# The Role of Resource Adequacy in Midwest ISO-administered Energy Markets

# Joint Stakeholder Meeting November 14, 2008





### The Role of Resource Adequacy in ISO Administered Energy Markets

- Resource Adequacy Plans are created to help
  - Ensure reliability, and
  - Promote investment (resource adequacy)
- The Midwest ISO filed a plan with FERC for moving towards a permanent resource adequacy plan.
  - Phase I of the Resource Adequacy Requirement (RAR) Plan will focus on the short-term reliability of the Midwest ISO Region through the integration of Contingency Reserves and Regulation service into the existing Energy Markets.
  - Phase II of the RAR plan will focus on the longer-term reliability needs of the regions such as long-term planning, demand side resources, long-term FTRs and national industry standards that are currently under development.





- Midwest ISO priorities are on improvements likely to have the most impact on regional efficiency that can lead to customer savings.
  - > Improve spot pricing and regional dispatch.
  - Create regional Operating Reserve (OR) markets and co-optimize with energy.
  - Introduce scarcity pricing for better price signals.





RAR filing made at FERC on 28 December 2007 to modify Module E in our Tariff:

- Determination of reserve obligations
  - Loss of load expected (LOLE) analysis
- Determination of RAR status
  - LSE responsibilities
  - Qualification of resources
    - Capacity Resources
    - Load Modifying Resources
      - Demand resources
  - Must offer requirement
    - Behind-the-meter generation
- Reports
  - Deficiency reports
  - Voluntary capacity exchange
  - Load & planning resource assessment





- FERC order on RAR filing made on 26 March 2008 to modify Module E in our Tariff: compliance issues
  - Summary/effective dates
  - Sufficiency of the proposal
  - Jurisdictional concerns
  - Establishing Planning Reserve Margins (PRMs)
    - ≻ LOLE
    - Planning Zones
  - LSEs forecasting load requirements
  - Resource Plan submittal





- FERC order on RAR filing made on 26 March 2008 to modify Module E in our Tariff: compliance issues
  - Qualification of Planning Resources
    - > UCAP
    - Power Purchasing Agreements (PPAs) as Capacity Resources
    - Load Modifying Resources (LMRs)
    - Behind the Meter Generation (BTM)
  - Tracking tool & bulletin board
  - Capacity markets
- Midwest ISO made a compliance filing addressing the aforementioned issues on 27 May 2008





- FERC order on RAR filing made on 26 March 2008 to modify Module E in our Tariff: compliance issues
  - Financial settlement provisions for deficient LSEs
  - Business Practices Manuals (BPMs)
  - Relationship between Phase I & II
- Midwest ISO made a compliance filling addressing the aforementioned issues on 25 June 2008





- Midwest ISO compliance filling on 25 June 2008
- Financial settlement provisions for deficient LSEs
  - Voluntary capacity auction monthly
    - Voluntary
    - Bids & offers
    - ➤ Offer cap
    - Uniform clearing price
    - Must offer obligation
    - Settlements & public information





- Midwest ISO compliance filling on 25 June 2008
- Financial settlement provisions for deficient LSEs
  - Administrative charge
    - Determining a deficient LSE
    - > Assessing a financial charge
  - Calculation of Cost of New Entry (CONE)
  - Distribution of financial settlement charge revenues
    - ➤ Suppliers
    - ≻ LSEs





- Midwest ISO compliance filling on 25 June 2008
- BPMs draft posted for public consumption
- Relationship between Phase I & II
  - Relationship between energy & operating reserves markets, resource adequacy construct, scarcity pricing, demand response and the role of state regulators
- Relationship between RPM & Module E





## FERC Orders

- Three Resource Adequacy Requirements (RAR) Orders received from FERC on 20 October
- Order on rehearing: granted in part and denied in part ("Rehearing Order")
- Order conditionally accepting Midwest ISO's 27 May Compliance Filing ("Compliance Order")
- Order conditionally accepting the Midwest ISO's 25 June Compliance Filing on Financial Settlement Provisions ("Financial Settlements Order")





## FERC Orders: impacts on design elements

- LMRs (penalties, netting, and accreditation)
- Data discovery (resource capability, state jurisdiction)
- PPAs (verification, capacity designation, force majeure)
- Planning zones (determination, minimum size)
- CONE calculation (justification, monthly deficiency charges)
- Credit conditions
- Fungible capacity credits
- Use-limited resources
- Price-responsive demand



