



ATTACHMENT TO TESTIMONY OF ASIM Z. HAQUE

OHIO SENATE
ENERGY AND PUBLIC UTILITIES COMMITTEE

June 5, 2019

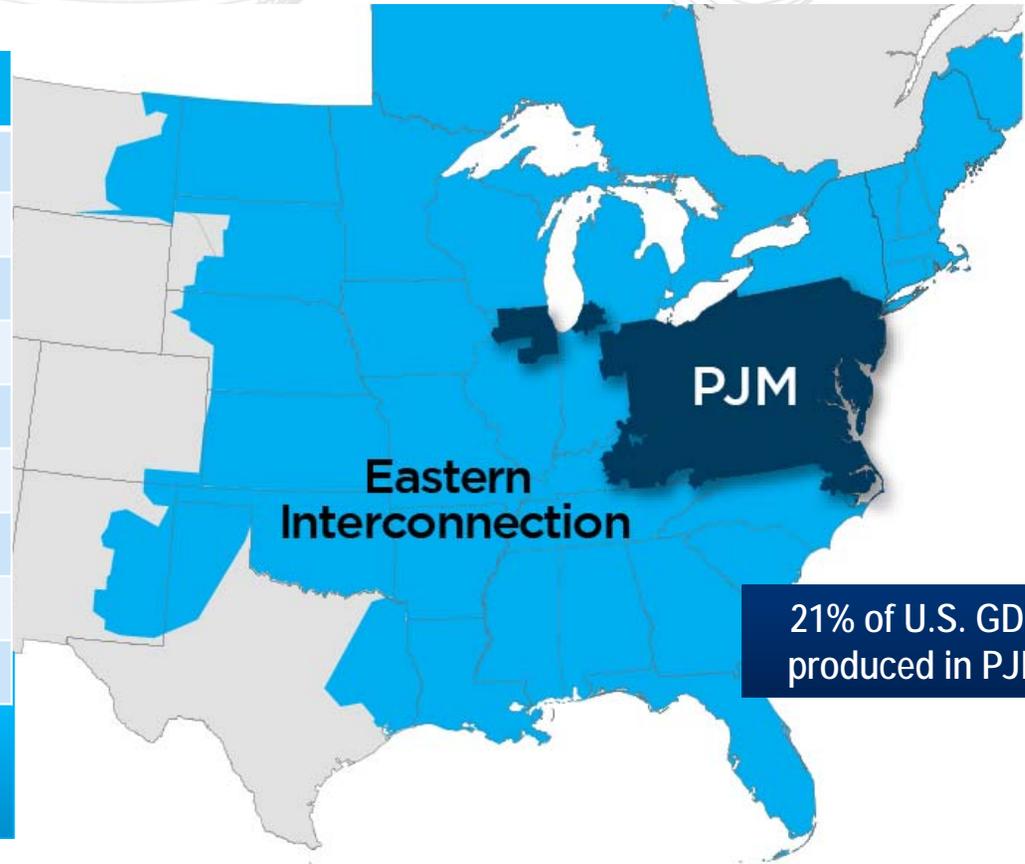


PJM as Part of the Eastern Interconnection

Key Statistics

Member companies	1,010+
Millions of people served	65
Peak load in megawatts	165,492
MW of generating capacity	180,086
Miles of transmission lines	84,042
2018 GWh of annual energy	806,546
Generation sources	1,379
Square miles of territory	243,417
States served	13 + DC

- 26% of load in Eastern Interconnection
- 20% of transmission assets in Eastern Interconnection



As of 1/2019



PJM's Role as a Regional Transmission Organization

PLANNING



Planning for the future like...



OPERATIONS



Matches supply with demand like...



MARKETS



By Zone	
AE	\$20.59
AFP	\$25.55
AFS	\$25.18
ATSI	\$25.46
RC	\$37.91
COMED	\$25.68
DAYTON	\$26.22
DFOK	\$25.38

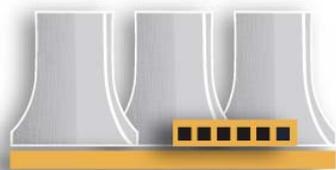
Energy Market Pricing like...



