Disclaimer for Customer Training: ISO New England (ISO) provides training to enhance participant and stakeholder understanding. Not all issues and requirements are addressed by the training. Consult the effective <u>Transmission, Markets and Services Tariff</u> and the relevant <u>Market Manuals</u>, <u>Operating Procedures</u> and <u>Planning Procedures</u> for detailed information. In case of a discrepancy between training provided by ISO and the Tariff or Procedures, the meaning of the Tariff and Procedures shall govern.

September 5, 2019 WebEx Broadcast

Settlements Forum

2019 Q3



Jin Thian & Rachel Likover

Market Analysis & Settlements

This presentation was updated on September 23, 2019. Q&A from the live session was added at the end.

BLIC

forum Topics



Upcoming Market/Settlement Changes

- Financial Transmission Rights Balance of Planning Period (FTR BoPP)
- Energy Storage Devices Enhancement
- Enhanced Energy Scheduling (EES) New Platform



Informational Items

- ISO Reporting Features Review of Load Asset Meter Data
- ISO Survey Data Delivery Pilot
- Meeting Dates



Upcoming Market/Settlement Changes

- Financial Transmission Rights Balance of Planning Period (FTR BoPP)
- Energy Storage Devices Enhancement
- Enhanced Energy Scheduling (EES) New Platform



Financial Transmission Rights – Balance of Planning Period (FTR BoPP)

October 1, 2019

Joint ISO-NE/NEPOOL Filing

- Monthly FTR auctions enhanced to include each month through end of year
 - For BoPP go-live, October FTR auction will also include auctions for November and December
 - e.g. January FTR auction will include Feb Dec
 - e.g. February FTR auction will include Mar Dec
- MIS report changes
 - See list of revisions <u>here</u>
- Divisional Accounting reporting enabled
 - FTR assignment functionality in the future
 - FTRs initially in default subaccount for divisional accounting users
 - Auction Revenue Rights reports will reflect any load asset assignments to subaccounts

Joint ISO-NE/NEPOOL FERC Filing

ER12-2195-000 ER18-2293-000

Links to FERC filings active in .pdf version.

See the FTR BoPP FA Project's:

<u>Customer Readiness page</u>



Energy Storage Devices (ESD)

December 2019 *

Joint ISO-NE/NEPOOL Filing

- April 1, 2019 (Implemented)
 - Binary storage facilities, continuous storage facilities
 - Storage facilities as small as 1 MW can participate
- December 1, 2019 (Changes)
 - Enhancements to rules on participation as ESD
 - Electric storage facility charging load may be exempted from Open Access Transmission Tariff (OATT) Regional Network Service (RNS) cost allocation
 - New Regional Network Load Configuration Change Request form will be available later this year

Joint ISO-NE/NEPOOL FERC Filing

ER19-84-000 ER19-470-000

Links to FERC filings active in .pdf version.

See the ESD Project's:

- <u>Customer Readiness page</u>
- ESD webinar presentation or recording

See Settlements Forum:

Q4 2018 presentation or recording

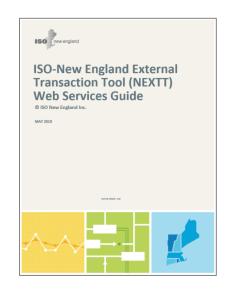
* Pending FERC Approval

Enhanced Energy Scheduling (EES) Devices Upgrade

Target launch October 23, 2019

Platform Replacement

- New England External Transaction Tool (NEXTT) replaces EES
 - New features and process changes
- Divisional Accounting
 - External transactions
 - Assignment to subaccounts can be made in NEXTT
 - No MIS changes required
 - Subaccount reporting for external transactions already in place



See the Update Enhanced Energy Scheduling (EES) Technical Architecture Project's:

- Customer Readiness page
- Web services <u>presentation & recording</u> (webinar held June 5, 2019)
- User interface <u>presentation & recording</u> (webinar held July 30, 2019)



