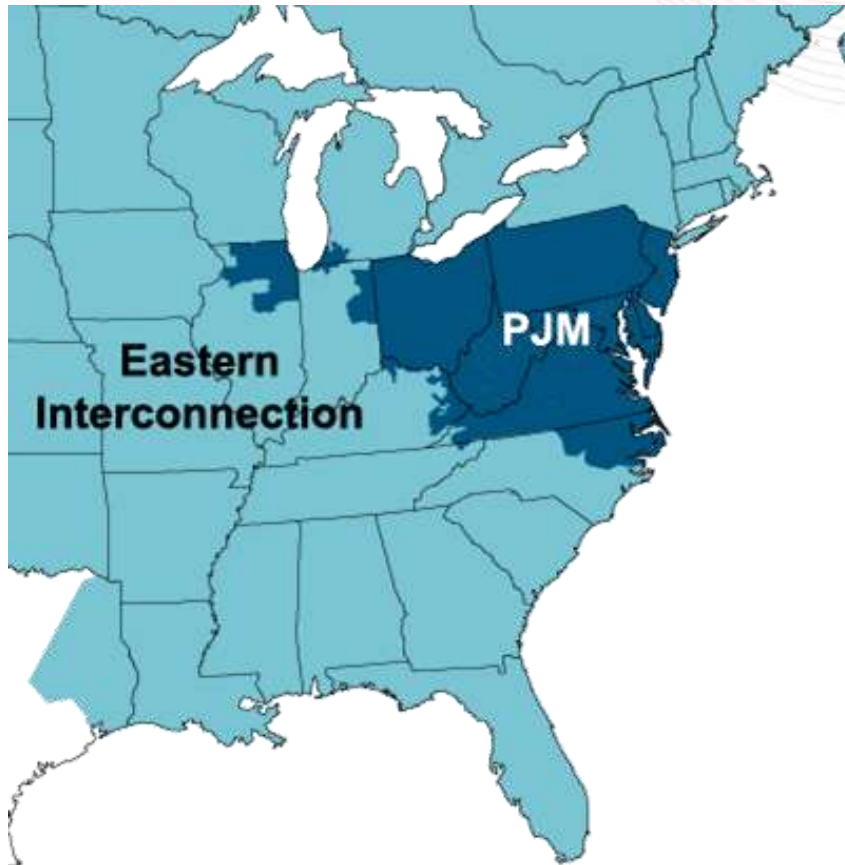


State Energy Offices Transforming the Electricity Sector

Denise Foster
VP, State & Member Services

NASEO Annual Meeting
September 16, 2013




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

KEY STATISTICS

Member companies	800+
Millions of people served	60
Peak load in megawatts	163,848
MW of generating capacity	185,600
Miles of transmission lines	59,750
GWh of annual energy	832,331
Generation sources	1,365
Square miles of territory	214,000
States served	13 + DC

