

Load Serving Entity Uplift and Other Allocation Settlements

Gina E. Craan

Manager, Market Training, New York Independent System Operator

Accounting & Billing Workshop

December 9 – 13, 2024 Remote Learning



What is Uplift?

 Uplift results from additional payments made that are above market revenue

 Uplift is allocated to all energy withdrawals (including LSEs and Transaction Customers)



How are Uplift and Other Allocations allocated?

- Based on load ratio share of the following:
 - NYISO-wide
 - Local
 - Transmission Owner
 - Superzone

***Load ratio share allocations for uplift and other allocations excludes CTS-NE MWHrs from the calculation ***



Load Ratio Share

LOAD RATIO SHARE (LRS): An LSE's portion of load compared to the Designated Total Load*

Load Ratio Share (LRS) =

OR

RT Actual MWs

Designated Total Load

RT Actual MWs

NYISO-wide Load*

RT Actual MWs

Superzone Load*

RT Actual MWs

OR

Transmission

District Load*

RT Actual MWs

Subzone Load*

OR



LSE Customer Uplift and Other Settlement **Allocations**

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



Load Serving Entity Uplift Settlement Allocations

LSE Uplift Settlements -1



Settlement Name	Settlement Description	Load Ratio Share
PS DAM BPCG	Charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Power Suppliers	NYISO Wide
PS DAM BPCG LRR	Charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, committed after a request by TOs for local reliability (DARU) or to solve a local reliability constraint (LRR).	Sub Zone Wide
PS RT BPCG	Charge to LSEs, intended to recover NYISO's costs of the RT BPCG payment to Power Suppliers	NYISO Wide
PS RT BPCG LRR	Charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, committed OOM or SREd by TOs for local reliability	Sub Zone Wide
PS DAMAP	Charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers	NYISO Wide
PS DAMAP LRR	Charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers, scheduled below their DAM schedules by TOs, for <u>local reliability</u>	Sub Zone Wide



LSE Uplift Settlements -2

Settlement Name	Settlement Description	Load Ratio Share
TC DAM BPCG	A charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Transaction Customers	NYISO Wide
TC Import ECA Supplier Guarantee	A charge to LSEs, intended to recover NYISO's costs of the Import Extraordinary Corrective Action Supplier Guarantee payment to Transaction Customers	NYISO Wide
PS DAM BPCG Under Forecasted Load	A charge to LSEs, intended to recover a portion of NYISO's costs of the DAM BPCG payment to Power Suppliers due to LSEs under forecasting of DAM load	Super Zone Wide
PS RT BPCG for Supplemental Events	A charge to LSEs, intended to recover NYISO's costs of the RT BPCG for Supplemental Events payment to Power Suppliers	NYISO Wide
Financial Impact Credit Allocation	A credit to LSEs, against uplift charges, resulting from a charge imposed on Market Participants when a transaction fails checkout due to Market Participant action	NYISO Wide



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier DAM BPCG Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Power Suppliers.



- Settlement Eligibility
 - LSEs will receive a charge for PS DAM BPCG (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Day Total NYISO DAM BPCG (\$) > 0



- Settlement Determinants
 - Hr RT LSE Load (MWh)
 - Hr Total NYISO RT LSE Load (MWh)
 - Hr Total NYISO RT Export Trans (MWh)
 - Hr Total NYISO RT WT Trans (MWh)

Day Total NYISO DAM BPCG (\$)



Settlement Intermediates

- Day RT LSE Load (MWh)
- Day Total NYISO RT LSE Load (MWh)
- Day Total NYISO RT Export Trans (MWh)
 - Excludes CTS-NE Export MWs
- Day Total NYISO RT WT Trans (MWh)
- Day RT LSE Ld Ratio Sh: LSE, Exp, WT

Settlement Results

Day DAM BPCG StImnt: LSE (\$)



Settlement Algorithm

```
Day DAM BPCG StImnt: LSE ($) = {Day Total NYISO DAM BPCG ($) * Day RT LSE Ld Ratio Sh: LSE, Exp, WT} * (-1)
```

Where:

```
Day RT LSE Ld Ratio Sh: LSE, Exp, WT =
Day RT LSE Load (MWh) / {Day Total NYISO RT LSE Load (MWh) + Day Total
NYISO RT Export Trans (MWh) + Day Total NYISO RT WT Trans (MWh)}
```

```
Day RT LSE Load (MWh) = \sum Hr RT LSE Load (MWh), for all hours in a given day
```



Settlement Algorithm

Where:

```
Day Total NYISO RT LSE Load (MWh) = 
∑ Hr Total NYISO RT LSE Load (MWh), for all hours in a given day
```

```
Day Total NYISO RT Export Trans (MWh) = 
∑ Hr Total NYISO RT Export Trans (MWh), for all hours in a given day
```

```
Day Total NYISO RT WT Trans (MWh) = \sum Hr Total NYISO RT WT Trans (MWh), for all hours in a given day
```



Settlement Scenario

- 'LSE A' purchased energy, meeting load requirements
 - 11,000 MWh in total, from HB 0 HB 23 from NYISO Energy Market
- The daily total NYISO RT LSE Load is 500,078 MWh
- The daily total NYISO RT Export MWh is 14,450 MWh
- The daily total NYISO RT Wheel Through MWh is 2,650 MWh
- The total Credit to PS for DAM BPCG is \$7,800



Settlement Example

```
Day DAM BPCG StImnt: LSE ($) = \$ - 165.90 {$7,800 * (.021269) } * (-1)
```

Where:

```
Day RT LSE Load Ratio Sh: LSE, Exp, WT = .021269 11,000 / \{500,078 + 14,450 + 2,650\}
```



Summary

- A charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Power Suppliers.
 - Based on RT Load Ratio Share
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - NYISO Wide Uplift Charge \$
 - Daily Bill Code 812



20

LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier DAM BPCG LRR Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, committed after a request by TOs for local reliability (DARU) or to solve a local reliability constraint (LRR).



