



Summer 2011 PJM Reliability Assessment

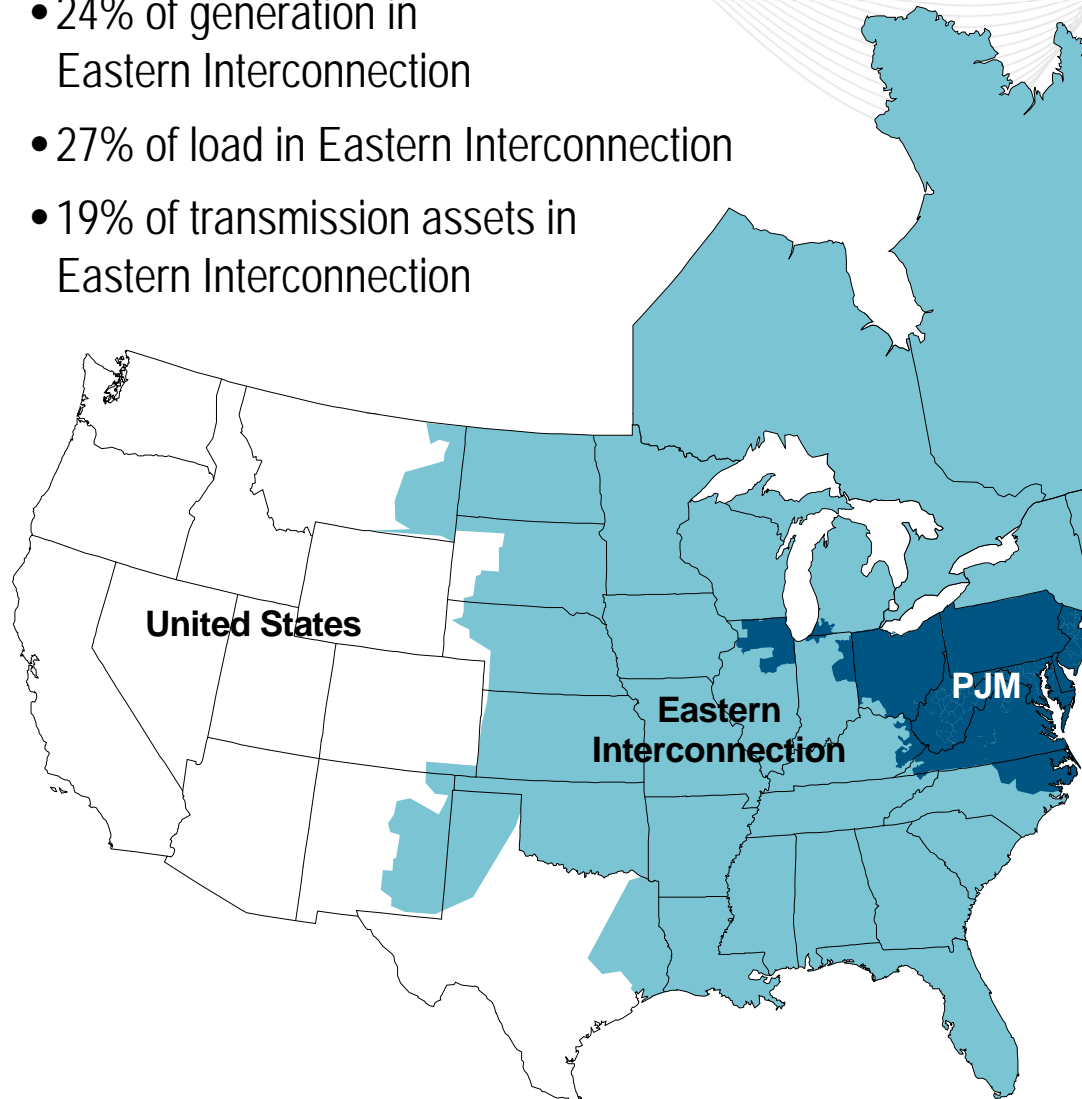
Pennsylvania Public Utility Commission

June 9, 2011



PJM as Part of the Eastern Interconnection with ATSI Integration

- 24% of generation in Eastern Interconnection
- 27% of load in Eastern Interconnection
- 19% of transmission assets in Eastern Interconnection

