

Settlement Process Overview: Integrating DER

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Agenda

- **DER Terminology**
- **Hourly Meter Data Reporting for DER Aggregations**
- **Settlement Results Posting and Invoicing Cycle**
- **Meter Data Reporting Enhancement: Application Programming Interface (API)**

DER Terminology

Key Terms for this Presentation

■ Meter Service Entity (MSE):

- Entity authorized to provide metering and meter data services for DER Aggregation (as well as DSASP, RIP, CSP)

■ Member System:

- The eight transmission owners that comprised the membership of the New York Power Pool

■ Meter Authority (MA):

- Either a Member System or MSE responsible for reporting hourly meter data to NYSIO for DER Aggregations (as well as other types of generators, LSE load bus, tie-lines, etc.)

Key Terms for this Presentation -continued

- **Generator Injections:**

- Injections of energy onto the grid/wholesale markets

- **Generator Withdrawals:**

- Withdrawals of energy from the grid used to charge a storage device for later injection back onto the grid/wholesale markets

- **Demand Reductions:**

- Reductions in load measured by comparing actual load relative to a baseline value

Hourly Meter Data Reporting for DER Aggregations

Hourly Meter Data Reporting for DER Aggregations

- **Types of hourly meter data associated with DER Aggregations**
 - Generator injections
 - Generator withdrawals
 - Demand Reductions (new)
- **Roles and Responsibilities**
 - Hourly meter data for DER Aggregation is submitted to NYISO by the designated Meter Authority (MA) for the DER Aggregation. MA may be either the Member System/utility for the area or an MSE
 - DER Aggregation/Aggregator should review hourly meter data for accuracy and challenge any discrepancies

Hourly Meter Data Submission Timeline

- **Must be reported to NYISO by noon on the day following service date**
- **Opportunities exist to update data throughout the initial month**
- **All requests to revise hourly meter data for DER Aggregations must be submitted to NYISO within 55 (calendar) days following the issuance of the initial monthly invoice for service month.**
 - Includes both requests by the DER Aggregation/Aggregator and the MA for the Aggregation
- **At 60 (calendar) days following issuance of the initial monthly invoice for a given service month all hourly meter data for DER Aggregations is considered final (consistent with other types of generators and tie lines)**
 - Review, revision, and lock-down schedule posted on [Billing and Settlements](#) page under *Processing and Invoice Schedule > Meter Data Review* folder. See appendix for example
 - Changes required beyond 60 Days require an order from FERC or court of competent jurisdiction

Settlement Results Posting and Invoicing Cycle

Settlement Results Posting

- **Settlement processing begins at noon on the day following service date with advisory settlement statements available early morning on 2nd day following service date**
 - Provide energy and ancillary service market settlement results
 - Day-Ahead and Real-Time Markets
 - Note that “Cash Rec” and associated reports in Consolidated Invoice application (CSI) will be available immediately following bill spins
- **NYISO’s Decision Support System (DSS) application provides access to settlement results and billing determinants**
 - Hourly and Daily Statements
 - Standard corporate reports
 - MPs can develop their own custom reports
 - Schedule execution and delivery or reports

Invoicing Cycle

- Invoices are issued weekly with subsequent month-end, 4-month, and 8-month true-up cycle
- Standard weekly invoice
 - Standard billing period: Saturday through Friday (within same month)
 - Invoice typically issued on Wednesday with payments to NYISO due Friday and payments to Market Participants dispersed the following Tuesday.
 - Holidays may impact invoice issuance and banking dates
 - Issuance of monthly invoice may impact weekly invoice schedule (cannot be same day)
 - For additional details on weekly invoice schedule see section 1.2 of NYISO's Accounting and Billing Manual
 - Schedule posted on Billing and Settlements page within *Processing and Invoice Schedule > Flexible Invoicing Schedule* folder. See appendix for example

Invoicing Cycle -continued

■ Standard monthly Invoice

- Generally issued on the 5th business day of each month and includes the following billing periods:
 - Prior service month prior (e.g., October monthly invoice includes September service month)
 - 4-month settlement adjustment (e.g., October monthly invoice includes May service month)
 - Close-out settlement adjustment (e.g., October monthly invoice includes January service month)
- For additional details on monthly invoice schedule see section 1.3 of NYISO's [Accounting and Billing Manual](#)
- Schedule posted on [Billing and Settlements](#) page within *Processing and Invoice Schedule* > *Monthly Invoicing Schedules* folder. See appendix for example

Meter Data Reporting Enhancement: Application Programming Interface (API)

Upcoming meetings and Info Sessions

- API Demo/ Discussion – Targeting December BACWG/MTF
- Planned Training TBD
- Market Trials TBD

Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system



Questions?