- Settlement Eligibility
 - LSEs will receive a charge within the NYC-Sub Zone for PS DAM BPCG LRR (\$) if:
 - LSE purchased energy to meet their load requirements in a Sub Zone from the NYISO Energy markets
 - Day Total NYISO SZ DAM BPCG LRR (\$) > 0



23

LSE - PS DAM BPCG LRR Allocation

Settlement Determinants

- RTD RT Actual Load (MW) * In the subzone
- Sub Zone ID
- Hr DAM Gen Commit Reason ID
- Day DAM BPCG StImnt (\$)



Settlement Intermediates

- Day LSE Sub Zone Load (MWh)
 - = Sum Hr LSE Subzone Load (MWh)
 - = Sum of RTD RT Actual Load (MW) * In the subzone
- Day Total Sub Zone Load (MWh)
- Day RT LSE SZ Ld Ratio Sh: LSE, SZ
- Day Total NYISO SZ DAM BPCG LRR (\$)

Settlement Results

Day SZ DAM BPCG LRR StImnt: LSE (\$)



Settlement Algorithm

Day SZ DAM BPCG LRR Stlmnt: LSE (\$) = {Day Total NYISO SZ DAM BPCG LRR (\$) * Day RT LSE SZ Ld Ratio Sh: LSE, SZ} * (-1)

Where:

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = {Day LSE SZ Load (MWh) / Day Total SZ Load (MWh) if

Day Total Sub Zone Load (MWh) < or > 0 else

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = 0



Settlement Scenario

- 'LSE A' purchased 600 MWh of energy in Sub Zone_123 from HB 00-23, meeting load requirements
- The daily total Sub Zone_123 Load is 5,000 MWh
- The total Credit to PS for DAM BPCG in the 123 Sub Zone is \$3,300



Settlement Example

```
Day SZ DAM BPCG LRR Stlmnt: LSE (\$) = \$ - 396
{$3,300 * .12} * (-1)
```

Where:

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = .12600 / 5000



Summary

- A charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, scheduled off their DAM economic schedules by TOs or NYISO for local reliability
 - Based on Sub Zone Load
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - LRR Mingen Charge \$
 - Daily Bill Code 810



30

LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier RT BPCG Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the RT BPCG payment to Power Suppliers.



- Settlement Eligibility
 - LSEs will receive a charge for PS RT BPCG (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Day Total NYISO RT BPCG (\$) > 0



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)

Day Total NYISO RT BPCG (\$)



Settlement Intermediates

- Day RT LSE Load (MWh)
- Day Total NYISO RT LSE Load (MWh)
- Day Total NYISO RT Export Trans (MWh)
- Day Total NYISO RT WT Trans (MWh)
- Day RT LSE Ld Ratio Sh: LSE, Exp, WT

Settlement Results

Day RT BPCG StImnt: LSE (\$)



Settlement Algorithm

```
Day RT BPCG StImnt: LSE ($) = {Day Total NYISO RT BPCG ($) * Day RT LSE Ld Ratio Sh: LSE. Exp, WT} * (-1)
```

Where:

```
Day RT LSE Ld Ratio Sh: LSE, Exp, WT =
Day RT LSE Load (MWh) / {Day Total NYISO RT LSE Load (MWh) + Day
Total NYISO RT Export Trans (MWh) + Day Total NYISO RT WT Trans
(MWh)}
```

```
Day RT LSE Load (MWh) = \sum Hr RT LSE Load (MWh), for all hours in a given day
```



Settlement Algorithm

Where:

```
Day Total NYISO RT LSE Load (MWh) = 
∑ Hr Total NYISO RT LSE Load (MWh), for all hours in a given day
```

```
Day Total NYISO RT Export Trans (MWh) = 
∑ Hr Total NYISO RT Export Trans (MWh), for all hours in a given day
```

```
Day Total NYISO RT WT Trans (MWh) = 
∑ Hr Total NYISO RT WT Trans (MWh), for all hours in a given day
```



Settlement Scenario

- 'LSE A' purchased energy, meeting load requirements
 - 1,200 MWh in total, from HB 0 HB 23 from NYISO Energy Market
- The daily total NYISO RT LSE Load is 13,000 MWh
- The daily total NYISO RT Export MWh is 1,100 MWh
- The daily total NYISO RT Wheel Through MWh is 320
- The total Credit to PS for RT BPCG is \$1,700



Settlement Example

```
Day RT BPCG StImnt: LSE ($) = $ - 141.47 {$1,700 * (.083218) } * (-1)
```

Where:

```
Day RT LSE Load Ratio Sh: LSE, Exp, WT = .083218 1,200 / \{13,000 + 1,100 + 320\}
```



Summary

- A charge to LSEs, intended to recover NYISO's costs of the RT BPCG payment to Power Suppliers.
 - Based on RT Load Ratio Share
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - NYISO Wide Uplift Charge \$
 - Daily Bill Code 812



41

LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier RT BPCG LRR Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, committed OOM or SREd by TOs for local reliability.



