

Summer 2007 PJM Reliability Assessment

May 30, 2007 Pennsylvania Public Utility Commission





Projected Peak Demand and Capacity

Agenda

- Reserves
- Unavailable Capacity
- PJM Load Response Programs
- Transmission Adequacy





PJM Load and Capacity Summary

2007 (Projected as of May 23, 2007)

Forecast Load (MW)	Interruptible Load for Reliability (ILR) (MW)	Forecast Load Less ILR (MW)	Total Generation Capacity (MW)	Committed Generation Capacity (MW)	Total Reserve Margin	Committed Reserve Margin	Required Reserve Margin
136,961	2,153	134,808	164,280	160,680	21.9%	19.2%	15.0%

<u>2006</u>

Metered Peak: 144,644 MW on August 2 (New Record Peak)

Previous record peak was 133,761 MW





Projected Load and Capacity

- PJM "90/10" peak is estimated to be about 6% above "50/50" peak or 144,774 MW.
- Capacity down about 200 MW from June 1, 2006
- Total wind generation in PJM: 490 MW
- Total wind generation in PA: 290 MW
- Total wind projects in Queues: 16,240 MW





- Historically 6.4% of PJM capacity is "forced out" of service during the peak summer period
- All nuclear units are expected to be in service and at full capacity (30,776 MW) at the time of the peak
- Scheduled generator maintenance is coordinated to minimize peak period impacts
- Planned generator outages are generally not permitted during peak periods





- 2,153 MW of ILR for Summer 2007
- Operational control turned over to PJM
- Requirements regarding number of interruptions, duration of interruptions, lead time, etc.
- PJM verifies compliance

Year	<u># of ILR Events</u>	<u>Year</u>	<u># of ILR Events</u>
2001	4	2004	0
2002	3	2005	2
2003	0	2006	2





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PJM Load Response Programs



ECONOMIC

Designed to provide an incentive to customers or curtailment service providers to reduce consumption when PJM LMP prices are high.

> Two options: Day-Ahead Option Real-Time Option As of 5/24/07 1,759 MW 1,067 Sites

- The PJM Mid-Atlantic Region and Western Region bulk transmission systems are expected to perform adequately in Summer 2007 based on PJM and RFC criteria.
- The PJM Southern Region (Dominion Virginia Power) bulk transmission system is expected to perform adequately in Summer 2007 based on PJM and SERC criteria.





- Integral part of bulk power supply reliability
- Allows lower installed reserve margins (~2%)
- Assistance not required this summer if:
 - Weather is normal
 - Units perform as expected
- If required, assistance from neighboring systems should be available







- Expected Peak Demand and Reserves
 - Peak demand growth of 1.5% on weather-normalized basis
 - Projected capacity slightly less than summer 2006
 - Committed reserves exceed required margin of 15%
- Load Response Resources
 - About 3% of total demand is in load response programs
- Transmission Adequacy
 - Expected to perform per criteria

