



IMM Report

ERCOT Board of Directors Meeting

June 19, 2012

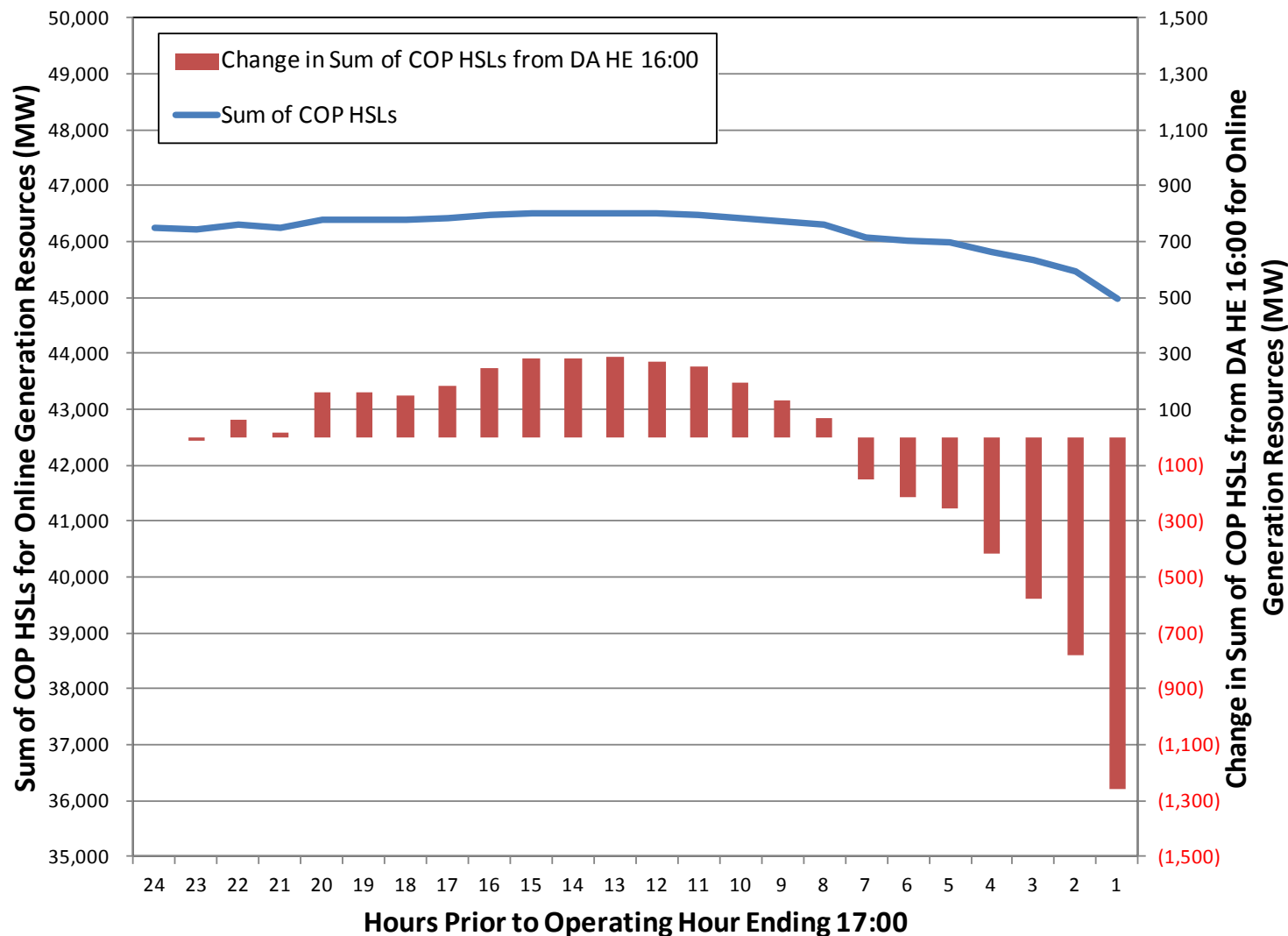
Dan L. Jones
Vice President
Director, ERCOT IMM
Potomac Economics

Analysis of Current Operating Plan Practices

- Systematic changes in the aggregate Current Operating Plan (COP) data have been observed this spring
- On average, the aggregate HSL in the COPs for online resources for the peak afternoon hours has been declining in the hours leading up to real-time
 - Observed by ERCOT Operations
 - Concerns raised by some market participants
 - Observed and analyzed by the IMM

Aggregate COP Data for HE 17:00

March 15 – May 15, 2012 Average



IMM Analysis

- Review of market data from March 1 – May 15, 2012
- Discussions with several market participants that have raised concerns regarding observations of aggregate COP data
- Discussions with several market participants regarding their COP practices
- IMM briefing of PUCT Office of Oversight and Enforcement