- Settlement Eligibility
 - LSEs will receive a charge within a given Sub Zone for PS RT BPCG LRR (\$) if:
 - LSE purchased energy to meet their load requirements in a given NYISO Sub Zone from the NYISO Energy markets
 - Day Total NYISO SZ RT BPCG LRR (\$) > 0



Settlement Determinants

- RTD RT Actual Load (MW) *In subzone
- Sub Zone ID
- Hr DAM Gen Commit Reason ID
- Day RT BPCG Stlmnt (\$)



Settlement Intermediates

- Day LSE Sub Zone Load (MWh)
 - = Sum Hr LSE Subzone Load (MWh)
 - = Sum of RTD RT Actual Load (MW) * In the subzone
- Day Total Sub Zone Load (MWh)
- Day RT LSE SZ Ld Ratio Sh: LSE, SZ
- Day Total NYISO SZ RT BPCG LRR (\$)

Settlement Results

Day SZ RT BPCG LRR Stlmnt: LSE (\$)



Settlement Algorithm

Day SZ RT BPCG LRR Stlmnt: LSE (\$) = {Day Total NYISO SZ DAM BPCG LRR (\$) * Day RT LSE SZ Ld Ratio Sh: LSE, SZ} * (-1)

Where:

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = {Day LSE SZ Load (MWh) / Day Total SZ Load (MWh) if

Day Total Sub Zone Load (MWh) < or > 0 else

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = 0



Settlement Scenario

- 'LSE A' purchased energy in SZ 123, meeting load requirements
 - 210 MWh in total, from HB 0 HB 23 from NYISO Energy Market
- The daily total 123 Sub Zone Load is 1300 MWh
- The total Credit to PS for RT BPCG in the 123 Sub Zone is \$2,990



Settlement Example

Day SZ RT BPCG LRR Stlmnt: LSE (\$) = \$ - 478.40 {\$2,990 * .16} * (-1)

Where:

Day RT LSE SZ Ld Ratio Sh: LSE, SZ = .16 210 / 1300



Summary

- A charge to LSEs, intended to recover NYISO's costs of DAM BPCG payments to Power Suppliers, scheduled off their RT economic schedules by TOs for local reliability
 - Based on Sub Zone Load
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - LRR Mingen Charge \$
 - Daily Bill Code 810



51

LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier DAM Margin Assurance Uplift Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers.



- Settlement Eligibility
 - LSEs will receive a charge for PS DAM Margin Assurance (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Hr Total NYISO DAM Margin Assurance (\$) > 0



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)
- Hr Total NYISO DAM Mrgn Assrnc (\$)



- Settlement Intermediates
 - Hr RT LSE Ld Ratio Sh: LSE, Exp, WT

- Settlement Results
 - Hr DAM Mrgn Assrnc Stlmnt: LSE (\$)



Settlement Algorithm

```
Hr DAM Mrgn Assrnc StImnt: LSE ($) =
Hr Total NYISO DAM Mrgn Assrnc ($) * Hr RT LSE Ld Ratio Sh: LSE, Exp,
WT * (-1)
```

Where:

```
Hr RT LSE Ld Ratio Sh: LSE, Exp, WT =
Hr RT LSE Load (MWh) / {Hr Total NYISO RT LSE Load (MWh) + Hr Total
NYISO RT Export Trans (MWh) + Hr Total NYISO RT WT Trans (MWh)}
```

LSE - PS DAM Margin Assurance New York ISO Allocation

- Settlement Scenario
 - 'LSE A' purchased energy, meeting load requirements
 - 575 MWh in HB 15 from NYISO Energy Market
 - The hourly total NYISO RT LSE Load is 23,000 MWh
 - The hourly total NYISO RT Export MWh is 840 MWh
 - The hourly total NYISO RT Wheel Through MWh is 192
 - The total Credit to PS for DAM Margin Assurance is \$1,362



Settlement Example

```
Hr DAM Mrgn Assrnc Stlmnt: LSE ($) = - $ 32.59 {$1,362 * .023926} * (-1)
```

Where:

```
Hr RT LSE Load Ratio Sh: LSE, Exp, WT = .023926
575 / \{23,000 + 840 + 192\}
```



Summary

- A charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers.
 - Based on RT Load Ratio Share
 - Calculated on Hourly Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Residual Adjustment \$
 - Hourly Bill Code 611
 - Daily Bill Code 813
- DSS Corporate Report
 - Settlement Details- Load Serving Entity PS Uplift Allocations



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier DAM Margin Assurance LRR Uplift Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers, scheduled below their DAM schedules by TOs, for <u>local reliability</u>.



