### Acronyms

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Five Minute Calculations

$$
\text{Commitment MW} = \text{MIN}[\text{RT Eco Min}, \text{Energy Quantity}] - \text{MIN}[\text{Self-Scheduled MW}, \text{Self-Dispatch MW}, \text{RT Eco Min}, \text{Energy Quantity}]
$$

$$
\text{Economic Dispatch MW} = \text{MIN}[\text{EDP MW}, \text{Energy Quantity}] - \text{MAX}[\text{Commitment MW}, \text{MIN}[\text{Self-Dispatch MW}, \text{EDP MW}, \text{Energy Quantity}]]
$$

$$
\text{Dispatch OOM MW} = \text{MIN}[\text{DDP MW}, \text{Energy Quantity}^*] - \text{MAX}[\text{EDP MW}, \text{MIN}[\text{Self-Dispatch MW}, \text{DDP MW}, \text{Energy Quantity}^*]]
$$

* If ESD is regulating, then Energy Quantity is not used in the calculation
RT NCPC Generator Commitment OOM MRT Credit
ISO New England Calculation Summary

Credit Calculation for Minimum Run Time (MRT) Period

\[
\text{MAX} \left[ \begin{array}{c}
\text{RT NCPC MRT Credit} \\
\text{(Economic, LSCP, SCR, LV VAR, HV VAR, GPA)}
\end{array} \right] \\
\text{MRT Cost for Period} \\
(\text{\$}) \\
\text{MRT Revenue for Period} \\
(\text{\$}) \\
\text{MRT RRPOC Credit for Period} \\
(\text{\$}) \\
\text{MRT DLOC Credit for Period} \\
(\text{\$}) \\
0
\right]
\]

Five Minute Calculations

\[
\text{Five Minute RT Cost} \\
(\text{\$})* \\
\text{Five Minute RT Revenue} \\
(\text{\$})*
\]

\[
\left( \begin{array}{c}
(\text{Commitment MW} \times \text{Offer Price (EOC/EOD)} (\text{\$})) \\
+ (\text{Economic Dispatch MW} \times \text{Offer Price (EOD)} (\text{\$}))
\end{array} \right) + \\
\left( \begin{array}{c}
\text{Self-Dispatch MW}, \text{EDP MW}, \text{Energy Quantity} \times \text{Energy Offer Floor Price (EOC/EOD)} (\text{\$})
\end{array} \right) / 12 + \\
\left( \begin{array}{c}
\text{Five Minute No Load Fee (EOC/EOD)} (\text{\$}) \\
\text{Five Minute Start-Up Fee (EOC/EOD)} (\text{\$})
\end{array} \right)
\]

* For any interval that corresponds to a Day-Ahead cleared hour, the Start-Up Fee, No Load Fee, and Energy price parameter for output up to the Resource’s Economic Minimum Limit shall be set to $0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource’s Economic Minimum Limit shall be set to $0 for the interval if such revenue is less than $0.
Credit Calculation for Post MRT Period

\[
\text{RT NCPC Post MRT Credit}
\]

\[
(\text{Economic, LSCP, SCR, LV VAR, HV VAR, GPA})
\]

\[
\text{Maximum Potential Net Revenue for Post MRT Period}
\]

\[
\text{Net Revenue for Post MRT Period}
\]

\[
\max \left\{ \max_{j \in (N,T)} \sum_{t=N}^{j} \left( \text{Five Minute RT Revenue} \cdot (\text{\$}) + \text{Five Minute RRPOC Credit} \cdot (\text{\$}) + \text{Five Minute DLOC Credit} - \text{Five Minute RT Cost} \cdot (\text{\$}) \right) \right\}, 0
\]

\[
\sum_{t=N}^{T} \left( \text{Five Minute RT Revenue} \cdot (\text{\$}) + \text{Five Minute RRPOC Credit} \cdot (\text{\$}) + \text{Five Minute DLOC Credit} - \text{Five Minute RT Cost} \cdot (\text{\$}) \right)
\]

Where:

\( (t, T) = \) Interval of contiguous five minute intervals contained in the settlement period.

