

HOUSE ENVIRONMENT AND TRANSPORTATION COMMITTEE

Delegate Marc Korman, Chair
Delegate Michele Guyton, Vice Chair

January 20, 2026

1:00 PM

House Office Building, Room 250

Maryland's Energy Landscape - Part 1

AGENDA

- I. Introductory Remarks
- II. Maryland Public Service Commission
 - Kumar Barve, Commission Chair
 - Ben Baker, Senior Advisor
- III. Maryland Office of People's Counsel
 - David Lapp, People's Counsel
- IV. Maryland Department of Natural Resources
 - Bob Sadzinski, Manager, Power Plant Research Program
- V. Questions
- VI. Concluding Remarks

Maryland Public Service Commission Electricity and Gas

Environment and Transportation
Committee

January 20, 2026

Utility Regulation

- Mission of the Public Service Commission is to ensure safe, reliable, and economic public utility and transportation service to the citizens of Maryland.
- Electric and gas utilities are granted exclusive franchises throughout Maryland and an opportunity to recover their prudently incurred costs at a fair rate of return.
- The Commission follows the guidelines directed by the legislature through the Public Utility Article (PUA).

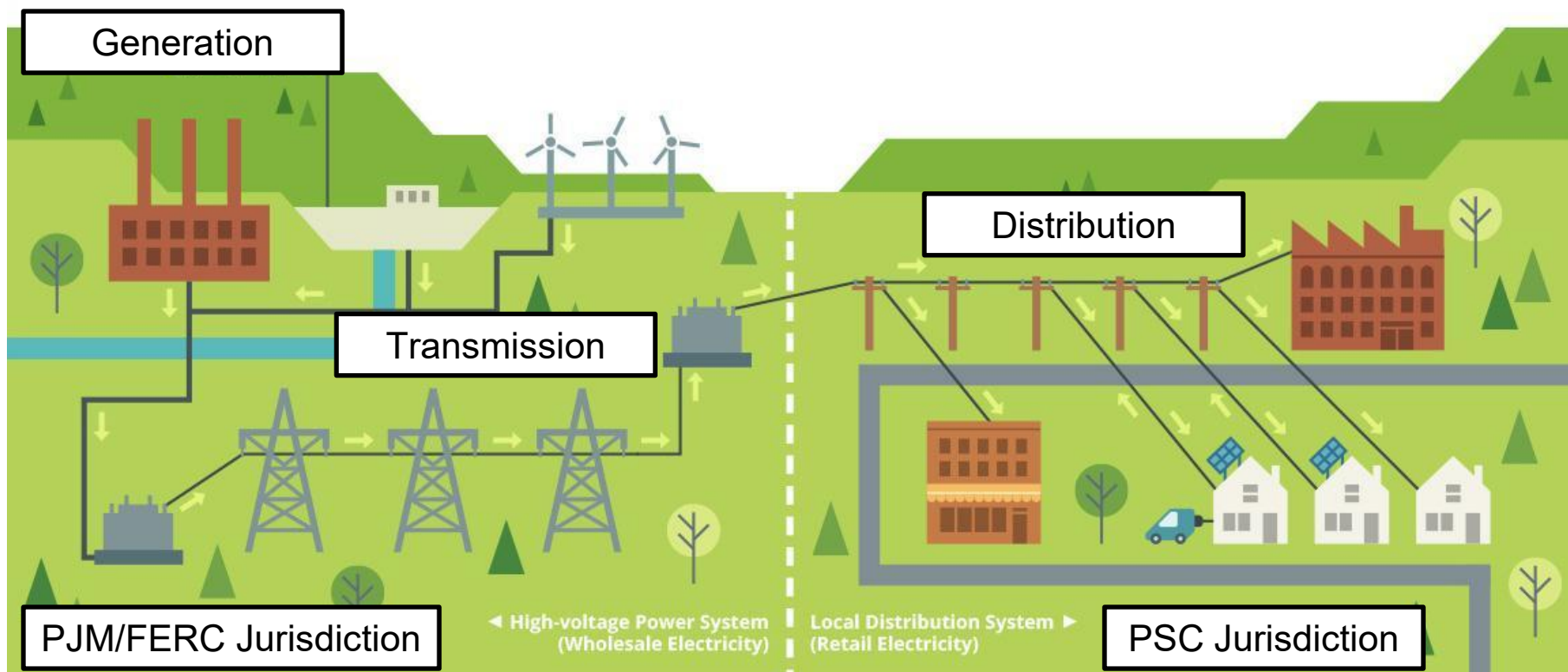
Electric and Gas Systems

- Utility systems consist of three parts: **Supply, Transmission, Distribution**
 - Electricity flow has traditionally been single direction. With advent of distributed generation, flow of electricity can now go both ways (e.g. solar)
 - For both electric and gas need to ensure there is enough supply and a sufficient network to move the supply to instantaneously meet customers demand within reasonable parameters
- PSC has regulatory jurisdiction over the **distribution** system, e.g. rate setting
- PSC has limited authority over **supply** and **transmission**.
 - Predominantly overseen by FERC and PJM
 - Oversight of supply procurement
 - Certificate of Public Convenience and Necessity (CPCN) for electric generation and transmission build in Maryland
 - Maryland utilities procure capacity, energy, and other ancillary services from wholesale market.

High Level Electric System Example

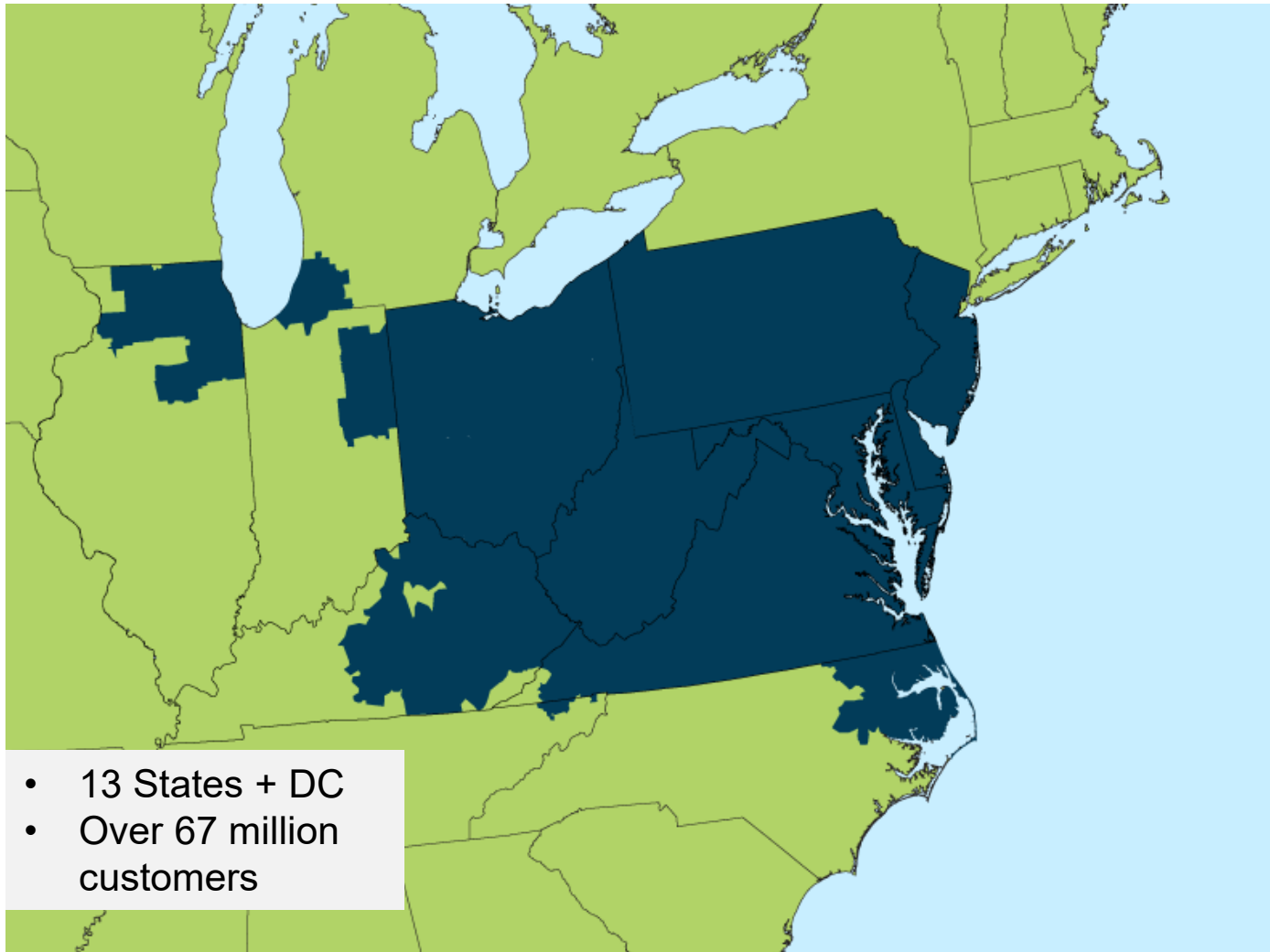
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How electricity is produced, transported, and delivered to consumers



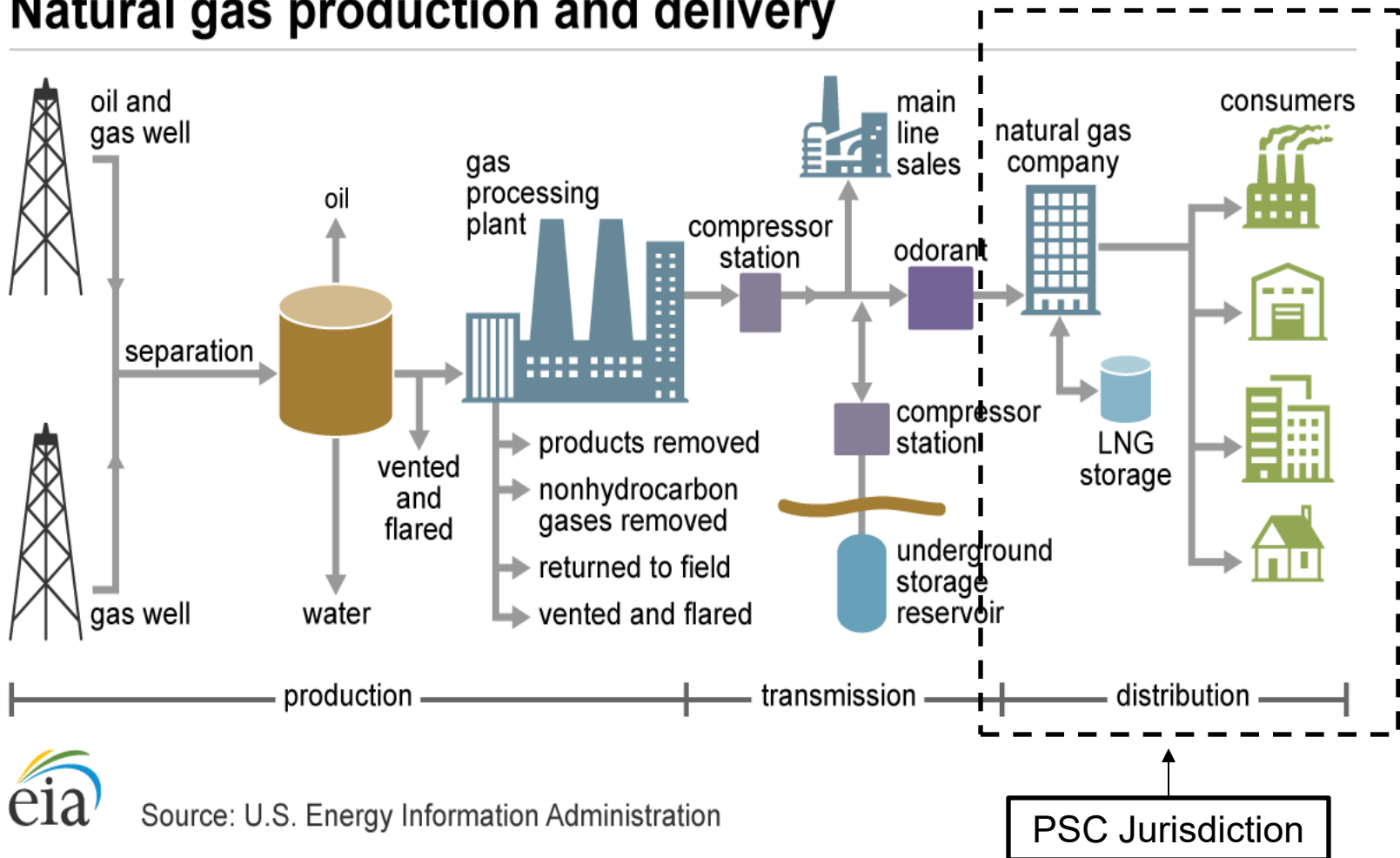
ISO New England (<https://www.iso-ne.com/about/what-we-do/in-depth/how-electricity-flows-from-wholesale-to-retail>)