Settlement Eligibility

- LSEs will receive a charge within a given Sub Zone for PS DAM Margin Assurance LRR (\$) if:
 - LSE purchased energy in a given Sub Zone, to meet their load requirements from the NYISO Energy markets
 - Hr SZ NYISO DAM Margin Assurance LRR (\$) > 0



- Settlement Determinants
 - RTD RT Actual Load (MW) *In subzone
 - Hr DAM Mrgn Assrnc LRR Stlmnt (\$)



Settlement Intermediates

- Hr LSE Sub Zone Act Load (MWh)
 = Sum of RTD RT Actual Load (MW) * In the subzone
- Hr Total Sub Zone Act Load (MWh)
- Hr RT LSE SZ Ld Ratio Sh: LSE, SZ
- Hr SZ NYISO DAM Mrgn Assrnc LRR (\$)

Settlement Results

 Hr SZ DAM Mrgn Assrnc LRR Stlmnt: LSE (\$)

Settlement Algorithm

```
Hr DAM Mgn Assrnc LRR StImnt: LSE ($) = \sum {Hr SZ NYISO DAM Mrgn Assrnc LRR ($) * Hr SZ RT LSE Ld Ratio Sh: LSE, SZ} * (-1)
```

Where:

Hr SZ RT LSE Ld Ratio Sh: LSE, SZ =
Hr LSE Sub Zone Act Load (MWh) / Hr Total Sub Zone Act Load (MWh) if
Hr Total Sub Zone Act Load (MWh) < or > 0 else

Hr RT LSE SZ Ld Ratio Sh: LSE, SZ = 0



- Settlement Scenario
 - 'LSE A' purchased energy, in Sub Zone 123, meeting load requirements
 - 240 MWh in HB 5 from NYISO Energy Market
 - The hourly total NYISO Sub Zone 123 RT LSE Load is 1560 MWh
 - The total Credit to PS for DAM Margin
 Assurance LRR in Sub Zone 123 is \$870



Settlement Example

```
Hr DAM Mgn Assrnc LRR Stlmnt: LSE ($) = \$-130.50 {$870 * .15} * (-1)
```

Where:

Hr RT LSE SZ Ld Ratio Sh: LSE, SZ = .15



Summary

- A charge to LSEs, intended to recover NYISO's costs of the DAM Margin Assurance payment to Power Suppliers, scheduled below their DAM schedules by TOs, for local reliability.
 - Based on Sub Zone
 - Calculated on Hourly Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Residual Adjustment \$
 - Hourly Bill Code 611
 - Daily Bill Code 813



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Transaction DAM BPCG Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Transaction Customers.



- Settlement Eligibility
 - LSEs will receive a charge for Transaction DAM BPCG (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Day Total NYISO Trans DAM BPCG (\$) > 0



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)

Day DAM Trans BPCG (\$)



Settlement Intermediates

- Day RT LSE Load (MWh)
- Day Total NYISO RT LSE Load (MWh)
- Day Total NYISO RT Export Trans (MWh)
- Day Total NYISO RT WT Trans (MWh)
- Day RT LSE Ld Ratio Sh: LSE, Exp, WT
- Day Total NYISO Trans DAM BPCG (\$)

Settlement Results

Day DAM Trans BPCG StImnt: LSE (\$)



Settlement Algorithm

```
Day DAM Trans BPCG StImnt: LSE ($) = {Day Total NYISO Trans DAM BPCG ($) * Day RT LSE Ld Ratio Sh: LSE, Exp, WT} * (-1)
```

Where:

```
Day RT LSE Ld Ratio Sh: LSE, Exp, WT =
Day RT LSE Load (MWh) / {Day Total NYISO RT LSE Load (MWh) + Day Total
NYISO RT Export
Trans (MWh) + Day Total NYISO RT WT Trans (MWh)}
```

```
Day RT LSE Load (MWh) = \sum Hr RT LSE Load (MWh), for all hours in a given day
```



Settlement Algorithm

Where:

```
Day Total NYISO RT LSE Load (MWh) = 
∑ Hr Total NYISO RT LSE Load (MWh), for all hours in a given day
```

```
Day Total NYISO RT Export Trans (MWh) = 
∑ Hr Total NYISO RT Export Trans (MWh), for all hours in a given day
```

```
Day Total NYISO RT WT Trans (MWh) = 
∑ Hr Total NYISO RT WT Trans (MWh), for all hours in a given day
```



78

LSE - Transaction DAM BPCG Allocation

- Settlement Scenario
 - 'LSE A' purchased energy, meeting load requirements
 - 6700 MWh in total, from HB 0 HB 23 from NYISO Energy Market
 - The daily total NYISO RT LSE Load is 29,500 MWh
 - The daily total NYISO RT Export MWh is 2,600 MWh
 - The daily total NYISO RT Wheel Through MWh is 260
 - The total Credit to TCs for DAM BPCG is \$5330



Settlement Example

```
Day DAM Trans BPCG StImnt: LSE ($) = \$ - 1,119.30 {$5330 * .21} * (-1)
```

Where:

```
Day RT LSE Load Ratio Sh: LSE, Exp, WT = .21 6700 / \{29,500+2,600+260\}
```



80

LSE - Transaction DAM BPCG Allocation

Summary

- A charge to LSEs, intended to recover NYISO's costs of the DAM BPCG payment to Transaction Customers.
 - Based on RT Load Ratio Share
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - NYISO Wide Uplift Charge \$
 - Daily Bill Code 812



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Transaction Import ECA Supplier Guarantee Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the Import Extraordinary Corrective Action Supplier Guarantee payment to Transaction Customers.



