Virtual Trading Market Settlements

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Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- Uplift Allocation

Virtual Trading Market Settlements

Objectives Per Settlement:

- 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

Virtual Trading Market Settlements

Settlement Name:

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Virtual Trading Market Settlements
DAM Virtual Supply

- **Description**
  - Intended to compensate Virtual Trading Market Participants for DAM virtual energy sales to the NYISO Virtual Supply (VS) Market
    - *Based on the VS DAM Scheduled virtual energy at a given VS bus*
    - *Determined at the hourly level*

Virtual Trading Market Settlements
DAM Virtual Supply

- **Settlement Eligibility**
  - Virtual supplier will be credited for DAM VS Energy ($) if:
    - *VS bus is scheduled to sell virtual energy (MWh) in the NYISO Day Ahead Market*

Virtual Trading Market Settlements
DAM Virtual Supply

- **Settlement Determinants**
  - *Hr DAM Energy Price: VS ($/MWh)*
  - *Hr DAM Loss Price: VS ($/MWh)*
  - *Hr DAM Cong Price: VS ($/MWh)*
  - Hr DAM VSupply Energy (MWh)

Virtual Trading Market Settlements
DAM Virtual Supply

- **Settlement Intermediates**
  - *Hr DAM VSupply Engy Stlmnt ($)*
  - *Hr* DAM VSupply Loss Stlmnt *($)*
  - *Hr* DAM VSupply Cong Stlmnt *($)*

- **Results**
  - Hr Total DAM VSupply Stlmnt ($)

Virtual Trading Market Settlements

DAM Virtual Supply

- **Settlement Algorithm**
  - Hr DAM VSupply Engy Stlmnt ($) + Hr DAM VSupply Loss Stlmnt ($) + Hr DAM VSupply Cong Stlmnt ($)

Where:

Hr DAM VSupply Engy Stlmnt ($) = Hr DAM Energy Price: VS ($/MWh) * Hr DAM VSupply Energy (MWh)

Hr DAM VSupply Loss Stlmnt ($) = Hr DAM Loss Price: VS ($/MWh) * Hr DAM VSupply Energy (MWh)

Hr DAM VSupply Cong Stlmnt ($) = {(-1) *Hr DAM Cong Price: VS ($/MWh)} * Hr DAM VSupply Energy (MWh)

And:

Hr DAM VSupply Energy (MWh) = Hr DAM VSupply Energy (MW)

Virtual Trading Market Settlements

DAM Virtual Supply

- **Settlement Scenario**
  - Customer was scheduled for 10 MWs of Virtual Supply in NYC for HB09 in the DAM.
  - Hourly DAM Energy Price = $23.90/MWh
  - Hourly DAM Loss Price = $3.08/MWh
  - Hourly DAM Cong Price = $-2.29/MWh

Virtual Trading Market Settlements

DAM Virtual Supply

- **Settlement Example**

1. Calculate the Hr DAM VSupply Engy Stlmnt ($)
   $ 23.90/MWh * 10 = $239

2. Calculate the Hr DAM VSupply Loss Stlmnt ($)
   $ 3.08/MWh* 10 = $30.80

3. Calculate the Hr DAM VSupply Cong Stlmnt ($)
   {(-1) * ($-2.29/MWh)} * 10 = $22.90

4. Calculate the Hr Total DAM VSupply Stlmnt ($)

   $239 + $30.80 + $22.90 = $292.70 (Payment to MP)

Virtual Trading Market Settlements

DAM Virtual Supply

Settlement Reference Material:

- **Tariff Reference**
  - MST – Section 4.2.6
- **Accounting and Billing Manual**
  - Section 4.4 and Appendix B
- **Advisory Billing File**
  - Virtual Bidding Program
    - DAM Virtual Supplier $
  - Hourly Bill Codes: 414
  - Daily Bill Code: 773
- **DSS Corporate Report**
  - Settlement Details – Virtual Market Customers – Virtual Supply

Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- Uplift Allocation

Virtual Trading Market Settlements
Balancing Market Virtual Supply

- **Settlement Description**
  - Intended to charge Virtual Suppliers for the energy purchased in the NYISO RT Market
    - *Based on the VS DAM scheduled energy (MWh) at a given virtual supply bus*
    - *Determined at the RTD interval level*

