



PJM Summer Reliability Assessment Illinois Commerce Commission

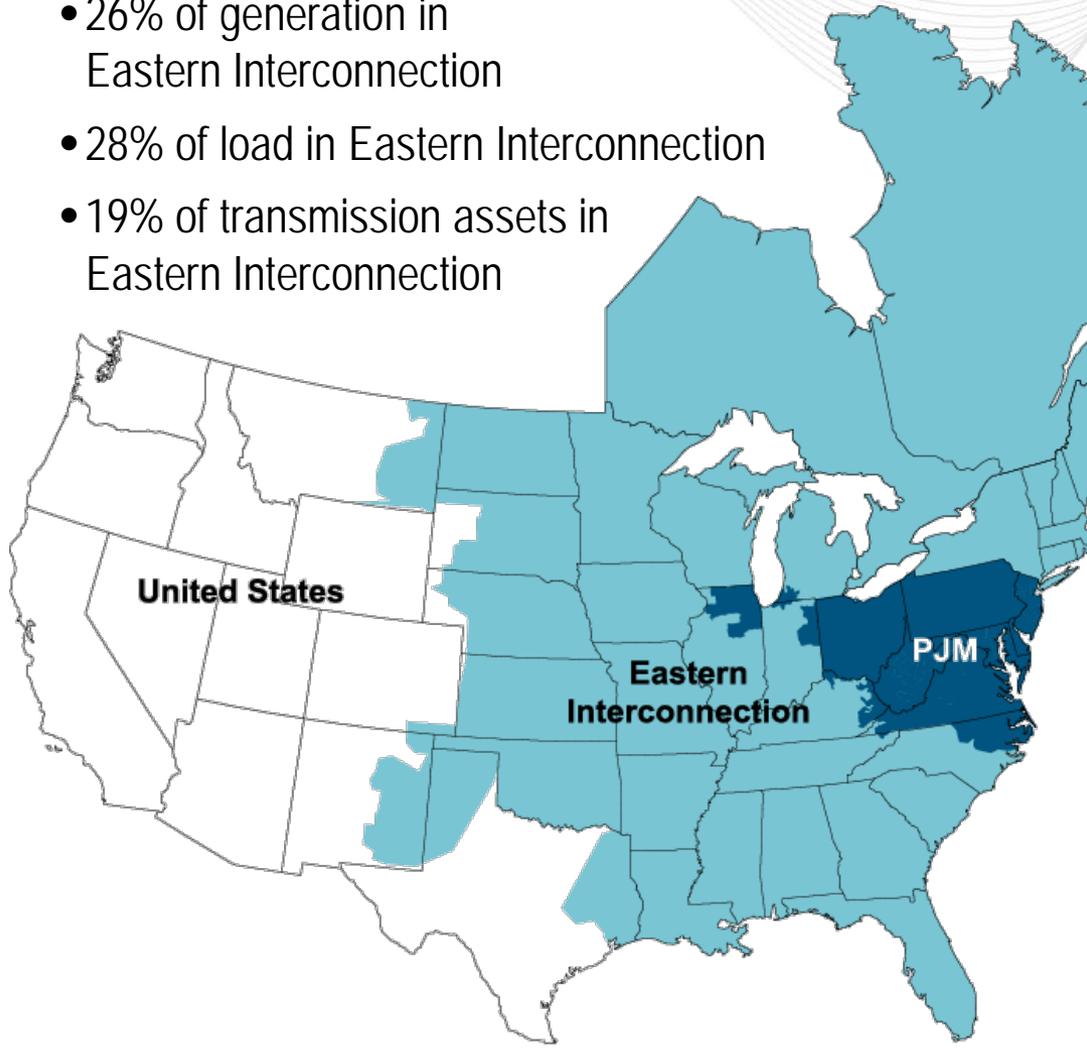
June 6, 2012

Richard Mathias

M. Gary Helm

PJM Interconnection, LLC

- 26% of generation in Eastern Interconnection
- 28% of load in Eastern Interconnection
- 19% of transmission assets in Eastern Interconnection