- Settlement Eligibility
 - LSEs will receive a charge for Transaction Import ECA Supplier Guarantee (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Hr Total NYISO Imp ECA Sup Gnt (\$) > 0



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)

- Hr Ttl NYISO ImECASupGnt: LBMP (\$)
- Hr Ttl NYISO ImECASupGnt: PTP (\$)



- Settlement Intermediates
 - Hr RT LSE Ld Ratio Sh: LSE, Exp, WT
 - Hr Total NYISO Imp ECA Sup Gnt (\$)

- Settlement Results
 - Hr Imp ECA Sup Gnt StImnt: LSE (\$)



Settlement Algorithm

```
Hr Imp ECA Sup Gnt StImnt: LSE ($) = {Hr Total NYISO Imp ECA Sup Gnt ($) * Hr RT LSE Ld Ratio Sh: LSE, Exp, WT} * (-1)
```

Where:

```
Hr Total NYISO Imp ECA Sup Gnt ($) = 
Hr Ttl NYISO ImECASupGnt: LBMP ($) + Hr Ttl NYISO ImECASupGnt: PTP ($)
```

```
Hr RT LSE Ld Ratio Sh: LSE, Exp, WT =
Hr RT LSE Load (MWh) / {Hr Total NYISO RT LSE Load (MWh) + Hr Total
NYISO RT Export Trans (MWh) + Hr Total NYISO RT WT Trans (MWh)}
```



Settlement Scenario

- 'LSE A' purchased energy, meeting load requirements
 - 470 MWh in HB 9 from NYISO Energy Market
- The hourly total NYISO RT LSE Load is 2010 MWh
- The hourly total NYISO RT Export MWh is 840 MWh
- The hourly total NYISO RT Wheel Through MWh is 70
- The total Credit to TCs for Import ECA Supplier Guarantee is \$610



Settlement Example

```
Hr Imp ECA Sup Gnt StImnt: LSE ($) = \$ - 97.60 {$610 * .16} * (-1)
```

Where:

```
Hr RT LSE Load Ratio Sh: LSE, Exp, WT = .16 470 / \{2010 + 840 + 70\}
```



Summary

- A charge to LSEs, intended to recover NYISO's costs of the Import Extraordinary Corrective Action Supplier Guarantee payment to Transaction Customers.
 - Based on RT Load Ratio Share
 - Calculated on Hourly Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - NYISO Wide Uplift Charge \$
 - Daily Bill Code 812
- DSS Corporate Report
 - Settlement Details- Load Serving Entity PS Uplift Allocations



92

LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Power Supplier DAM BPCG Under Forecasted Load Allocation Description
 - A charge to LSEs, intended to recover a portion of NYISO's costs of the DAM BPCG payment to Power Suppliers due to LSEs under forecasting of DAM load.



- Settlement Eligibility
 - LSEs will receive an allocation of DAM BPCG Under Forecasted Load (\$) if:
 - Day DAM Forecasted BPCG (\$) > 0



- Settlement Determinants
 - Day RT LSE Load: LSE/SprZn (MW)
 - Day DAM Sched Load: LSE/SprZn (MW)
 - Day DAM VSupply Energy: VBE/SprZn (MW)
 - Day DAM VLoad Energy: VBE/SprZn (MW)



- Settlement Determinants
 - Day RT LSE Load: SprZn (MW)
 - Day DAM Sched Load: SprZn (MW)
 - Day DAM VSupply Energy: SprZn (MW)
 - Day DAM VLoad Energy: SprZn (MW)
 - Day DAM NYISO Frcst Load: SprZn (MW)

Day Ttl NYISO DAM UndrFrcst BPCG (\$)



Settlement Intermediates

- Day Adj2 RT Actual Load: LSE/SprZn (MW)
- Day Total Adj RT Actual Load (MW)
- Day Adj2 RT Actual Load: SprZn (MW)
- Day Adj RT Actual Load: SprZn (MW)
- Day Adj Frcst Load: SprZn (MW)



Settlement Intermediates

- Day DAM Frest 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

Settlement Results

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



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



- Settlement Scenario
 - 'LSE A' purchased energy, meeting load requirements
 - 6400 MWh in total from HB 0 HB 23 from NYISO Energy Market
 - The daily DAM BPCG Under Forecast Ratio for LSE A in Super Zone 123 is .08
 - The total Credit to PS for DAM BPCG due to Under Forecasting is \$3,840



Settlement Example

Day DAM BPCG UnderFrcst: LSE/SprZn (\$) = \$307.20 {\$3840 * .08} * (-1)



Summary

- A charge to LSEs, intended to recover a portion of NYISO's costs of the DAM BPCG payment to Power Suppliers due to LSEs under forecasting of DAM load.
 - Based on Super Zone
 - Forecast Accuracy
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Incremental Uplift \$
 - Daily Bill Code 815



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Supplemental Events Allocation Description
 - A charge to LSEs, intended to recover NYISO's costs of the RT BPCG for Supplemental Events payment to Power Suppliers.