Virtual Trading Market Settlements
Balancing Market Virtual Supply

- **Settlement Eligibility**
  - Virtual Suppliers will be charged for RT energy imbalance ($) if:
    - *VS bus is scheduled to sell virtual energy (MWh) in the NYISO Day Ahead Market*

Virtual Trading Market Settlements
Balancing Market Virtual Supply

- **Settlement Determinants**
  - Hr DAM VSupply Energy (MW)
  - RTD Interval Seconds
  - RTD RT Energy Price: VS ($/MWh)
  - RTD RT Loss Price: VS ($/MWh)
  - RTD RT Cong Price: VS ($/MWh)

Virtual Trading Market Settlements
Balancing Market Virtual Supply

- **Settlement Intermediates**
  - RTD BalMkt VSupply Engy Stlmnt ($)
  - RTD BalMkt VSupply Loss Stlmnt ($)
  - RTD BalMkt VSupply Cong Stlmnt ($)

- **Results**
  - RTD Total BalMkt VSupply Stlmnt ($)

Balancing Market Virtual Supply

- **Settlement Algorithm**

RTD Total BalMkt VSupply Stlmnt ($) = RTD BalMkt VSupply Engy Stlmnt ($) + RTD BalMkt VSupply Loss Stlmnt ($) + RTD BalMkt VSupply Cong Stlmnt ($)

Where:

RTD BalMkt VSupply Engy Stlmnt ($) = [RTD RT Energy Price: VS ($/MWh) * Hr DAM VSupply Energy (MW) * (RTD Interval Seconds/3600)] * (-1)

RTD BalMkt VSupply Loss Stlmnt ($) = [RTD RT Loss Price: VS ($/MWh) * Hr DAM VSupply Energy (MW) * (RTD Interval Seconds/3600)] * (-1)

RTD BalMkt VSupply Cong Stlmnt ($) = [{(-1) * RTD RT Cong Price: VS ($/MWh)} * Hr DAM VSupply Energy (MW) * (RTD Interval Seconds/3600)] * (-1)

Virtual Trading Market Settlements
Balancing Market Virtual Supply

- **Settlement Scenario**
  - HB 09 DAM Virtual Supply energy scheduled in NYC = 10 MW
  - Actual energy injected in RT = 0 MW
  - RTD interval length 9:35 - 9:40 = 300 seconds
  - RTD Energy price = $23.90/MWh
  - RTD Loss price = $2.34/MWh
  - RTD Cong price = $ -2.91/MWh

Virtual Trading Market Settlements

Balancing Market Virtual Supply

Settlement Example:

1. Calculate the RTD BalMkt VSupply Engy Stlmnt ($)
   $23.90 * 10 * (300/3600) *(-1) = $-19.92

2. Calculate the RTD BalMkt VSupply LossStlmnt ($)
   $2.34 * 10 * (300/3600) *(-1) = $-1.95

3. Calculate the RTD BalMkt VSupply Cong Stlmnt ($)
   {(-1) *($-2.91)} * 10 * (300/3600) *(-1) = $-2.43

4. Calculate the RTD Total BalMkt VSupply Stlmnt ($)
   $-19.92 + $-1.95 + $-2.43 = $ -24.30 (Charge to MP)

Virtual Trading Market Settlements

Balancing Market Virtual Supply

Settlement Reference Material:

- **Tariff Reference**
  - MST – Section 4.5.5
- **Accounting and Billing Manual**
  - Section 4.4.2, Appendix B
- **Advisory Billing File**
  - Virtual Bidding Program
    - Balancing Virtual Supply $
  - Hourly Bill Codes: 417
  - Daily Bill Code: 775
- **DSS Corporate Report**
  - Settlement Details – Virtual Market Customers – Virtual Supply

Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- Uplift Allocation

Virtual Trading Market Settlements
DAM Virtual Load

- Intended to charge Virtual Market Customers for DAM virtual energy purchases in the NYISO Virtual Load (VL) Market
  - *Based on the VL DAM Scheduled virtual energy at a given VL bus*
  - *Determined at the hourly level*

