

# **Load Serving Entity (LSE)**

# **Ancillary Service Settlements**

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# LSE Ancillary Service Settlements

## ■ Settlement Name:

- MST/OATT Rate Schedule 1
- OATT Rate Schedule 2 (VSS)
- OATT Rate Schedule 3 (Regulation)
- OATT Rate Schedule 3 (Regulation Revenue)
- OATT Rate Schedule 5 (Operating Reserves)
- OATT Rate Schedule 6 (Black Start Service)
- OATT Rate Schedule 12 (Highway Facilities Charge)
- OATT Rate Schedule 13 (Regulated Transmission)

# LSE Ancillary Service Settlements

## ■ Objectives Per Settlement Name:

- Provide Settlement Description
- Identify Settlement Eligibility
- Name Settlement Determinants
- Name Settlement Intermediates
- Explain Settlement Algorithm
- Step Through Settlement Scenario
- Perform Settlement Example
- Note Settlement Reference Material

# LSE Ancillary Service Settlements

- **MST/OATT Rate Schedule 1 (LSE) Description**
  - Intended to recover a portion of NYISO's operating costs and FERC fees from Load Serving Entities.

Scheduling, System Control, and Dispatch (S,SC & D)  
+  
FERC Fees

# LSE Ancillary Service Settlements

## **MST/OATT Rate Schedule 1 (LSE)**

### ■ Settlement Eligibility

- LSEs will receive a charge for MST/OATT Schedule 1 if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - Including Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.

# MST/OATT Rate Schedule 1 (LSE) S, SC, & D

- **Settlement Determinants**
  - Hr Withdraw OATT Sched 1 Rate (\$/MWh)
  - Hr RT LSE Load (MWh)

# **MST/OATT Rate Schedule 1 (LSE) S, SC, & D**

- **Settlement Intermediates**
  - Not Applicable
  
- **Settlement Results**
  - Hr OATT Sched 1 Stlmnt: LSE (\$)

# MST/OATT Rate Schedule 1 (LSE) S, SC, & D

- Settlement Algorithm

**Hr OATT Sched 1 Stlmnt: LSE (\$)** =

[Hr Withdraw OATT Sched 1 Rate (\$/MWh) \* Hr RT LSE Load (MWh)] \* (-1)

**Where:**

Hr Withdraw OATT Sched 1 Rate (\$/MW) =

$0.72 * \{(\text{NYISO Cost of Ops}) / \text{Forecasted MWh Volume}\}$



# MST/OATT Rate Schedule 1 (LSE) S, SC, & D

## ■ Settlement Scenario

- ‘LSE A’ purchased energy, meeting load requirements
  - 60 MWh in HB 02 from NYISO Energy Market
  - 5 MWh in HB 02 from a Bilateral Transaction
- ‘LSE A’ has signed both NYISO tariffs
- Combined Rate Schedule 1 for Withdrawals :  
\$1.213/ MWh (for 2023)
- ‘LSE A’ will be charged a RT Settlement for HB 02

# MST/OATT Rate Schedule 1 (LSE) S, SC, & D

## ■ Settlement Example

$$\text{Hr OATT Sched 1 Stlmnt: LSE (\$)} = \$ - 56.77$$
$$[ \$0.873360 * 65 ] * (-1)$$

**Where:**

$$\text{Hr Withdraw OATT Sched 1 Rate (\$/MWh)} = \$0.873360 / \text{MWh}$$
$$0.72 * \{(\$190,000,000)/156,700,000\}$$

# MST/OATT Rate Schedule 1 (LSE) FERC Fees

- **Settlement Determinants**
  - Hr RT LSE Load (MWh)
  - Hr Proj FERC Fee NYISO Total (\$)
  - Hr True-up FERC Fee NYISO Total (\$)