LSE - Supplemental Events Allocation

- Settlement Eligibility
 - LSEs will receive a charge for Supplemental Events (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Day Total NYISO Supp Event Cr (\$) > 0



LSE - Supplemental Events Allocation

Settlement Determinants

- Day RT LSE Load (MWh)
- Day Total NYISO RT LSE Load (MWh)
- Day Total NYISO RT Export Trans (MWh)
- Day Total NYISO RT WT Trans (MWh)

Hr Total NYISO Supp Event Cr (\$)



LSE Supplemental Events Allocation

- Settlement Intermediates
 - Day RT LSE Ld Ratio Sh: LSE, Exp, WT
 - Day Hr Total NYISO Supp Event Cr (\$) =
 Sum of Hr Total NYISO Supp Event Cr (\$)

- Settlement Results
 - Day Supp Event Stlmnt: LSE (\$)



Settlement Algorithm

```
Day Supp Event StImnt: LSE ($) = {Day Total NYISO Supp Event Cr ($) * Day RT LSE Ld Ratio Sh: LSE, Exp, WT} * (-1)
```

Where:

```
Day RT LSE Ld Ratio Sh: LSE, Exp, WT =
Day RT LSE Load (MWh) / {Day Total NYISO RT LSE Load (MWh) + Day Total
NYISO RT Export Trans (MWh) + Day Total NYISO RT WT Trans (MWh)}
```

Day Total NYISO Supp Event $Cr(\$) = \sum Hr Supp Event Stlmnt(\$)$, for all generators in the given hour



Settlement Scenario

- 'LSE A' purchased energy, meeting load requirements
 - 385 MWh from NYISO Energy Market
- The daily total NYISO RT LSE Load is 21,100 MWh
- The daily total NYISO RT Export MWh is 405 MWh
- The daily total NYISO RT Wheel Through MWh is 175
- The total credit to PS for RT BPCG due to Supplemental Events is \$2,040



Settlement Example

```
Day Supp Event Stlmnt: LSE ($) = \$ - 36.23 {$2,040 * (.017758)} * (-1)
```

Where:

```
Day RT LSE Load Ratio Sh: LSE, Exp, WT = .017758 385 / \{21,100 + 405 + 175\}
```



Summary

- A charge to LSEs, intended to recover NYISO's costs of the Supplemental Event Credits to Power Suppliers.
 - Based on Daily RT Load Ratio Share

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Sup Event Charge \$
 - Hourly Bill Code 619 *
 - Daily Bill Code 818
- DSS Corporate Report
 - Settlement Details- Load Serving Entity Supplemental Event Charge* needs to be updated



LSE Uplift Settlements

Settlement Name:

- PS DAM BPCG
- PS DAM BPCG LRR
- PS RT BPCG
- PS RT BPCG LRR
- PS DAMAP
- PS DAMAP LRR
- TC DAM BPCG
- TC Import ECA Supplier Guarantee
- PS DAM BPCG Under Forecasted Load
- [PS RT BPCG for] Supplemental Events
- Financial Impact Credit Allocation



LSE Uplift Settlements

- LSE Financial Impact Credit (FIC) Allocation
 Description
 - A credit to LSEs, against uplift charges, resulting from a charge imposed on Market Participants when a transaction fails checkout due to Market Participant action.



- Settlement Eligibility
 - LSEs will receive a credit for FIC (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Hr Total NYISO FIC (\$) < 0



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)

Hr Fin Imp Ch Stlmnt: Trans (\$)



- Settlement Intermediates
 - Hr RT LSE Ld Ratio Sh: LSE, Exp, WT

- Settlement Results
 - Hr FIC Imp Cred StImnt: LSE (\$)



Settlement Algorithm

```
Hr FIC Imp Cred StImnt: LSE ($) =
{(-1) * Hr Fin Imp Ch StImnt: Trans ($)} * Hr RT LSE Ld Ratio Sh: LSE, Exp,
WT
```

Where:

```
Hr RT LSE Ld Ratio Sh: LSE, Exp, WT =
Hr RT LSE Load (MWh) / {Hr Total NYISO RT LSE Load (MWh) + Hr Total
NYISO RT Export Trans (MWh) + Hr Total NYISO RT WT Trans (MWh)}
```

```
Hr Total NYISO FIC ($) = \sum Hr Fin Imp Ch StImnt: Trans ($), for all transactions in the given hour
```



Settlement Scenario

- 'LSE A' purchased energy, meeting load requirements
 - 385 MWh in HB 14 from NYISO Energy Market
- The hourly total NYISO RT LSE Load is 21,100 MWh
- The hourly total NYISO RT Export MWh is 405 MWh
- The hourly total NYISO RT Wheel Through MWh is 175
- The total Charge to TCs for FIC is \$970



Settlement Example

```
Hr FIC Imp Cred StImnt: LSE ($) = $17.22 {(-1) * ($ - 970)} * .017758
```

Where:

```
Hr RT LSE Load Ratio Sh: LSE, Exp, WT = .017758 385 / \{21,100 + 405 + 175\}
```



Summary

- A <u>credit</u> to LSEs, against uplift charges, resulting from a charge imposed on Market Participants when a transaction fails checkout due to Market Participant action
 - Based on RT Load Ratio Share
 - Calculated on Hourly Level

LSE – Financial Impact Credit Allocation Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Financial Impact Credit \$
 - Hourly Bill Code 620
 - Daily Bill Code 819
- DSS Corporate Report
 - Settlement Details- Load Serving Entity Financial Impact Credit



Load Serving Entity Other Settlement Allocations

Settlement Name	Settlement Description	Load Ratio Share
LRR I-R3 and LRR I-R5	Charge intended to recover the costs of payments to suppliers pursuant to the incremental cost recovery for units that responded to either LRR I-R3 or LRR I-R5	Transmission District Wide
DADRP Allocation to LSE	Designed to recover, through allocations to LSEs, NYISO's payments made to DADRP customers	Super Zone Wide
NTAC Charge*	Charge intended to cover NYPA's transmission revenue requirements	Based on Actual RT MWs
Non-NYISO Facilities – Ramapo PAR	Charge intended to cover NYISO's monthly payments to the owners of facilities needed for economic and reliable operation of NYS Transmission System	NYISO Wide
Non-NYISO Facilities – Station 80 Cap Bank	Charge intended to cover NYISO's monthly payments to the owners of facilities needed for economic and reliable operation of NYS Transmission System	NYISO Wide



- Settlement Name
 - LRR I-R3 & LRR I-R5 (Minimum Oil Burn)
 - DADRP Allocation to LSE
 - NTAC Charge
 - Non-NYISO Facilities
 - Ramapo Par
 - Station 80 Cap Bank



LSE I-R3 & I-R5 Description

 A charge intended to recover the costs of payments to suppliers pursuant to the incremental cost recovery for units that responded to either LRR I-R3 or LRR I-R5.