As of 7/2012



1 Reliability

- Grid Operations
- Supply/Demand Balance
- Transmission monitoring

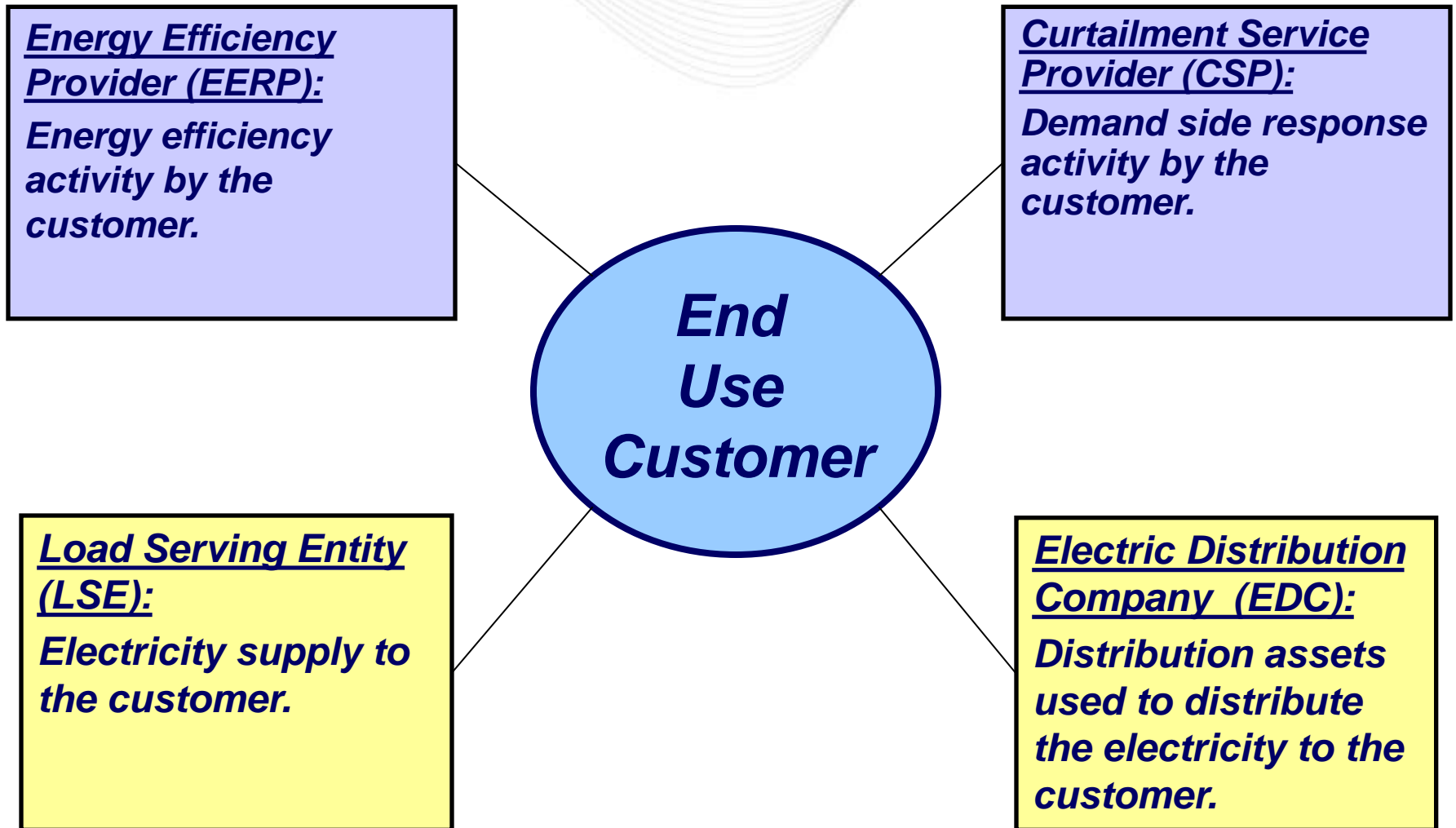
3 Regional Planning

- 15-Year Outlook

2 Market Operation

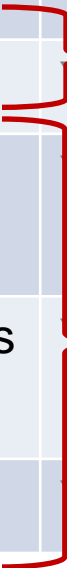
- Energy
- Capacity
- Ancillary Services

Market Structure – Who Does What?



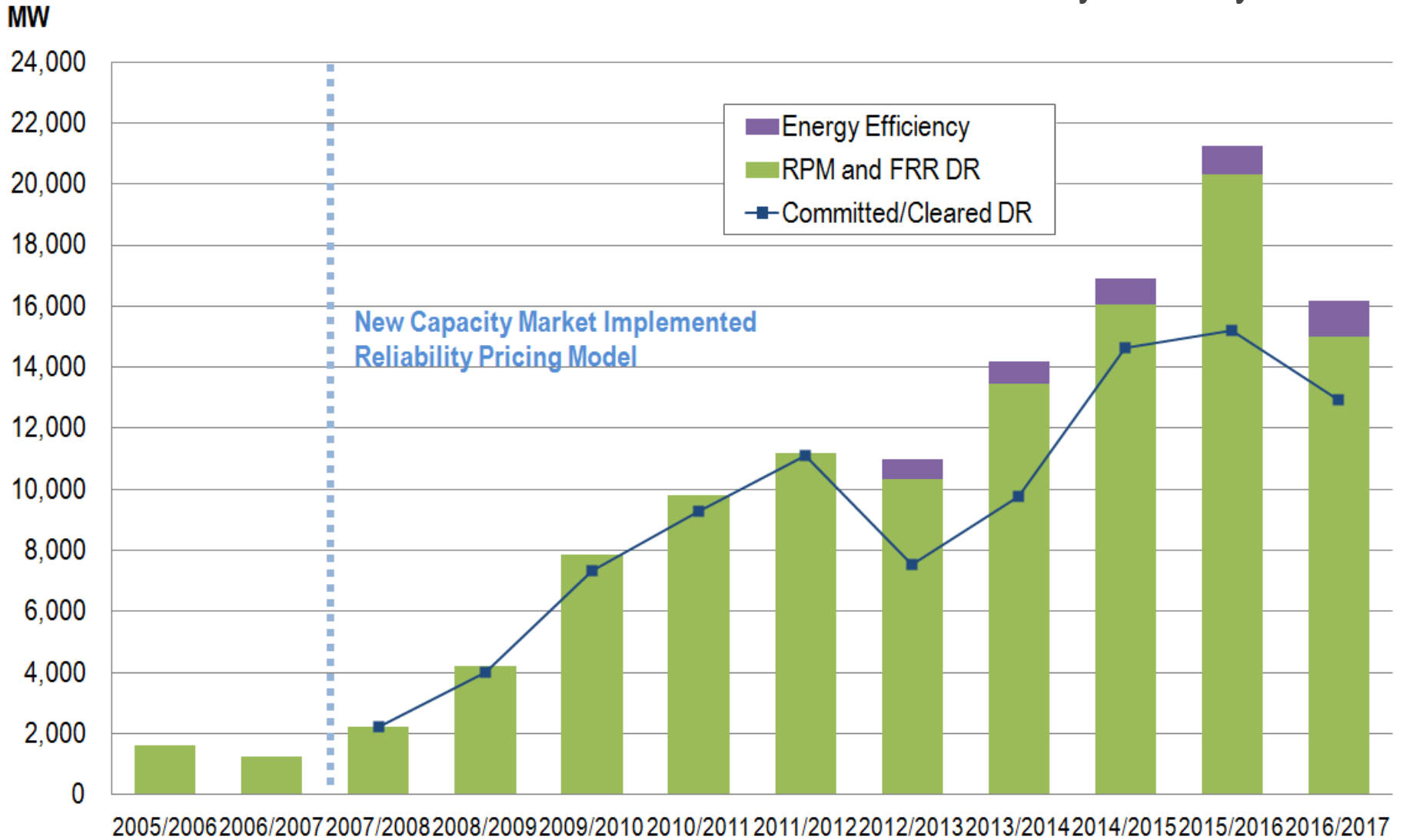
DR and EE Opportunities by Wholesale Service