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Informational Items

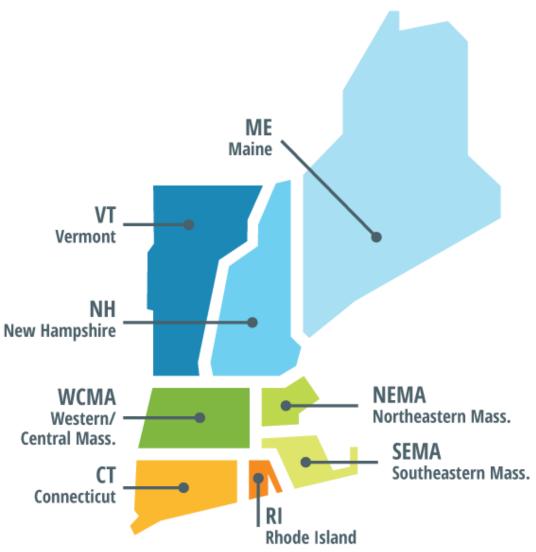
- ISO Reporting Features Review of Load Asset Meter Data
- ISO Survey Data Delivery Pilot
- Settlements Forum Dates
- Questions



Load Assets in ISO New England Settlement Model

What are Load Assets?

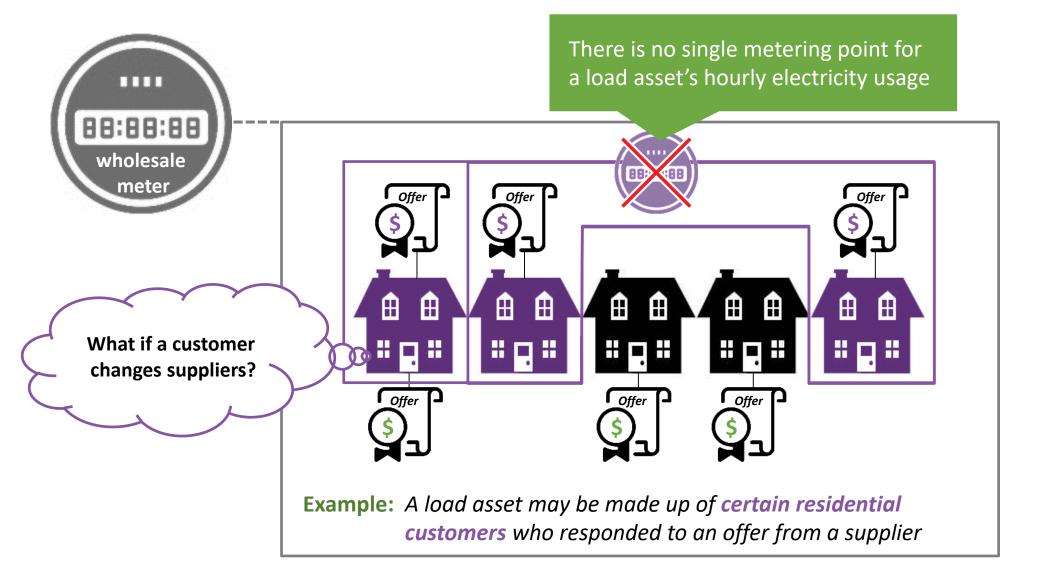
- Load assets represent electric consumption in the settlement model
- Load assets are aggregations of many individual customers
- A market participant serving load in New England will own load asset(s) that reflect the electric usage of the customers it serves
- Load assets "reside" in load zones
 - A market participant that serves load in more than one load zone will own at least one asset in each of those load zones



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Why do most load assets have profiled meter data?





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How does a host participant determine the allocation of hourly usage?



The host participant* meter reader reads wholesale meters in its service territory to determine bulk hourly usage Host participant determines the allocation of this hourly usage to load assets based on models of the expected consumption of the customers in the load asset for the day type and season

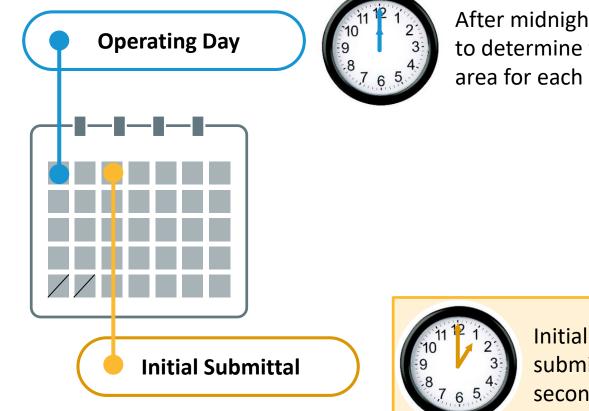


Example: A load asset may be made up of *certain residential customers* who responded to an offer from a supplier