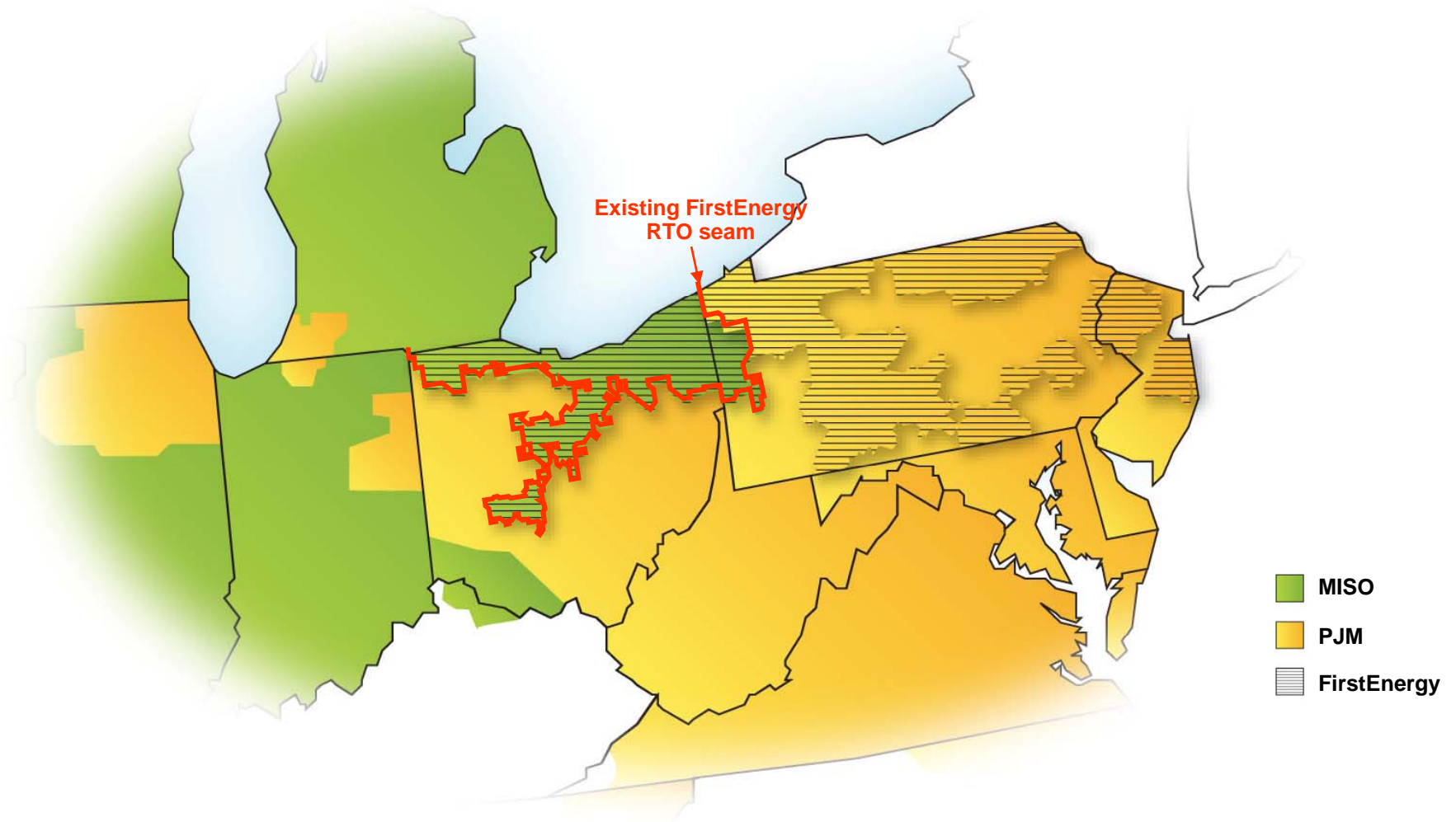


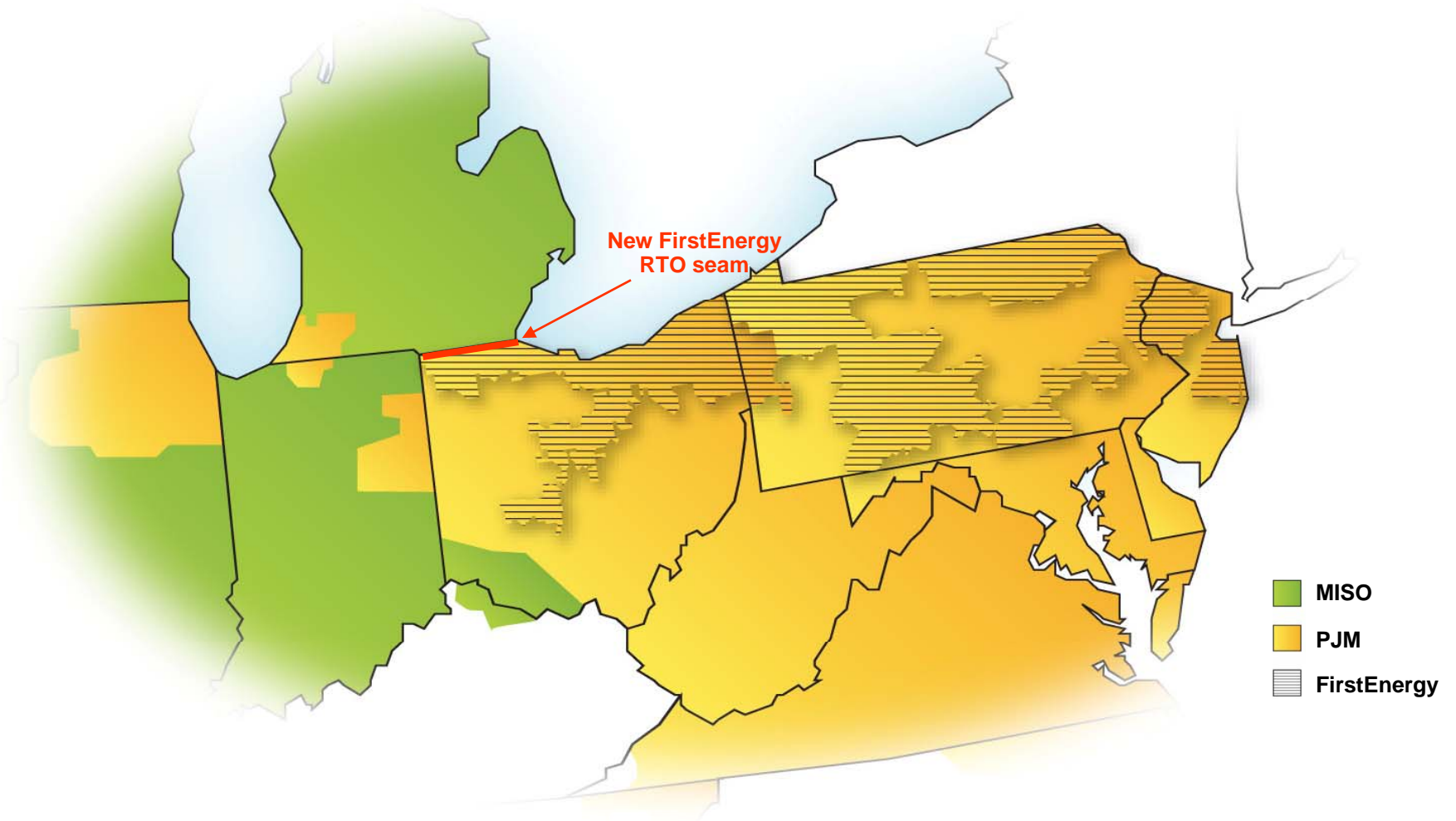
KEY STATISTICS

PJM member companies	700+
millions of people served	58
peak load in megawatts	158,448
MW's of generating capacity	180,400
miles of transmission lines	61,200
GWh of annual energy	794,335
generation sources	1,365
square miles of territory	211,000
area served	13 states + DC
Internal/external tie lines	142

**20% of U.S. GDP
produced in PJM**

As of 6/1/2011







PJM Load and Capacity Comparison: 2011 vs. 2010

2011 (w/ ATSI and CPP)

Forecast Peak Load (MW)	Demand Response (MW)	Forecast Peak Load (MW) Less Demand Response	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
148,940	11,675¹ (est.)	137,265	180,400	43,135	31.4%	15.5%

¹Includes 75MW of Energy Efficiency

2011 (w/o ATSI and CPP)

Forecast Peak Load (MW)	Demand Response (MW)	Forecast Peak Load (MW) Less Demand Response	Installed Generation Capacity (MW)	Reserve (MW)	Reserve Margin	Required Reserve Margin
136,574	10,433 (est.)	125,836	164,533	38,697	30.5%	15.5%