Independent Board of Managers

Market Monitor

Members Committee



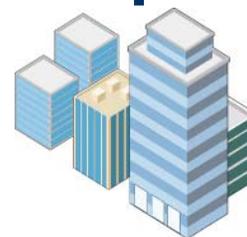
Generation Owners



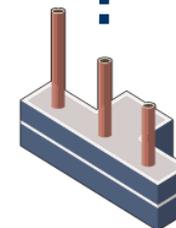
Transmission Owners



Competitive Retail Companies & Trading Companies

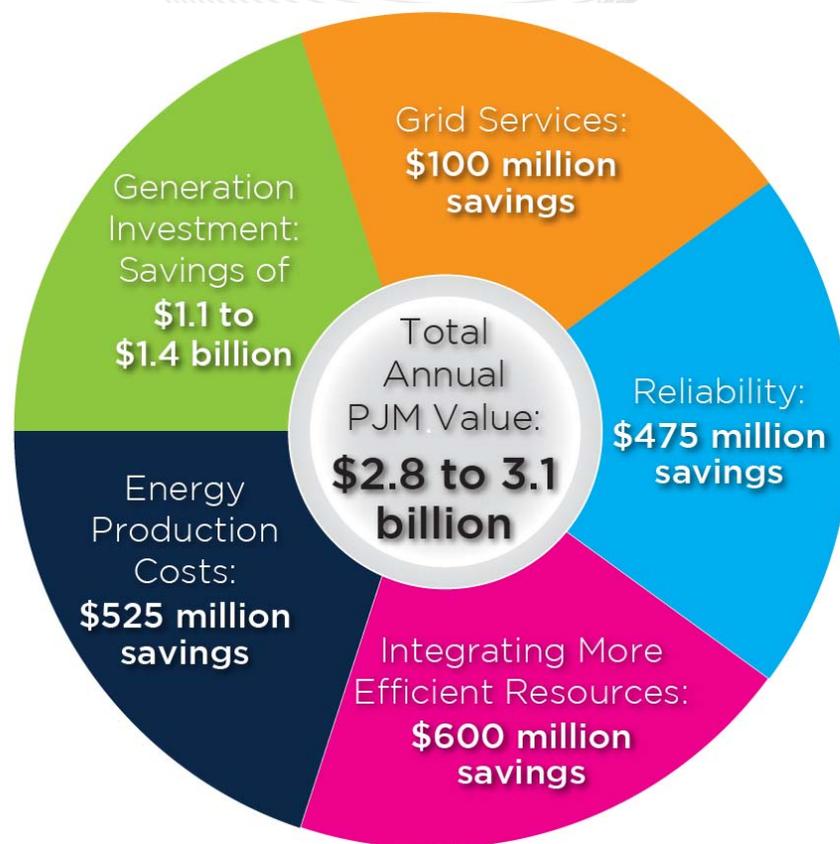