* Host participants are transmission companies

Load Asset Hourly Meter Readings Timeline





After midnight, host participants read meters to determine the bulk hourly usage in their area for each hour of the previous day



Initial meter readings are submitted by 1:00 pm on the second business day after OD



values

 daily coincident peak contribution

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Load Asset Hourly Meter Readings

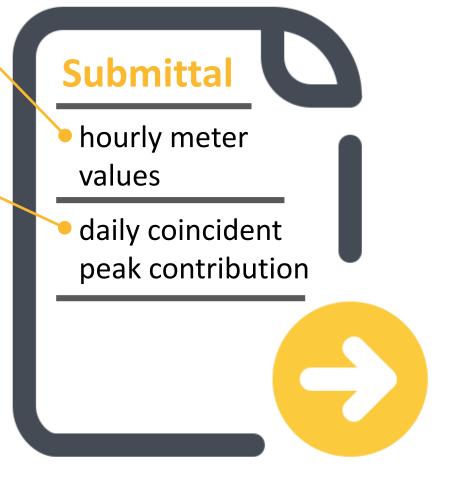
Operating Day



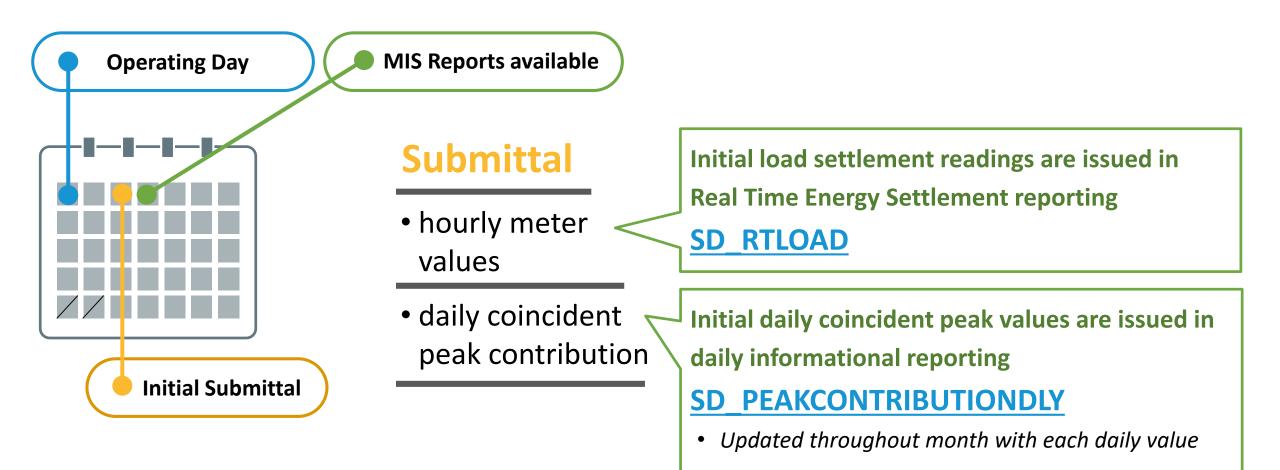
Used to settle Real-Time Energy and ancillary services

Used to allocate charges in Forward Capacity Market (FCM) settlement

- Represents load asset's MW share of previous year annual peak
- Value accounts for *load shifting*, which happens when individual customers are moved into a different load asset because their electricity supplier has changed
- The sum of all of the peak contribution values on any given day will equal the annual peak from the prior year