KEY STATISTICS

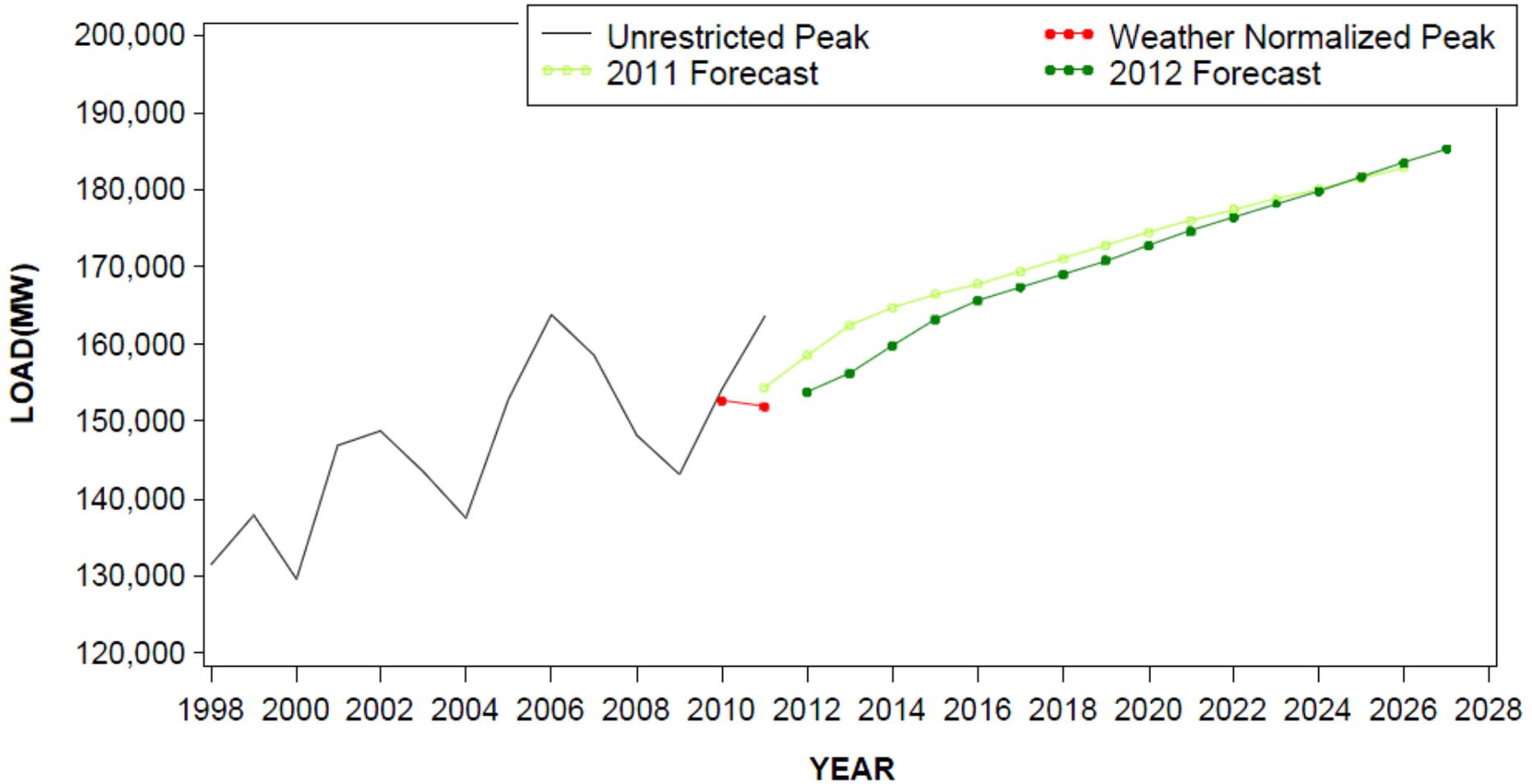
PJM member companies	750+
millions of people served	60
peak load in megawatts	163,848
MWs of generating capacity	185,600
miles of transmission lines	65,441
GWh of annual energy generation	832,331
sources	1,365
square miles of territory	214,000
area served	13 states + DC
Internal/external tie lines	142

