Sources of Stakeholder Uncertainty

- Significant uncertainty still exists and will continue to exist when stakeholders and the Board have to make a decision
  - Will all the modeling be complete?
  - Late additions/changes?
  - Timing pressure?
  - Effect of FERC decision on fast start pricing?
  - Other external events?
- Effort to reach a compromise proposal given the Board’s timeline and direction
Areas of Stakeholder Consensus

- Consolidation of Tier 1 and Tier 2 Synchronized Reserves with appropriate penalties to ensure resource responsiveness
- Reserve Locations using existing RTO reserve sub-zone structure with several possible reserve sub-zones
- ORDC proposed by PJM at the November 28 EPFSTF
Areas Requiring Additional Stakeholder Input

- Penalty Factor
- Day-Ahead and Real-Time Market Alignment
- Transition Mechanism and “Circuit Breaker” Provision
The PJM Board has determined that a comprehensive package inclusive of the components outlined below, is needed to meaningfully address the reserve procurement and pricing issues.

1. Consolidation of Tier 1 and Tier 2 Synchronized Reserve products
2. Improved utilization of existing capability for locational reserve needs
3. Alignment of market-based reserve products in Day-ahead and Real-time Energy Markets *
4. Operating Reserve Demand Curves (ORDC) for all reserve products
5. Increased penalty factors to ORDCs to ensure utilization of all supply prior to a reserve shortage *
6. Transitional mechanism to the RPM Energy and Ancillary Services (E&AS) Revenue Offset to reflect expected changes in revenues in the determination of the Net Cost of New Entry

* Not previously discussed as part of short-term scope
Penalty Factor

- Current penalty factor of $850/MWh is the maximum appropriate value for most reserves’ marginal reliability value.
- Increases in the penalty factor must be linked to evidence that reserves are not being met at specific quantities.
Penalty Factor

- Two-step compromise: $2,000/MWh penalty factor up to 500MW (extremely tight reserves), then an $850/MWh penalty factor to the current primary reserve amount
Day-Ahead and Real-Time Market Alignment

- Day-Ahead and Real-Time Markets serve different functions
- Market participants may hedge positions in the day-ahead market, making an over-administered ORDC unnecessary and costly
- Alignment of products and product definitions along with consistent concepts, not identical curves, should be the guiding principle
Transition Mechanism

- Three year transition mechanism to align changes in the energy market with existing capacity market auction parameters
- Transition mechanism is necessary to ensure consumers are not paying twice
- Examine transition mechanism based on a forward looking E&AS offset
Circuit Breaker Provision

- Even the best designed markets have flaws or are vulnerable to extreme conditions
- Extreme pricing could result in a loss of confidence in the market by stakeholders, consumers, and state commissions
- “Circuit Breaker” provision to protect markets and consumers