PJM Footprint



PJM Website: <https://www.pjm.com/about-pjm/who-we-are/territory-served#:~:text=PJM%20Interconnection%20coordinates%20the%20movement,and%20the%20District%20of%20Columbia>

Natural gas production and delivery



Source: U.S. Energy Information Administration

PSC Jurisdiction

Commission Oversight of Distribution Utilities

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- Setting Utility Rates
- Setting standard utility practices via tariffs
- Safety and Reliability Standards
- Implementing programs required by the legislature
- Low Income programs

PSC Proceedings

- Distribution Rate Cases
 - Utilities may request a distribution rate increase at any time
- Supply procurement and review cases
 - Utilities through either competitive bids or through their own procurement processes will purchase electricity and gas to serve customers.
- EmPOWER program (Energy Efficiency, Demand Response, Electrification)
 - Commission will hold a proceeding this year to determine program design for 2027 – 2029.
- Certificates of Public Convenience and Necessity (CPCN)
 - At least 3 transmission and 50 generation CPCN proceedings active
 - Storage does not require a CPCN
 - Commission recently completed the first solicitation for certain generation to be eligible for an expedited CPCN (SB937/HB1035, 2025)
- Electric Reliability and Distribution System Planning
 - Annually review utility reliability performance and plans
 - Electric utilities planning done with stakeholder input allowing greater transparency into the process

Example Proceedings at the PSC Cont.⁹

- Net Energy Metering and Community Solar Programs
 - Customers install solar on their property to reduce consumption. If a customer produces more energy than consumption the utility will net that against customer usage when consumption was greater than solar production. (NEM)
 - Customers can purchase solar output from authorized solar array to virtually participate in NEM
- Future of Gas Proceeding
 - Proceeding to examine the gas company planning and implications to the gas system of a low carbon future.
- Energy Storage Programs
 - Electric utilities authorized to propose two pilot storage programs to examine different ownership models and ability to offset distribution upgrades. (SB 573, 2019)
 - 3000 MW Storage Goal by 2033 (HB 910, 2023)
 - Establishing storage procurements toward meeting goal and complying with previous legislation (SB937/HB1035, 2025)

Cost and Reliability Pressures

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- Rates have been increasing
 - Electricity: both distribution and supply costs have increased, but supply has been the greater driver
 - Gas: Primarily driven by distribution costs
- Electricity supply costs increases have included both increases to transmission and capacity costs. There have also been concerns about serving future load.
 - Capacity cost constraints are driven by a supply – demand imbalance.
 - Concerns with uncertainty with projected data center load growth

Actions to help mitigate cost growth and reliability concerns

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- Programs that encourage additional supply resources or reduce need for infrastructure investment
 - Implementation of Next Generation Energy Act
 - Expedited CPCN and storage procurements (mid term)
 - Nuclear procurement (long term)
 - Large Load tariff implementation (active rulemaking)
 - State Energy Planning Office (long term)
 - Continued implementation of Demand Response programs, enhanced TOU rates, and other distributed energy resource projects such as DRIVE Act VPP implementation
 - Commission and State involvement with PJM and FERC proceedings.
 - Improving solar interconnection process (PC73)
- Infrastructure investments:
 - Distribution System Planning and Future of Gas Proceedings
 - Application of increased scrutiny for STRIDE and incorporating gas system investments into rates (Next Generation Energy Act)

Helping Customers Control Bills ¹²

- Commission and Legislative Actions
 - Implementation of Limited Income Mechanism (PC59)
 - Provision of legislative relief funds (Next Generation Energy Act)
 - Alternative rate designs (e.g. shoulder month cost recovery)
 - Increased service weather termination protections and considering additional protections regarding connections and reconnections (RM86)
- Customer Opportunities
 - Load management programs such as Time-of-Use and Demand Response
 - Partake in EmPOWER
 - Take advantage of distributed energy resource opportunities such as Community Solar
 - Budget Billing and OHEP programs

Limited Income Programs

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Maryland Policies

- **Universal Service Protection Program (USPP):** prohibits the termination of low-income customers during the heating season for nonpayment.
- **Electric Universal Service Program (EUSP):** assists low-income electric customers to retire utility bill arrearages, make current bill payments, and access home weatherization.

Grants and Assistance Available

- **Maryland Energy Assistance Program (MEAP):** grants for heating bills.
- **EUSP:** grants for current electric bills.
- **Arrearage Retirement Assistance:** grants for past due electric and gas bills.
- **Weatherization:** energy efficiency replacements and upgrades designed to reduce monthly utility bills through more energy efficient homes.
- Assistance from non-profits or other sources.

Programs administered by the Office of Home Energy Programs (OHEP) and Department of Housing and Community Development (DHCD).

Thank you and Questions?

Appendix

Electric System

- **Generation is delivered via transmission lines to the local distribution systems.**
 - Generation + Transmission = Wholesale Market
 - Maryland utilities and retail energy providers procure energy from wholesale market.
- PSC oversight of safety and reliability on the distribution system
- Electricity flow has traditionally been single direction. With advent of distributed generation, flow of electricity can now go both ways (e.g. solar)

Gas System

- Gas supply can come from anywhere and is delivered to Maryland via interstate pipelines.
- The utilities take natural gas off the interstate pipeline to deliver to customers or store for delivery at later date.
- Gas takes time to move via pressure (slow).

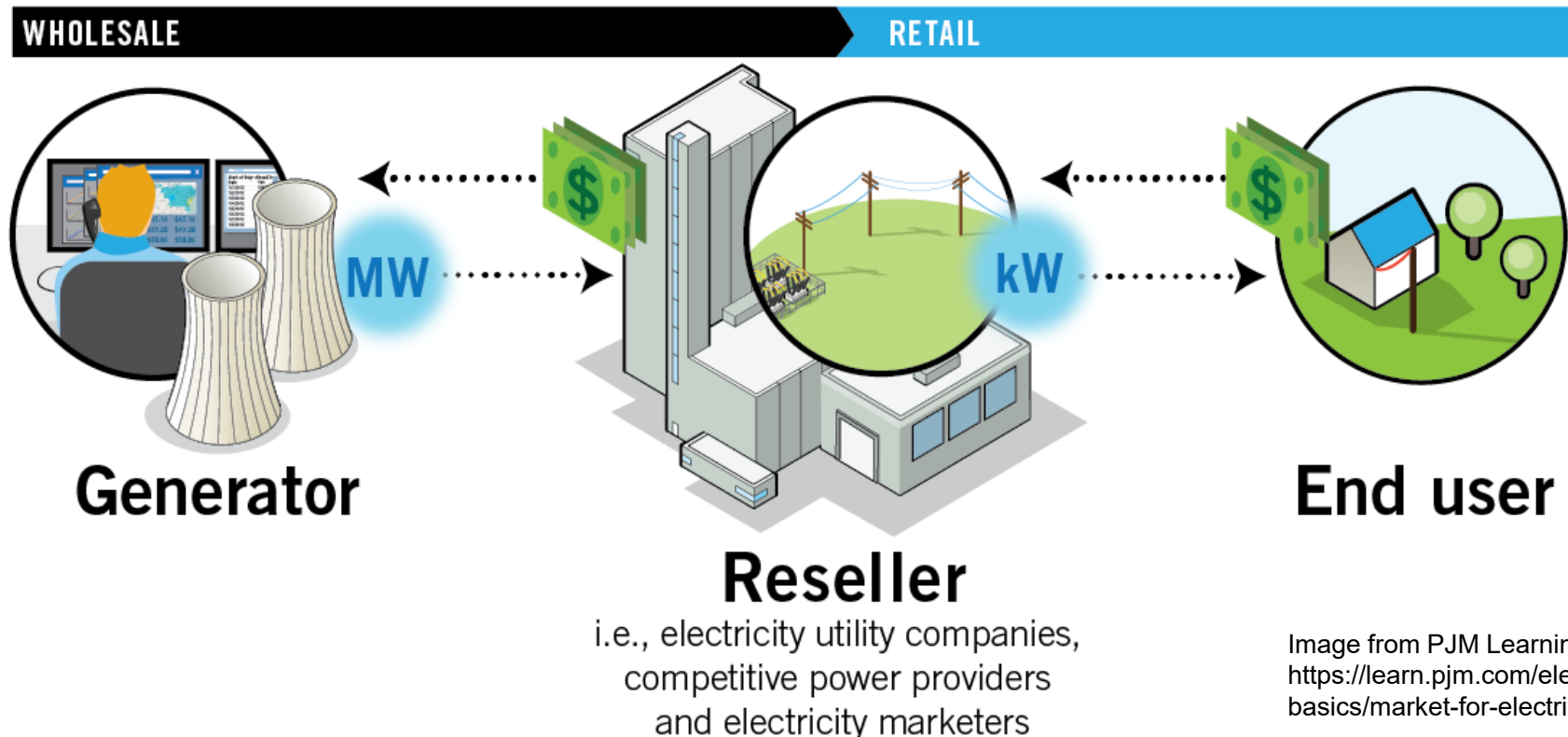
FERC/PJM

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- Federal Energy Regulatory Commission: Regulates the interstate commerce and reliability of electricity and gas
 - Wholesale markets for sale of electricity
 - Transmission of gas and electricity.
- PJM: Oversees the reliability and safety of the bulk electric power system and the operations of the power market serving 13 states and D.C. (including MD)

Wholesale vs Retail Choice

- Maryland customers can choose to purchase the commodity from a retail choice provider instead of the utility.
- Utility and retail suppliers buy commodity and sell it to the customer.
- PSC has process for setting and review of utility retail rates.