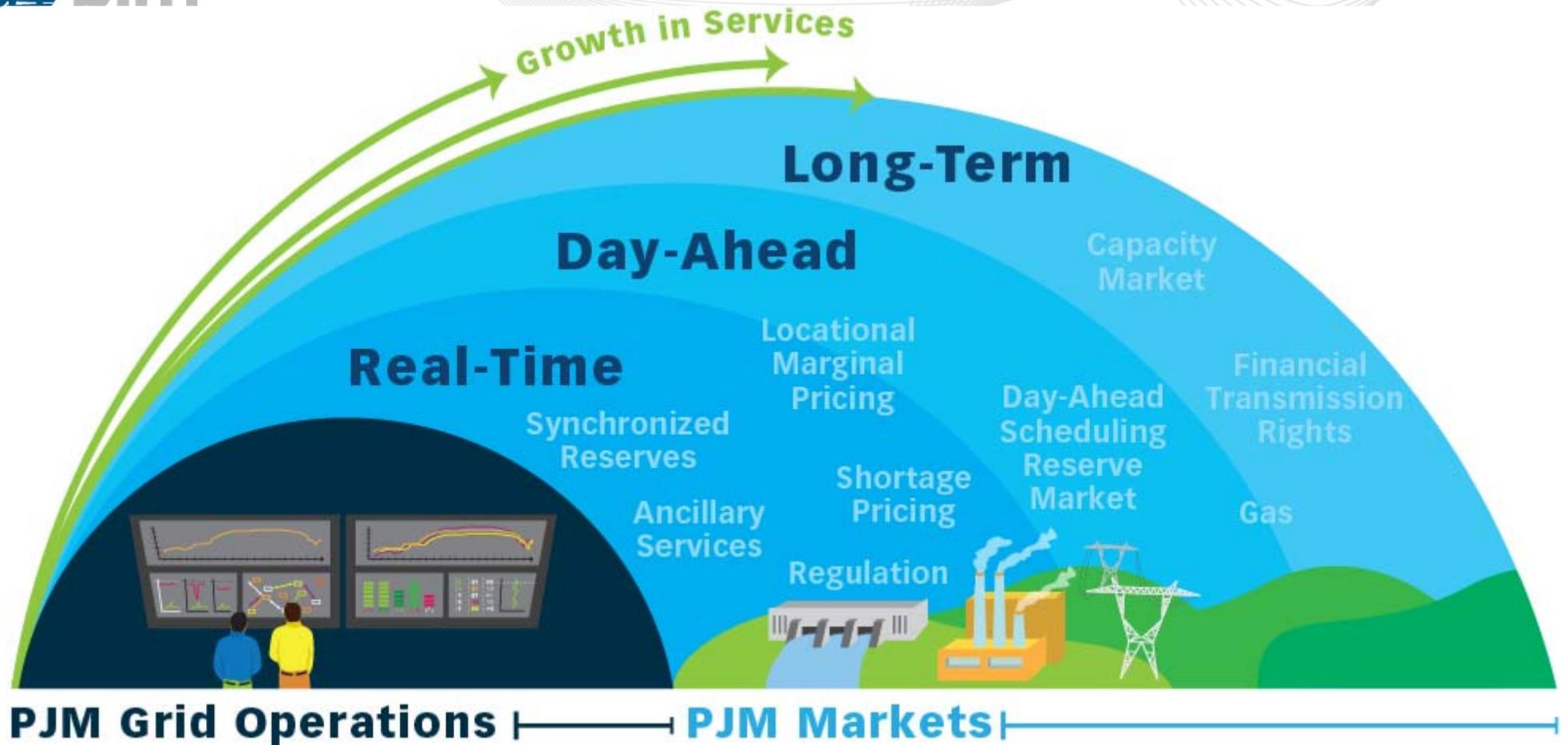
Utility Electric Distributor & Retail Business



Wholesale End Use Customers (Industrial)

- Independent Board of Managers
- Stakeholder process – provide balanced stakeholder input
- Established process for discussion of market evolution
- ISO funding and startup