\( N = \) Interval after the last interval of the minimum run time.

\( j = \) Integer for intervals between the interval after the last interval of the minimum run time and the end of the settlement period.

\( \in = \) Is element of

* Five Minute RT Revenue and Five Minute RT Cost calculations are shown on the RT NCPC Generator Commitment OOM MRT Credit calculation summary.
Credit Calculation for Intervals Dispatched Above EDP

\[
\text{RT NCPC Dispatch OOM Credit} = \text{MAX}\left[\left(\text{Dispatch OOM MW} \times \text{Offer Price (EOD)}\right) - \text{MIN}\left[\text{Self-Dispatch MW}, \text{DDP MW}, \text{Energy Quantity} \times \text{Energy Offer Floor Price}\right]\right] \times \text{RT LMP} \right) / 12
\]

* If ESD is regulating, then Energy Quantity is not used in the calculation.

Five Minute Calculations

\[
\text{MAX} \left[ \left( \frac{\text{Economic Dispatch Point Energy Profit (5)}}{12} \right) - \left( \frac{\text{Economic Dispatch Point Reserve Revenue (5)}}{12} \right) \right]
\]

\[
\text{RT NCPC DLOC Credit (5)} + \left( \frac{\text{Actual Output Energy Profit (5)}}{12} \right) - \left( \frac{\text{RT Reserve Credit (5)}}{12} \right)
\]

\[
\text{RT NCPC RRPOC Credit (5)} - \left( \frac{\text{RRPOC Credit (5)}}{12} \right)
\]

\[
\text{MAX}[\text{Energy Quantity (**), 0}]
\]

* From the Reserve Market Settlement.
** Determined by the ISO's Locational Marginal Price Program
*** If ESD is regulating, then the Energy Quantity is not used in the calculation

RT NCPC Generator Cancelled Start Credit
ISO New England Calculation Summary

**Cancelled Start RT NCPC Credit**
(Economic, LSCP, LV VAR, HV VAR, SCR, GPA)

\[ \text{Start up Fee (EOC/EOD)} \times \frac{\text{Completed Notification Time (hours)}}{\text{Notification Time (hours)}} \]

\[ \text{MIN} [\text{Cancelled Time} - \text{Notification Start Time}, \text{Notification Time (hours)}] \]

\[ \text{Scheduled Start Time} - \text{Start-up Time (hours)} - \text{Notification Time (hours)} \]

**Fast Start Generators**

Fast Start Hourly Shortfall NCPC Credit
(Economic, LSCPR, LV VAR, HV VAR, SCR)

\[ \text{MAX} \left[ \begin{array}{c}
\text{DA Cleared MW} \\
\text{RT Eco Max}
\end{array} \right] 
\times \left( \begin{array}{c}
\text{RT LMP} \\
\text{DA LMP}
\end{array} \right) - \left( \begin{array}{c}
\text{DA LMP} \\
\text{DA LMP}
\end{array} \right) , 0] \]

\[ \text{MIN} \left[ \begin{array}{c}
\text{RT Eco Max} \\
\text{Hourly LEG Limit}
\end{array} \right] \]

**Settlement Period Calculation**

**Non-Fast Start Generators**

\[ \text{MAX} \left[ \begin{array}{c}
\text{RT NCPC Hourly Shortfall Credit} \\
\text{(Economic, LSCPR, SCR, LV VAR, HV VAR)}
\end{array} \right] , 0] + \text{MAX} \left[ \begin{array}{c}
\text{RT NCPC Above Economic Min Hourly Shortfall Credit} \\
\text{(Economic, LSCPR, SCR, LV VAR, HV VAR)}
\end{array} \right] , 0] \]