2010 (Actual Peak Load: 135,039 MW on July 7, 2010 at HE 17)

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



Glossary for Load and Capacity Summary Slide

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

Demand Response – 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 after demand response has been implemented (Net Internal Demand-NID)

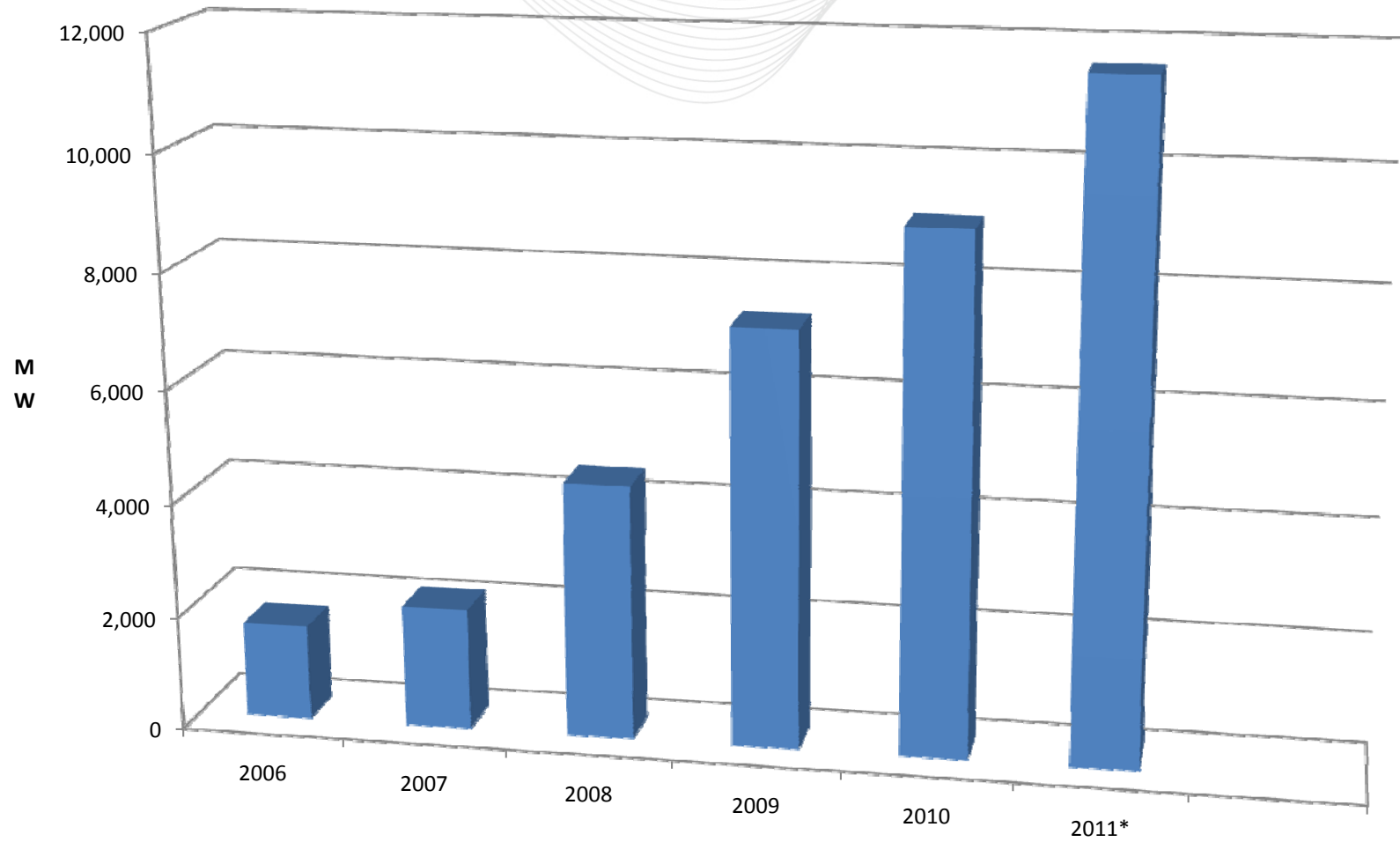
Installed Generation Capacity – Total MW output of all of the generators that cleared in RPM and are committed to serve PJM load (Installed Capacity)

