

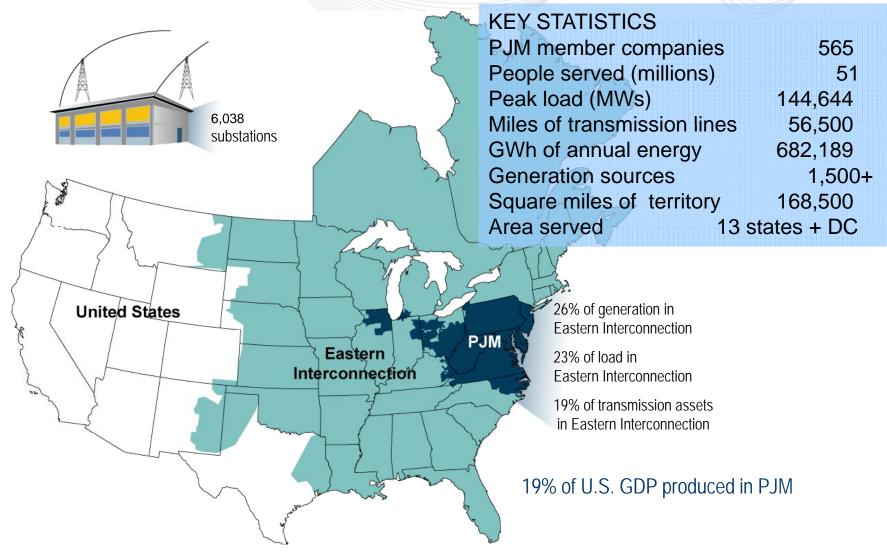
# Summer 2010 PJM Reliability Assessment

Pennsylvania Public Utility Commission May 20, 2010

PJM www.pjm.com



#### PJM as Part of the Eastern Interconnection





#### **Projected for 2010**

Forecast Load (MW) Total	Demand Response (MW)	Forecast Load (MW) Less Demand Response	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
135,750	8,525 (est.)	127,225	162,903	35,678	28.0%	15.5%

#### <u>2009</u>

RTO Metered Peak: 126,805 MW

Weather Normalized Peak: 133,780 MW

All-Time Metered Peak: 144,644 MW on August 2, 2006



## Glossary for Load and Capacity Summary Slide

Forecast Load – Expected peak demand, based on normal weather (Total Internal Demand-TID)

**Demand Response** – Contractually interruptible load and other customer load willing to be interrupted at the direction of PJM. Compliance check is performed at end of summer.

Forecast Load Less Load Management – Expected peak demand <u>after</u> demand response has been implemented (Net Internal Demand-NID)

Installed Generation Capacity – Total MW output of all of the generators that cleared in RPM and are committed to serve PJM load (Installed Capacity)

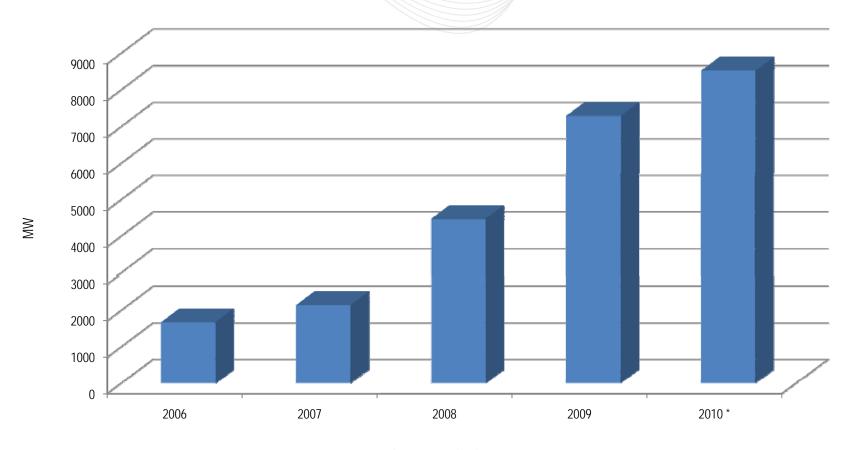
Reserve (MW) - Installed Generation Capacity minus Net Internal Demand

Reserve Margin (%) - Reserve expressed as a percent of Net Internal Demand

Required Reserve Margin (%) – PJM required planning reserve, as determined by the RPM process (Installed Reserve Margin-IRM)



# Growth in PJM Demand Response



\* - estimated value

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- Compensated through RPM
- Operational control turned over to PJM
- Requirements regarding number of interruptions, duration of interruptions, lead time, etc.
- PJM verifies compliance

<u>Year</u>	# of LM Events	<u>Year</u>	# of LM Events
2004	0	2007	1
2005	2	2008	0
2006	2	2009	0

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2010 Economic Load Response registrations: 2,630 MW

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- Historically about 6% of PJM capacity is "forced out" of service during the peak summer period
- Scheduled generator maintenance is coordinated to minimize peak period impacts
- Water levels are expected to be normal or above for hydro units
- PJM has about 1,300 MW of energy-only generation
- Projected to have 3,800 MW of wind generation by 6/1/2010
  - 660 MW in Pennsylvania



### Some PJM Summer 2010 Preparations

- PJM Operating Analysis Task Force (OATF) Summer Operating Study
- Reliability First, SERC and NERC Summer Assessments
- Joint Operations Coordination Meeting with PJM and MISO/NYISO/TVA/VACAR
- PJM Spring Operator Seminar (9 sessions over 700 operators attended)
- PJM Emergency Procedures Drill Scheduled for May 26





- Generation reserves exceed required margin of 15.5%
- 6.3% of total demand is in emergency load response programs
- Transmission system is expected to perform adequately based on applicable criteria.
- PJM expects to be able to reliably serve projected peak loads

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