## Real-Time Reliability Deployment Ancillary Service Imbalance Amount (Effective Date 6/25/2015)

**Description**

Based on the Real-Time On-Line Reliability Deployment Price Adders, Real-Time On-Line Reserve Price Adders and a Real-Time Off-Line Reserve Price Adders, ERCOT shall calculate Ancillary Service imbalance Settlement, which will make Resources indifferent to the utilization of their capacity for energy or Ancillary Service reserves. The payment or charge to each QSE for the Ancillary Service Imbalance for a given 15-minute Settlement Interval is calculated as follows:

**Calculations**

Calculate the Real-Time Reliability Deployment Ancillary Service Imbalance Amount by QSE and 15-minute Settlement Interval for the Operating Day

= (-1) \* ( \* )

**MWh**

**Real-Time Ancillary Service On-Line Reserve Imbalance for the QSE (RTASOLIMBq)**

**$/MWh**

**Real-Time On-Line Reliability Deployment PRice**

**(RTRDP)**

**$**

**Real Time Reliability Deployment Ancillary Service Imbalance Amount**

**(RTRDASIAMT q)**

Where:

**$/MWh**

**Real-Time On-Line Reliability Deployment Price Adder**

**(RTORDPAy**)

**Resource Node Weighting Factor per interval**

**(RNWFy)**

**$/MWh**

**Real-Time On-Line Reliability Deployment Price**

**(RTRDP)**

= ∑y ( \*

**Duration of SCED interval per Interval**

**(TLMPy)**

**Duration of SCED interval per Interval**

**(TLMPy)**

**Resource Node Weighting Factor per Interval**

**(RNWFy)**

= /∑y

The above variables are defined as follows:

| Variable | Unit | Description | Interval Frequency | Source | Shadow-able |
| --- | --- | --- | --- | --- | --- |
| RTRDASIAMT *q* | $ | *Real-Time Reliability Deployment Ancillary Service Imbalance Amount*—The total payment or charge to QSE *q* for the Real-Time Ancillary Service imbalance associated with Reliability Deployments for each 15-minute Settlement Interval. | *4/hour* | *Calculated* | *Yes* |
| RTASOLIMB *q* | MWh | *Real Time Ancillary Service On-Line Reserve Imbalance for the QSE* ⎯The Real-Time Ancillary Service On-Line reserve imbalance for the QSE *q*, for each 15-minute Settlement Interval. | *4/hour* | *ERCOT* | *No* |
| RTORPA*y* | $/MWh | *Real-Time On-Line Reserve Price Adder per interval*⎯The Real-Time Price Adder for On-Line Reserves for the SCED interval *y*. | *4/hour* | *ERCOT* | *No* |
| TLMP *y* | second | *Duration of SCED interval per interval*⎯The duration of the SCED interval *y*. | *4/hour* |  | *No* |
| RTRDP | $/MWh | *Real-Time On-Line Reliability Deployment Price*⎯The Real-Time price for the 15-minute Settlement Interval, reflecting the impact of reliability deployments on energy prices that is calculated from the Real-time On-Line Reliability Deployment Price Adder. | *4/hour* |  | *No* |
| RTORDPA*y* | $/MWh | *Real-Time On-Line Reliability Deployment Price Adder*⎯The Real-Time Price Adder that captures the impact of reliability deployments on energy prices for the SCED interval *y*. | *4/hour* |  | *No* |
| RNWF *y* | none | *Resource Node Weighting Factor per interval*⎯The weight used in the Resource Node Settlement Point Price calculation for the portion of the SCED interval *y* within the 15-minute Settlement Interval. |  |  |  |
| *y* | none | A SCED interval in the 15-minute Settlement Interval. The summation is over the total number of SCED runs that cover the 15-minute Settlement Interval. |  |  |  |
| *q* | none | A QSE. |  |  |  |