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



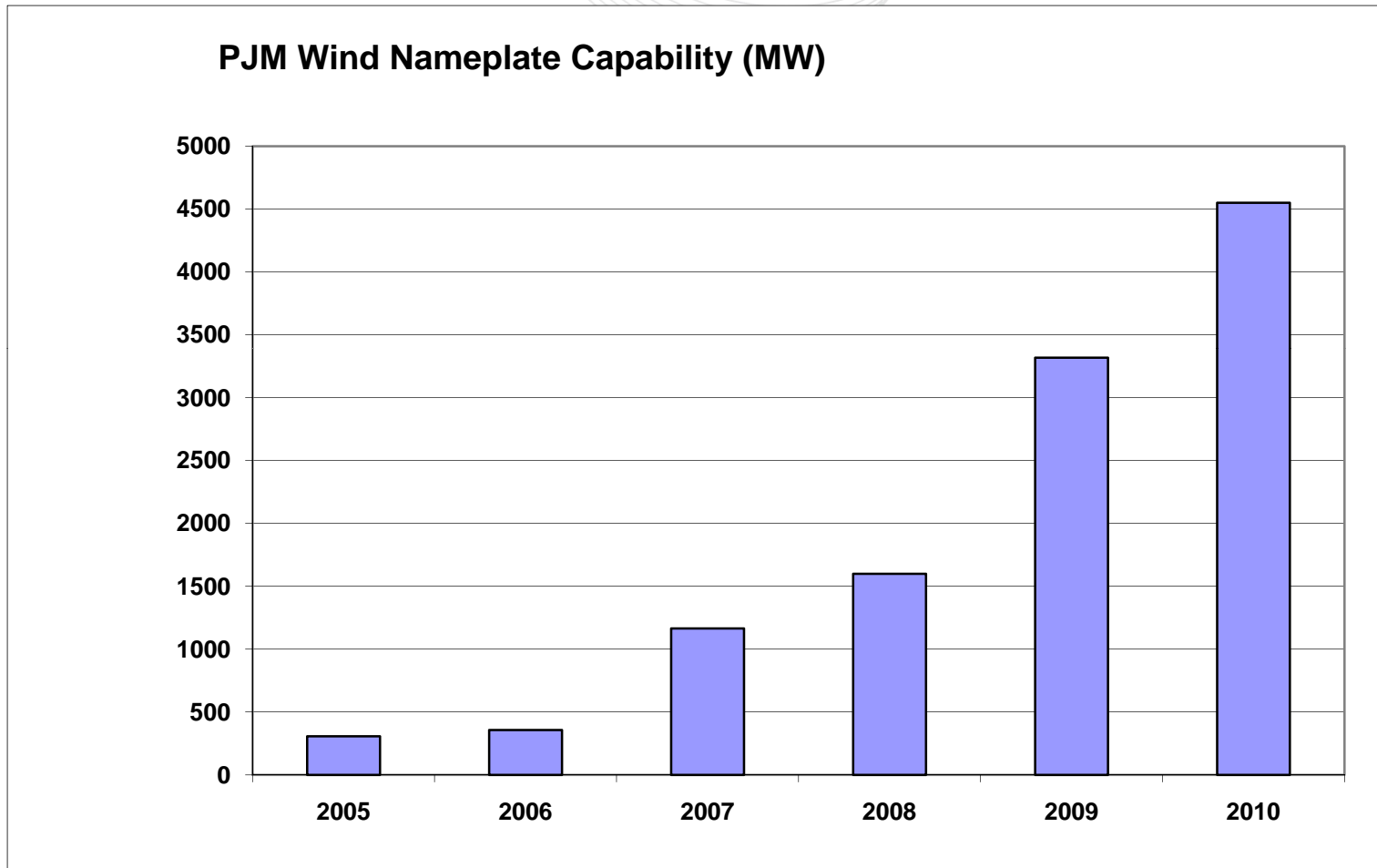
* - estimated value

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