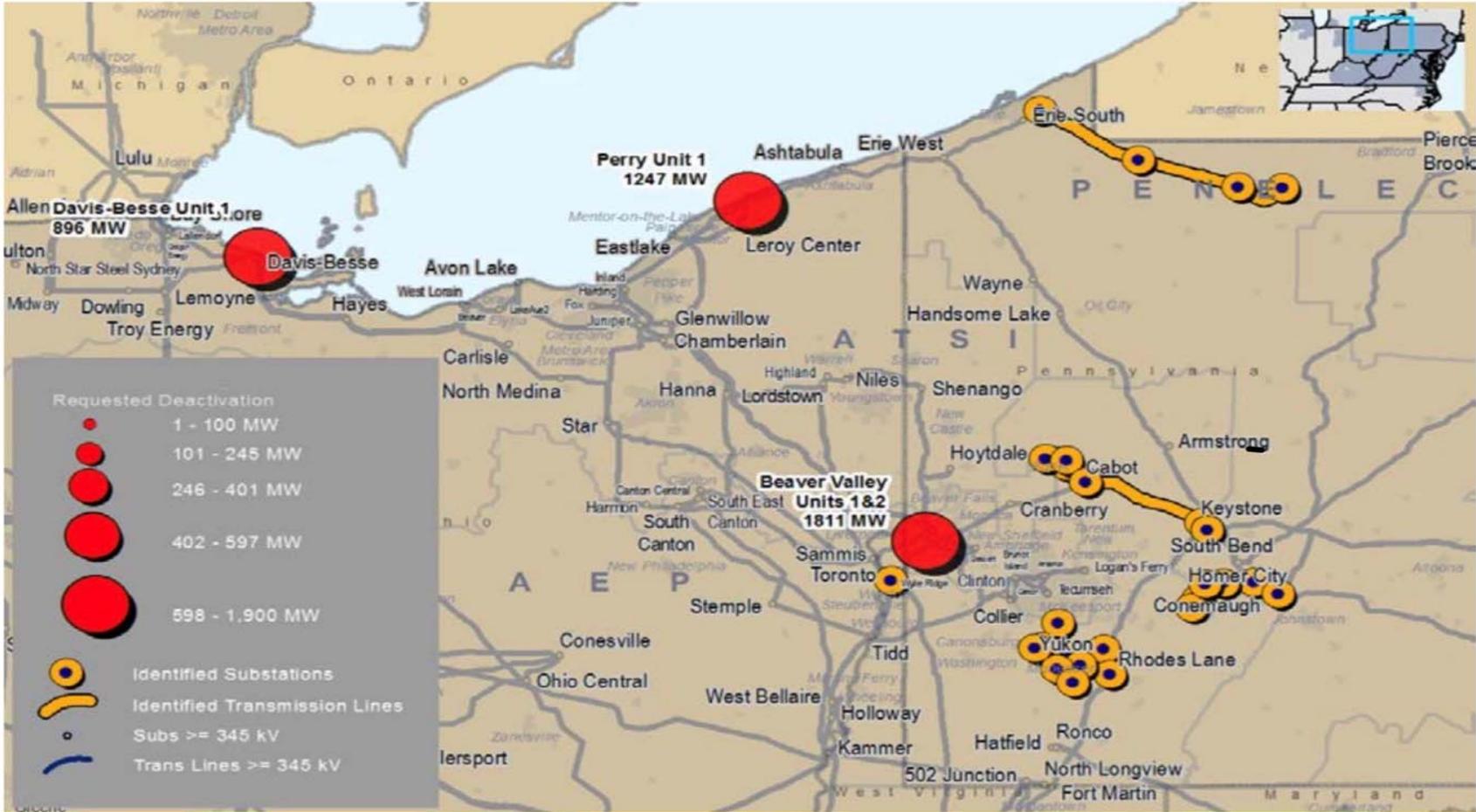


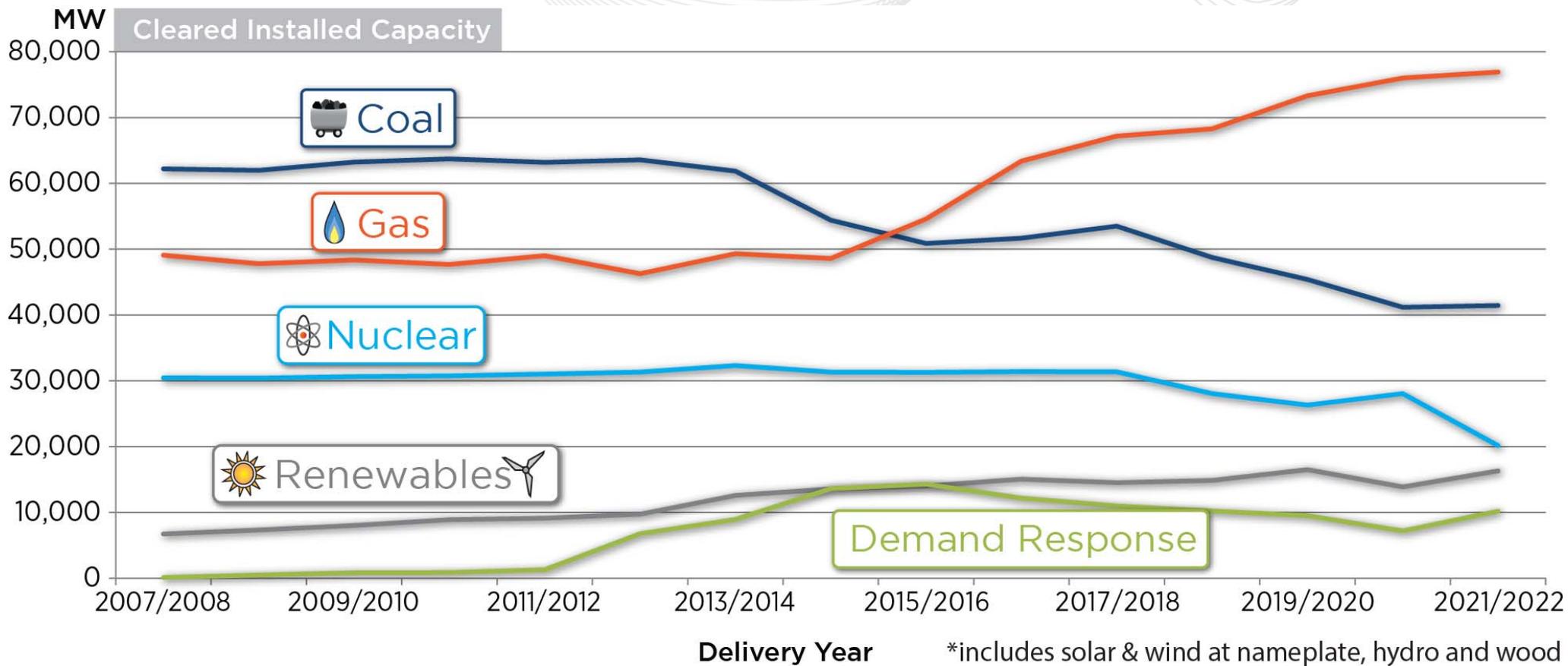


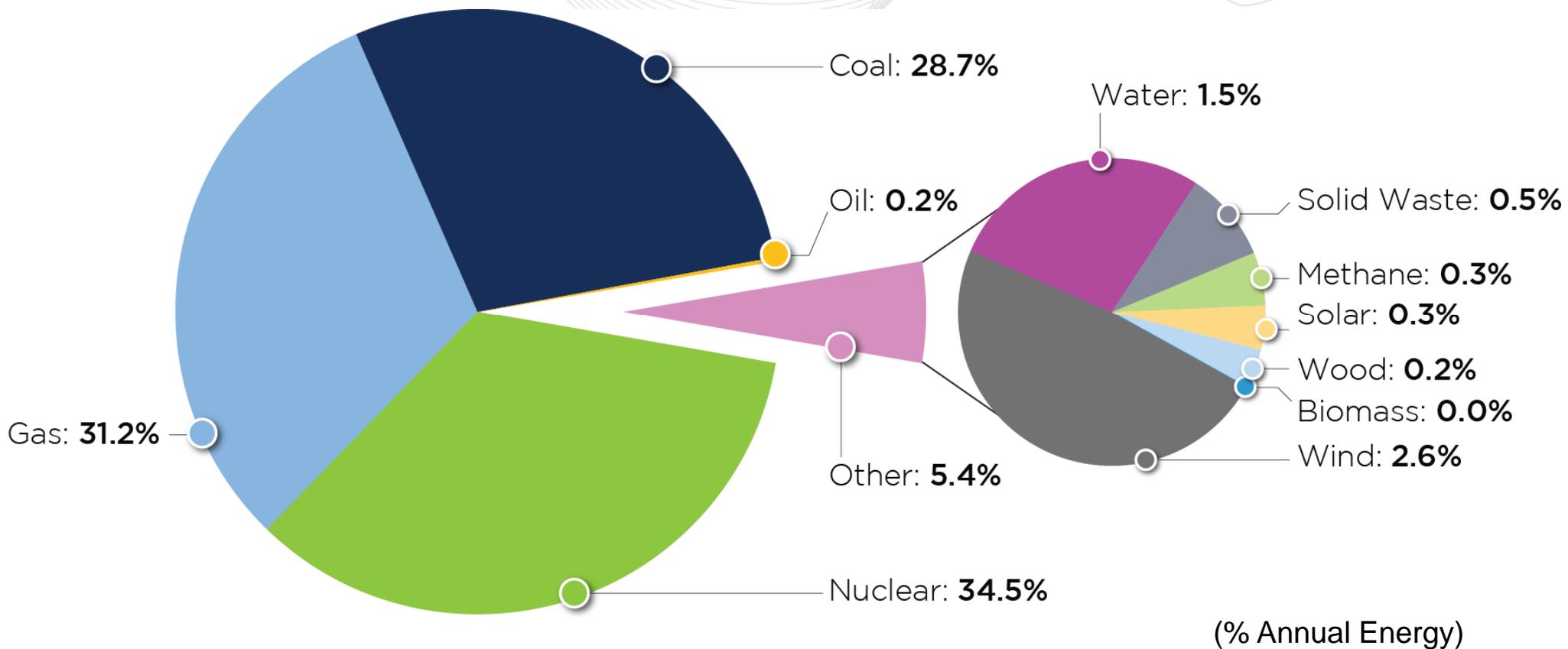
Robust Reserve Margins