# MST/OATT Rate Schedule 1 (LSE) FERC Fees

- **Settlement Intermediates**
  - Hr Sched 1 Withdrawal: LSE (MW)
  - Hr OATT Sched 1 FERC Fees Rate: WD (\$/MWh)
  
- **Settlement Results**
  - Hr OATT Sched 1 FERC Fees WD Stlmnt: LSE (\$)

# MST/OATT Rate Schedule 1 (LSE)

## FERC Fees

### ■ Settlement Algorithm

*Hr OATT Sched 1 FERC Fees Rate: WD Stlmnt: LSE (\$) =*

*Hr OATT Sched 1 FERC Fees Rate: WD (\$/MWh) \* Hr Sched 1 Withdrawal: LSE (MW) \* (-1)*

#### ***Where:***

*Hr OATT Sched 1 FERC Fees Rate: WD (\$/MWh) =  
actual billed fees – annual estimated fees + true up interest accrual*

- Broken down to a monthly level and then an hourly level rate
- LSEs assessed 72% of the 94% Physical Allocation

*Hr Sched 1 Withdrawal: LSE (MW) = Total LSE withdrawal MWh*

# LSE Ancillary Service Settlements

## **MST/OATT Rate Schedule 1 (LSE)**

### ■ Summary

- Intended to recover a portion of NYISO's operating costs and FERC fees from Load Serving Entities.
  - Based on RT Actual Load Withdrawal
  - Calculated at Hourly Level

# LSE Ancillary Service Settlements

## **MST/OATT Rate Schedule 1 (LSE)**

### ■ Settlement Reference Material

- MST Schedule 1 & OATT Schedule 1
- Accounting and Billing Manual Section 8
- Advisory Billing File
  - Ancillary Services
    - S, SC&D MST Charge \$ & S, SC&D OATT Charge \$
      - » Hourly Bill Codes 608 & 615
      - » Daily Bill Codes 805 & 809
    - FERC Fees OAT WD Charge \$
      - » Hourly Bill Codes 644
      - » Daily Bill Codes 842
- DSS Corporate Report
  - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

## ■ Settlement Name

- MST/OATT Rate Schedule 1
- **OATT Rate Schedule 2 (VSS)**
- OATT Rate Schedule 3 (Regulation)
- OATT Rate Schedule 3 (Regulation Revenue)
- OATT Rate Schedule 5 (Operating Reserves)
- OATT Rate Schedule 6 (Black Start Service)
- OATT Rate Schedule 12 (Highway Facilities Charge)
- OATT Rate Schedule 13 (Regulated Transmission)



# LSE Ancillary Service Settlements

## ■ Voltage Support OATT Rate Schedule 2 (LSE) Description

- Intended to recover NYISO's costs to procure Voltage Support Services from Power Suppliers.

# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

### ■ **Settlement Eligibility**

- LSEs will receive a charge for OATT Schedule 2 VSS (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - Including Import and Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.

# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

### ■ **Settlement Determinants**

- Hr VSS Rate (\$/MWh)
- Hr RT LSE Load (MWh)

# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

- **Settlement Intermediates**
  - Not Applicable
- **Settlement Results**
  - Hr VSS Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Voltage Support Rate Schedule 2 (LSE)

### ■ Settlement Algorithm

**Hr VSS Stlmnt: LSE (\$)** =

$[\text{Hr VSS Rate (\$/MWh)} * \text{Hr RT LSE Load (MWh)}] * (-1)$

**Where:**

Hr VSS Rate (\\$/MWh) =

{ Total 2023 NYISO VSS Payments) / Forecasted MWh Volumes}

**And :**

Total 2023 NYISO VSS Payments =

Projected 2023 NYISO VS Payments to Generators +

Projected 2023 NYISO VS Payments to non-generator VAR Suppliers +

Projected 2023 VSS LOC Payments +

2022 Over/Under-Collection of VSS Payments

# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

### ■ **Settlement Scenario**

- 'LSE A' purchased energy, meeting load requirements
  - 60 MWh in HB 02 from NYISO Energy Market
  - 5 MWh in HB 02 from a Bilateral Transaction
- Voltage Support Rate Schedule 2 for Withdrawals: \$0.46 (for 2023)
- 'LSE A' will be charged a RT Settlement for HB 02