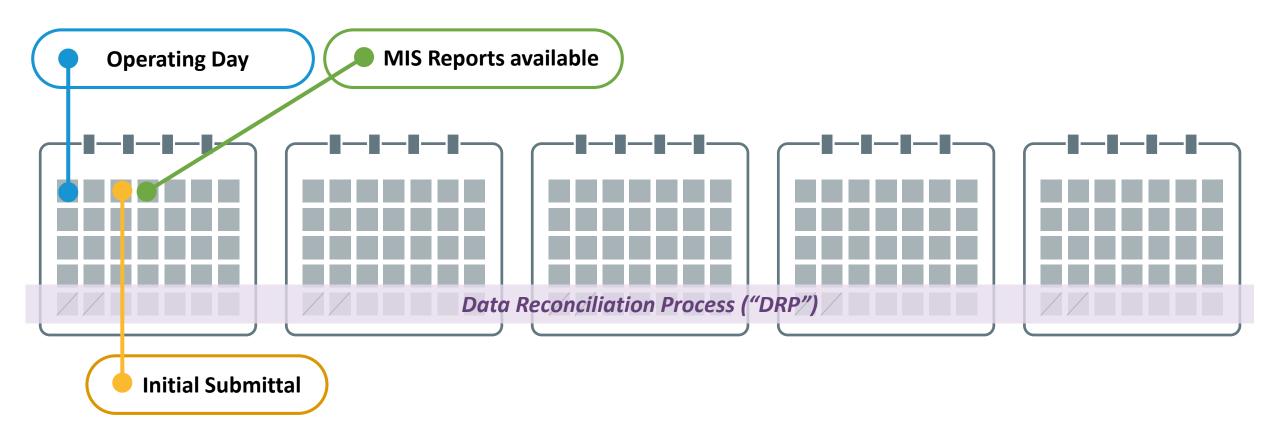


MIS Reports are available to load asset owners on the 3rd business day after the operating day



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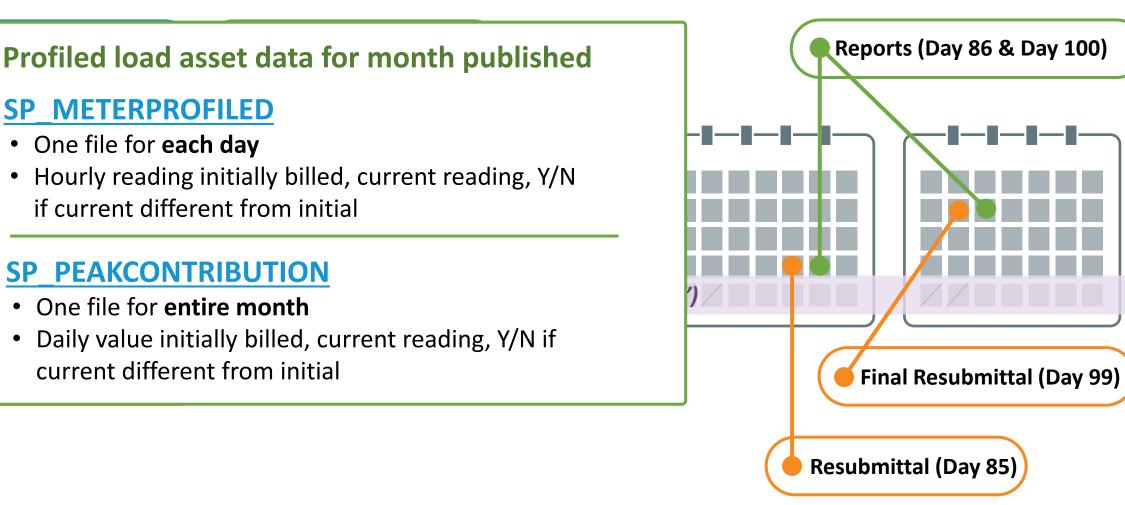
Load Asset Hourly Meter Readings Timeline



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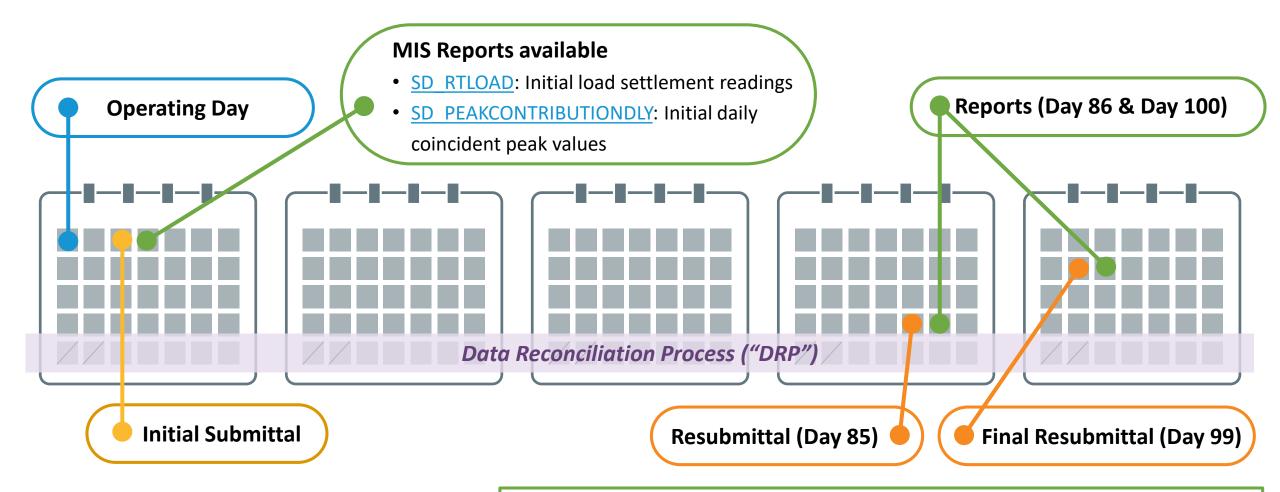
Load Asset Hourly Meter Readings Timeline





