR Target Credits. Calculated at the end of each Planning Period.
- Auction Revenue Rights (ARR) credits The allocation to holders of ARRs of net revenues resulting from the sale of FTRs through PJM FTR Auctions.
- Fuel Cost Policy Penalty credits The sum of the PJM Member's credits for all hours in which a Fuel Cost Policy Penalty charge occurred.
- Load Reconciliation for Transmission Losses credits The sum of the PJM member's Transmission Losses credit adjustments (+/-) for a specified month due to a two-month after-the-fact reconciliation of kWh load responsibility for that member in that month.

2.3.2 Open Access Transmission Tariff Credits

The monthly billing statement lists the amount in dollars due to PJM Members for the services provided under the PJM Open Access Transmission Tariff. For more detail about how these credits are calculated, see the PJM Manual 27: Open Access Transmission Tariff Accounting.

The following billing line items may appear on each month's billing statement:

- Transmission Owner Scheduling, System Control, and Dispatch Service credits The Transmission Owner's monthly credit for the expense of providing scheduling, system control, and dispatch service through its control center.
- Reactive Supply and Voltage Control Generation and Other Sources Service credits —
 The Transmission or Generation Owners' share of all service charges collected for
 reactive supply and voltage control from generation sources service collected for the
 month.
- Network Integration Transmission Service (NITS) credits The Transmission Owners' share of all demand charges for network integration transmission service collected for the month.
- Network Integration Transmission Service Offset credits The negative credit applied to Allegheny Power to hold Network Integration Transmission Service Customer's in the Allegheny Power transmission zone harmless from the network rate conversion.
- Non-Zone Network Integration Transmission Service credits The Transmission Owners' share of all demand charges for non-zone network integration transmission service collected for the month.
- MTEP Project Cost Recovery credits MISO's share of MTEP Project Cost Recovery charges collected from ATSI and network customers in the DEOK zone for the month, as well as ATSI's and Duke Energy Ohio and Duke Energy Kentucky's share of MTEP Project Cost Recovery charges collected from MISO for the month.



- Direct Assignment Facilities credits The month credit to a Transmission Owner for the necessary transmission facilities to ensure firm or non-firm point-to-point transmission service may be provided.
- Transmission Enhancement (TEC) credits Approved RTEP project costs are provided
 to the applicable transmission owners, or to the applicable zone's network customers on
 a network service peak load ratio share if the project costs are already included in the
 transmission owner's network service rate.
- Other Supporting Facilities (OSF) credits The monthly credit to a Transmission Owner for low voltage facilities as specified in their service agreement and/or the TO's Attachment H to the PJM tariff.
- Firm Point-to-Point Transmission Service credits The PJM Transmission Owners' (excluding ComEd) and ComEd Network Customers' share of demand charges collected for firm point-to-point service collected for the month.
- Non-Firm Point-to-Point Transmission Service credits The PJM Network and Firm Point-to-Point Transmission Customers' share of demand charges for non-firm pointtopoint service collected for the month.
- Black Start Service credits The Generation Owners' share of all service charges collected for black start service for the month.
- RPM-related and FRR-related Capacity credits (details are included in the PJM Manual 18: PJM Capacity Market)
- Generation Deactivation credits The credits to generators requesting retirement where PJM studies find reliability issues that require the generation to continue operating.

2.4 Other

The monthly billing statement may also include other charges and credits of a miscellaneous nature that are not described in the above sections.

The following charge billing line items may appear on a billing statement:

- Deferred Tax Adjustment Network Customers taking service from PPL Electric Utilities Corporation, Duquesne Light Company, and PECO Energy Company are charged monthly in accordance with the Open Access Transmission Tariff, Attachment H-8A (PPL), Attach H-17C (DUQ), and Attachment H-7B (PECO).
- Schedule 11A PJM Net PJM Member request to purchase additional PJMnet connection(s) as described in the Open Access Transmission Tariff, Schedule 11A
- Miscellaneous Bilateral PJM Settlement administers agreed upon requests between specific PJM Members to bilaterally adjust their billing statement
- PJM Annual Member Fee The Primary/Voting Member, as described in PJM Manual 33, is charged an annual fee in the November month billing statement for the upcoming calendar year membership.



 PJM Customer Payment Default – PJM Members calculation in accordance with the Operating Agreement, section 15 for when a default has occurred.

The following credit billing line items may appear on a billing statement:

- Deferred Tax Adjustment PPL Electric Utilities Corporation, Duquesne Light Company, and PECO Energy Company are credited monthly in accordance with the Open Access Transmission Tariff, Attachment H-8A (PPL), Attach H-17C (DUQ), and Attachment H-7B (PECO).
- Miscellaneous Bilateral PJM Settlement administers agreed upon requests between specific PJM Members to bilaterally adjust their billing statement.

PJM may bill for other charges and credits like capital costs, training charges, and interconnection studies through a separate invoice not issued by PJM Settlement.