**Hourly Calculation**

\[ \text{MAX} \left[ \begin{array}{c}
\text{DA Eco Min} \\
\text{RT LMP}
\end{array} \right] - \text{DA LMP} \]

\[ \times \left( \begin{array}{c}
\text{RT LMP} \\
\text{DA LMP}
\end{array} \right) - \left( \begin{array}{c}
\text{DA LMP} \\
\text{DA LMP}
\end{array} \right) \]

\[ \text{MIN} \left[ \begin{array}{c}
\text{DA Cleared MW} \\
\text{RT Eco Max}
\end{array} \right] , \text{Hourly LEG Limit} \]

* If prices were increased on the RT Effective Offer for Dispatch then the DA Economic Min MW is used for the Eligible Quantity for non-fast start generators, and zero is used for fast start generators.
Settlement Period Calculation

\[
\text{MAX} \left[ \left( \text{Settlement Period Optimized Output Revenue} \times \text{Optimized Output Remaining Energy Quantity} \right) + \left( \text{Estimated Avoided Replacement Cost} \right) \right] - \left( \text{Settlement Period Actual Revenue} + \text{Actual Avoided Replacement Cost} \right) \geq 0
\]

Hourly Calculation

\[
\text{Hourly Optimized Energy Revenue} \times \text{RT LMP} \times \text{Optimized Energy Output Quantity}
\]

Five Minute Calculation

\[
\left( \text{Energy Quantity} \times \text{RT LMP} \right) / 12
\]
**Note:** The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

### RT NCPC Non-LEG Generator Posturing Credit

ISO New England Calculation Summary

![Diagram](RT_NCPC_Calculation_Summary.vsd)

**MAX [(** \[\]

- Hourly Optimized Energy Revenue ($)
- Hourly Optimized Cost ($)

- (Hourly Actual Energy Revenue ($) - Hourly Actual Cost **) **0)

**Five Minute Calculation**

\[
\frac{(\text{Energy Quantity} \times \text{RT LMP} (\text{s}))}{12}
\]

- Actual Energy Cost ($)
- Five Minute No Load Fee (EOD) ($)
- Five Minute Start-Up Fee (EOD) ($)

**- If postured to remain on line but reduce output, the lesser of the EOC and EOD fee is used. If postured off line, the fee from the EOP is used.

**- The hourly actual offer cost for a resource postured offline is zero.**

ISO New England Calculation Summary

```
Hourly RT NCPC Import Credit (Purchases) ($)
```

\[ \text{MAX} \left[ \text{Hourly RT Offer} \times \text{RT Offer Price} - \text{Hourly RT Revenue} \right] , 0 \]

Five Minute Calculation

```
Eligible Quantity \times \text{RT Offer Price} ($) / 12
```

\[ \text{MAX} \left[ \text{RT Scheduled MW} - \text{DA Cleared MW} \right] , 0 \]

\[ \text{MAX} \left[ \text{RT Scheduled MW} - \text{DA Cleared MW} \right] , 0 \]

* DA Cleared MW are zero if the transaction price was revised in the re-offer period.

**ISO New England Calculation Summary**

**Hourly RT NCPC Export Credit (Sales)**

\[
\text{MAX} \left[ \text{Hourly RT Cost} \times \right. \left. \text{ Eligible Quantity} \right] - \text{Hourly RT Bid}_{\text{ }}^{,0}
\]

**Five Minute Calculation**

\[
\left( \frac{\text{Five Minute RT Offer}}{12} \right) / \left( \text{RT LMP} \times \text{ Eligible Quantity} \right) - \left( \text{DA Cleared MW} \times \text{ RT Bid Price} \right)_{\text{ }}^{,0}
\]

* DA Cleared MW are zero if the transaction price was revised in the re-offer period.
Five Minute Calculations

\[
\text{Commitment MW} = \min(\text{RT Min Consumption MW}, \text{Energy Quantity}^*) - \text{Self-Scheduled MW}
\]

\[
\text{Economic Dispatch MW} = \min(\text{EDP MW}, \text{Energy Quantity}^*) - \text{Commitment MW}
\]

\[
\text{Dispatch OOM MW} = \max(0, \min(\text{DDP MW}, \text{Energy Quantity}^*) - \text{EDP MW})
\]