These reports are a supplement to the review process with the meter reader described in Manual 28, Section 6

Data Reconciliation Process Timeline

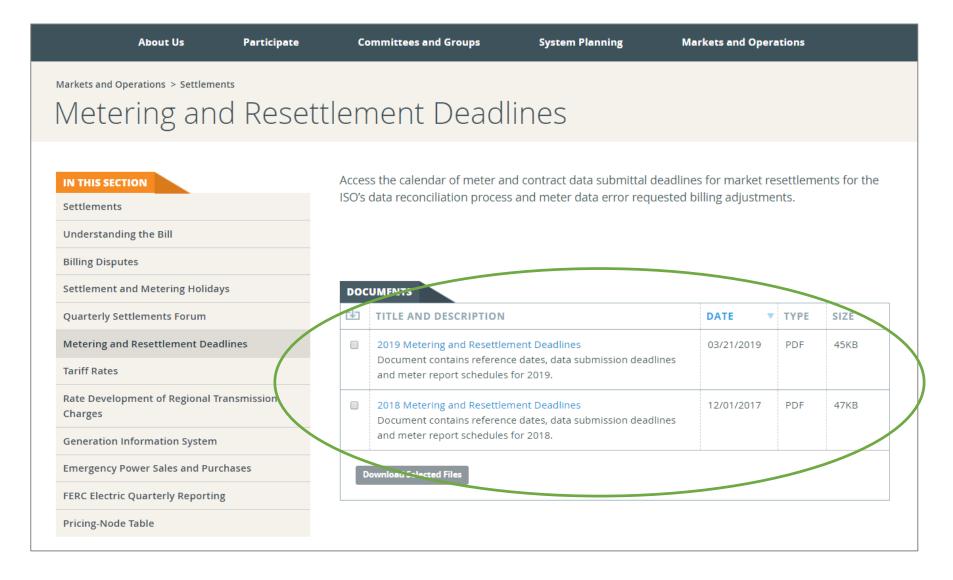


These reports are a supplement to the review process with the meter reader described in <u>Manual 28, Section 6</u>

DRP MIS Reports available (Day 86 & Day 100)

- <u>SP_METERPROFILED</u>: Profiled load asset data for month (one file for each day)
 - Hourly reading initially billed, current reading, Y/N if current different from initial
- <u>SP_PEAKCONTRIBUTION</u>: (One file for entire month)
 - Daily value initially billed, current reading, Y/N if current different from initial

Where do I get the dates for data review?



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The ISO publishes <u>Metering and</u> <u>Resettlement Deadlines</u> reports for all months in each calendar year