Virtual Trading Market Settlements
DAM Virtual Load

- **Settlement Eligibility**
  - Virtual load will be charged for DAM VL Energy ($) if:
    - *VL bus is scheduled to purchase virtual energy (MWh) in the NYISO Day Ahead Market*

Virtual Trading Market Settlements
DAM Virtual Load

- **Settlement Determinants**
  - *Hr DAM Energy Price: VL ($/MWh)*
  - *Hr DAM Loss Price: VL ($/MWh)*
  - *Hr DAM Cong Price: VL ($/MWh)*
  - Hr DAM VLoad Energy (MWh)

Virtual Trading Market Settlements
DAM Virtual Load

- **Settlement Intermediates**
  - *Hr DAM VLoad Engy Stlmnt ($)*
  - *Hr* DAM VLoad Loss Stlmnt *($)*
  - *Hr* DAM VLoad Cong Stlmnt *($)*

- **Results**
  - Hr Total DAM VLoad Stlmnt ($)

Virtual Trading Market Settlements

DAM Virtual Load

- **Settlement Algorithm**
  - Hr Total DAM VLoad StImnt ($) = Hr DAM VLoad Engy StImnt ($) + Hr DAM VLoad Loss StImnt ($) + Hr DAM VLoad Cong StImnt ($)

Where:

Hr DAM VLoad Engy StImnt ($) = [Hr DAM Energy Price: VL ($/MWh) * Hr DAM VLoad Energy (MWh)] * (-1)

Hr DAM VLoad Loss StImnt ($) = [Hr DAM Loss Price: VL ($/MWh) * Hr DAM VLoad Energy (MWh)] * (-1)

Hr DAM VLoad Cong StImnt ($) = [{(-1) *Hr DAM Cong Price: VL ($/MWh)} * Hr DAM VLoad Energy (MWh)] * (-1)

And:

Hr DAM VLoad Energy (MWh) = Hr DAM VLoad Energy (MW)

Virtual Trading Market Settlements

DAM Virtual Load

- **Settlement Scenario**
  - Customer was scheduled for 10 MWs of Virtual Load for HB09 in the DAM.
    - Hr DAM Energy Price: VL = $23.90/MWh
    - Hr DAM Loss Price: VL = $3.08/MWh
    - Hr DAM Cong Price: VL = $ -2.29/MWh

Virtual Trading Market Settlements

DAM Virtual Load

Settlement Example:

1. Calculate the Hr DAM VLoad Engy Stlmnt ($)
   $ 23.90/MWh * 10 * (-1) = $-239

2. Calculate the Hr DAM VLoad Loss Stlmnt ($)
   $ 3.08/MWh* 10 * (-1) = $-30.80

3. Calculate the Hr DAM VLoad Cong Stlmnt ($)
   {(-1) * ($-2.29/MWh) } * 10 * (-1) = $-22.90

4. Calculate the Hr Total DAM VLoad Stlmnt ($)
   $-239 + $-30.80 + $-22.90 = $-292.70 = (Charge to MP)

Virtual Trading Market Settlements

DAM Virtual Load

Settlement Reference Material:

- **Tariff Reference**
  - MST – Section 4.2.6
- **Accounting and Billing Manual**
  - Section 6.3.1, Appendix J
- **Advisory Billing File**
  - Virtual Bidding Program
    - DAM Virtual Load $
  - Hourly Bill Codes: 413
  - Daily Bill Code: 771
- **DSS Corporate Report**
  - Settlement Details – Virtual Market Customers – Virtual Load

Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- Uplift Allocation

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Description**
  - Intended to compensate Virtual Loads for the energy sold in the NYISO RT Market
    - *Based on the VL DAM scheduled energy (MWh) at a given virtual load bus*
    - *Determined at the RTD interval level*

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Eligibility**
  - Virtual Loads will be credited for RT energy imbalance ($) if:
    - *VL bus is scheduled to purchase virtual energy (MWh) in the NYISO Day Ahead Market*

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Determinants**
  - Hr DAM VLoad Energy (MW)
  - RTD Interval Seconds
  - RTD RT Energy Price: VL ($/MWh)
  - RTD RT Loss Price: VL ($/MWh)
  - RTD RT Cong Price: VL ($/MWh)