* If ESD is regulating, then Energy Quantity is not used in the calculation.
Credit Calculation for Minimum Run Time (MRT) Period

\[
\text{RT NCPC MRT Credit} = \text{MAX} \left\{ \text{MRT Cost for Period}, 0 \right\} - \text{MRT Bid for Period} - \text{MRT RRPOC Credit for Period} - \text{MRT DLOC Credit for Period}
\]

Five Minute Calculations

\[
\text{Five Minute RT Cost} = \left\{ \left( \text{Commitment MW} + \text{Economic Dispatch MW} \right) \times \text{RT LMP} \right\} / 12
\]

\[
\text{Five Minute RT Bid} = \left\{ \left( \text{Commitment MW} \times \text{Bid Price (EOC/EOD/EOWP)} \right) + \left( \text{Economic Dispatch MW} \times \text{Bid Price (EOD/EOWP)} \right) + \left( \text{Self-Scheduled MW} \times \text{Energy Offer Cap Price} \right) \right\} / 12
\]

* For any interval that corresponds to a Day-Ahead cleared hour, the Start-Up Fee, No Load Fee, and Energy price parameter for output up to the Resource’s Economic Minimum Limit shall be set to $0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource’s Economic Minimum Limit shall be set to $0 for the interval if such revenue is less than $0.
Credit Calculation for Post MRT Period

\[
\text{Max} \left\{ \text{Max} \sum_{j \in (N,T)}^j \left( \text{Five Minute RT Bid} \times \text{(\$)} + \text{Five Minute RRPOC Credit} \times \text{(\$)} + \text{Five Minute DLOC Credit} \times \text{(\$)} - \text{Five Minute RT Cost} \times \text{(\$)} \right), 0 \right\}
\]

Where:
- \((t, T)\) = Interval of contiguous five minute intervals contained in the settlement period.
- \(N\) = Interval after the last interval of the minimum run time.
- \(j\) = Integer for intervals between the interval after the last interval of the minimum run time and the end of the settlement period.
- \(\in\) = Is element of

* Five Minute RT Bid and Five Minute RT Cost calculations are shown on the RT NCPC DARD Commitment OOM MRT Credit calculation summary.
Credit Calculation for Intervals Dispatched Above EDP

\[
\text{RT NCPC Dispatch OOM Credit (Economic, LV VAR, Posturing, GPA)} \\
\text{MAX} \left[ \frac{(\text{Dispatch OOM MW} \times \text{RT LMP})}{12} - \frac{(\text{Dispatch OOM MW} \times \text{Bid Price })}{12}, 0 \right]
\]
Five Minute Calculations

RT NCPC DARD DLOC Credit

RT NCPC DARD RRPOC Credit

MAX [ \(-\frac{\text{RT Reserve TMSR Credit}}{12}\) + \(\frac{\text{Consumption Energy Bid}}{12}\)/12 + \(\frac{\text{Consumption Energy Cost}}{12}\) - \(\text{RT Reserve Credit}\) - \(\text{RRPOC Credit}\), 0]}

RT Reserve TMSR Credit*

RT Reserve Credit

RRPOC Credit

\(\text{MAX}\left[\frac{\text{Energy Quantity}}{\text{NCPC DDP}} \times \text{RT LMP}\right]\), 0]

\(*\) From the Reserve Market Settlement.