# LSE Ancillary Service Settlements

## Voltage Support Rate Schedule 2 (LSE)

### ■ Settlement Example

Hr VSS Stlmnt: LSE (\$) = \$ -29.90

$[\$0.46 * 65] * (-1)$

Where:

Hr VSS Rate (\$/MWh) = \$0.46

$\{(\$72,313,363.27 + \$444,562.64 + \$0 + (\$-1,021,884.50)) / 156,700,000\}$

# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

### ■ **Summary**

- Intended to recover NYISO's costs to procure Voltage Support Services from Power Suppliers.
  - Based on RT Actual Load Withdrawal
  - Calculated on Hourly Level



# **LSE Ancillary Service Settlements**

## **Voltage Support Rate Schedule 2 (LSE)**

- **Settlement Reference Material**
  - OATT Schedule 2
  - Accounting and Billing Manual Section 8
  - Advisory Billing File
    - Ancillary Services
      - VSS Charge \$
    - Hourly Bill Code 606
    - Daily Bill Code 804
  - DSS Corporate Report
    - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

## ■ Settlement Name

- MST/OATT Rate Schedule 1
- OATT Rate Schedule 2 (VSS)
- **OATT Rate Schedule 3 (Regulation)**
- OATT Rate Schedule 3 (Regulation Revenue)
- OATT Rate Schedule 5 (Operating Reserves)
- OATT Rate Schedule 6 (Black Start Service)
- OATT Rate Schedule 12 (Highway Facilities Charge)
- OATT Rate Schedule 13 (Regulated Transmission)

# LSE Ancillary Service Settlements

- **Regulation Service OATT Rate Schedule 3 (LSE)**  
**Description**
  - Intended to recover NYISO's costs to procure Regulation Services from Power Suppliers.

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Settlement Eligibility

- LSEs will receive a charge for OATT Schedule 3 Regulation (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - Including Import and Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

- **Settlement Determinants**
  - Hr RT LSE Load (MWh)
  - Hr Total NYISO RT LSE Load (MWh)
  - Hr Total NYISO Reg Cr to PS (\$)
  - Hr Total NYISO Reg Chg to PS (\$)

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

- **Settlement Intermediates**
  - Hr RT LSE Ld Ratio Sh: LSE
  - Hr Total NYISO Net Reg Cr to PS (\$)
  
- **Settlement Results**
  - Hr Regulation Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Settlement Algorithm

Hr Regulation Stlmnt: LSE (\$) =

[Hr Total NYISO Net Reg Cr to PS (\$) \* Hr RT LSE Ld Ratio Sh: LSE ] \* (-1)

Where:

Hr Total NYISO Net Reg Cr to PS (\$) =

Hr Total NYISO Reg Cr to PS (\$) - Hr Total NYISO Reg Chg to PS (\$)

Hr RT LSE Ld Ratio Sh: LSE =

Hr RT LSE Load (MWh) / Hr Total NYISO RT LSE Load (MWh)

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Settlement Scenario

- ‘LSE A’ purchased energy, meeting load requirements
  - 60 MWh in HB 02 from NYISO Energy Market
- The total credit made to PS, for providing regulation in HB 02, is \$3000
- The total amount of charges to PS, for over- or under-generating in HB 02, is \$800
- The total NYISO Load for HB 02 is 15,250 MWh



# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Settlement Example

$$\text{Hr Regulation Stlmnt: LSE (\$)} = \$ - 8.58$$
$$[\$2,200 * .0039] * (-1)$$