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Intermediates**
  - RTD BalMkt VLoad Engy Stlmnt ($)
  - RTD BalMkt VLoad Loss Stlmnt ($)
  - RTD BalMkt VLoad Cong Stlmnt ($)

- **Results**
  - RTD Total BalMkt VLoad Stlmnt($)

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Algorithm**

RTD Total BalMkt VLoad StImnt ($) = RTD BalMkt VLoad Engy StImnt ($) + RTD BalMkt VLoad Loss StImnt ($) + RTD BalMkt VLoad Cong StImnt ($)

Where:

RTD BalMkt VLoad Engy StImnt ($) = RTD RT Energy Price: VL ($/MWh) * Hr DAM VLoad Energy (MW) * (RTD Interval Seconds/3600)

RTD BalMkt VLoad Loss StImnt ($) = RTD RT Loss Price: VL ($/MWh) * Hr DAM VLoad Energy (MW) * (RTD Interval Seconds/3600)

RTD BalMkt VLoad Cong StImnt ($) = {(-1) * RTD RT Cong Price: VL ($/MWh)} * Hr DAM VLoad Energy (MW) * (RTD Interval Seconds/3600)

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Scenario**
  - HB 09 DAM Virtual Load energy scheduled = 10 MW
  - Actual energy withdrawn in RT = 0 MW
  - RTD interval length 9:20 - 9:25 = 300 seconds
  - RTD Energy price = $23.90/MWh
  - RTD Loss price = $2.34/MWh
  - RTD Cong price = $ -2.91/MWh

Virtual Trading Market Settlements
Balancing Market Virtual Load

- **Settlement Example**

1. Calculate the RTD BalMkt VLoad Engy Stlmnt ($)
   $23.90 * 10 * (300/3600) = $19.92

2. Calculate the RTD BalMkt VLoad LossStlmnt ($)
   $2.34 * 10 * (300/3600) = $1.95

3. Calculate the RTD BalMkt VLoad Cong Stlmnt ($)
   {(-1) *($-2.91)} * 10 * (300/3600) = $2.43

4. Calculate the RTD Total BalMkt VLoad Stlmnt ($)
   $ 19.92 + $1.95 + $2.43 = $ 24.30 (Payment to MP)

Summary

DAM and Balancing Market for VS and VL Bids

- **Virtual Supply**
  - Sells in DAM @ DAM LBMP
  - Purchases in RT @ RT LBMP
- **Virtual Load**
  - Purchases in DAM @ DAM LBMP
  - Sells in RT @ RT LBMP
- **Entirely a financial market**
  - Same number of MWs purchased (sold) in DAM are sold (bought) back in RT on a per bus, per hour basis
  - Netted DAM $ and Balancing Market $ can be a profit or loss for VS or VL customer

Virtual Trading Market Settlements

Balancing Market Virtual Load

Settlement Reference Material:

- **Tariff Reference**
  - MST – Section 4.5.2
- **Accounting and Billing Manual**
  - Section 6.3.2, Appendix J
- **Advisory Billing File**
  - Virtual Bidding Program
    - Balancing Virtual Load $
  - Hourly Bill Codes: 416
  - Daily Bill Code: 774
- **DSS Corporate Report**
  - Settlement Details – Virtual Market Customers – Virtual Load

Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- Uplift Allocation

Virtual Trading Market Settlements
Ancillary Services Rate Schedule 1

- **Settlement Description**
  - OATT & MST Rate Schedule 1:

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

+

FERC Fees

Intended to recover a portion of NYISO's operating costs and NYISO assessed FERC fees from customers engaging in Virtual Trading

- *Based on cleared MWh*

Virtual Trading Market Settlements
Ancillary Services Rate Schedule 1

- **Settlement Eligibility**
  - Virtual Suppliers and Virtual Loads will receive a charge for OATT & MST Rate Schedule 1 if:
    - *Virtual Customer is scheduled to purchase or sell virtual energy (MWh) in the NYISO DAM Market*

Virtual Trading
Rate Schedule 1 – S, SC, & D

- **Settlement Determinants**
  - Hr DAM Vsupply/Vload Energy (MW)