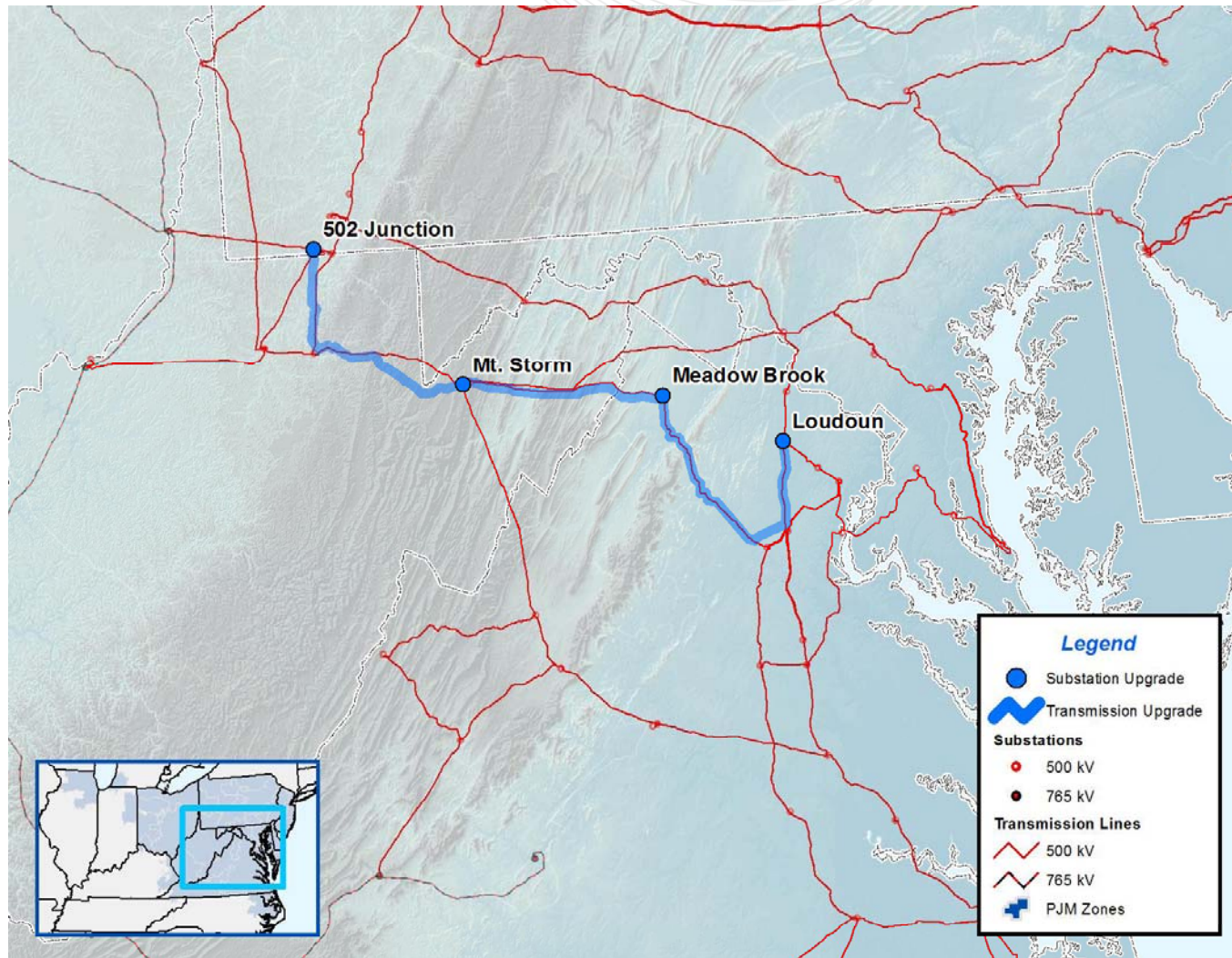
<u>Year</u>	<u># of LM Events</u>	<u>Year</u>	<u># of LM Events</u>
2005	2	2008	0
2006	2	2009	0
2007	1	2010	6