**Where:**

$$\text{Hr Total NYISO Net Reg Cr to PS (\$)} = \$2,200$$
$$\$3000 - \$800$$

$$\text{Hr RT LSE Ld Ratio Sh: LSE} = .0039$$
$$60 / 15,250$$

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Summary

- Intended to recover NYISO's costs to procure Regulation Services from Power Suppliers.
  - Based on RT Load Ratio Share
  - Calculated on Hourly Level

# LSE Ancillary Service Settlements

## Regulation Rate Schedule 3 (LSE)

### ■ Settlement Reference Material

- OATT Schedule 3
- Accounting and Billing Manual Section 8
- Advisory Billing File
  - Ancillary Services
    - R&FR Charge \$
  - Hourly Bill Code 612
  - Daily Bill Code 807
- DSS Corporate Report
  - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

- Objectives Per Settlement Name:
  - MST/OATT Rate Schedule 1
  - OATT Rate Schedule 2 (VSS)
  - OATT Rate Schedule 3 (Regulation)
  - **OATT Rate Schedule 3 (Regulation Revenue)**
  - OATT Rate Schedule 5 (Operating Reserves)
  - OATT Rate Schedule 6 (Black Start Service)
  - OATT Rate Schedule 12 (Highway Facilities Charge)
  - OATT Rate Schedule 13 (Regulated Transmission)

# LSE Ancillary Service Settlements

- **Regulation Revenue Adjustment OATT Rate Schedule 3 (LSE) Description**
  - A charge or credit to LSEs for Power Supplier Regulation Revenue Adjustment
    - RRA intended to properly compensate Power Suppliers for balancing energy if they are also providing Regulation Service in the real-time market.

# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

### ■ Settlement Eligibility

- LSEs will receive a charge or credit for OATT Schedule 3 Regulation (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - Including Import and Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.

# **LSE Ancillary Service Settlements**

## **RRA Rate Schedule 3 (LSE)**

- **Settlement Determinants**
  - Hr RT LSE Load (MWh)
  - Hr Total NYISO RT LSE Load (MWh)
  - Hr Total NYISO RRA to PS (\$)

# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

- **Settlement Intermediates**
  - Hr RT LSE Ld Ratio Sh: LSE
  
- **Settlement Results**
  - Hr RRA Stlmnt: LSE (\$)



# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

- Settlement Algorithm

Hr RRA Stlmnt: LSE (\$) =

[Hr Total NYISO RRA to PS (\$) \* Hr RT LSE Ld Ratio Sh: LSE] \* (-1)

Where:

Hr RT LSE Ld Ratio Sh: LSE =

Hr RT LSE Load (MWh) / Hr Total NYISO RT LSE Load (MWh)

# **LSE Ancillary Service Settlements**

## **RRA Rate Schedule 3 (LSE)**

### ■ **Settlement Scenario**

- ‘LSE A’ purchased energy, meeting load requirements
  - 60 MWh in HB 02 from NYISO Energy Market
- The total net amount of regulation revenue adjustments paid to PS is \$215, for HB 02
- The total NYISO Load for HB 02 is 15,250 MWh

# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

### ■ Settlement Example

$$\text{Hr RRA Stlmnt: LSE (\$)} = \$ - 0.84$$
$$[\$215 * .0039] * (-1)$$

Where:

$$\text{Hr RT LSE Ld Ratio Sh: LSE} = .0039$$
$$60 / 15,250$$

# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

### ■ Summary

- A charge or credit to LSEs for Power Supplier Regulation Revenue Adjustment.
  - Based on RT Load Ratio Share
  - Calculated at Hourly Level

# LSE Ancillary Service Settlements

## RRA Rate Schedule 3 (LSE)

- **Settlement Reference Material**
  - OATT Schedule 3
  - Accounting and Billing Manual Section 8
  - Advisory Billing File
    - Ancillary Services
      - Reg Rev Adj \$
    - Hourly Bill Code 618
    - Daily Bill Code 817
  - DSS Corporate Report
    - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