Generation Capacity Factors

- Capacity factors are a comparison of plant energy output to the theoretical energy output of the plant running all the time at full capacity.
 - E.g. 100% CF = Plant ran all at time at full output
- Output of some resources are determined based on weather patterns: solar and wind;
- Market based dispatch resources are primarily fossil fuel resources.
 - All resources, may respond to market signals, but renewables don't generally, unless needed (e.g. curtailment).

Example of Different Generation Characteristics

	Capacity Factor	Effective Load Carrying Capability	Example Midpoint LCOE (\$/MWh) from Lazard's
Utility-Scale Solar	25%	7%	\$58
C&I or Community Solar	17.5%	N/A	\$149
Residential Rooftop Solar*	17.5%	N/A	\$203
Wind - Land	42.5%	41%	\$61.50
Wind - Offshore	50%	67%	\$113.50
Nuclear	New - 91.5% Operating - 89%	95%	New - \$180.5 Operating/Marginal - \$34
Natural Gas - Combine Cycle	New - 60% Operating - 39.5%	74%	New - \$78.5 Operating/Marginal - \$31.5
Natural Gas - Peaking	New - 12.5% Operating - 3.5%	61 - 77%	New - \$200 Operating/Marginal - \$108.5
Coal	New - 75% Operating - 28%	83%	New - \$122 Operating/Marginal - \$72.5

- Capacity Factor – Units annual energy output relative to the unit outputting energy at 100% of its capacity rating
- ELCC – Percent of units capacity that is considered reliably available for peak usage
- Levelized Cost of Energy – A lifecycle view of cost of the project relative to its output
- Storage can be used to improve solar or winds ELCC. For example, Lazard estimates a 33% ELCC for solar + storage in PJM. Lazard estimates a midpoint LCOE for Solar + Storage of \$90.5.

Sources:

Capacity Factor – Lazard's 2025 LCOE+ report

ELCC – PJM ELCC Class Ratings 2027/2028 Base Residual Auction,

LCOE – Midpoint LCOE published in Lazard's 2025 LCOE+ report

*values from Lazard's 2024 report as residential rooftop solar was not included in the 2025 analysis

Utility Cost Recovery

- PSC oversees distribution rate cases to determine the amount of money owed a utility and the rates charged to customers
- Utilities earn a return on rate base
- Customer rates are cost of service based.
- Three types of rates
 - Fixed charge, Variable rate, Demand charge

Ratemaking Principles

- Customer rationing/economic efficiency
- Avoidance of rate-shock
- Gradualism
- Effectiveness in yielding the revenue requirement
- Fair cost apportionment
- Understandability of Rates
- State Policy Goals

Types of Rate Cases

- Traditional
 - Rates are based on historical spend
- Multi-Year Rate Plan
 - Rates based on forecasted spend over three years
 - Prudency review and true up occur at end of three years
 - Commission is currently contemplating lessons learned for how multi-year rate plans may operate in the future.

General Assembly has passed legislation ending reconciliation and setting certain standards for MYPs to be allowed (SB937/HB1035, 2025)

Various Proceedings at the Commission

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- Rate Cases
 - 5 active distribution rate case
 - Pepco, Washington Gas, Hagerstown, Thurmont, Maryland American Water Company
- Certificate of Public Convenience and Necessity (CPCN)
 - At least 3 transmission and 50 generation CPCN proceedings active
 - Commission completed first solicitation for expedited CPCN
- EmPOWER (Energy Efficiency, Demand Response, Electrification) (Case No. 9705)
 - Most recent legislation revised goals to electrification goals and made other programmatic changes: HB864 (2024)

Various Proceedings at the Commission Con't

- Future of Gas Proceeding (Case No. 9707)
- Reliability Proceeding (Case No. 9353)
- Distribution System Planning (Case No. 9665)
- Multi-Year Rate Plan lessons learned (Case No. 9618)
- Interconnection Working Group
- Electric Vehicle programs and working group (Case No. 9478)
- Retail Choice Reform (Implementation of SB1, 2024)

Upcoming Rulemakings

- Consider Nuclear procurement regulations (Fall 2026)
- Gas extension line policy
- Large Load Tariffs



www.psc.state.md.us



Briefing for the House Environment and Transportation Committee

David S. Lapp
Maryland People's Counsel

January 20, 2026

Office of People's Counsel

Who we are and what we do

OPC is charged with protecting the interests of residential utility customers.

Public Utilities Article (PUA), Title 2, Subtitle 2, creates the People's Counsel

Two core responsibilities under PUA § 2-204:

1. “[E]valuate each matter pending before the Commission” and “appear before the Commission and courts”
2. “[C]onduct investigations and request the Commission to initiate proceedings”

OPC “shall consider public safety, economic welfare, and environmental interests of the State and its residents, including the State’s progress toward meeting its greenhouse gas emissions reductions goals.”

Under PUA § 2-205, OPC also “may recommend to the General Assembly legislation on any matter related to the Commission's jurisdiction.”

A Consumer's Guide To: **Pepco's Proposed Rate Increase**

Future of Gas

The PSC FOG Docket

Gas Spending and Analysis

STRIDE

STRIDE FAQs

OPC
OFFICE OF PEOPLE'S COUNSEL
State of Maryland

FOR IMMEDIATE RELEASE
February 26, 2025

Contact:
Lori Sears
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410-767-8172

Regulators should reject BGE's \$152 million addition to previous rate hike, OPC filing says

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

MARYLAND OFFICE OF PEOPLE'S COUNSEL, ET AL.,
PETITIONERS

V.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

OPC
OFFICE OF PEOPLE'S COUNSEL
State of Maryland

Maryland's Utility Rates and Charges

Explanation and data on utility bills, rates, and charges, and how—and why—they have changed over time.

June 2024
(updates for 2025-26 rate increases to pp. 6, 9, 12, March 2025)

Consumer Assistance Unit

Utilities are profit maximizers

... that maximize profits by spending on infrastructure

- **Utilities increase profits by spending (customer money) on capital infrastructure**
- **Capital investments** – on infrastructure such as buildings, pipes, concrete, wires, computers, etc. – increase “**rate base.**”
- Customers pay utilities a return (profit) on rate base, plus taxes—a total rate of 9-10 percent.
- Once approved by regulators, costs are locked in for many decades.