Delivery Year	Committed Capacity	Target Reserve Margin	Committed Reserve Margin
2017/18	167,004 MW	15.7%	19.7%
2018/19	166,837 MW	15.7%	19.8%
2019/20	167,306 MW	16.5%	22.4%
2020/21	165,109 MW	16.6%	23.3%
2021/22	163,627 MW	15.8%	21.5%

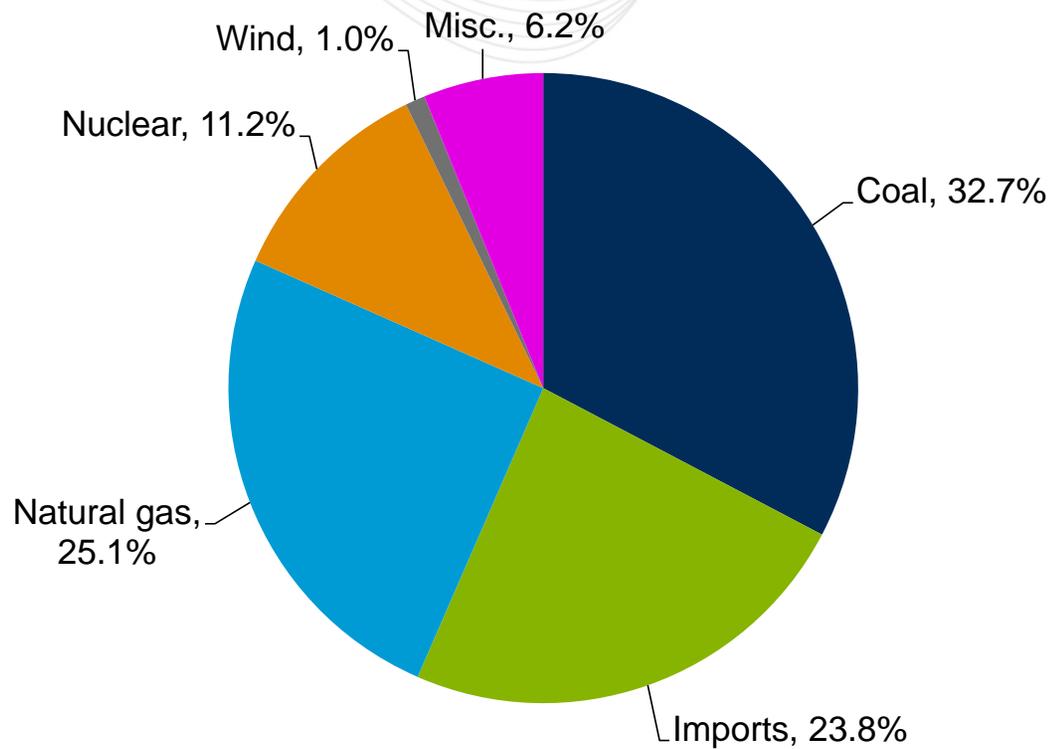
* The PJM Delivery Year runs from June 1 – May 31