- Objectives Per Settlement Name:
  - MST/OATT Rate Schedule 1
  - OATT Rate Schedule 2 (VSS)
  - OATT Rate Schedule 3 (Regulation)
  - OATT Rate Schedule 3 (Regulation Revenue)
  - **OATT Rate Schedule 5 (Operating Reserves)**
  - OATT Rate Schedule 6 (Black Start Service)
  - OATT Rate Schedule 12 (Highway Facilities Charge)
  - OATT Rate Schedule 13 (Regulated Transmission)

# **LSE Ancillary Service Settlements**

- **Operating Reserve Service OATT Rate Schedule 5 (LSE) Description**
  - Intended to recover NYISO's costs to procure Operating Reserve Service from Power Suppliers

# LSE Ancillary Service Settlements

## Operating Reserves Rate Schedule 5 (LSE)

### ■ Settlement Eligibility

- LSEs will receive a charge for OATT Schedule 5 Operating Reserves (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
- Including Import and Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.
  - Excludes CTS-NE Export MWs



# **LSE Ancillary Service Settlements**

## **Operating Reserves Rate Schedule 5 (LSE)**

- **Settlement Determinants**
  - Hr RT LSE Load (MWh)
  - Hr Total NYISO RT LSE Load (MWh)
  - Hr Total NYISO RT Export Trans (MWh)
  - Hr Total NYISO Op Res Cr to PS (\$)

# **LSE Ancillary Service Settlements**

## **Operating Reserves Rate Schedule 5 (LSE)**

- **Settlement Intermediates**
  - Hr RT LSE Ld Ratio Sh: LSE & Exp
  
- **Settlement Results**
  - Hr Op Res Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Operating Reserves Rate Schedule 5 (LSE)

### ■ Settlement Algorithm

Hr Op Res Stlmnt: LSE (\$) =

[Hr Total NYISO Op Res Cr to PS (\$) \* Hr RT LSE Ld Ratio Sh: LSE & Exp] \* (-1)

Where:

Hr RT LSE Ld Ratio Sh: LSE & Exp =

Hr RT LSE Load (MWh) / {Hr Total NYISO RT LSE Load (MWh) + Hr Total NYISO RT Export Trans (MWh)}

# **LSE Ancillary Service Settlements**

## **Operating Reserves Rate Schedule 5 (LSE)**

### ■ **Settlement Scenario**

- ‘LSE A’ purchased energy, meeting load requirements
  - 60 MWh in HB 02 from NYISO Energy Market
  - 5 MWh in HB 02 for a Bilateral Transaction
- The total credit made to PS, for providing reserves for HB 02 is \$4,700
- The total NYISO Load for HB 02 is 15,250 MWh
- The total NYISO Export Schedules for HB 02 is 550 MWh

# LSE Ancillary Service Settlements

## Operating Reserves Rate Schedule 5 (LSE)

### ■ Settlement Example

$$\text{Hr Op Res Stlmnt: LSE (\$)} = \$ - 19.27$$
$$[\$4,700 * .0041] * (-1)$$

Where:

$$\text{Hr RT LSE Ld Ratio Sh: LSE \& Exp} = .0041$$
$$65 / \{15,250 + 550\}$$

# **LSE Ancillary Service Settlements**

## **Operating Reserves Rate Schedule 5 (LSE)**

### ■ **Summary**

- A charge to LSEs, recovering NYISO's costs to procure Operating Reserve Service
  - Based on RT Load Ratio Share
  - Calculated at Hourly Level

# **LSE Ancillary Service Settlements**

## **Operating Reserves Rate Schedule 5 (LSE)**

### **■ Settlement Reference Material**

- OATT Schedule 5
- Accounting and Billing Manual Section 8
- Advisory Billing File
  - Ancillary Services
    - Res Chg \$
  - Hourly Bill Code 610
  - Daily Bill Code 806
- DSS Corporate Report
  - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