** Determined by the ISO’s Locational Marginal Price Program

*** If ESD is regulating, then the Energy Quantity is not used in the calculation


ISO New England Calculation Summary

**RT NCPC DARD Hourly Shortfall Credit**

DARD Hourly Shortfall NCPC Credit (Economic) ($) 

\[ \text{MAX}[\text{Eligible Quantity} \times (\text{DA LMP} - \text{RT LMP}), 0] \]

\[ \text{MIN}[\text{DA Cleared MW}, \text{RT Max Consumption Limit}] \]
Five Minute Calculations

\[
\text{Energy Quantity} = (\text{Demand Reduction} \times) + \text{Net Supply} ** - \text{Commitment MW} - \text{EDP MW}
\]

\[
\text{MIN}[\text{RT Min Reduction Limit}, \text{Energy Quantity}] - \text{Commitment MW}
\]

\[
\text{MIN}[\text{EDP MW}, \text{Energy Quantity}] - \text{Commitment MW}
\]

\[
\text{MIN}[\text{Dispatch OOM MW}, \text{Energy Quantity}] - \text{EDP MW}
\]

*The cost or revenue for the portion of Energy Quantity MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055).

**The cost or revenue for the portion of Energy Quantity MWs that is associated with Net Supply will be not increased by the Pool Distribution Loss Factor.
Credit Calculation for Minimum Run Time (MRT) Period

RT NCPC MRT Credit (Economic, LSCP, SCR, DRPA) (8)

MAX [MRT Cost for Period (8) - MRT Revenue for Period (8) - MRT RRPOC Credit for Period (8) - MRT DLOC Credit for Period 0]

Five Minute Calculations

Five Minute RT Cost * (8)

Five Minute RT Revenue ** (8)

(Commitment MW *** + Economic Dispatch MW *** ) x RT LMP (9) / 12 + Five Minute Dispatch Excess Revenue (9) + Ramp On Revenue (9)

Five Minute Dispatch Excess Revenue (9)

Five Minute Interruption Cost (EOC/EOD) (5)

* For any interval that corresponds to a Day-Ahead cleared hour, the Interruption Cost and Energy price parameter for output up to the Resource’s Minimum Reduction Limit shall be set to 0 for the hour.

** For any interval that corresponds to a Day-Ahead cleared hour, the revenue for output up to the Resource’s Minimum Reduction Limit shall be set to 0 for the interval if such revenue is less than 0.

*** The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055). The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.
Credit Calculation for Post MRT Period

$$\text{Maximum Potential Net Revenue for Post MRT Period} = \max \left( \sum_{j \in (N,T)} (\text{Five Minute RT Revenue} \times (t, T)), 0 \right) - \text{Net Revenue for Post MRT Period}$$

Where:
- \((t, T)\) = Interval of contiguous five minute intervals contained in the settlement period.
- \(N\) = Interval after the last interval of the minimum run time.
- \(j\) = Integer for intervals between the interval after the last interval of the minimum run time and the end of the settlement period.
- \(-\) Is element of

* Five Minute RT Revenue and Five Minute RT Cost calculations are shown on the RT NCPC Generator Commitment OOM MRT Credit calculation summary.
Credit Calculation for Intervals Dispatched Above EDP

\[
\text{MAX} \left[ \frac{(\text{Dispatch OOM MW} \times \text{Offer Price (EOD)})}{12} - \frac{(\text{Dispatch OOM MW} \times \text{RT LMP})}{12} \right] = 0
\]

*The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055). The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.*

RT NCPC DRR DLOC and RRPOC Credit
ISO New England Calculation Summary

Five Minute Calculations

\[
\text{MAX} \left[ \left( \frac{\text{EDP MW} *** \times \text{RT LMP} (\$) - \text{EDP MW} *** \times \text{Offer Price} (\$)}{12} \right) + \left( \frac{\text{RT Reserve TMOR MW} *** \times \text{RT Reserve TMOR CP} (\$) - \text{RT Reserve TMSR MW} *** \times \text{RT Reserve TMSR CP} (\$)}{12} \right) \right]
\]

\[
\frac{\text{Actual Output Energy \_ Revenue (\$)} - \text{Actual Output Energy \_ Cost (\$)}}{12}
\]

\[
\text{MAX} \left[ \text{Energy *** Quantity, NCPC DDP} \right] \times \text{RT LMP (\$)}
\]