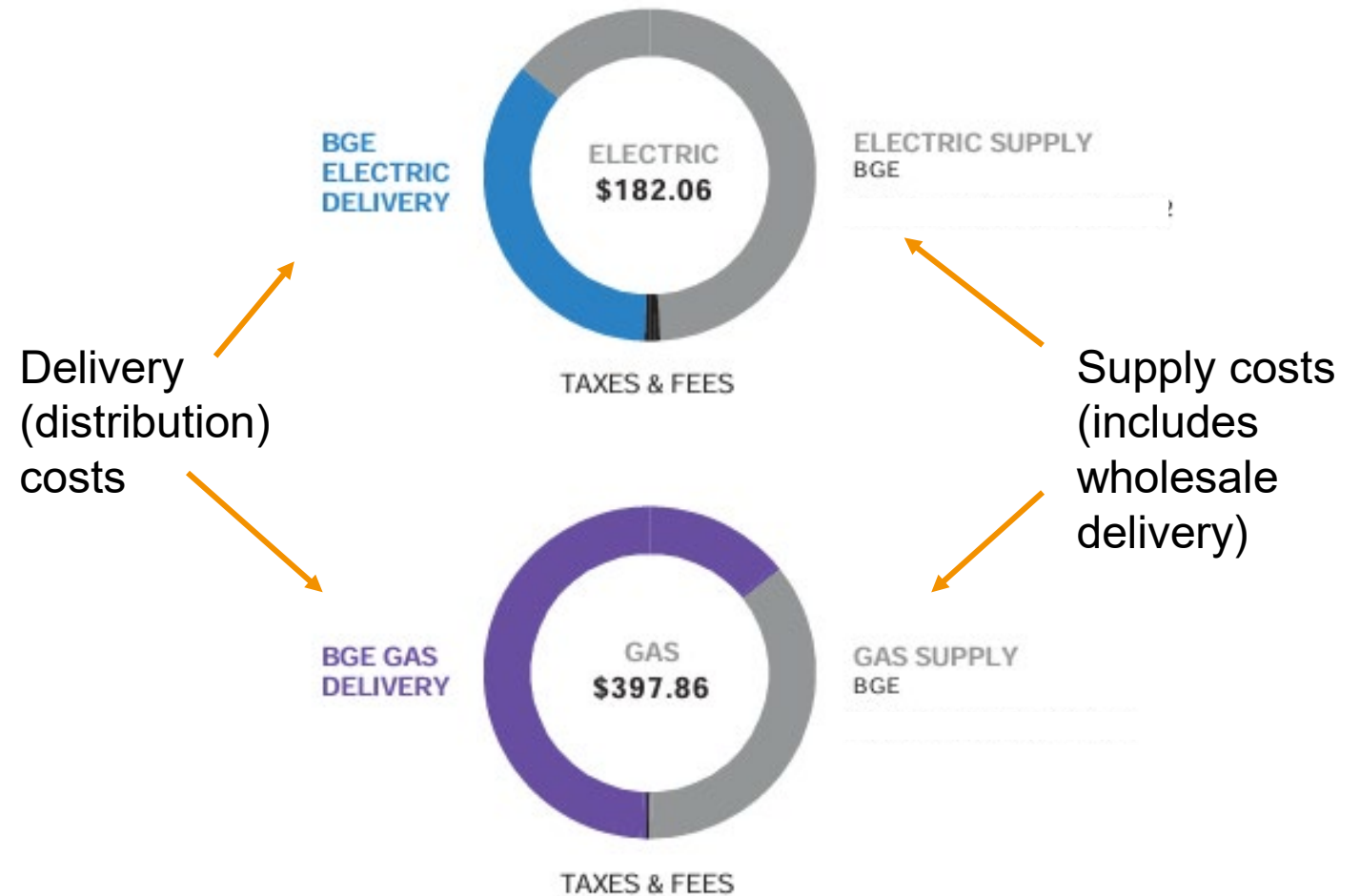


** Electric utilities earn a small return on the kilowatt hour sales they make for providing standard offer service*

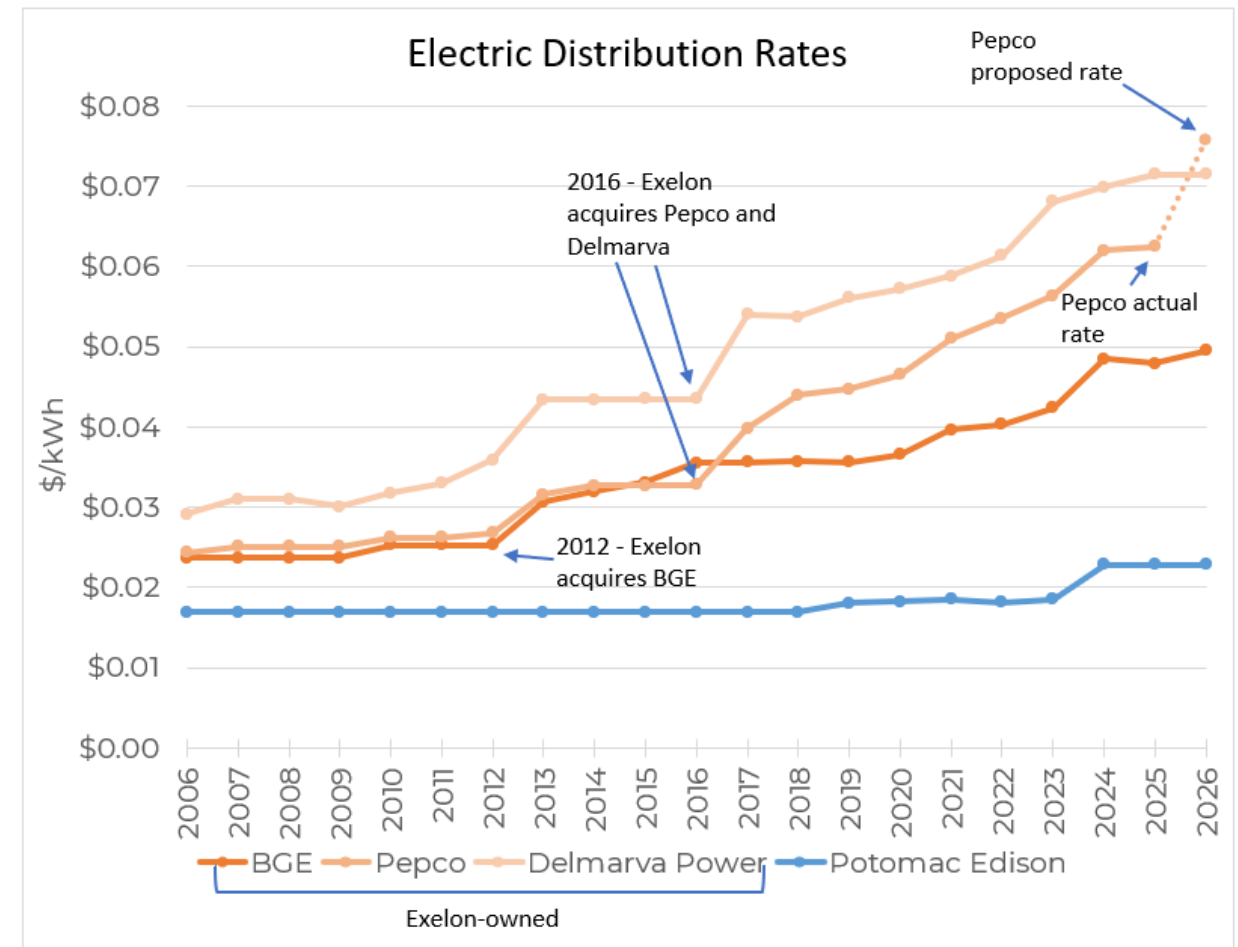
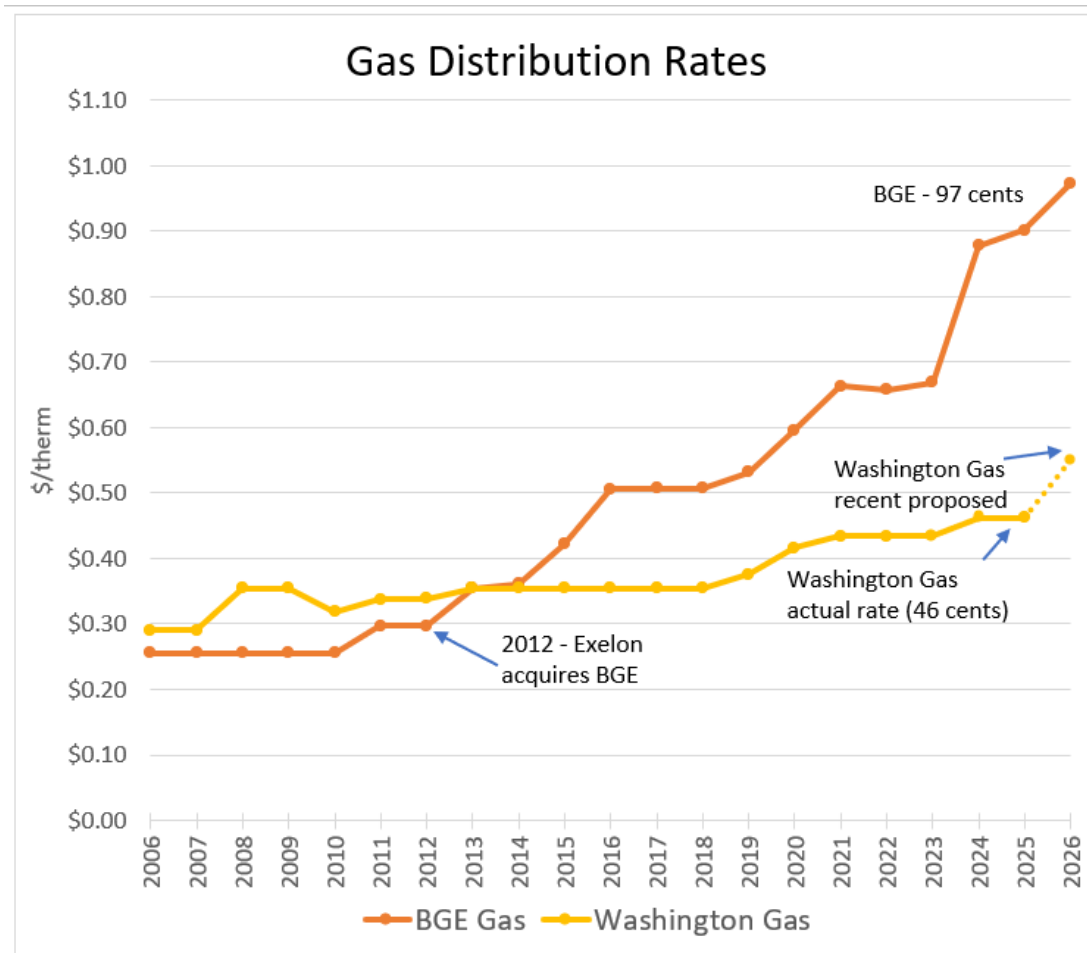
These features are counterintuitive to competitive markets.

Electric and gas utility bills include charges for two primary categories of services:

DELIVERY SERVICE
(or distribution service)
&
SUPPLY SERVICE
(or commodity service)



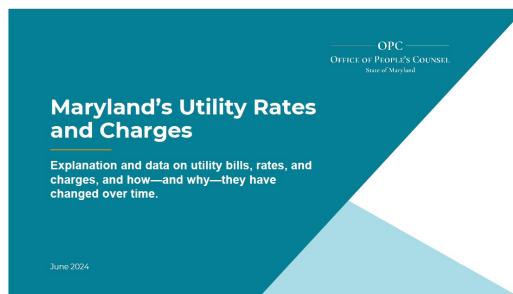
Escalating distribution rates—a primary driver of higher utility bills for Maryland customers



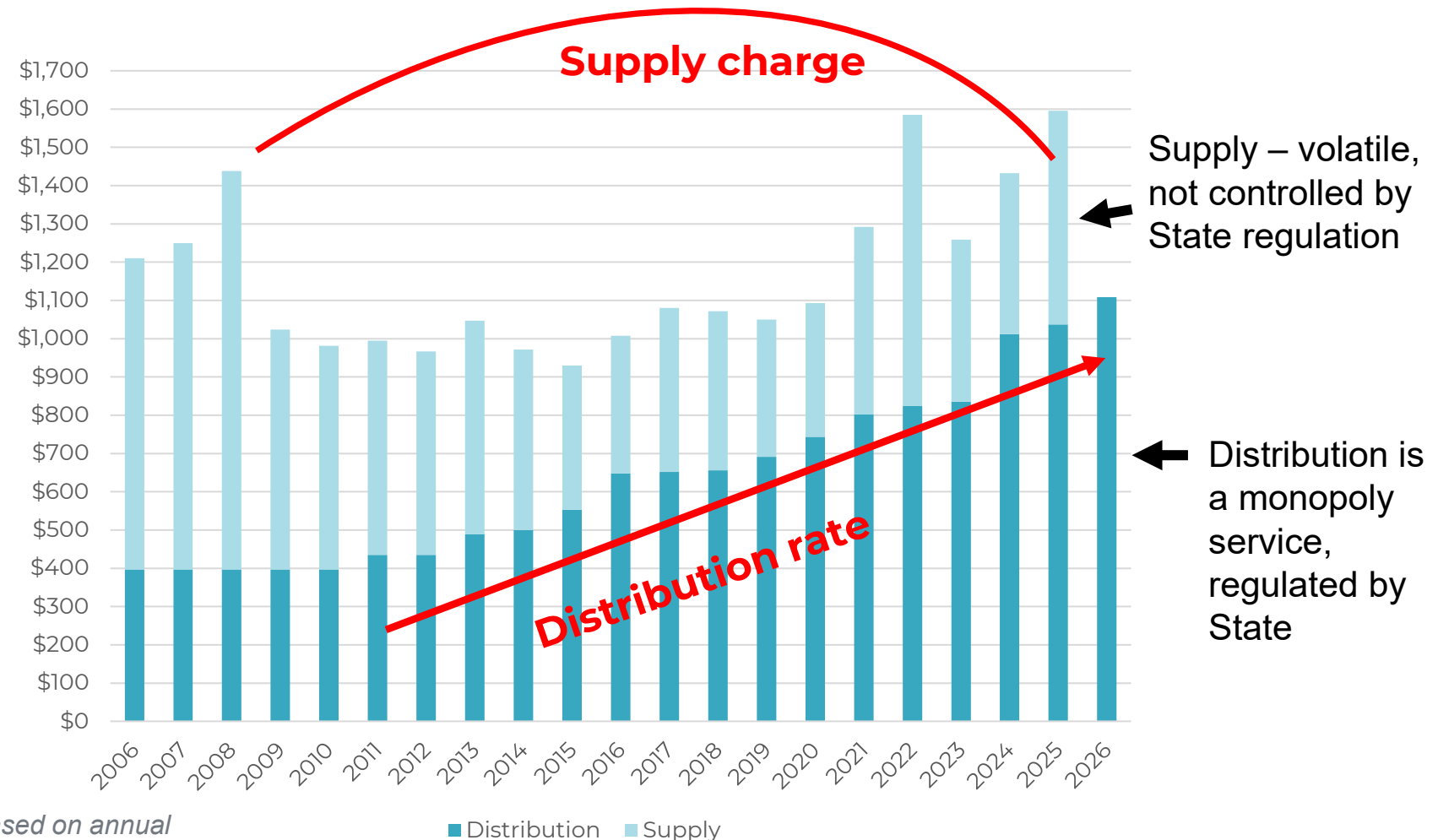
Baltimore Gas and Electric

Gas Total Annual Bill: Delivery Plus Supply Charges

- Distribution charges are independent of supply charges
- With rising distribution rates, customers are more vulnerable to volatile gas supply costs.