- **Objectives Per Settlement Name:**
  - MST/OATT Rate Schedule 1
  - OATT Rate Schedule 2 (VSS)
  - OATT Rate Schedule 3 (Regulation)
  - OATT Rate Schedule 3 (Regulation Revenue)
  - OATT Rate Schedule 5 (Operating Reserves)
  - **OATT Rate Schedule 6 (Black Start Service)**
  - OATT Rate Schedule 12 (Highway Facilities Charge)
  - OATT Rate Schedule 13 (Regulated Transmission)



# LSE Ancillary Service Settlements

- **Black Start Service OATT Rate Schedule 6 (LSE)**  
**Description**
  - Intended to recover NYISO's costs to procure Black Start Services from Power Suppliers

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

### ■ NYCA Wide - Settlement Eligibility

- LSEs will receive a charge for OATT Schedule 6 Black Start Service (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - Including Import and Internal Bilateral Transaction energy, purchased from 3<sup>rd</sup> parties.

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

- **NYCA Wide - Settlement Determinants**
  - Hr RT LSE Load (MWh)
  - Hr Total NYISO RT LSE Load (MWh)
  - Hr Total NYISO Black Start Cost (\$)

# **LSE Ancillary Service Settlements**

## **Black Start Rate Schedule 6 (LSE)**

- **NYCA Wide - Settlement Intermediates**
  - Hr RT LSE Ld Ratio Sh: LSE
  
- **NYCA Wide - Settlement Results**
  - Hr Black Start Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

- Settlement Algorithm – NYCA Wide

Hr Black Start Stlmnt: LSE (\$) =

[Hr Total NYISO Black Start Cost (\$) \* Hr RT LSE Ld Ratio Sh: LSE] \* (-1)

Where:

Hr RT LSE Ld Ratio Sh: LSE =

Hr RT LSE Load (MWh) / Hr Total NYISO RT LSE Load (MWh)

# **LSE Ancillary Service Settlements**

## **Black Start Rate Schedule 6 (LSE)**

### ■ **Settlement Scenario**

- ‘LSE A’ purchased energy, meeting load requirements
  - 60 MWh in HB 12 from NYISO Energy Market
- The total NYISO costs to procure Black Start Service for HB 02 is \$125
- The total NYISO Load for HB 02 is 15,250 MWh

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

### ■ Settlement Example

$$\text{Hr Black Start Stlmnt: LSE (\$)} = \$ - 0.49$$
$$[\$125 * .0039] * (-1)$$

Where:

$$\text{Hr RT LSE Ld Ratio Sh: LSE} = .0039$$
$$60 / 15,250$$

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

### ■ Local - Settlement Eligibility

- LSEs will receive a charge for OATT Schedule 6 Black Start Service (\$) if:
  - LSE purchased energy to meet their load requirements from the NYISO Energy markets
  - LSE Located in Consolidated Edison District



# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

### ■ Local - Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr RT Total Load: ConEd SprZn (MWh)
- Hr Total Local Black Start Cost (\$)

Note: The Black Start class does not currently contain the complete set of billing determinants to perform the actual local Black Start calculation.

# **LSE Ancillary Service Settlements**

## **Black Start Rate Schedule 6 (LSE)**

- **Local - Settlement Intermediates**
  - Hr RT LSE Ld Ratio Sh: LSE for SprZn
  
- **NYCA Wide - Settlement Results**
  - Hr Local Black Start Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

- Settlement Algorithm – Local

Hr Local Black Start Stlmnt: LSE (\$) =  
[Hr Total Local Black Start Cost (\$) \* Hr RT LSE Ld Ratio Sh: LSE SprZn] \* (-1)

Where:

Hr RT LSE Ld Ratio Sh: LSE SprZn =  
Hr RT LSE Load (MWh) / Hr RT Total Load: ConEd SprZn (MWh)