**21% of U.S. GDP
produced in PJM**

As of 1/4/2012

- PJM expects to be able to reliably serve expected peak load.
- Demand response commitments may be slightly lower
- The 2012 forecast of peak loads reflects lower peak loads than forecast in 2011

SUMMER PEAK DEMAND FOR PJM RTO GEOGRAPHIC ZONE



2012 (with DEOK)

Forecast Load (MW) Total	Demand Response and Energy Efficiency (MW)	Forecast Load Less Demand Response (MW)	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
153,780	10,230 ¹ (est.)	143,550	185,180	41,630	29.0%	15.6%

¹Includes 654MW of Energy Efficiency

2011 (without DEOK)

Forecast Load (MW) Total	Demand Response and Energy Efficiency (MW)	Forecast Load Less Demand Response (MW)	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
148,940	11,897	137,043	180,400	43,357	31.6%	15.5%

¹Includes 75 MW of Energy Efficiency

2011 (Actual Peak Load: 158,016 MW on July 21, 2011 at HE 17)

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

Installed Generation Capacity – Total MW amount of deliverable generation inside PJM (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)

- PJM Operations Assessment Task Force (OATF) Summer Operating Study
- Reliability *First* Summer Assessment
- Joint MISO/PJM Operations Coordination Meeting
- PJM Spring Operator Seminar (10 sessions – over 700 operators attended)
- PJM Emergency Procedures Drill – May 22, 2012

Normal Sequence of Emergency Communications

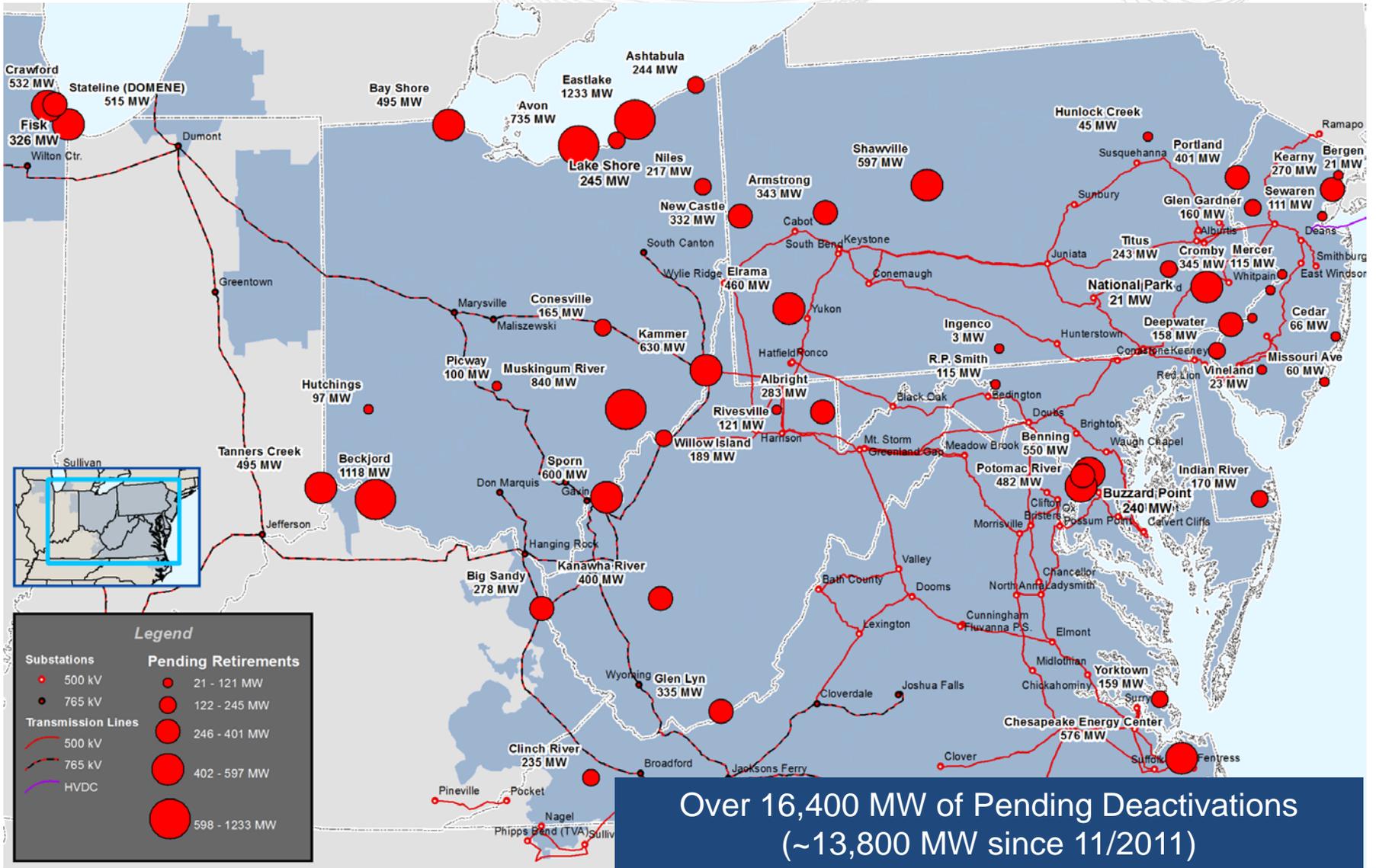
- Alerts – Usually, issued the day before the operating day
- Warnings – Usually, issued the morning of the operating day or when the event is imminent
- Actions – At the onset of the event
- In Illinois, PJM **notifies only** the ICC