Virtual Trading
Rate Schedule 1 – S, SC, & D

- **Settlement Intermediates**
  - Hr Vsupply/Vload OATT Rate Sched 1 Annual Budget Rate ($/MWh)

- **Settlement Results**
  - Hr Vsupply/Vload OATT Sched 1 Annual Budget Charge Stlmnt ($)

Virtual Trading Market Settlements

Ancillary Services Rate Schedule 1

- **Settlement Algorithm - *S,SC, &D***

Hr Vsupply/Vload OATT Sched 1 Annual Budget Charge Stlmnt ($) =

Hr Vsupply/Vload OATT Sched 1 Annual Budget Rate ($/MWh)
** Hr DAM Vsupply/Vload Energy (MW) * (-1)*

Where:

Hr Vsupply/Vload OATT Sched 1 Annual Budget Rate ($/MWh) = *projected annual Virtual Trading revenue*

- 2023 Rate: $ 0.1066 per cleared MWh
- Based on $3,789,879.33 projected recoveries from Non-Physical Transactions for 2023

Hr DAM Vsupply/Vload Energy (MW) = *Total cleared Virtual MWh*

Virtual Trading
Rate Schedule 1 – FERC Fees

- **Settlement Determinants**
  - Hr DAM Vsupply/Vload Energy (MW)

Virtual Trading
Rate Schedule 1 – FERC Fees

- **Settlement Intermediates**
  - Hr Vsupply/Vload OATT Sched 1 FERC Fees Rate ($/MWH)

- **Settlement Results**
  - Hr Vsupply/Vload OATT Sched 1 FERC Fees Stlmnt ($)

Virtual Trading Market Settlements

Ancillary Services Rate Schedule 1

- **Settlement Algorithm - *FERC Fees***

Hr Vsupply/Vload OATT Sched 1 FERC Fees Stlmnt ($) =

Hr Vsupply/Vload OATT Sched 1 FERC Fees Rate ($/MWh)

- *Hr DAM Vsupply/Vload Energy (MW) * (-1)*

Where:

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

- Broken down to a monthly level and then an hourly level rate
- Virtual Traders assessed 34.7% of the 6% Non-Physical Allocation

Hr DAM Vsupply/Vload Energy (MW) = Total cleared Virtual MWh

Virtual Trading Market Settlements

Ancillary Services Rate Schedule 1

Settlement Reference Material:

- **Tariff Reference**
  - OATT –Sections 6.1.2.4.1 and 6.1.2.4.4
- **Accounting and Billing Manual**
  - Section 8.1.1, Appendix M
- **Advisory Billing File**
    - Virtual Bidder
      - Annual Budget OATT Virtuals Charge $
        - Hourly Bill Code 418
        - Daily Bill Code 778
      - FERC Fees OATT Virtuals Charge $
        - Hourly Bill Code 419
        - Daily Bill Code 779
- **DSS Corporate Report**
  - Settlement Details – Virtual Market Customers

Virtual Trading Market Settlements

Settlement Name:

- Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- Ancillary Services Rate Schedule 1
- **Uplift Allocation**

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Description**
  - Day DAM BPCG UnderFrcst: LSE/SprZn ($)
    - A charge to recover a portion of uplift costs associated with BPCG payments to generating resources
      - *Specifically, those additional resources scheduled to meet the NYISO's forecast load*
    - *Calculated at the daily level*

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Description (cont'd)**
  - Based on ratios of differences between Day-Ahead net energy purchases and forecast or actual energy withdrawal for four New York Control Area locations (Superzones)
  - Uplift costs allocated to a given location (Superzone) are then further allocated to individual bidders within that location based upon the individual bidder's contribution to the deficiency relative to the total deficiency of the location

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Description (cont'd)**
  - The need for additional resources to meet forecast load can be partially attributed to Virtual Supply Transactions and real-time purchases
    - *If NYISO forecast does not exceed actual load, costs are allocated to bidding entities that are short in real time…by design VS are short in RT*
    - *Loads whose actual consumption is more that they have acquired in the DAM…by design VS consume more in RT than what was acquired in DAM*
  - Virtual Load bids do not add to these uplift costs and therefore are not subject to the uplift charges

