



PJM Winter 2015 / 2016 Preparedness FERC Update

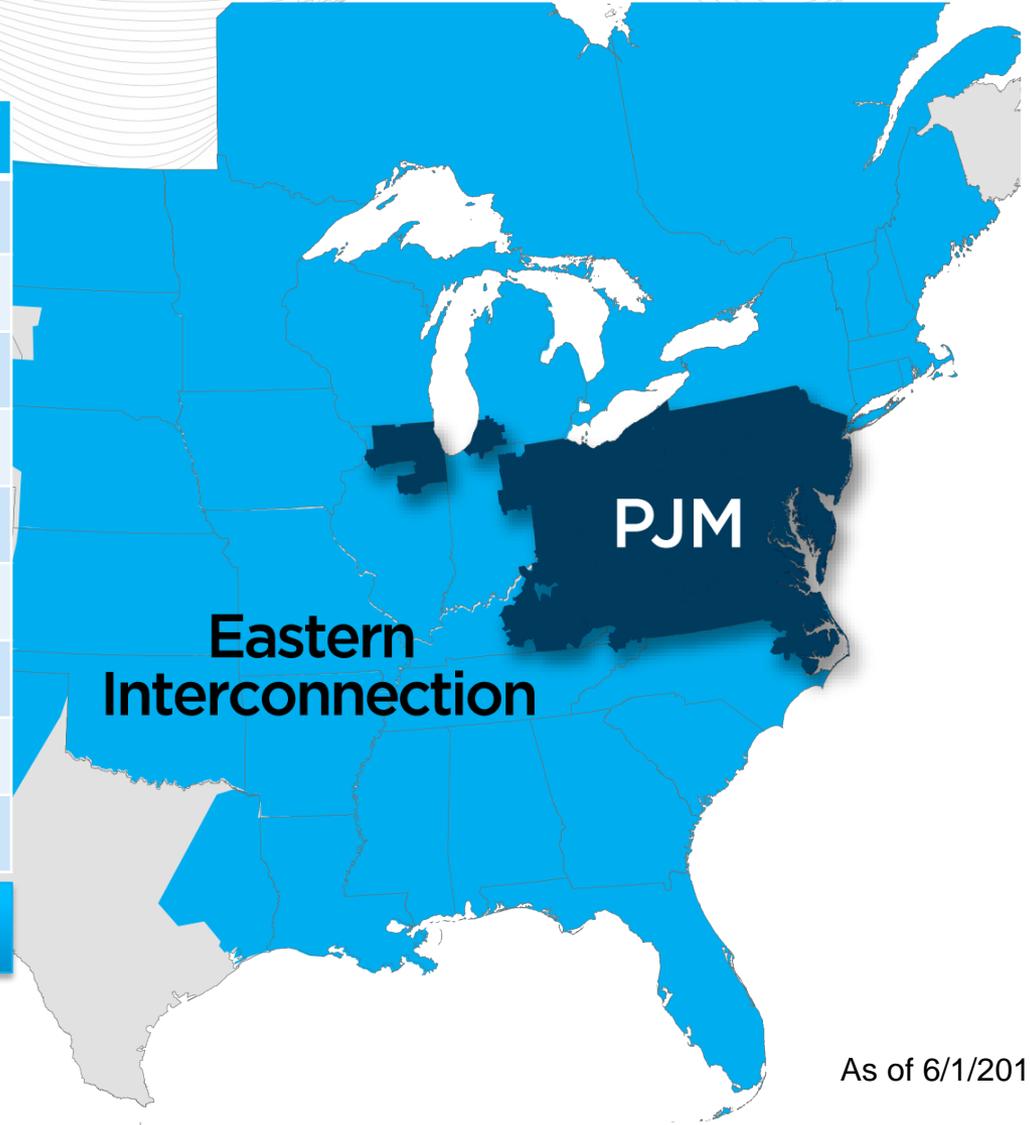
Michael J. Kormos
Executive Vice President Operations
PJM Interconnection