Nearly 25 GW coal generation at risk based on economic analysis

Capacity Revenue Needed	PJM RTO	MAAC	Rest of PJM
< ½ Net CONE	38,334	12,634	25,700
½ Net CONE – Net CONE	14,147	2,908	11,239
> Net CONE	11,051	3,194	7,857

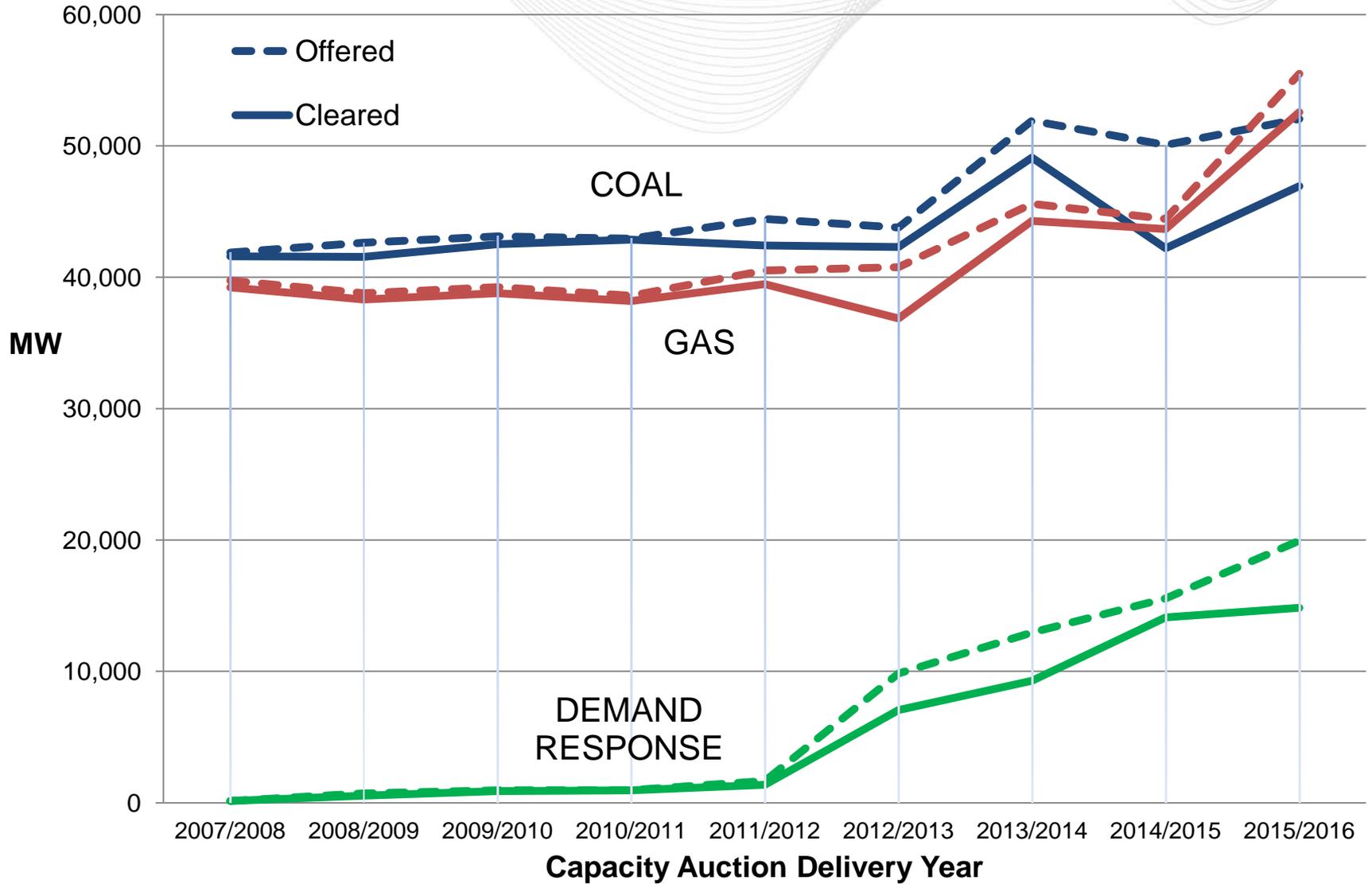
Note: CONE is the Cost of New Entry (Simple Cycle Combustion Turbine)