# LSE Ancillary Service Settlements

## Black Start Rate Schedule 6 (LSE)

### ■ Summary

- A charge to LSEs, recovering NYISO's costs to procure Black Start Service
  - Based on RT Load Ratio Share
  - Calculated at Hourly Level

# **LSE Ancillary Service Settlements**

## **Black Start Rate Schedule 6 (LSE)**

- **Settlement Reference Material**
  - OATT Schedule 6
  - Accounting and Billing Manual Section 8
  - Advisory Billing File
    - Ancillary Services
      - Black Start Charge \$
    - Hourly Bill Code 613 (Local 641)
    - Daily Bill Code 808 (Local 811)
  - DSS Corporate Report
    - Settlement Details- Load Serving Entity - Ancillary Services

# LSE Ancillary Service Settlements

- **Objectives Per Settlement Name:**
  - MST/OATT Rate Schedule 1
  - OATT Rate Schedule 2 (VSS)
  - OATT Rate Schedule 3 (Regulation)
  - OATT Rate Schedule 3 (Regulation Revenue)
  - OATT Rate Schedule 5 (Operating Reserves)
  - OATT Rate Schedule 6 (Black Start Service)
  - **OATT Rate Schedule 12 (Highway Facilities Charge)**
  - OATT Rate Schedule 13 (Regulated Transmission)

# **LSE Ancillary Service Settlements**

- **LSE Ancillary Service Highway Facilities Cost Recovery Charge Description**
  - The LSE Ancillary Service Highway Facilities Cost Recovery Charges are the amount to be paid by LSEs with internal load in the NYCA to compensate Transmission Project Owners for approved Highway Deliverability System Upgrades.

# **LSE Ancillary Service Settlements**

## **Highway Facilities Cost Recovery Rate**

### **Schedule 12 (LSE)**

#### ■ **Settlement Eligibility**

- LSEs will be allocated a charge for Highway Facilities Cost Recovery(\$) if:
  - LSE served load in a transmission district subject to cost allocation for a Highway Deliverability System Upgrade



# LSE Ancillary Service Settlements

## Highway Facilities Cost Recovery Rate

### Schedule 12 (LSE)

#### ■ Settlement Determinants

- Interval Start Day (Eastern)
- Project Name
- Project Description
- Project Type Description
- Recovery Period Start and End Date
- Day Total NYISO ROS ICAP Requirement (MW)
- Day LSE ROS ICAP Requirement (MW)
- Day Deliverability Highway Project Recovery Rate (\$/MWh)

# **LSE Ancillary Service Settlements**

## **Highway Facilities Cost Recovery Rate**

### **Schedule 12 (LSE)**

- **Settlement Intermediates**

- Day Deliverability Highway Project Net Recovery (\$)

- **Settlement Results**

- Day Deliverability Highway Project Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Highway Facilities Cost Recovery Rate Schedule 12 (LSE)

### ■ Settlement Algorithm

Day Deliverability Highway Project Stlmnt: LSE (\$) =

Day LSE ROS ICAP Requirement (MW) \* Day Deliverability Highway Project Recovery Rate (\$/MWh)

# **LSE Ancillary Service Settlements**

## **Highway Facilities Cost Recovery Rate**

### **Schedule 12 (LSE)**

#### ■ **Summary**

- The LSE Ancillary Service Highway Facilities Cost Recovery Charges are the amount to be paid by LSEs with internal load in the NYCA to compensate Transmission Project Owners for approved Highway Deliverability System Upgrades.