- Settlement Eligibility
 - LSEs will receive a charge for LRR I-R3 or LRR I-R5 (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets and
 - LSE is located in the Consolidated Edison Transmission District for LRR I-R3 or the Long Island Power Authority District for LRR I-R5
 - ***Note***
 - At this time, LRR I-R5 units choose to reflect their costs in their reference level bids



Settlement Determinants

- Interval Start Day (Eastern)
- Day RT LSE Load (MWh)***
- Day Transmission Dist Load (MWh)
- Day Marg Restor MOB Credit to PS (\$)

***Only LSE Load in Transmission District



- Settlement Intermediates
 - N/A

- Settlement Results
 - Day Marg Restor MOB StImnt: LSE (\$)



Settlement Algorithm

```
Day Marg Restor MOB StImnt: LSE ($) = {Day Marg Restor MOB Credit to PS ($) * (Day RT LSE Load (MWh)/ Day Transmission Dist Load (MWh)} * (-1)
```



Summary

- A charge intended to recover the costs of payments to suppliers pursuant to the incremental cost recovery for units that responded to either LRR I-R3 or LRR I-R5.
 - Based on Actual RT Load Withdrawal for given TO District
 - Calculated on Daily Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8.1.6 (Appendix M)
- Advisory Billing File
 - Ancillary Services
 - Margin Restoration (MOB) Charge \$
 - Daily Bill Code 839



- Settlement Name
 - LRR I-R3 & I-R5 (Minimum Oil Burn)
 - DADRP Allocation to LSE
 - NTAC Charge
 - Non-NYISO Facilities
 - Ramapo Rar
 - Station 80 Cap Bank



- LSE Day Ahead Demand Response (DADRP)
 Allocation Description
 - Designed to recover, through allocations to LSEs, NYISO's payments made to DADRP customers



- Settlement Eligibility
 - LSEs will receive a charge for DADRP Allocation (\$) if all exist:
 - LSE purchased load in RT Market within a particular Super Zone
 - Day RT LSE Load: West SprZn (MW) > 0 or
 - Day RT LSE Load: East SprZn (MW) > 0 or
 - Day RT LSE Load: ConEd SprZn (MW) > 0 or
 - Day RT LSE Load: LI SprZn (MW) > 0
 - Day Total NYISO DADRP Cost (\$) > 0
 - Across all super zones



Settlement Determinants

- Day DADRP Cost: West SprZn (\$)
- Day DADRP Cost: East SprZn (\$)
- Day DADRP Cost: ConEd SprZn (\$)
- Day DADRP Cost: LI SprZn (\$)

Day Total NYISO DADRP Cost (\$)



Settlement Determinants

- Day RT LSE Load: West SprZn (MWh)
- Day RT LSE Load: East SprZn (MWh)
- Day RT LSE Load: ConEd SprZn (MWh)
- Day RT LSE Load: LI SprZn (MWh)
- Day RT Total Load: West SprZn (MWh)
- Day RT Total Load: East SprZn (MWh)
- Day RT Total Load: ConEd SprZn (MWh)
- Day RT Total Load: LI SprZn (MWh)



Settlement Determinants

- Day Allocation Factor: West SprZn
- Day Allocation Factor: East SprZn
- Day Allocation Factor: ConEd SprZn
- Day Allocation Factor: LI SprZn

- Day Allocation Factor: NYISO
- Day Total NYISO RT LSE Load (MW)



- Settlement Intermediates
 - Day Cost Alloc Ratio: West SprZn
 - Day Cost Alloc Ratio: East SprZn
 - Day Cost Alloc Ratio: ConEd SprZn
 - Day Cost Alloc Ratio: LI SprZn

Settlement Results

Day DADRP StImnt: LSE (\$)



Settlement Algorithm

```
Day DADRP Stimnt: LSE ($) =

Day Cost Alloc Ratio: West SprZn * {Day RT LSE Load: West SprZn (MWh) /
Day RT Total Load:West SprZn (MWh)} +

Day Cost Alloc Ratio: East SprZn * {Day RT LSE Load: East SprZn (MWh) /
Day RT Total Load: East SprZn (MWh)} +

Day Cost Alloc Ratio: ConEd SprZn * {Day RT LSE Load: ConEd SprZn (MWh) /
Day RT Total Load ConEd SprZn (MWh)} +

Day Cost Alloc Ratio: LI SprZn * {Day RT LSE Load: LI SprZn (MWh) /
Day RT Total Load: LI SprZn (MWh)}
```



Summary

- Designed to recover, through allocations to LSEs, NYISO's payments made to DADRP customers
 - Determined according to
 - LSEs Super Zone Load Ratio Share
 - Total DADRP Costs by Super Zone