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Eligibility**
  - Customers will receive an allocation of DAM Bid Production Cost Guarantee ($) due to under forecasted load for each NYISO Superzone in which Virtual Supply MWh are scheduled in DAM if:
    - *DAM BPCG payments were allocated to power suppliers due to DAM load under- forecasting.*

Virtual Trading Market Settlements

Uplift Allocation

- **Settlement Determinants**
  - Day RT LSE Load: LSE/SprZn (MWh)
  - Day DAM Sched Load: LSE/SprZn (MWh)
  - Day DAM VSupply Energy: VBE/SprZn (MWh)
  - Day DAM VLoad Energy: VBE/SprZn (MWh)
  - Day RT LSE Load: SprZn (MWh)
  - Day DAM Sched Load: SprZn (MWh)
  - Day DAM VSupply Energy: SprZn (MWh)
  - Day DAM VLoad Energy: SprZn (MWh)
  - Day DAM NYISO Frcst Load: SprZn (MWh)

  - Day Ttl NYISO DAM UndrFrcst BPCG ($)

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Intermediates**
  - Day Adj2 RT Actual Load: LSE/SprZn (MWh)
  - Day Total Adj RT Actual Load (MWh)
  - Day Adj2 RT Actual Load: SprZn (MWh)
  - Day Adj RT Actual Load: SprZn (MWh)
  - Day Adj Frcst Load: SprZn (MWh)

  - Day DAM Frcst Accuracy Ratio: SprZn
  - Day SprZn Adj RT Ld Ratio Sh
  - Day Adj2 RT Load Ratio Sh: LSE/SprZn

  - Day DAM BPCG UndrFrcst Rat: LSE/SprZn

- **Results**
  - Day DAM BPCG UnderFrcst: LSE/SprZn ($)

Virtual Trading Market Settlements

Uplift Allocation

- Settlement Algorithm

Day DAM BPCG UnderFrcst: LSE/SprZn ($) =

*Day Ttl NYISO DAM UndrFrcst BPCG ($) * Day DAM BPCG UndrFrcst Rat: LSE/SprZn *(-1)*

Where:

Day DAM BPCG UndrFrcst Rat: LSE/SprZn =

*Day DAM Frcst Accuracy Ratio: SprZn * Day SprZn Adj RT Ld Ratio Sh * Day Adj2 RT Ld Ratio Sh: LSE/SprZn*

Virtual Trading Market Settlements

Uplift Allocation

- **Settlement Scenario**
  - Day DAM BPCG UndrFrcst Rat: LSE/SprZn for VS_123 in Super Zone A-E for Aug 1, 2023 = .05
  - The total credit to PS for DAM BPCG due to Under Forecasting: Day Ttl NYISO DAM UndrFrcst BPCG ($) = $2,500

Virtual Trading Market Settlements

Uplift Allocation

- **Settlement Example**
  1. Calculate the Day DAM BPCG UnderFrcst: LSE/SprZn ($) for this Virtual Supplier for the given date

Virtual Trading Market Settlements
Uplift Allocation

- **Settlement Summary**
  - *A charge to recover a portion of uplift costs associated with BPCG payments to generating resources*
    - *Based on Superzone*
    - *Forecast Accuracy*
    - *Applies to Virtual Suppliers not Virtual Loads*
    - *Calculated on Daily Level*

Virtual Trading Market Settlements

Uplift Allocation

Settlement Reference Material:

- **Tariff Reference**
  - OATT - Attachment T
- **Accounting and Billing Manual**
  - Section 8.1.11, Appendix J
- **Advisory Billing File**
  - Ancillary Services Charges
    - Incremental Uplift $
  - Hourly Bill Codes: N/A
  - Daily Bill Code: 815
- **DSS Corporate Report**
  - Settlement Details – LSE Ancillary Services – limited availability

Virtual Trading Market Settlements

Settlement Name:

- ✓ Virtual Supply Settlements
  - Day Ahead Market Virtual Supply
  - Balancing Market Virtual Supply
- ✓ Virtual Load Settlements
  - Day Ahead Market Virtual Load
  - Balancing Market Virtual Load
- ✓ Ancillary Services Rate Schedule 1
- ✓ Uplift Allocation for Virtual Suppliers