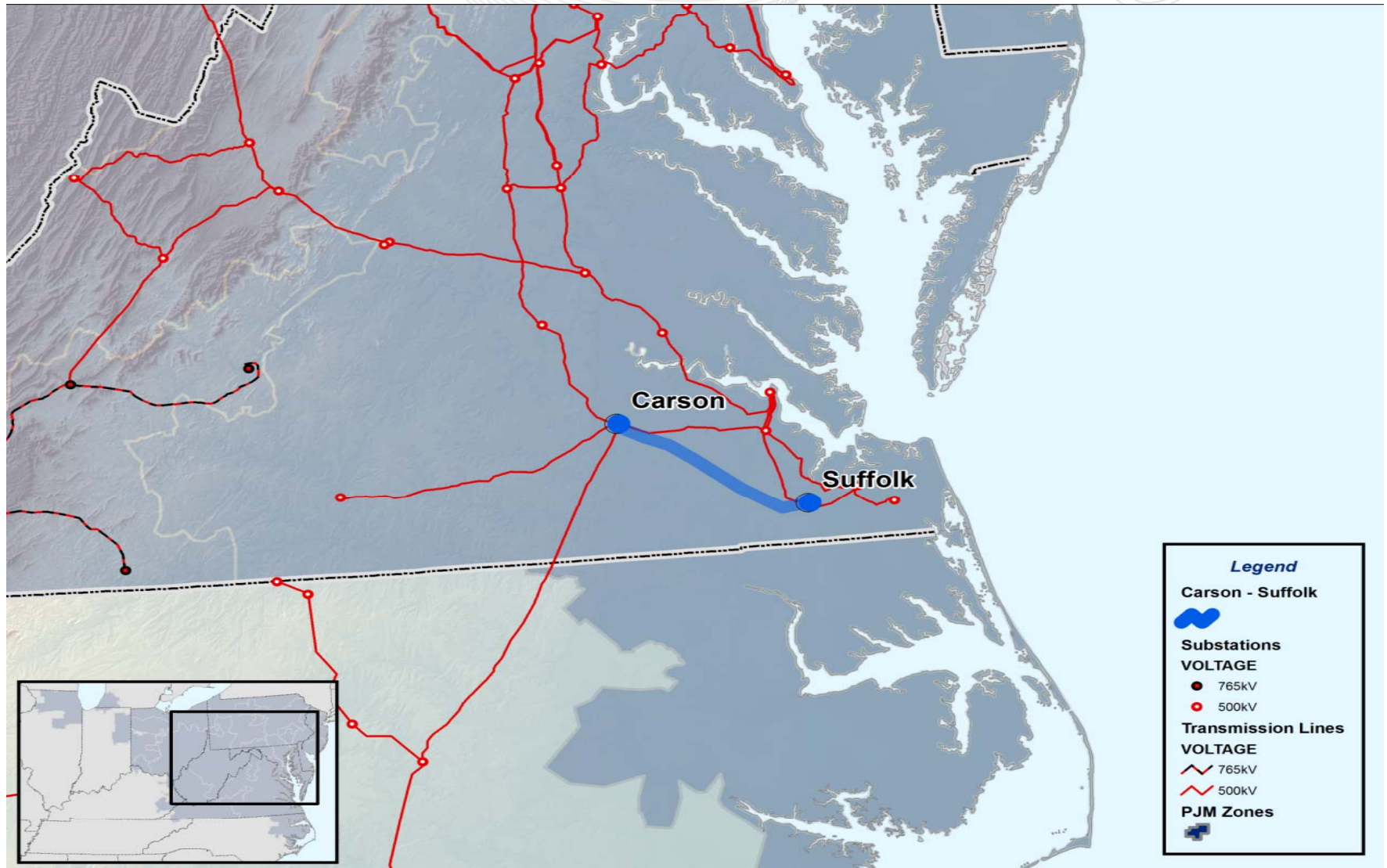
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- 2011 Economic Load Response registrations: 2,530 MW

- 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 for hydro units
- PJM has about 1,300 MW of energy-only generation
- Projected to have 4,600 MW of wind generation by 6/1/2011
 - 830 MW in Pennsylvania



- TrAIL 500kV Line (Allegheny/Dominion)
 - 220 mile 500 kV line from 502 Junction -- Mt. Storm – Meadowbrook – Loudoun [5 years from inclusion in plan to energization]
 - Import capability into the Baltimore/Washington/Northern Virginia area is increased by ~1,000 MW (AP South Interface is increased by ~500 MW)
- Carson—Suffolk 500 kV Line (Dominion)
 - Strengthen transmission system to the southern Dominion area





- PJM Operations Assessment Task Force (OATF) Summer Operating Study
- Reliability *First*, SERC and NERC Summer Assessments
- Joint MISO/PJM Operations Coordination Meeting
- PJM Spring Operator Seminar (10 sessions – over 700 operators attended)
- PJM Emergency Procedures Drill

- PJM expects to be able to reliably serve expected peak loads—peak loads are expected to be slightly higher this summer vs. last summer
- Demand response has increased significantly—helping to offset the impact of generator retirements
- The energizing of the Trans Allegheny Interstate Line (TrAIL) line and the replacement of the last Doubs transformer will increase transfer capability into the Washington/Baltimore/Northern Virginia area