# LSE Ancillary Service Settlements

## Highway Facilities Cost Recovery Rate

### Schedule 12 (LSE)

- **Settlement Reference Material**
  - OATT Attachment S
    - Section 25.7.12.3.2
  - OATT Rate Schedule 12
    - Section 6.12.2
  - Accounting and Billing Manual Section 8
  - Advisory Billing File
    - Ancillary Services
      - Regulated Transmission Projects Charge (\$)
    - Daily Bill Code 4004
  - DSS Corporate Report
    - Load Serving Entity – Deliverability Highway Project

# LSE Ancillary Service Settlements

- Objectives Per Settlement Name:
  - MST/OATT Rate Schedule 1
  - OATT Rate Schedule 2 (VSS)
  - OATT Rate Schedule 3 (Regulation)
  - OATT Rate Schedule 3 (Regulation Revenue)
  - OATT Rate Schedule 5 (Operating Reserves)
  - OATT Rate Schedule 6 (Black Start Service)
  - OATT Rate Schedule 12 (Highway Facilities Charge)
  - **OATT Rate Schedule 13 (Regulated Transmission)**

# LSE Ancillary Service Settlements

- **LSE Ancillary Service Regulated Transmission Project Cost Recovery Charge Description**
  - The LSE AS Regulated Transmission Project Cost Recovery Charges are the amount to be paid by LSEs with internal load in the NYCA to compensate Transmission Project Owners for approved Regulated Transmission Projects.

# **LSE Ancillary Service Settlements**

## **Regulated Transmission Project Cost Recovery Rate Schedule 13 (LSE)**

### ■ **Settlement Eligibility**

- LSEs will be allocated a charge for Regulated Transmission Project Cost Recovery(\$) if:
  - LSE served load in a transmission district subject to cost allocation for a regulated transmission project



# LSE Ancillary Service Settlements

## Regulated Transmission Project Cost Recovery Rate Schedule 13 (LSE)

### ■ Settlement Determinants

- Interval Start Day (Eastern)
- Project Name
- Project Description
- Recovery Period Start and End Date
- Day RT Actual Load (MWh)
- Recovery Rate (\$/MWh)
- Day Transmission Region Load MWh
- Day Transmission Region Recovery \$
- Transmission Region Allocation %
- Day Project Recovery \$

# LSE Ancillary Service Settlements

## Regulated Transmission Project Cost Recovery Rate Schedule 13 (LSE)

- Settlement Intermediates
  - Day 'Type' Projects Cost Recovery: LSE(\$)
  
- Settlement Results
  - Day Reg Trans Project Stlmnt: LSE (\$)

# LSE Ancillary Service Settlements

## Regulated Transmission Project Cost Recovery Rate Schedule 13 (LSE)

### ■ Settlement Algorithm

Day Reg Trans Project Stlmnt: LSE (\$) =

$\sum$  Day Reg Trans Project Load Bus Recovery Charge (\$) for all Regulated Transmission Project Load Buses associated with a given Regulated Transmission Project LSE

Where:

Day Reg Trans Project Load Bus Recovery Charge (\$) =

Day Reliability Projects Cost Recovery: LSE(\$) + Day TOTS Projects Cost Recovery: LSE(\$) +

Day Economic Planning Projects Cost Recovery: LSE(\$) +

Day Public Policy Projects Cost Recovery: LSE(\$)

# **LSE Ancillary Service Settlements**

## **Regulated Transmission Project Cost Recovery Rate Schedule 13 (LSE)**

### ■ **Summary**

- The LSE AS Regulated Transmission Project Cost Recovery Charges are the amount to be paid by LSEs with internal load in the NYCA to compensate Transmission Project Owners for approved Regulated Transmission Projects.

## LSE Ancillary Service Settlements

### Regulated Transmission Project Cost Recovery Rate

#### Schedule 13 (LSE)

##### ■ Settlement Reference Material

- OATT Attachment Y
  - Sections 31.1.1.2 and 32.2.1
- Accounting and Billing Manual Section 8
- Advisory Billing File
  - Ancillary Services
    - Regulated Transmission Projects Charge (\$)
  - Daily Bill Code 4004
- DSS Corporate Report
  - Load Serving Entity – Regulated Transmission Project