Relevant COP Requirements

■ Protocols 3.9.1(1)

- Each QSE that represents a Resource must submit a COP to ERCOT that reflects expected operating conditions for each Resource for each hour in the next seven Operating Days

■ Protocols 6.4.6.1, 6.4.6.2 and 6.5.5.1

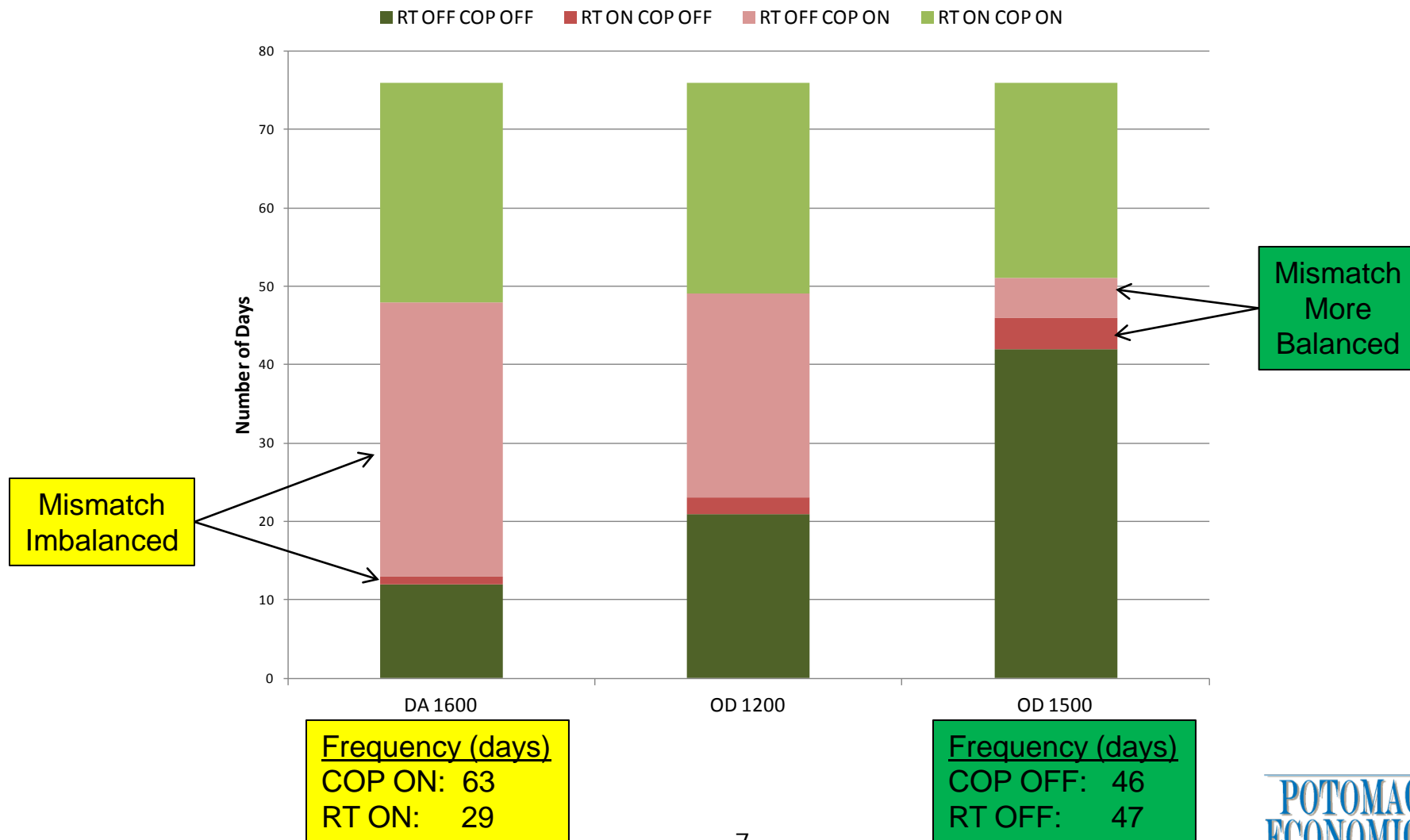
- A QSE may request to decommit a Resource in the Adjustment period by changing the COP while honoring the Resource's temporal constraint for startup time
- A QSE may request to decommit a Resource in the Operating Period via verbal request to ERCOT
- A QSE may commit a Resource in the Operating Period by changing the Resource Status via telemetry, even if the Resource was not shown as committed in the COP at the end of the Adjustment Period