Appendix: Meter Timelines and Invoice Schedules

Meter Data Review and Lock-down Schedule

Hourly Tie-line, Generator, and LSE Bus Meter Data Review, Revision, And Lock-down Schedule

Billing Month	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Initial Invoice Date	February 5, 2021	March 5, 2021	April 7, 2021	May 7, 2021	June 7, 2021	July 8, 2021	August 6, 2021	September 8, 2021	October 7, 2021	November 5, 2021	December 7, 2021	January 10, 2022
Period for Tie-line & Generator Metering Revision Submission by Meter Authorities Begins	February 11, 2021	March 11, 2021	April 13, 2021	May 13, 2021	June 11, 2021	July 14, 2021	August 12, 2021	September 14, 2021	October 13, 2021	November 11, 2021	December 13, 2021	January 14, 2022
Period to Challenge Tie-line & Generator Metering Only Through Written Request Begins	March 15, 2021	April 12, 2021	May 13, 2021	June 14, 2021	July 12, 2021	August 13, 2021	September 13, 2021	October 14, 2021	November 12, 2021	December 13, 2021	January 12, 2022	February 14, 2022
Period to Challenge Tie-line & Generator Metering Data Ends (Day-55)	April 1, 2021	April 29, 2021	June 1, 2021	July 1, 2021	August 2, 2021	September 1, 2021	September 30, 2021	November 2, 2021	December 1, 2021	December 30, 2021	January 31, 2022	March 7, 2022
Tie-line & Generator Metering Precluded From Further Revisions (Day-60)	April 6, 2021	May 4, 2021	June 7, 2021	July 6, 2021	August 5, 2021	September 7, 2021	October 5, 2021	November 8, 2021	December 6, 2021	January 4, 2022	February 7, 2022	March 11, 2022
LSE Bus Metering Data for 4-Month True-up Due From Meter Authorities (Day-70)	April 16, 2021	May 14, 2021	June 16, 2021	July 16, 2021	August 16, 2021	September 16, 2021	October 15, 2021	November 17, 2021	December 16, 2021	January 14, 2022	February 15, 2022	March 21, 2022
4-Month True-up LSE Metering Posted For Review (Day-75)	April 21, 2021	May 19, 2021	June 21, 2021	July 21, 2021	August 23, 2021	September 21, 2021	October 20, 2021	November 22, 2021	December 21, 2021	January 19, 2022	February 22, 2022	March 28, 2022
4-Month True-up LSE Metering Revisions Suspended for Invoice Processing	May 3, 2021	June 1, 2021	July 2, 2021	August 2, 2021	September 1, 2021	October 1, 2021	November 1, 2021	December 3, 2021	December 31, 2021	January 31, 2022	March 3, 2022	April 6, 2022
4-Month True-up Advisory LSE Metering Posted For LSE Review & Challenge** (Day-90)	May 6, 2021	June 3, 2021	July 6, 2021	August 5, 2021	September 7, 2021	October 6, 2021	November 4, 2021	December 7, 2021	January 5, 2022	February 3, 2022	March 7, 2022	April 11, 2022
Period to Challenge LSE Bus Metering Data for 4-Month True-up Ends (Day-100)	May 17, 2021	June 14, 2021	July 16, 2021	August 16, 2021	September 15, 2021	October 18, 2021	November 15, 2021	December 17, 2021	January 18, 2022	February 14, 2022	March 17, 2022	April 20, 2022
LSE Bus Metering Data for 4-Month True-up Precluded from Further Revisions (Day-105)	May 21, 2021	June 18, 2021	July 21, 2021	August 20, 2021	September 20, 2021	October 21, 2021	November 19, 2021	December 22, 2021	January 20, 2022	February 18, 2022	March 22, 2022	April 25, 2022
4-Month True-up LSE Metering Revisions Suspended Due to Invoicing (Day-120)	June 7, 2021	July 6, 2021	August 5, 2021	September 7, 2021	October 5, 2021	November 5, 2021	December 6, 2021	January 5, 2022	February 4, 2022	March 7, 2022	April 6, 2022	May 10, 2022
Close-out Settlement LSE Metering Due From Meter Authorities (Day-130)	June 15, 2021	July 13, 2021	August 16, 2021	September 14, 2021	October 15, 2021	November 15, 2021	December 14, 2021	January 18, 2022	February 14, 2022	March 15, 2022	April 18, 2022	May 20, 2022
Close-out Settlement LSE Metering Posted For Review & Challenge** (Day-135)	June 21, 2021	July 19, 2021	August 20, 2021	September 20, 2021	October 20, 2021	November 22, 2021	December 20, 2021	January 21, 2022	February 22, 2022	March 21, 2022	April 21, 2022	May 25, 2022
Period to Challenge LSE Metering Ends (Day-145)	June 30, 2021	July 28, 2021	August 30, 2021	September 29, 2021	November 1, 2021	November 30, 2021	December 29, 2021	January 31, 2022	March 1, 2022	March 30, 2022	May 2, 2022	June 6, 2022
Close-out Settlement LSE Metering Data Finalized (Day-150)	July 6, 2021	August 2, 2021	September 7, 2021	October 4, 2021	November 4, 2021	December 6, 2021	January 3, 2022	February 7, 2022	March 7, 2022	April 4, 2022	May 6, 2022	June 9, 2022