September 17, 2015

Key Statistics

Member companies	940+
Millions of people served	61
Peak load in megawatts	165,492
MW of generating capacity	183,604
Miles of transmission lines	62,556
2013 GWh of annual energy	797,461
Generation sources	1,376
Square miles of territory	243,417
States served	13 + DC

21% of U.S. GDP produced in PJM



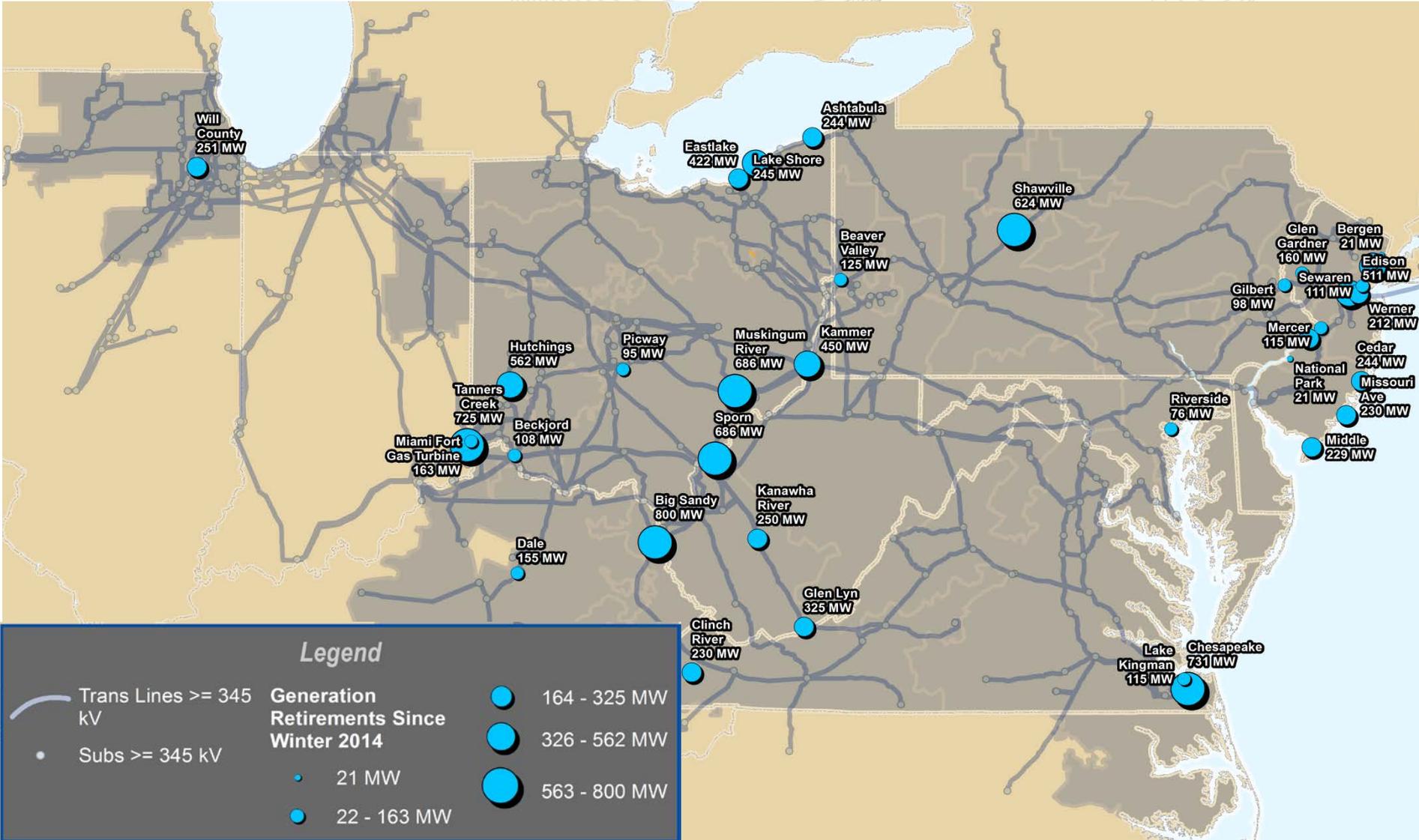
As of 6/1/2014

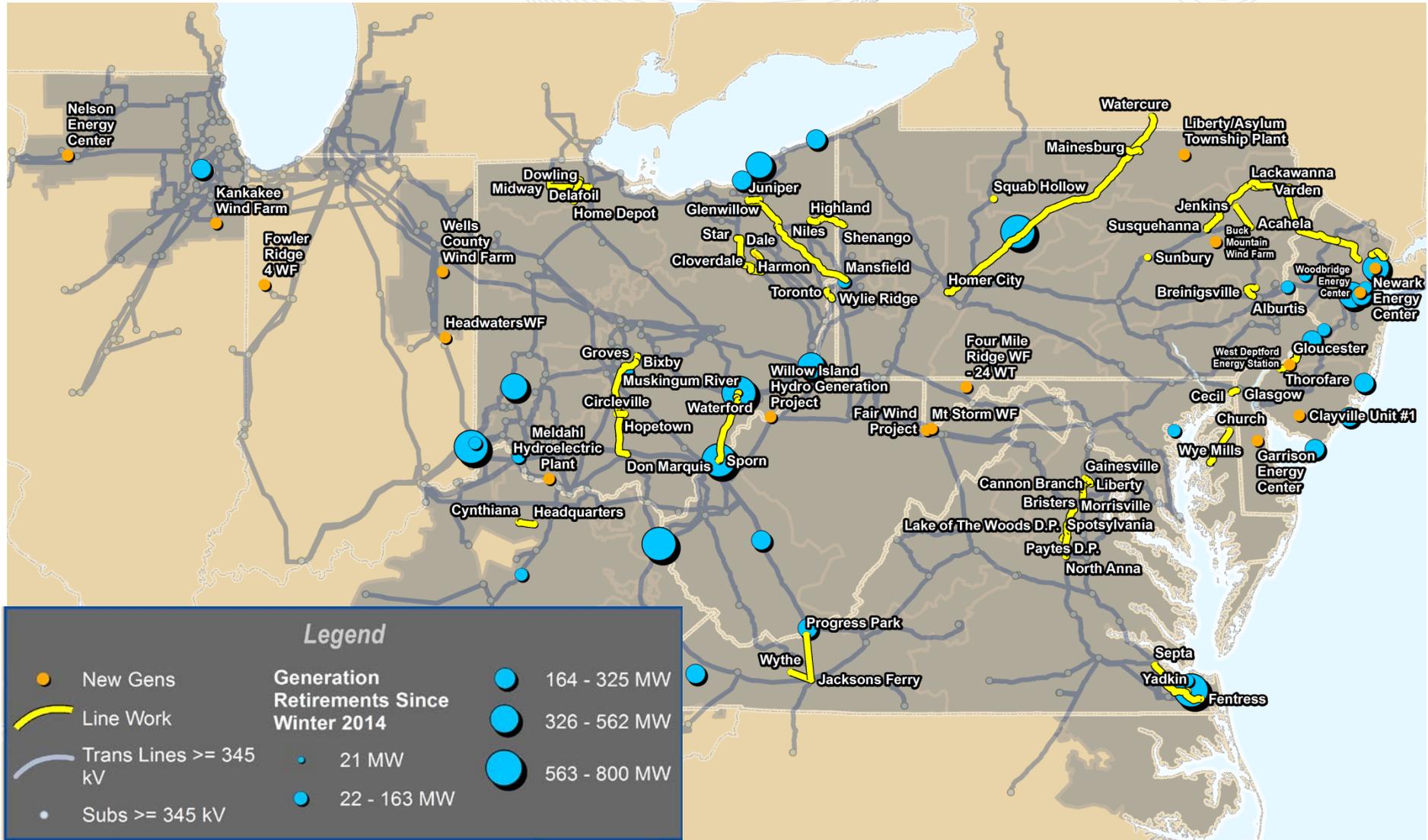
Peak Load Base Case	
Case Load	135,350 MW* (subject to change as case is re-dispatched)
RTO Net Interchange	7,200 MW (Importing)
PJM RTO Installed Capacity	177, 628 MW* (preliminary as of 9/8/2015)
Discrete Outages	24,124 MW