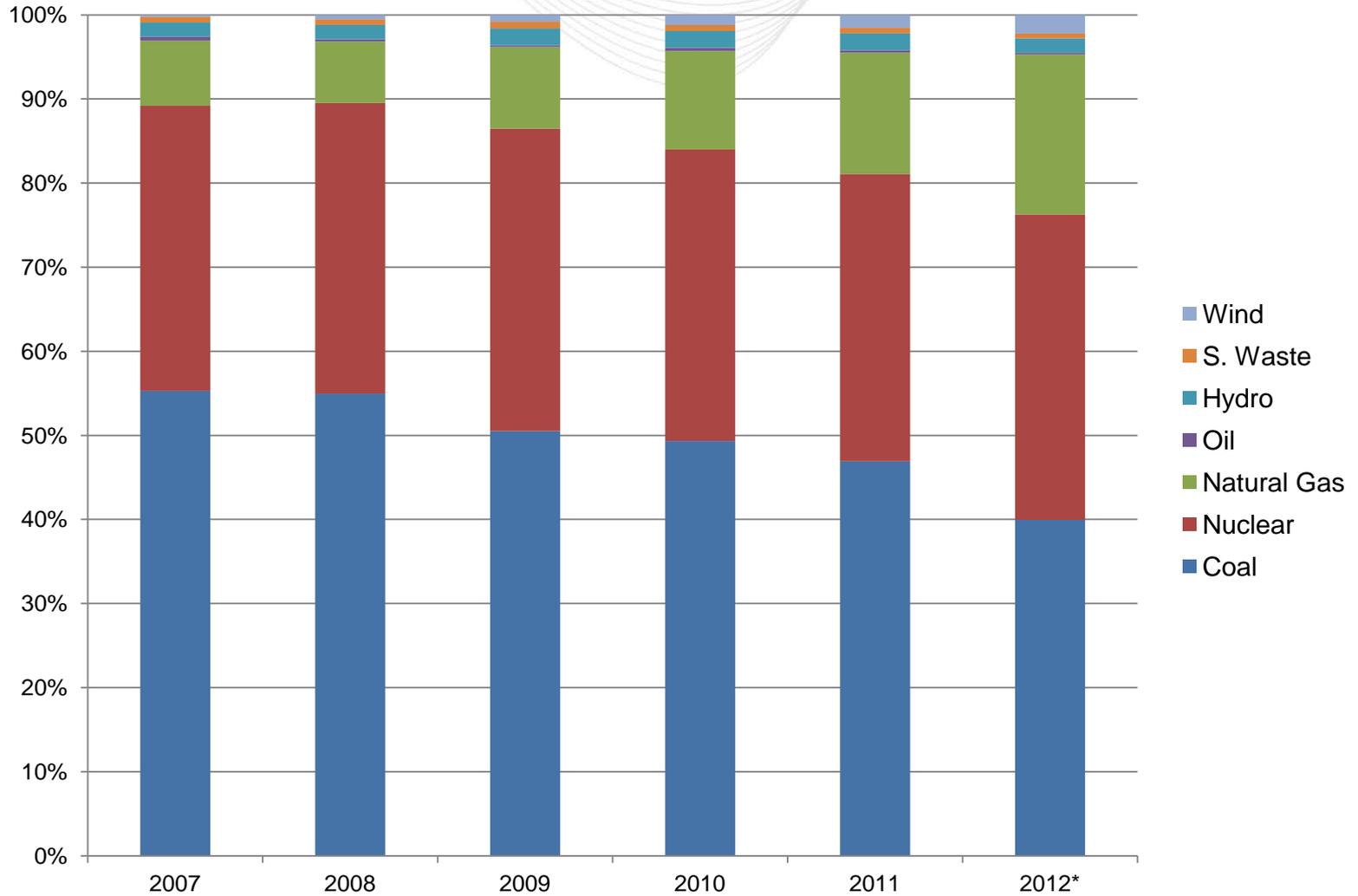
Source: PJM Report, *Coal Capacity At-Risk for Retirement in PJM: Potential Impacts of the Finalized EPA Cross State Air Pollution Rule and Proposed National Emissions Standards for Hazardous Air Pollutants*, August 2011