IMM Findings

- Inconsistent interpretation/application of the requirement that the COP reflect the “expected operating condition”
- Applicable to flexible natural gas resources that experience more day-to-day and hour-to-hour uncertainty regarding commitment decisions, particularly during the relatively low load and low gas price conditions present in recent months
 - Issue 1: In the day-ahead and several hours prior to real-time, a bias in the COP more reflective of an “expectation that the resource might run” rather than an assessment of the “expected operating condition”
 - Issue 2: Just prior to the close of the adjustment period, a bias toward moving a unit from COP ON to COP OFF, even when the unit may already be ON or may be expected to be ON in RT, to retain discretion by the QSE to either run the unit or decommit the unit in RT depending on RT market conditions

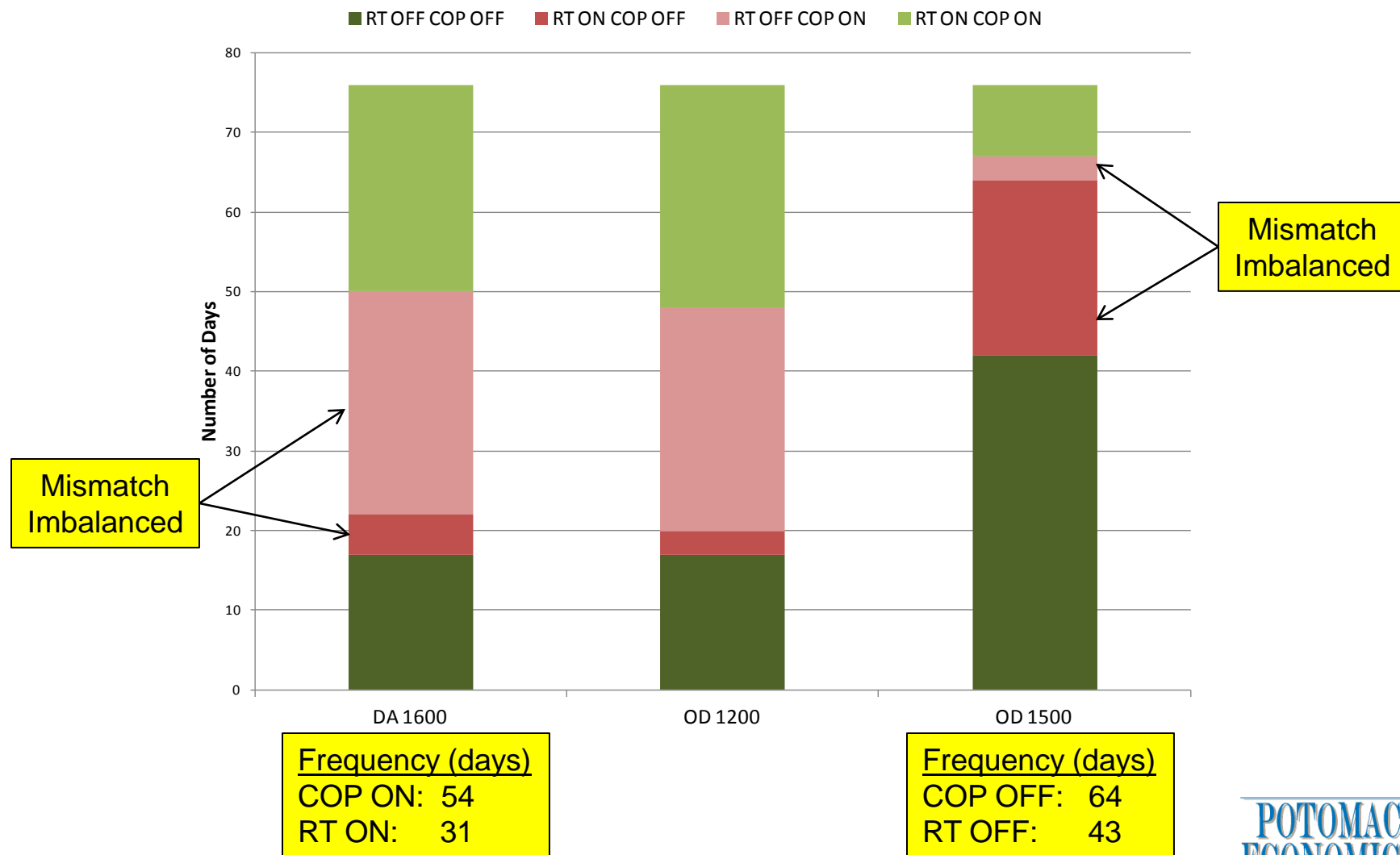
Unit 1 HE 17 COP Data (Issue 1)