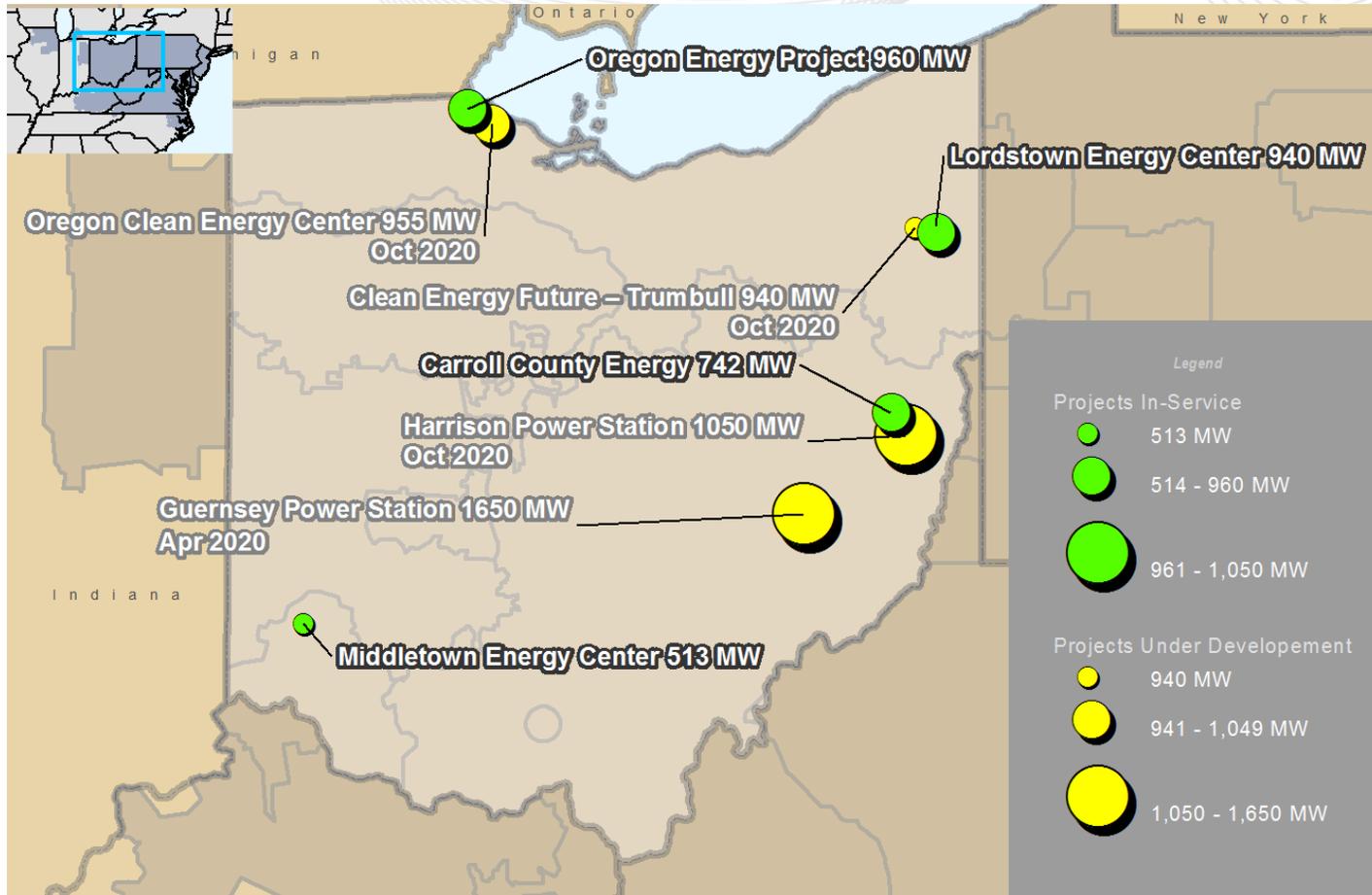






Amount of energy produced by Ohio generation





SCENARIO 5: D/B AND PERRY UN-RETIRE
AND 50% OF NEW ENTRY DOES NOT OCCUR

Increase from Base Case
of \$16 million

BASE CASE: D/B AND PERRY RETIRE AND
ALL NEW ENTRY OCCURS

Reduction of \$1.6 billion
from 2019

SCENARIO 2: D/B AND PERRY UN-RETIRE
AND ALL NEW ENTRY OCCURS

Further reduction from
Base Case of \$95 million

This represents changes in wholesale market pricing only without netting the impact of any subsidy provided to Davis-Besse or Perry