Wholesale Service	Demand Side Response	Energy Efficiency
Capacity	Yes	Yes
Energy	Yes	
Day Ahead Scheduling Reserves (30 min)	Yes	
Synchronized Reserves (10 min)	Yes	
Regulation	Yes	


Emergency resource (applies to Capacity, Energy, Day Ahead Scheduling Reserves, Synchronized Reserves)
Economic resource (applies to Synchronized Reserves, Regulation)

Customer may participate as Emergency and Economic DR and as EE

Offers of Demand Response as Capacity in PJM by Delivery Year





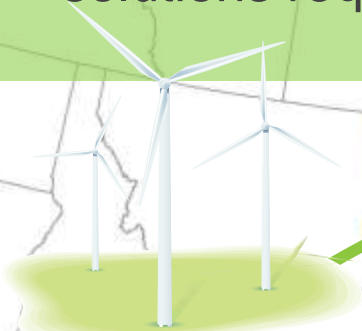
Emergency DR Product Type Requirements

Requirement	Limited DR	Extended Summer DR	Annual DR
Availability	Any weekday, other than NERC holidays, during June – Sept. period of DY	Any day during June-October period and following May of DY	Any day during DY (unless on an approved maintenance outage during Oct. - April)
Maximum Number of Interruptions	10 interruptions	Unlimited	Unlimited
Hours of Day Required to Respond <i>(Hours in EPT)</i>	12:00 PM – 8:00 PM	10:00 AM – 10:00 PM	Jun – Oct. and following May: 10 AM – 10 PM Nov. – April: 6 AM- 9 PM
Maximum Duration of Interruption	6 Hours	10 Hours	10 Hours
Notification	Must be able to reduce load within 2 hours of notification		
Event Compliance	Data due 45 day after end of event month		
Test Compliance	Mandatory test required if no emergency event called		

- Installation of more efficient devices or equipment or implementation of more efficient processes/systems exceeding building codes, appliance standards, or other relevant standards at the time of installation as known at the time of the commitment to the capacity market.
- Designed to achieve a continuous reduction in electric demand at the End-Use Customer's retail site that is not reflected in the peak load forecast prepared for the Delivery Year.
 - Value of EE installation is measured during defined EE Performance Hours
- Fully implemented at all times during the Delivery Year, without any requirement of notice, dispatch, operator intervention.
 - If dispatchable, it would be considered a Demand Resource.

Public Policy Requirements

- Planning process must consider public policy requirements and evaluate transmission solutions required to satisfy them.



- No requirement to order transmission to satisfy public policy requirements

- PJM will work with states to evaluate public policy requirements and any necessary transmission.
- States will decide whether to proceed with transmission to meet their needs.
- Transmission costs will be borne by states sponsoring projects to meet their needs.