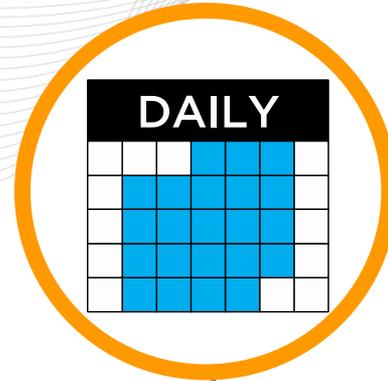
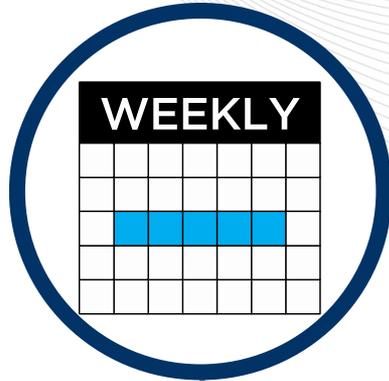
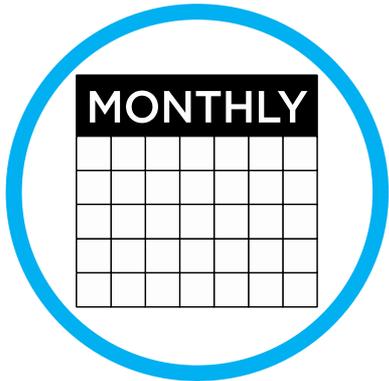
*Does NOT include Demand Response

Peak Load Base Case Study Results

- No reliability problems identified
- Off-cost and switching used to control local thermal and voltage violations in some TO zones
- PJM expects to be able to reliably serve peak load
- No emergency procedures needed to control for base case violations







Monthly coordination of gas and generator planned maintenance between PJM and the pipelines

Weekly or as needed conference calls with interstate pipelines will commence starting Nov. 1 through Mar. 1

- Weekly peak load forecast
- Projected gas usage
- Forecasted system conditions
- Forecasted pipeline

Daily review of gas nominations by PJM scheduled generators will start Nov. 1

Daily review of Gas Electronic Bulletin Boards (EBBs) for critical notices potentially impacting generation in the footprint

Ongoing PJM, MMU, and Pipeline MOU discussions

PJM Studies, Data Requests & Drills

PJM Operations Assessment Task Force (OATF) Winter Operations Study (Nov. 2015)

Resource Winter Testing Exercise (Nov. 2015- Jan. 2016)

PJM Emergency Procedures Drill (Nov. 10, 2015)

Fuel Inventory Survey (Nov. 2015)

Generation owner Cold Weather Resource Preparedness Checklist (Dec. 15, 2015)

Reliability Coordinator Winter Preparation Meetings

PJM / DEP / VACAR (Sept. 30, 2015)

SERC Operating Committee / SERC RCS / VACAR (Oct. 2015)

Reliability First (Nov. 2015)

Joint MISO/PJM/NPCC (Nov. 2015)

NYISO / PJM (Nov. 2015)

TVA / PJM (Nov. 2015)

Completion of EIPC study on Gas / Electric Infrastructure Adequacy

Gas / Electric Coordination

Joint INGAA – Inter-RTO Council Meeting (Oct. 2015)

PJM Winter gas preparation meeting (October 26 & 27, 2015)

MOU with PJM Pipelines signed July 2015

Daily, Weekly, Monthly, and Seasonal Coordination with Pipelines in PJM footprint

LDC outreach in progress

Sensitivity Studies

External contingencies that could impact PJM reliability

N-1-1 Relay trip conditions

Max-Cred Contingency Analysis

Transfer Interface Analysis

BGE/PEPCO Import Capability

90/10 Non-Coincident Load Forecast (143,371 MW)
(2014 / 2015 Winter peak was 143,295)

Higher outage amounts (~18% or 32,000 MW)
(7-10% is the average winter forced outage rate)

Gas Pipeline Contingency (LDC scenarios, Interstate Pipeline Outage,

Sensitivity study results should be finalized by November 2015.