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Sections 6.1-6.1.15
- Accounting and Billing Manual
 - Section 8
- Advisory Billing File
 - Ancillary Services
 - Demand Response Program Uplift \$
 - Daily Bill Code 814
- DSS Corporate Report
 - Settlement Details- Load Serving Entity Residuals



Settlement Name:

- LRR I-R3 & I-R5 (Minimum Oil Burn)
- DADRP Allocation to LSE
- NTAC Charge
- Non-NYISO Facilities
 - Ramapo Rar
 - Station 80 Cap Bank



LSE Other Settlement Allocations

- LSE NYPA Transmission Adjustment Charge (NTAC) Description
 - A charge intended to cover NYPA's transmission revenue requirements



- Settlement Eligibility
 - LSEs and ESRs will receive a charge for NTAC (\$) if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Including Import and Internal Bilateral Transaction energy, purchased from 3rd parties



Settlement Determinants

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



- Settlement Intermediates
 - N/A

- Settlement Results
 - Hr NTAC StImnt: LSE (\$)



Settlement Algorithm

```
Hr NTAC StImnt: LSE ($) = {Hr NTAC Rate ($/MWh) * Hr RT LSE Load (MWh)} * (-1)
```



- Settlement Scenario
 - 'LSE A' purchased energy, meeting load requirements
 - 425 MWh in HB 04 from NYISO Energy Market
 - The applicable monthly NTAC Rate is \$0.58/MWh



Settlement Example

```
Hr NTAC Stlmnt: LSE ($) = $ - 246.50 {$0.58 * 425} * (-1)
```



Summary

 A charge intended to cover NYPA's transmission revenue requirements.

Based on Actual RT Load Withdrawal

Calculated on Hourly Level

Settlement Reference Material:

- Tariff Reference
 - OATT
 - Attachment H, Section 14
- Accounting and Billing Manual
 - Appendix K
- Advisory Billing File
 - Ancillary Services
 - NTAC Charge \$
 - Hourly Bill Code 604
 - Daily Bill Code 803
- DSS Corporate Report
 - Settlement Details- Load Serving Entity NTAC



LSE Other Settlement Allocations

Settlement Name

- LRR I-R3 & I-R5 (Minimum Oil Burn)
- DADRP Allocation to LSE
- NTAC Charge
- Non-NYISO Facilities
 - Ramapo Rar
 - Station 80 Cap Bank



LSE Other Settlement Allocations

- Non-NYISO Facilities: Ramapo Par & Station 80 Cap Bank Charge Description
 - A charge intended to cover NYISO's monthly payments to the owners of facilities needed for economic and reliable operation of NYS Transmission System.
 - Payments Presently issued to...
 - Con Ed Co. of NY for Phase Angle Regulators @
 Ramapo interconnection between NYISO & PJM
 - RG&E Corp. for Capacitor Bank @ Station 80



Settlement Eligibility

- LSEs will receive a charge for Ramapo Par
 & Station 80 Cap Bank if:
 - LSE purchased energy to meet their load requirements from the NYISO Energy markets
 - Including Import and Internal Bilateral Transaction energy, purchased from 3rd parties.



Settlement Determinants

- Hr RT LSE Load (MWh)
- Hr Total NYISO RT LSE Load (MWh)
- Hr Total NYISO RT Export Trans (MWh)
- Hr Total NYISO RT WT Trans (MWh)
- Hr Ramapo PAR Cost: LSE (\$)
- Hr Station 80 Cost: LSE (\$)



- Settlement Intermediates
 - Hr RT LSE Ld Ratio Sh: LSE, Exp, WT

- Settlement Results
 - Hr Ramapo PAR StImnt: LSE (\$)
 - Hr Station 80 StImnt: LSE (\$)



Settlement Algorithm

```
Hr Ramapo PAR StImnt: LSE ($) =
Hr Ramapo PAR Cost: LSE ($) * Hr RT LSE Ld Ratio Sh: LSE, Exp, WT * (-1)
```

```
Hr Station 80 StImnt: LSE ($) =
Hr Station 80 Cost: LSE ($) * Hr RT LSE Ld Ratio Sh: LSE, Exp, WT * (-1)
```

Where:

Hr RT LSE Ld Ratio Sh: LSE, Exp, WT =
Hr RT LSE Load (MWh) / {Hr Total NYISO RT LSE Load (MWh) + Hr Total
NYISO RT Export Trans (MWh) + Hr Total NYISO RT WT Trans (MWh)}



- Summary
 - A charge intended to cover NYISO's monthly payments to the owners of facilities needed for economic and reliable operation of NYS Transmission System.
 - Payments Presently issued to...
 - Con Ed Co. of NY for Phase Angle Regulators @ Ramapo interconnection between NYISO & PJM
 - RG&E Corp. for Capacitor Bank @ Station 80

LSE Ramapo Par & Station 80 Charge Settlement Reference Material:

- Tariff Reference
 - OATT
 - Rate Schedule 1, Section 6.1.6
- Accounting and Billing Manual
 - Appendix K
- Advisory Billing File
 - Ancillary Services
 - Ramapo Par
 - Hourly Bill Code 639
 - Daily Bill Code 836
 - Station 80 Cap Bank
 - Hourly Bill Code 640
 - Daily Bill Code 838
- DSS Corporate Report
 - Settlement Details Load Serving Entity Ancillary Services