2019 Metering & Resettlement Calendar

	Market Month											
REFERENCE DATES	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Initial Monthly Bill Date	2/11/2019	3/11/2019	4/16/2019	5/13/2019	6/17/2019	7/15/2019	8/12/2019	9/16/2019	10/15/2019	11/12/2019	12/16/2019	1/13/2020
Day One of Data Reconciliation Process	2/1/2019	3/1/2019	4/1/2019	5/1/2019	6/1/2019	7/1/2019	8/1/2019	9/1/2019	10/1/2019	11/1/2019	12/1/2019	1/1/2020
Data Reconciliation Process Bill Date	6/17/2019	7/15/2019	8/12/2019	9/16/2019	10/15/2019	11/12/2019	12/16/2019	1/13/2020	2/18/2020	3/16/2020	4/13/2020	5/11/2020
Meter Data Error RBA Submission Limit	7/17/2019	8/14/2019	9/11/2019	10/16/2019	11/14/2019	12/12/2019	1/15/2020	2/12/2020	3/19/2020	4/15/2020	5/13/2020	6/10/2020
Meter Data Error PBA Resettlement Bill Date	12/13/2019	1/13/2020	2/18/2020	3/16/2020	4/13/2020	5/11/2020	6/15/2020	7/13/2020	8/17/2020	9/14/2020	10/13/2020	11/16/2020
REPORTS - DATA RECONCILIATION PROCESS												
Day 46: SP_METERDIRECT SP_METERDOMAIN	3/18/2019	4/15/2019	5/16/2019	6/15/2019	7/16/2019	8/15/2019	9/15/2019	10/16/2019	11/15/2019	12/16/2019	1/15/2020	2/15/2020
Day 66: SP_METERDIRECT SP_METERDOMAIN	4/7/2019	5/5/2019	6/5/2019	7/5/2019	8/5/2019	9/4/2019	10/5/2019	11/5/2019	12/5/2019	1/5/2020	2/4/2020	3/6/2020
Day 86: SP_METERDOMAIN SP_METERPROFILED SP_PEAKCONTRIBUTION	4/27/2019	5/25/2019	6/25/2019	7/25/2019	8/25/2019	9/24/2019	10/25/2019	11/25/2019	12/25/2019	1/25/2020	2/24/2020	3/26/2020
Day 100: SP_METERDOMAIN SP_METERPROFILED SP_PEAKCONTRIBUTION	5/11/2019	6/8/2019	7/9/2019	8/8/2019	9/8/2019	10/8/2019	11/8/2019	12/9/2019	1/8/2020	2/8/2020	3/9/2020	4/9/2020

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ISO-NE 2019 Metering and Resettlement Deadlines Calendar

REMINDER

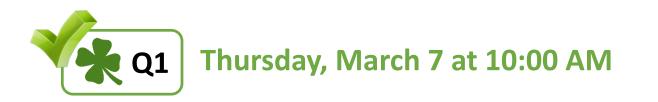
ISO New England Survey - Settlement Data Delivery Pilot

ISO New England emailed 4 question survey

- Sent to each market participant's billing contacts, as listed in Customer Asset Management System (CAMS)
- Requested input on data delivery preference for a pilot study
 - Pilot study to respond to feedback from participants requesting upgrade to MIS report delivery
 - Pilot a new method for delivering settlement data
- Survey closes ... today!
 - If you received the survey and have not yet responded, please do so today!



Settlements Forum Dates 2019





Thursday, June 6 at 10:00 AM



Thursday, September 5 at 10:00 AM





Customer Support Information

Ask ISO (preferred)

- Self-service interface for submitting inquiries
- Recommended browsers are Google Chrome and Mozilla Firefox
- For more information, see the <u>Ask ISO User Guide</u>



Other Methods of Contacting Customer Support						
Method	Contact Information	Availability				
Email	custserv@iso-ne.com	Anytime				
Phone*	(413) 540-4220 (833)248-4220	Monday through Friday 8:00 a.m. to 5:00 p.m. (EST)				
Pager (emergency inquiries)	(877) 226-4814	Outside of regular business hours				

*Recorded/monitored conversations

Settlements Forum 2019 Q3

Q&A from the Live Webinar September 5, 2019

1. Why does the coincident peak contribution need to be submitted daily, since it is based on the prior year's peak, which does not change?

Many load assets in New England have changes in customer composition throughout the year, and so the coincident peak contribution value is subject to change. The coincident peak contribution reflects the consumption on the peak hour of the previous year of the customers currently in the load asset on any given day.

2. Is there any effort underway to allow Load Assets to be "net metered" - e.g. if there is net generation at an hour from customer-sited solar?

At this time, there is no proposal to model injection of power by load assets into the grid.

3. Are load asset readings trued up by ISO to the associated transmission readings?

All load asset true-up is performed by the Host Participant meter readers. The ISO settlement ensures that the sum of the load assets matches the metered ties and generation in each metering domain. Any correction is assigned directly to the Host Participant; the ISO does not adjust any individual load asset readings.

4. Is there an ISO validation process to validate Load Asset accuracy?

The ISO does not have the information to review the accuracy of individual load asset data. The ISO performs certain high level checks, and will notify the Host Participants of any observed variances.