

RESOURCE OPTIMIZATION

- DOT Variance Metrics

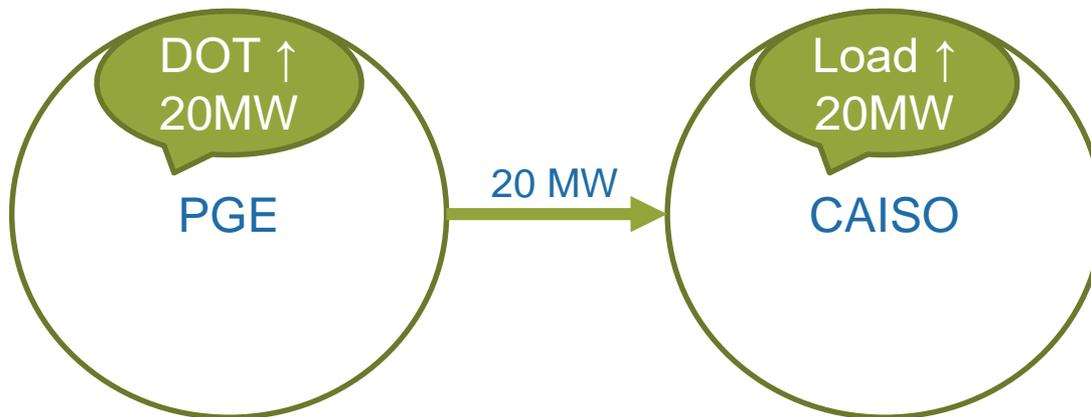
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Resource Optimization in the EIM

- The EIM is a balancing energy market that optimizes generator dispatch within and between Balancing Authority Areas (BAAs) every 15 and 5 minutes.
- The EIM software can detect the supply/demand imbalance and can dispatch available offered replacement generation from the least cost source

✓ Generation + transaction ≈ Load

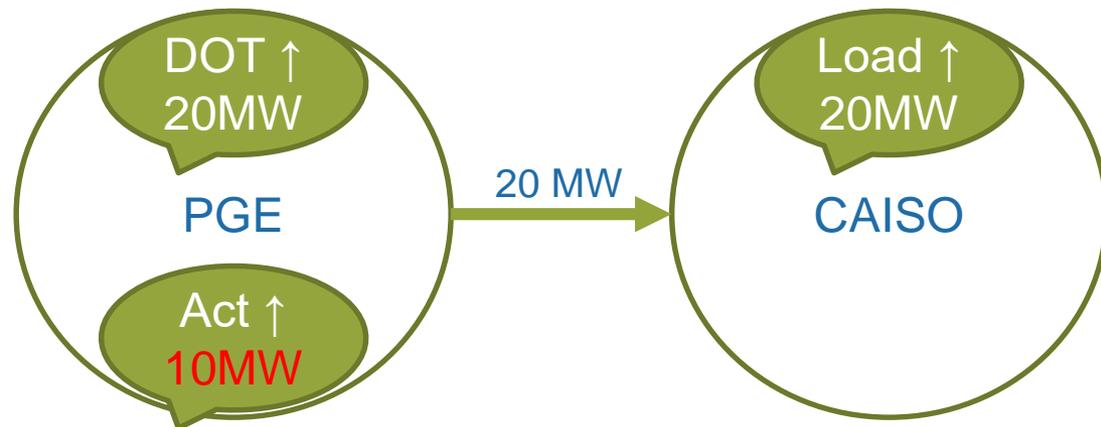


Measuring Performance in the EIM

PGE has spent considerable time to develop the reasonable performance metrics

Business Unit	Before EIM	New - After EIM
Merchant	Trading Vol, Margin, Cost Reduction	EIM Benefits
BAO	CPS1, BAAL	EIM Test Results
Plant	Online Hrs, Unit Trip, O&M	DOT Variance

✓ DOT Variance % = $\text{ABS}(\text{DOT} - \text{Meter}) / \text{DOT}$



Consequences:

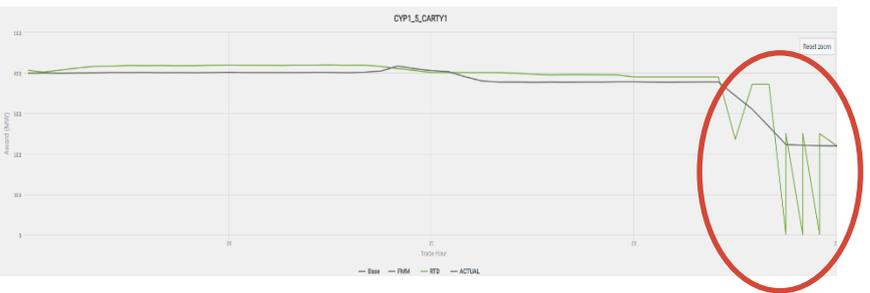
- UIE Imbalance Charge
- Regulating unit may have to pick up the difference uneconomically

Continued Improvements

- Continually learning and improving process



- Monitor Market update and Facilitate root cause analysis



Thank you