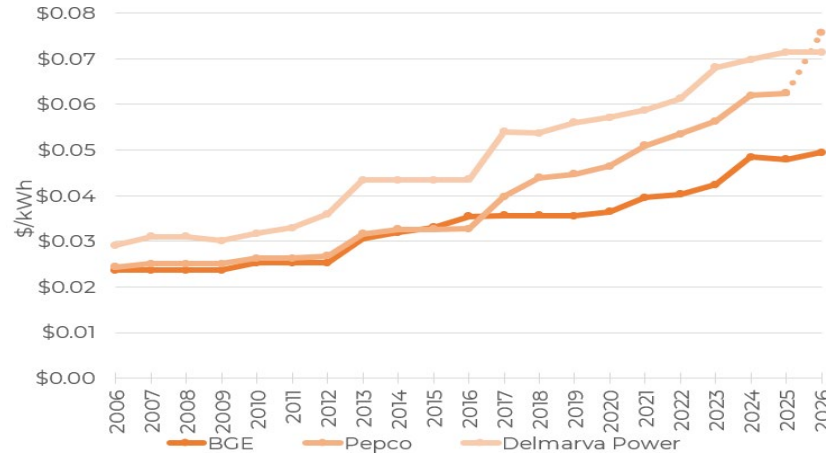
*Charges based on annual
consumption of 940 therms*



Regulated monopoly costs: Locked in for decades

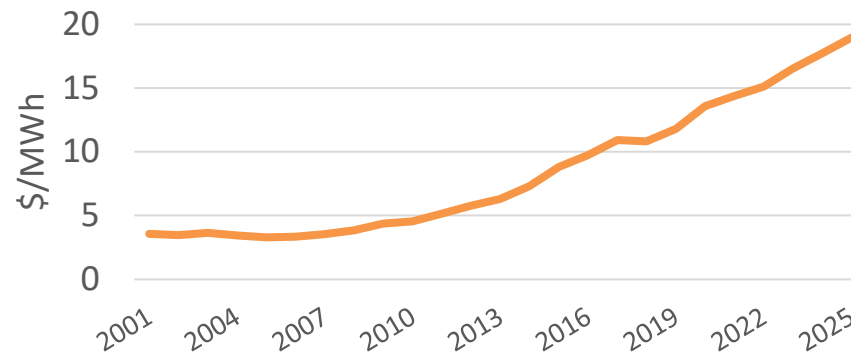
Distribution rates

Electric Distribution



Transmission rates

PJM average transmission rate



OPC

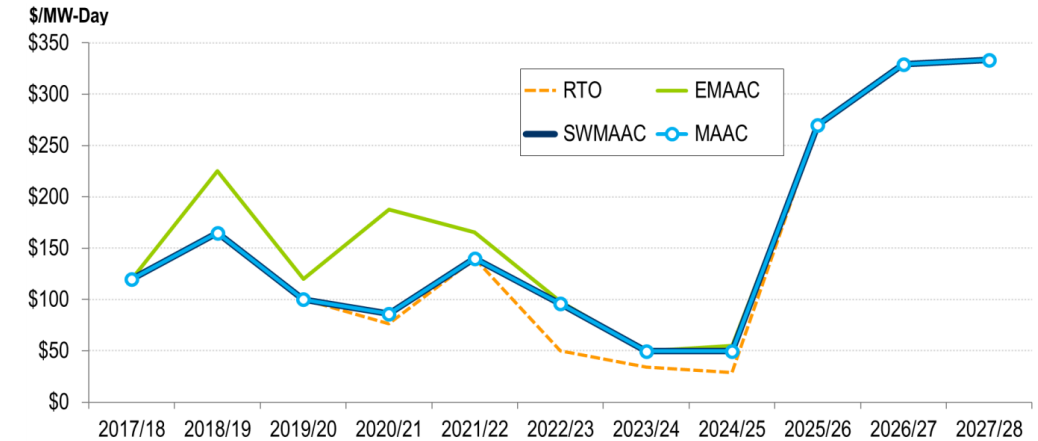
OFFICE OF PEOPLE'S COUNSEL

State of Maryland

Market-set costs: short term and variable

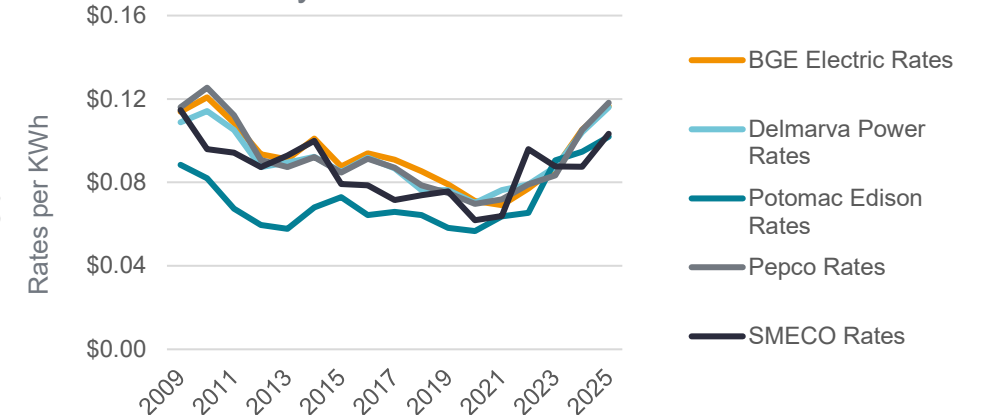
Capacity costs

PJM Capacity Market

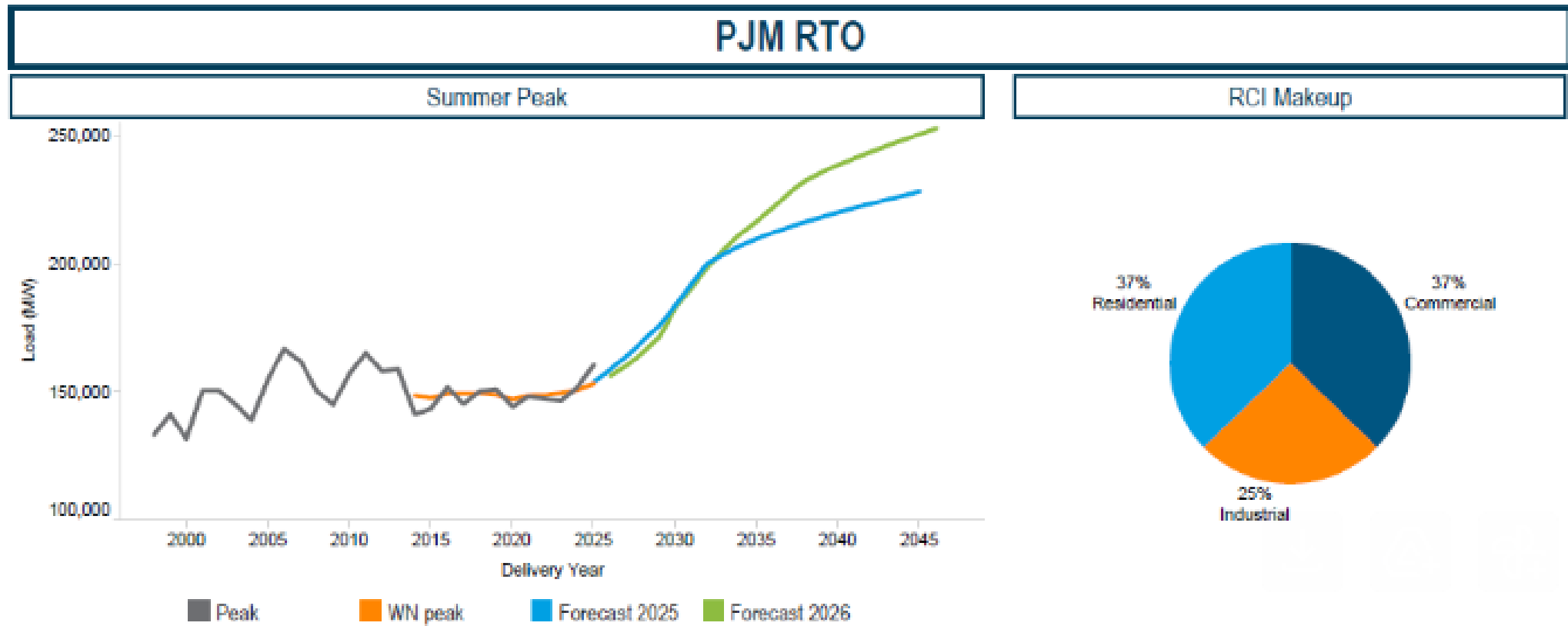


Energy costs

Maryland Standard Offer Service



PJM Wide 2026 Electric Demand Growth



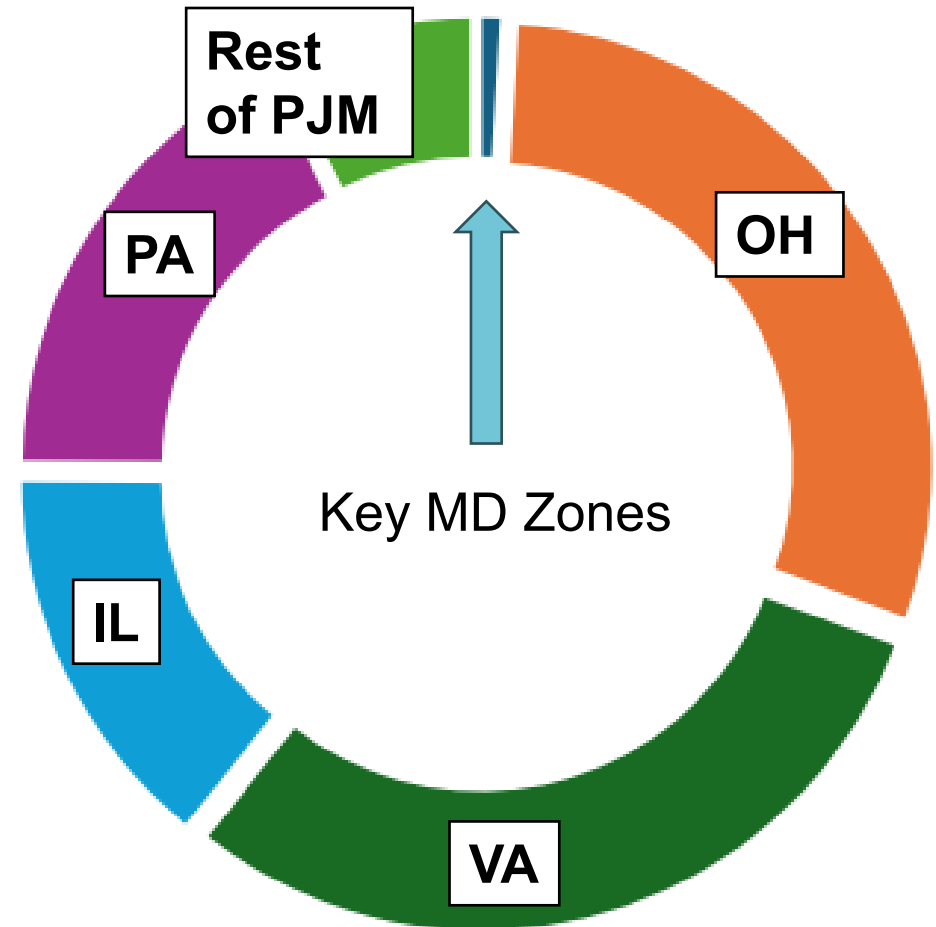
Source: [PJM 2026 load forecast](#)

