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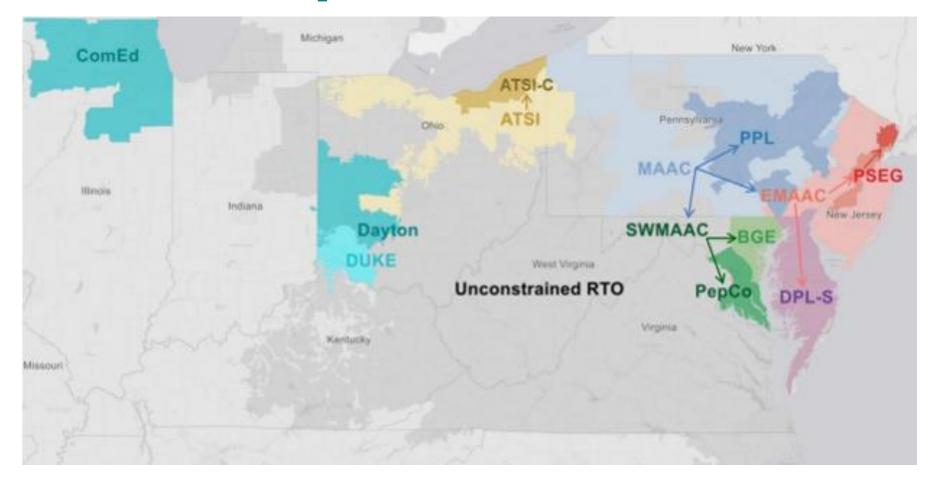
OPC

## ESIG Spring Technical Workshop

Power Plant Retirements: Transmission Buildout and Reliability Must Run Contracts

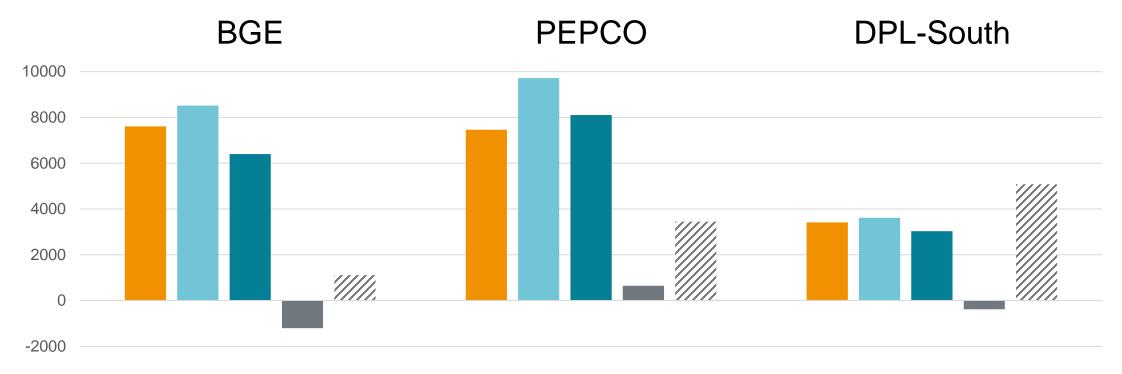
David Lapp, Maryland People's Counsel Tucson, Arizona Wednesday, March 27, 2024

### **PJM Constrained Locational Deliverability Areas**



OFFICE OF PEOPLE'S COUNSEL State of Maryland Source: Modeled LDAs as of 2020/2021. Map from Newell A., Oates, D., Pfeifenberger, J., Spees, K., Hagerty, J.M., Pedtke, J., Witkin, M., Shorin, E. April 2018. Fourth Review of PJM's Variable Resource Requirement Curve. Prepared for PJM by The Brattle Group. Available at: https://www.pjm.com/-/media/library/reports-notices/reliability-pricing-model/20180425-pjm-2018-variable-resource-requirement-curve-study.ashx.

### Maryland Locational Deliverability Areas: Retirement Risks



Reliability Requirement
Generation Post Retirement & Imports
Interconnection Queue 2020-27

Generation & Imports

Net Supply of Reliability Req. Post Retirement

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### **Baltimore Gas & Electric customer impacts** of Maryland retiring coal plants

Retirements of Wagner (841 MW) and Brandon Shores (1282 MW)	Annual customer costs	RMR term costs (6/2025-12/2028)	Monthly increase in avg. residential bill (\$/month)	Annual average residential bill impact
RMR Costs*	\$296,000,000	\$1,060,666,667	\$9	\$108
PJM Capacity Market <i>Incremental</i> Costs**	\$164,000,000	\$587,666,667	\$5	\$60
Total	\$460,000,000	\$1,648,333,333	\$14	\$168

\* RMR cost estimates are preliminary, based on the best available information on past RMR costs, and are not predictions. Estimates assume (optimistically) timely completion of PJM's transmission solution, currently scheduled for December 2028.

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\*\* Incremental capacity market costs assume, consistent with past practice, that RMRs do not participate in PJM's capacity market. OPC **OFFICE OF PEOPLE'S COUNSEL** 

#### **Transmission-related capital expenditure customer costs**

Brandon Shores Deactivation Grid Solutions	Capital Expenditures	Annual Costs (2030 and beyond)	Monthly increase in avg. residential bill (\$/month)	Annual average residential bill impact
Total costs across PJM footprint	\$726,000,000	-	-	-
Cost allocation to BGE customers	\$534,000,000	\$73,319,988	\$2.26	\$27.12

Customer costs incurred following completion of transmission solution, scheduled for December 2028, and last until the investments are fully depreciated (approximately 30-50 years).

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#### **Questions?**

# David Lapp, Maryland People's Counsel davids.lapp@maryland.gov