Capacity Performance

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July 31, 2014
Wind Chill vs. Forced Outage – Western PJM

Outage (MW)

Winter 2008-2014

Wind Chill °F
Jan. 7 Evening Peak, 7:00 p.m.
Forced Outages

- **Coal**
  - 13,700 MW
  - 34%

- **Natural Gas Interruption**
  - 9,300 MW
  - 23%

- **Gas Plant Outages**
  - 9,700 MW
  - 24%

- **Nuclear**
  - 1,400 MW
  - 3%

- **Other**
  - 6,100 MW
  - 15%

**Total Forced Outages**
40,200 MW
(22% Total PJM Capacity)
January 7 – Peak Load vs. Typical Load

Jan. 7: Hourly MW Load
(Preliminary)

- Morning Peak: 138,733 MW
- Evening Peak: 141,846 MW

Typical Jan. Demand Curve

- Morning Peak: 100,801 MW
- Evening Peak: 106,182 MW

35,000 MW
Performance Incentives / Penalties

Operational Availability and Flexibility

Fuel Security
Problem Definition

• Need to refine the definition of capacity
  • Fuel security – dependable fuel source
  • Performance incentives and penalties
  • Capacity resources must be highly available for operations
  • Require flexible unit operational parameters

• Other Cold Weather initiatives to incorporate
  • Energy Storage Participation in RPM (PC)
  • QTU Credit (MIC)
  • Cold Weather Resource Performance Improvement – long term aspects (OC)
  • Gas Unit Commitment Coordination– long term aspects (OC)
  • Unit Market Offers (MIC)
Enhanced Liaison Committee Process - Background

- Process developed by the Members during GAST Phase 2B
- Documented in Manual 34, Section 15.2.2
- Triggers
  - Failed vote at Members Committee, and Board determines action is required
  - MC vote at initiation of an issue
  - Board may initiate
- Elements
  - Whitepaper (or committee final report, including a matrix)
  - Members form coalitions
  - Coalitions submit briefing papers
  - Enhanced Liaison Committee meeting with the Board
Schedule

Preparation

- PJM posts draft whitepaper part 1 (background material) – 8/1/14
- Education and dialogue sessions – 8/12/14 and 8/18/14
- PJM posts draft whitepaper part 2 (with package in matrix) – 8/20/14
- Stakeholder meeting to present the draft whitepaper – 8/22/14
- Stakeholders submit written comments – 9/12/14
- Stakeholder meeting for PJM to receive comments and get clarification – 9/24/14

ELC Process

- PJM issues whitepaper – 10/7/14
- Stakeholders form coalitions by 10/21/14
- Coalition briefing papers submitted and posted by 10/28/14
- Enhanced LC meeting with the Board – 11/4/14