Large load growth: Uncertain, and not Maryland ratepayers' issue to resolve

- Key Maryland zones (Delmarva, Pepco, BGE): less than 1% of PJM's projected growth—**318 MWs**
- Virginia (30%), Ohio (30%), Pa. (18%), Illinois (14%); rest of PJM (7%)—**33,275 MWs**

<https://www.pjm.com/planning/resource-adequacy-planning/load-forecast-dev-process.aspx>

2030 PJM Large Load Adjustments



Source: PJM's 2026 load forecast

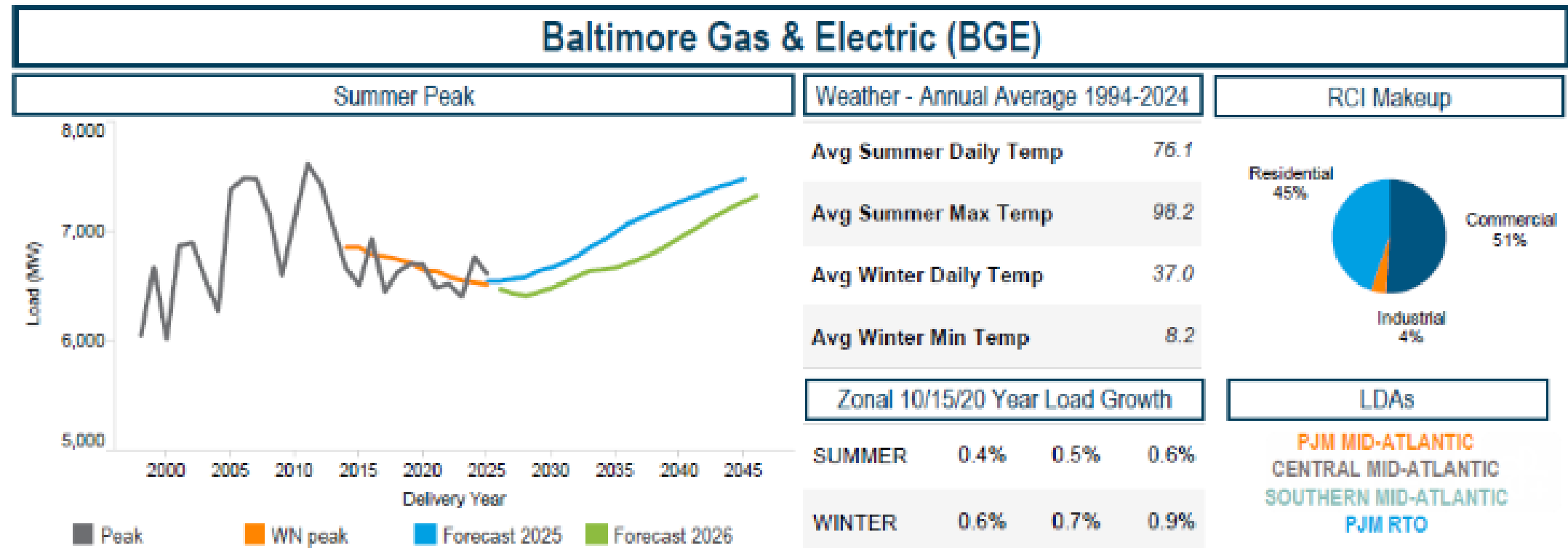
Forecasted Load Growth Comparisons for Maryland's Exelon Utilities (2025 versus 2026)

2025 Load Forecast (MWs)					2026 Load Forecast (MWs)				
	2026	2027	2028	2029		2026	2027	2028	2029
BGE	6,547	6,565	6,584	6,639	BGE	6,471	6,436	6,412	6,445
Delmarva	3,997	3,992	3,992	3,996	Delmarva	4,008	3,986	3,971	3,958
Pepco	6,095	6,113	6,130	6,150	Pepco	6,003	5,992	5,980	5,989

Exelon utilities' current demand projections are less for 2029 than 2026. Growth projections declined between PJM's 2025 and 2026 forecasts.

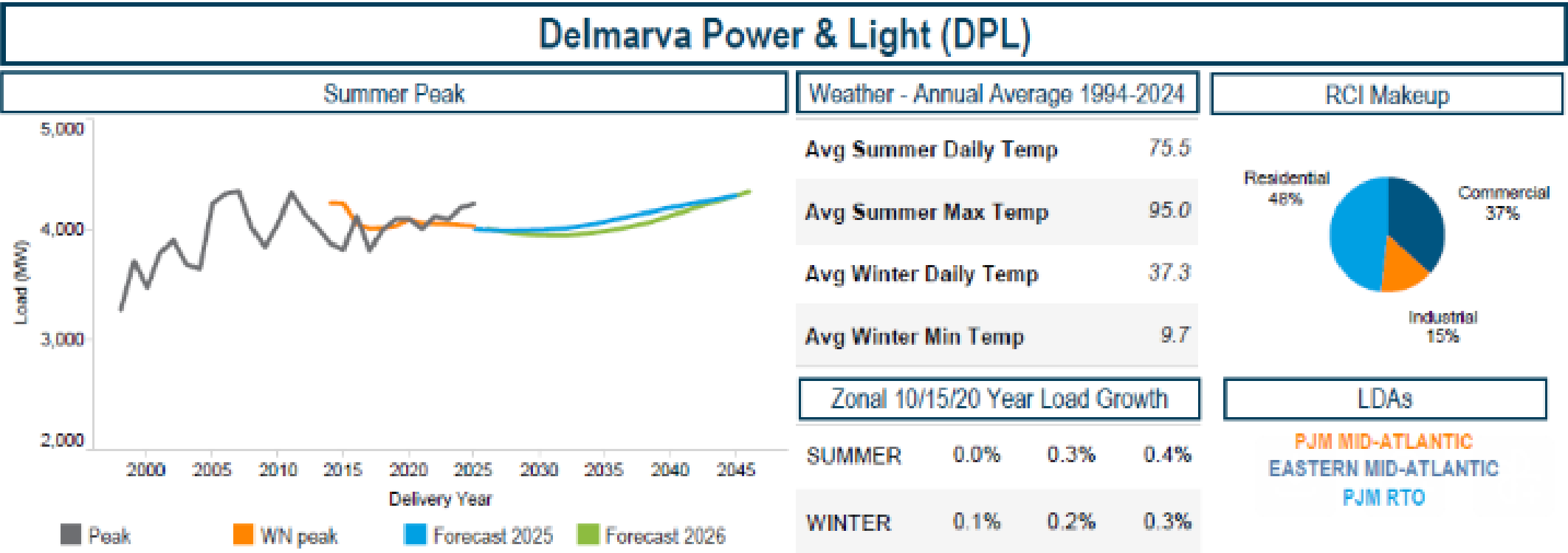
	2026	2027	2028	2029
BGE	-76	-129	-172	-194
Delmarva	11	-6	-21	-38
Pepco	-92	-121	-150	-161

Exelon utility load growth: BGE

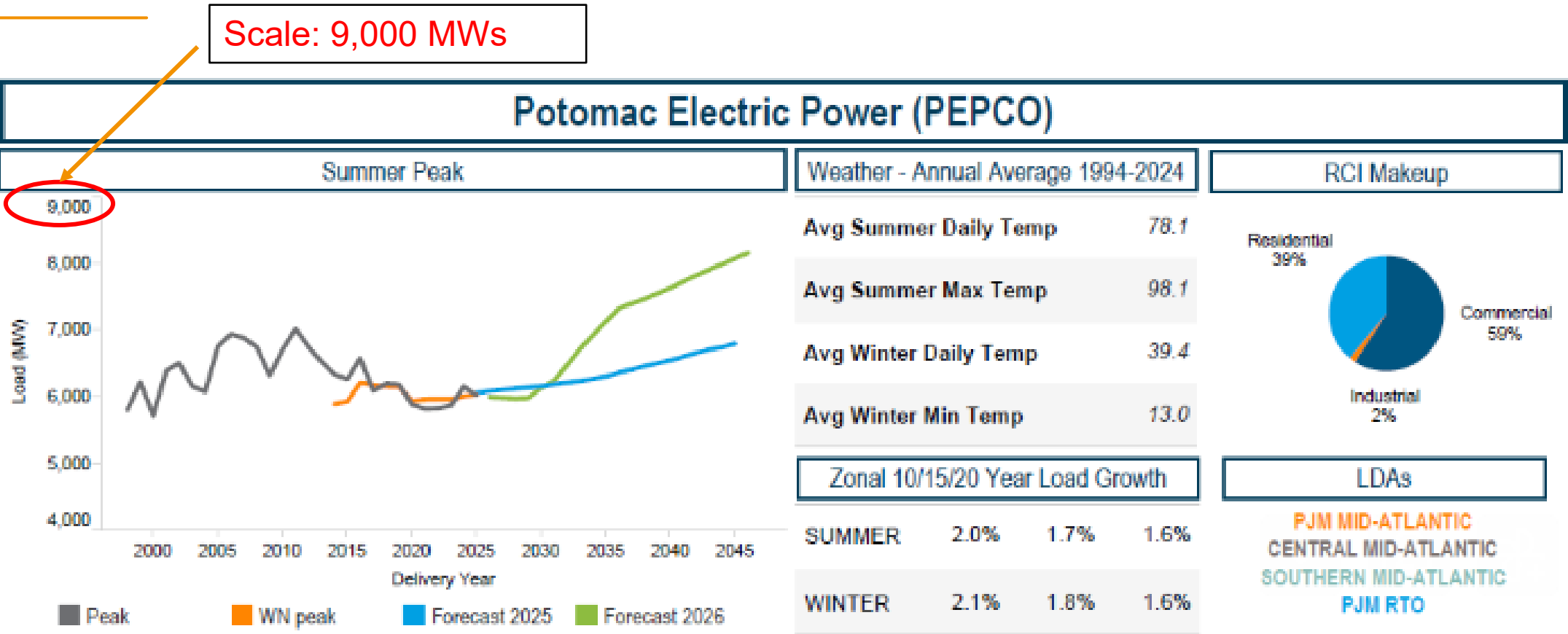


Source: [PJM 2026 load forecast](#)