* From the Reserve Market Settlement.
** Determined by the ISO’s Locational Marginal Price Program
*** The cost/revenue for the portion of MWs that is associated with Demand Reductions will be increased by the Pool Distribution Loss Factor (current value is 0.055).
The cost/revenue for the portion of MWs that is associated with Net Supply will not be increased by the Pool Distribution Loss Factor.
**Note:** The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

### RT NCPC DRR Cancelled Start Credit

<table>
<thead>
<tr>
<th>ISO New England Calculation Summary</th>
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#### Cancelled Start RT NCPC Credit (Economic, SCR, LSCPR, DRPA)

![Diagram](https://via.placeholder.com/150)

- **Interruption Cost (EOC/EOD)** \(\frac{X}{\text{hours}}\)
- **Completed Notification Time**
- **Notification Time**

\[
\text{MIN} [\text{Cancelled Time} - \text{Notification Start Time}, \text{Notification Time}] - \text{Scheduled Start Time} - \text{Start-up Time}
\]
**Note:** The relevant ISO New England Markets, Services and Transmission Tariff and the relevant Market Manuals, Operating Procedures and Planning Procedures shall govern.

**RT NCPC DRR Hourly Shortfall Credit**

ISO New England Calculation Summary

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**Fast Start DRR**

Fast Start Hourly Shortfall NCPC Credit (Economic, LSCPR, SCR)

\[ \text{MAX} [\text{Eligible Quantity } \times (\text{RT LMP} - \text{DA LMP})], 0] \times (1 + \text{Pool Distribution Loss Factor } **)

\[ \text{MIN}[\text{DA Cleared MW}, \text{RT Max Reduction}]

**Non-Fast Start DRR**

\[ \text{RT NCPC Above Min Reduction Hourly Shortfall Credit (Economic, LSCPR, SCR)}

\[ \text{MAX}[0, (\text{Eligible Quantity } \times (\text{DA Min Reduction} - \text{RT LMP})) \times (\text{DA LMP})], 0] \times (1 + \text{Pool Distribution Loss Factor } **)

\[ \text{MIN}[\text{DA Cleared MW}, \text{RT Max Reduction}]

* If prices were increased on the RT Effective Offer for Dispatch then the DA Min Reduction Limit MW is used for the Eligible Quantity for non-fast start demand response resource, and zero is used for fast start demand response resource.

** Current value is 0.055

---

Most recent changes are shown in red.

**Daily Calculations**

\[
\text{RT Economic NCPC Charge} = \left( \frac{\text{Economic NCPC Credits} \times \text{Participant Total RT Deviation}}{\text{Total Pool Deviations}} \right) + \text{Net Reallocation Credit/Charge}
\]

**Hourly Calculation**

\[
\begin{align*}
\text{Participant RT Increment Deviation} & \quad + \quad \text{Participant RT Import Deviation}^* \quad + \quad \text{Participant RT Demand Reduction Deviation} \quad + \quad \text{Participant RT Load Obligation Deviation}^* \\
\text{RT Increments Deviations} & \quad + \quad \text{Scheduled Imports} \quad - \quad \text{DA Cleared Imports} \\
\text{Not Following Dispatch Demand Reduction Deviation} & \quad + \quad \text{Hourly RT Load Obligation Deviation}^* \quad + \quad \text{RT DARD Deviation} \quad + \quad \text{Self Schedule Deviation} \\
\text{RTLO} & \quad - \quad \text{DALO} \quad - \quad \text{DARD RT MW} \quad - \quad \text{DA Cleared MW}
\end{align*}
\]

* ISO Curtailed External Transaction and Coordinated External Transactions are excluded from these values.