March 15 – May 15, 2012



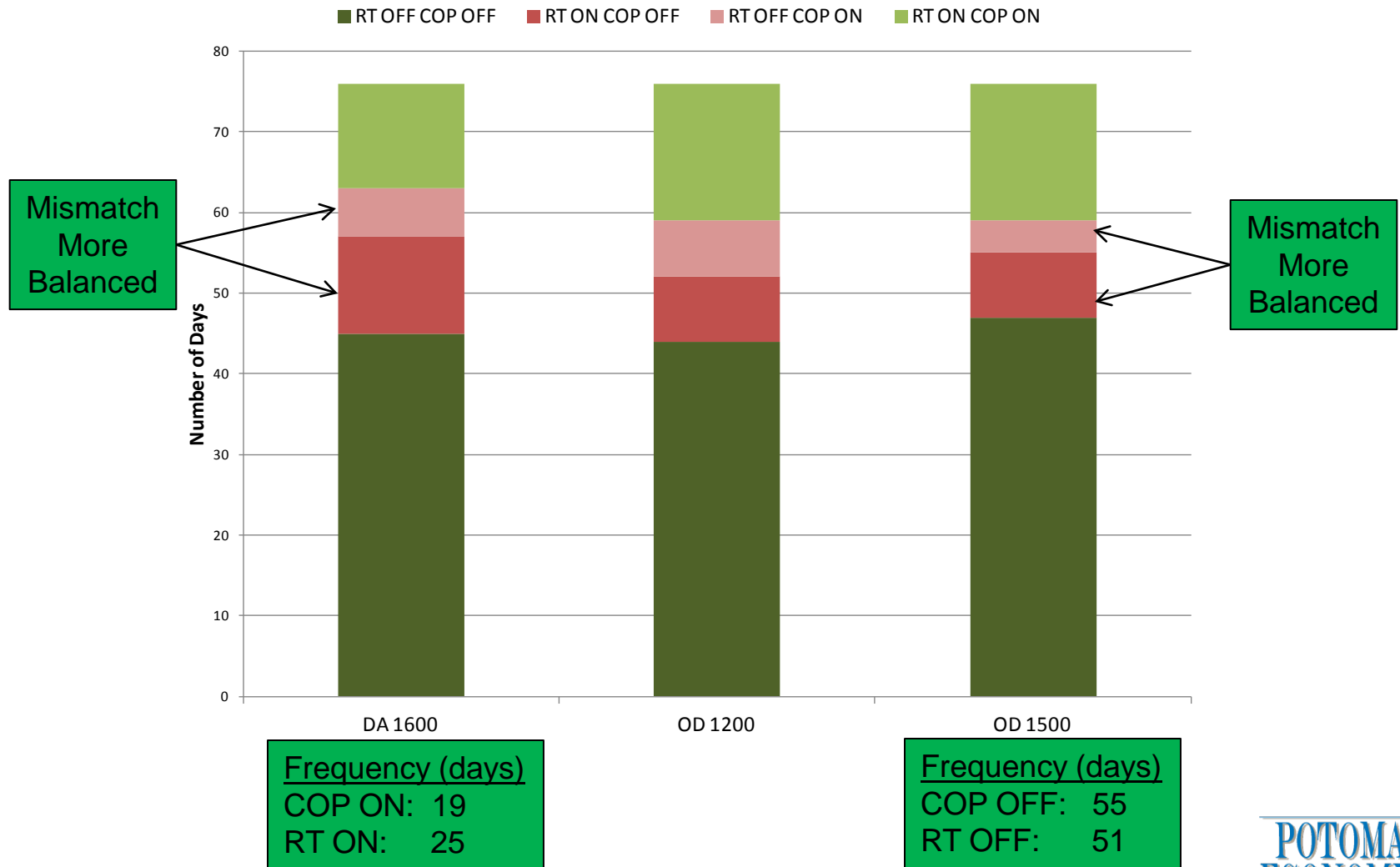
Unit 2 HE 17 COP Data (Issues 1 and 2)

March 15 – May 15, 2012



Unit 3 HE 17 COP Data (No Issues)

March 15 – May 15, 2012 Average



IMM Conclusions

- Inconsistent interpretation/application of the COP requirements were identified for several QSEs of various sizes, resulting in a general trend during the adjustment period of declining total HSL values in the aggregate COP data for the afternoon peak hours
- Generally not an operational issue as long as start-up lead times are observed in COP changes
- Primarily an issue of the accuracy of the market data and whether consistent with “expected operating conditions”
- IMM discussions with MPs with the most significant inconsistencies during the timeframe studied have resulted in commitments to review/modify procedures to ensure that the COP reflects the expected operating condition of each resource for each hour
- The level of systematic biases observed in the spring should be significantly improved going forward, but the occurrence of mismatches in the COP and RT status for flexible resources will not and should not be expected to be eliminated