

Settlements Training

Imbalance Energy Offset

Charge #1401

Massih Ahmadi, (916) 608-1265



Purpose for Adjustment

- Established as a public benefit, non-profit corporation, the ISO must maintain revenue neutrality.
- Imbalance Energy Offset is used to offset balances related to settlement of the following charges:
 - CT 4401-Instructed Energy
 - CT 4406-Unaccounted for Energy (UFE)
 - CT 4407-Uninstructed Energy
 - CT 4410-Un-schedule RMR Energy
 - CT 4450-Transmission Loss Obligation



Sources of Neutrality Mismatch related to Imbalance Energy

- Unscheduled flow across Interchanges
- Price differential between Zones due to Inter-zonal Congestion
- UFE Settlement
- Import Deviation vs. Import Transmission Loss Calculation



Settlements Details

- Imbalance Energy is settled on ten minute interval basis
- As such, Imbalance Energy Offset allocation will be allocated on ten minute basis
- Settlement amount pro-rata allocated to metered Load, adjusted export volumes and Metered Sub-System (MSS) net-metered demand.
- CT 1401 details on System Load & Export (allocation base), SC Load & Export, and offset balance (\$), published in Settlements Detail Records

Imbalance Energy Offset Allocation

Equation:

$$\text{Settlement Amount} = \frac{\text{Total amount to be Paid Out or Collected}}{\text{Total ISO Measured Load and Export per trading interval}} * \frac{\text{Total SC Measured Load and Adjusted Exports}}$$

Imbalance Energy Offset Charge/Refund

Example:

Individual SC Load and Export/Interval: 16.43 MWh

Total ISO Load and Exports/Interval: 4652.67 MWh

Revenue to be allocated to all SCs: \$857.29

$$\$3.03 = (\$857.29 / 4,652.67 \text{ MWh}) * 16.43 \text{ MWh}$$

Questions?