Experiences of Operation Efficiency Evaluation and Improvement at PJM

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Overview of PJM Markets

- Planning
- Day-ahead
- RAC
- Hourly
- 5 min

SE
AGC
RT energy & Reserves

Capacity (RPM)

DQ
Energy Reserve

Regulation

RPM (Reliability Pricing Model)
Reliability Assessment Commitment (RAC)
State Estimation (SE)
Automatic Generation Control (AGC)
RT Operation Efficiency Evaluation: Perfect Dispatch
Perfect Dispatch Focus

- 2008-2009: Conservative Constraint Control
- 2010: RT Steam Commitment
- 2011-2014: RT CT Commitment

Dispatch Action

- Uncertainty
- Deviation RT-PD
- Generation Response
• “Staged unit commitment with multiple scenarios”
Impact of CT Optimizer (CTO)

$221 million saving for 2013

March 18

Started to use CT Optimizer

May 30

Used CT Optimizer more consistently

2012 YTD%

2013 YTD%

Goal

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CT Commitment Comparison Chart
$842 million accumulative saving since 2008!
Uncertainty remains to be the Challenge!