### RT NCPC Economic Reallocation Credit/Charge

#### ISO New England Calculation Summary

**Daily Calculations**

- **Daily Reallocation Credit**
- **Daily Reallocation Charge**

**Hourly Calculation**

- **Positive Deviation Reallocation Credit**
- **RT NCPC Economic Charge Rate**

\[
\text{Positive Deviation MW for Reallocation} \times \frac{(\text{RT NCPC Deviation} + \text{Net Load and Export Deviations}) \text{MIN}[\ldots, 0]}{\text{All Zones Net Load and Export Deviations}}
\]

**Load Zone Calculation**

- **Net Load and Export Deviation**

For All Affected Load Zones

- **Net Load and Export RTLO**

**Pool Net Load and Export RTLO**

**Participant Net Load and Export RTLO**

**Pool Daily Reallocation Credits**

**Hourly RTLO Reallocation Charge**

**Export RTLO**

**Exempt DARD RTLO**

**RTLO**
Daily Calculations

\[
\text{RT LSCPR NCPC Charge per RR} \times \left( \frac{\text{Participant RT RR LSCPR NCPC Load Obligation (MW)}}{\text{Pool RT LSCPR NCPC Credits per RR (S)}} \right) \div \left( \frac{\text{Pool Daily RT RR LSCPR NCPC Load Obligation (MW)}}{} \right)
\]

- Participant RT RR Load Obligation for CA* (MW)
- Participant RT RR External Sale Load Obligation (MW)
- Participant RT RR DARD RT Load Obligation Reduction (MW)

* Excludes Coordinated External Transactions
RT NCPC Minimum Generation Emergency Charges

ISO New England Calculation Summary

Minimum Generation Emergency Period Calculations

RT MGE NCPC Charge

\[ \text{RT MGE NCPC Credits} \times \left( \frac{\text{Participant RT NCPC Generation Obligation}}{\text{Participant RT NCPC Demand Reduction Obligation}} \right) \]

\[ \text{Pool RT NCPC} + \text{Pool RT NCPC Demand Reduction Obligation} \]

Pool RT MGE NCPC Credits

Participant RT NCPC Generation Obligation

Participant RT NCPC Demand Reduction Obligation

Participant RT NCPC Generation Obligation

Participant Positive RT Demand Reduction Obligation for CA*

Participant RT Exempt Demand Reduction Obligation for CA*

Energy Quantity

DDP MW

EDP MW

Hourly Calculation

RT Exempt Generation Obligation

/12

Five Minute Calculation

\[ \text{MAX} \left[ \text{MIN} \left[ \text{Energy Quantity}, \text{DDP MW} \right], \text{EDP MW} \right], 0 \]

\[ \text{MAX} \left[ \text{MIN} \left[ \text{Energy Quantity}, \text{DDP MW} \right], \text{EDP MW} \right], 0 \]

* Excludes Coordinated External Transactions

Daily Calculations

\[
\text{RT Generator NCPC Performance Audit Charge} \times \frac{\text{Pool RT GPA NCPC Credits}}{\text{Participant RT GPA NCPC Load Obligation}} \div \text{Pool RT GPA NCPC Load Obligation} + \text{Participant RT Load Obligation for CA*} \div \text{Participant RT DARD Load Obligation Reduction}
\]

* Excludes Coordinated External Transactions
Daily Calculations

\[
\text{Participant RT Posturing NCPC Charge} \times (\text{Pool RT Posturing NCPC Credits}) \div (\text{Participant RT Postured NCPC Load Obligation}) + (\text{Participant RT Load Obligation for CA}) + (\text{Participant DARD MW})
\]

* Excludes Coordinated External Transactions
Daily Calculations

\[
\text{RT DLOC NCPC Charge} \times \left( \frac{\text{Pool RT DLOC NCPC Credits}}{\text{Participant RT DLOC NCPC Load Obligation}} \right) + \frac{\text{Participant RT DARD Load Obligation for CA}^*}{\text{Participant RT DARD Load Obligation Reduction}}
\]

* Excludes Coordinated External Transactions
Daily Calculations

\[
\text{RT RRPOC NCPC Charge} = \frac{\text{Pool RT RRPOC NCPC Credits}}{\text{Participant RT RRPOC NCPC Load Obligation}} \times \left( \text{Participant RT Load Obligation for CA} \right)
\]

* Excludes Coordinated External Transactions