Exelon utility load growth: Delmarva

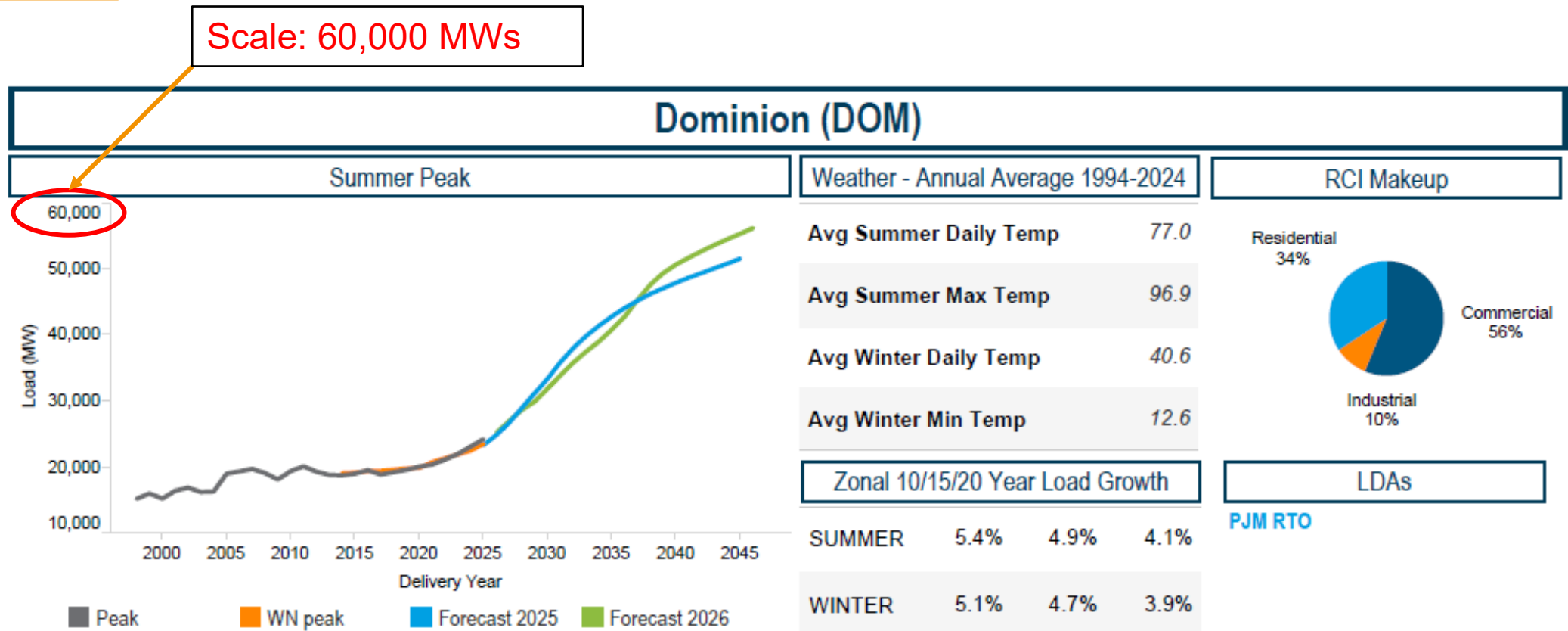


Exelon utility load growth: Pepco



Source: PJM 2026 load forecast

Utility load growth, Virginia: Dominion



Source: [PJM 2026 load forecast](#)

Some (new) State solutions to address affordability

- End accelerated cost recovery for gas replacement (STRIDE +)
- Limit utility (fast growing) profits by giving PSC guidance to reduce utility “return on equity”—utility profits
- Limit utility executive pay in rates (HB0001/SB0002)
- Require greater transparency – data centers, utility bills
- Protect residential ratepayers from paying costs caused by *in-state* data centers
- Enhance state transmission oversight

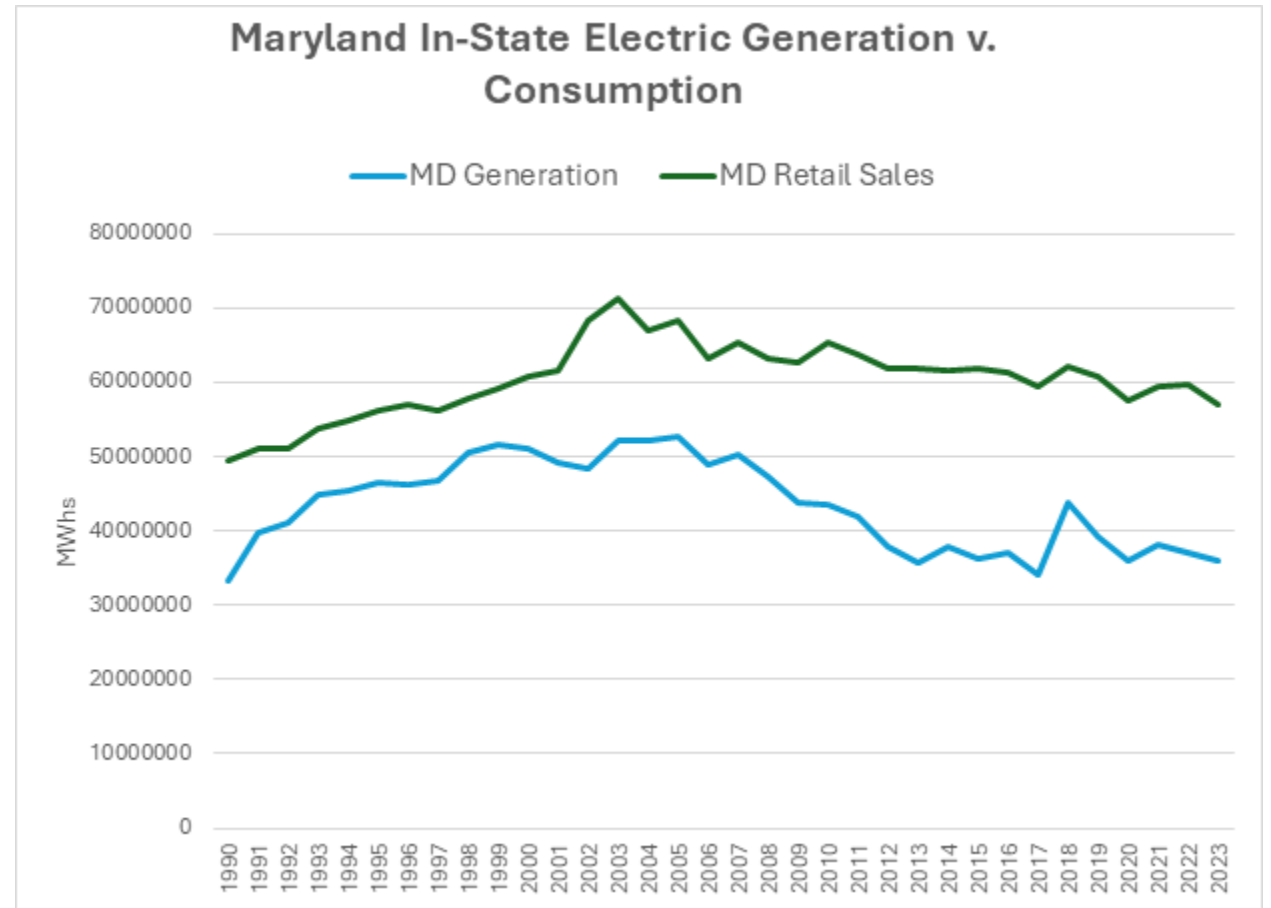
APPENDIX

Maryland imports and exports

Maryland imports are nothing new

Most PJM states are “net importers” of electricity

Source: PJM data

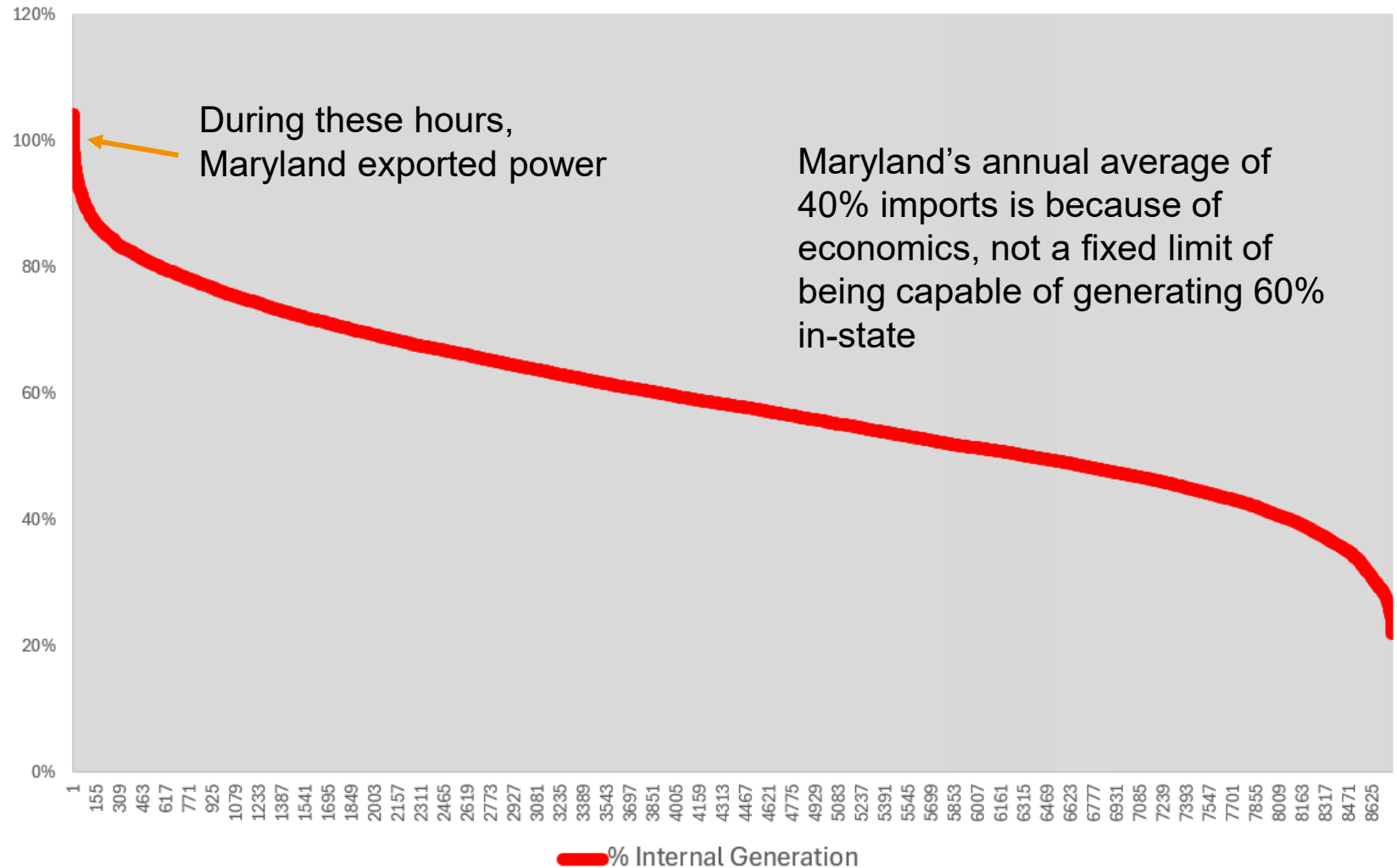


For more information, click here to see OPC’s FAQs on “resource adequacy”