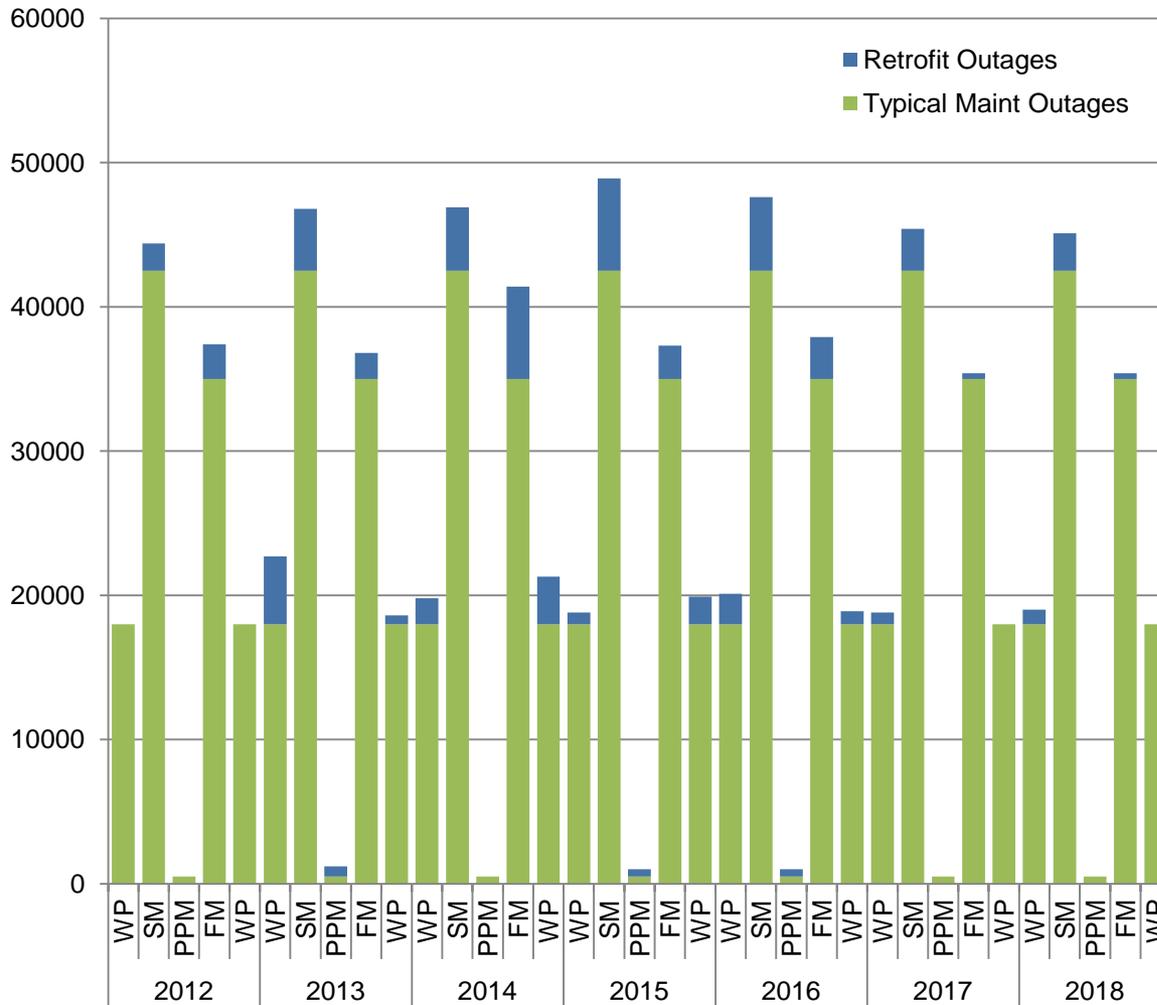
Over 16,400 MW of Pending Deactivations (~13,800 MW since 11/2011)

Capacity Resources : In Transition





Environmental Retrofit Outages and Typical Maintenance Outages



	Retrofit Outages (MW)	Typical Maint Outages (MW)	
2012	Winter Period (WP)	0	18000
	Spring Maintenance (SM)	1900	42500
	PPM	0	500
2013	Fall Maintenance (FM)	2400	35000
	Winter Period (WP)	0	18000
	Winter Period (WP)	4700	18000
2014	Spring Maintenance (SM)	4300	42500
	PPM	700	500
	Fall Maintenance (FM)	1800	35000
2015	Winter Period (WP)	600	18000
	Winter Period (WP)	1800	18000
	Spring Maintenance (SM)	4400	42500
2016	PPM	0	500
	Fall Maintenance (FM)	6400	35000
	Winter Period (WP)	3300	18000
2017	Winter Period (WP)	800	18000
	Spring Maintenance (SM)	6400	42500
	PPM	500	500
2018	Fall Maintenance (FM)	2300	35000
	Winter Period (WP)	1900	18000
	Winter Period (WP)	2100	18000
2019	Spring Maintenance (SM)	5100	42500
	PPM	500	500
	Fall Maintenance (FM)	2900	35000
2020	Winter Period (WP)	900	18000
	Winter Period (WP)	800	18000
	Spring Maintenance (SM)	2900	42500
2021	PPM	0	500
	Fall Maintenance (FM)	400	35000
	Winter Period (WP)	0	18000
2022	Winter Period (WP)	1000	18000
	Spring Maintenance (SM)	2600	42500
	PPM	0	500
2023	Fall Maintenance (FM)	400	35000
	Winter Period (WP)	0	18000

*Some retrofit outages may be included in typical maintenance outages.



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