Notes: Any deadline that falls on a Saturday, Sunday or holiday for which the NYISO is closed is observed on the NYISO's next business day.
 ** Generator & tie-line meter data is excluded from challenge.

Location: [Billing and Settlements](#) page under *Processing and Invoice Schedule* > *Meter Data Review* folder

Weekly Invoice Schedule

Scheduled Invoice Date	FIP Billing Period	Banking Dates	
		Requital Date (Due to NYISO)	Disbursement Date (Due from NYISO)
January 6, 2021	January 1, 2021	January 8, 2021	January 12, 2021
January 13, 2021	January 2, 2021 - January 8, 2021	January 15, 2021	January 20, 2021
January 20, 2021	January 9, 2021 - January 15, 2021	January 22, 2021	January 26, 2021
January 27, 2021	January 16, 2021 - January 22, 2021	January 29, 2021	February 2, 2021
February 3, 2021	January 23, 2021 - January 29, 2021	February 5, 2021	February 9, 2021
February 10, 2021	February 1, 2021 - February 5, 2021	February 12, 2021	February 17, 2021
February 17, 2021	February 6, 2021 - February 12, 2021	February 19, 2021	February 23, 2021
February 24, 2021	February 13, 2021 - February 19, 2021	February 26, 2021	March 2, 2021
March 3, 2021	February 20, 2021 - February 26, 2021	March 5, 2021	March 9, 2021

Location: [Billing and Settlements](#) page under *Processing and Invoice Schedule* > *Flexible Invoicing Schedule* folder

Monthly Invoice Schedule

Scheduled Invoice Date	Initial Settlement	4-Month Settlement Adjustment	Close-out Settlements	Banking Dates	
				Due to NYISO	Due from NYISO
January 8, 2121	December 2020	August 2020	April 2020	January 12, 2021	January 14, 2021
February 5, 2021	January 2021	September 2020	May 2020	February 9, 2021	February 11, 2021
March 5, 2021	February 2021	October 2020	June 2020	March 9, 2021	March 11, 2021
April 7, 2021	March 2021	November 2020	July 2020	April 9, 2021	April 13, 2021
May 7, 2021	April 2021	December 2020	August 2020	May 11, 2021	May 13, 2021
June 7, 2021	May 2021	January 2021	September 2020	June 9, 2021	June 11, 2021
July 8, 2021	June 2021	February 2021	October 2020	July 12, 2021	July 14, 2021
August 6, 2021	July 2021	March 2021	November 2020	August 10, 2021	August 12, 2021
September 8, 2021	August 2021	April 2021	December 2020	September 10, 2021	September 14, 2021
October 7, 2021	September 2021	May 2021	January 2021	October 12, 2021	October 14, 2021
November 5, 2021	October 2021	June 2021	February 2021	November 9, 2021	November 12, 2021
December 7, 2021	November 2021	July 2021	March 2021	December 9, 2021	December 13, 2021
January 10, 2022	December 2021	August 2021	April 2021	January 12, 2022	January 14, 2022

Location: [Billing and Settlements](#) page under *Processing and Invoice Schedule* > *Monthly Invoicing Schedules* folder