PJM dispatches the most economic generation

% of Maryland
internal generation
v. Maryland
consumption
(sorted highest to
lowest for each
hour of year July 1,
2024, to June 30,
2025)

- Source: PJM data



“Regulated generation”: big risks for captive utility customers

Competition versus monopoly

	Utility Monopolies	Competitors
How they make money	By spending more money, growing “rate base”	By satisfying customers, beating out competitors, and innovating
Cost overruns	Customers take on all risk of anything going wrong; utility benefits from cost overruns with regulator approval	Investors take on risks; lose money from cost overruns; sometimes go bankrupt (Talen, NRG)
New generation	Will build at any price, anywhere, as long as regulators approve it—whether needed or not	Won’t build unnecessarily or risk stranding investments; will site and build generation where lowest cost
Timing	Benefits from locking in long-term costs, esp. when market prices are high (now)	Costs are never locked in
Innovation	Why innovate? More effective to extend monopoly influence and exclude innovators	Innovation-motivated

Why the utilities? All risk and no benefit

- No evidence that utilities can build or operate generation better than competitors
- Utilities will use vendors to do the work, i.e., they will contract it out, but take a profit
- Exelon no longer has experience in generation—solar, wind, gas or otherwise
- It's a competitive business
- There are alternatives to utility-backed generation

Alternative approaches to utility-owned generation

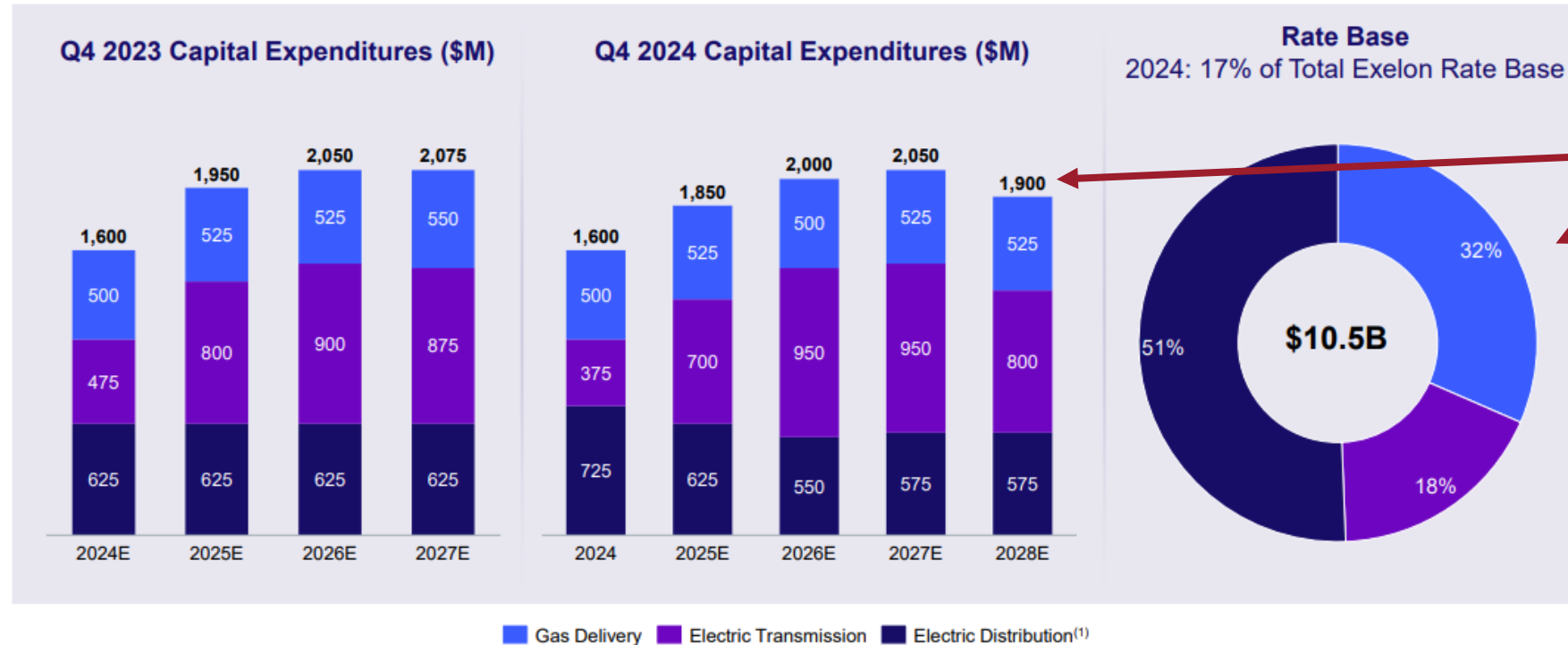
- Ratepayer-backed *competitive* procurements (examples: offshore wind, storage, solar)
- Standard offer service *competitive* procurements for capacity (State can control timing and amount)
- Consider forthcoming developments—Exelon utility peak loads decline through 2029; review progress on battery storage, PJM's interconnection queue, and DRIVE Act; pending data center policy outcomes, and improved data center load forecasts, and possible AI bubble burst

Utility generation undermines competition, creates new customer regulatory burdens and risks

- Government-granted advantages undermine competition and competitors
- Dominant market position protected by government
 - Access to resources paid for by customers (land, employees, eminent domain, etc.), i.e., ratepayer subsidies
- Mission creep: management distraction and brain drain from core responsibilities for delivering electricity
- Increased regulatory burdens

Utilities profit from spending more: Exelon investor presentation

BGE Capital Expenditure Forecast



Exelon wants to add a new category to these charts, to grow its rate base (and profits): “regulated generation”

Project ~\$7.8B of capital being invested from 2025-2028

Note: Numbers rounded to nearest \$25M and may not sum due to rounding. Rate base reflects year-end estimates. Q4 2023 disclosures dated February 21, 2024. Q4 2024 disclosure dated February 12, 2025.

(1) Electric distribution rate base includes regulatory assets that earn a full authorized Rate of Return; regulatory asset spend not reflected in capital spend projections.

exelon

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Cost Overrun Examples

Core utility work	Project Name	Initial Budget	Cost Increase	Updated Amount
	BGE's Brandon Shores Transmission Projects	\$738,830,000	\$775,130,000	\$1,513,960,000
	BGE Pole Replacements	\$5,400,000	\$7,100,000	\$12,500,000
	BGE's Annapolis Substation	\$77,000,000	\$47,000,000	\$124,000,000
	Pepco's Priority Feeder Improvements	\$12,157,000	\$9,912,000	\$22,069,000
	BGE's Fairhaven Substation Battery	\$9,841,000	\$6,237,531	\$16,078,531

Power markets are unpredictable: Their risks should not be shifted from investors to captive utility customers

- “It is very difficult to forecast tomorrow’s prices, let alone a 15-year stream.” *Exelon consultant, PSC battery storage docket*
- BGE opposes having to report cost overruns of 10% or more for geothermal network projects: **“because we’ve never built one of these systems before.”**

BGE has not built a community solar project, nor a gas plant since before 2000. (Around 2000, it moved its generation business into a separate affiliate, Constellation, and in 2022, Exelon spun off Constellation into an independent company.)

Gas System Planning and Spending

OPC: Gas system planning and spending

Future of Gas
The PSC FOG Docket
Gas Spending and Analysis
STRIDE
STRIDE FAQs
Third Party Suppliers
Gas Pricing
Energy-Efficiency Tips
Your Local Gas Companies
Get Help With Your Bill

Future of Gas

Maryland's gas distribution utilities are spending hundreds of millions of dollars a year on long-lived gas infrastructure. These investments are paid back to utilities over many decades along with a profit; that profit multiplies the initial cost by a factor of about three, driving huge rate increases. The State's largest gas utility, for example, has tripled its delivery rates since 2012. These investments are problematic because gas consumption is widely expected to decline as gas appliances face stiff competition from highly efficient electric appliances. The competition is compounded by other concerns about gas use, including its inherent safety risks, its health impacts, and its contribution to climate change and other environmental concerns. Thus, aside from rising distribution costs, there are risks that the gas infrastructure will become economically obsolete well before the investments are paid off.

Use the navigation menu on the left to read more Future of Gas content.

Click on box to go to OPC's website for many resources on gas regulation, OPC's petition for long-term gas planning (PSC Docket No. 9707), press releases, op-eds, and more

PSC decision granting OPC's request on gas line extension subsidies will save customers money



FOR IMMEDIATE RELEASE

July 1, 2025

Contact:

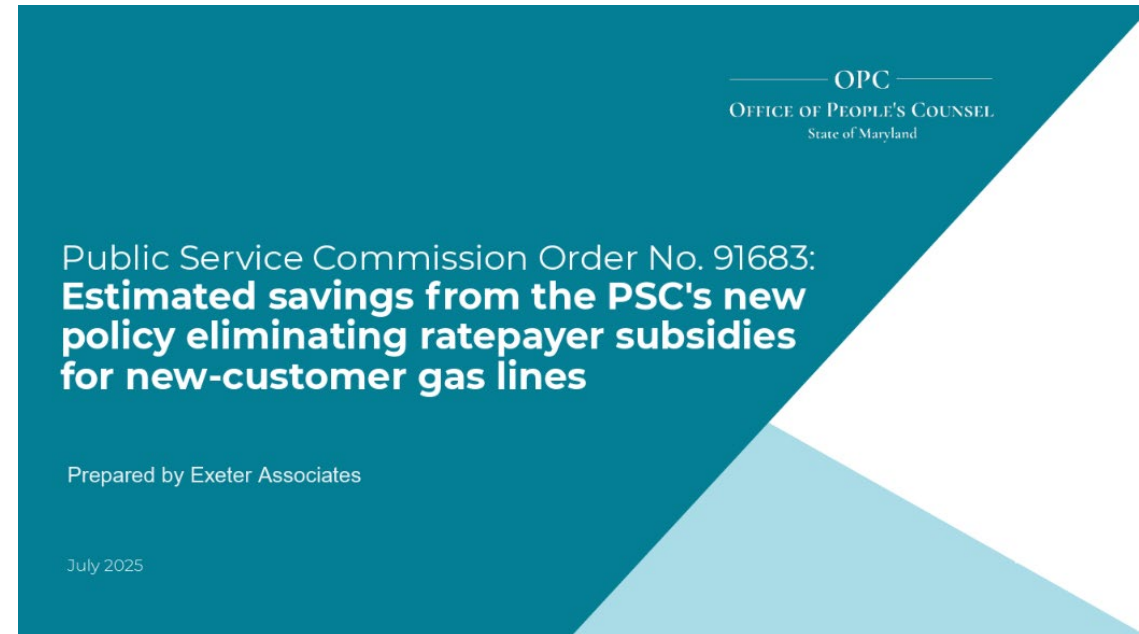
Lori Sears

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PSC order on new gas system connections avoids hundreds of millions of dollars in rate hikes over ten years, OPC analysis shows

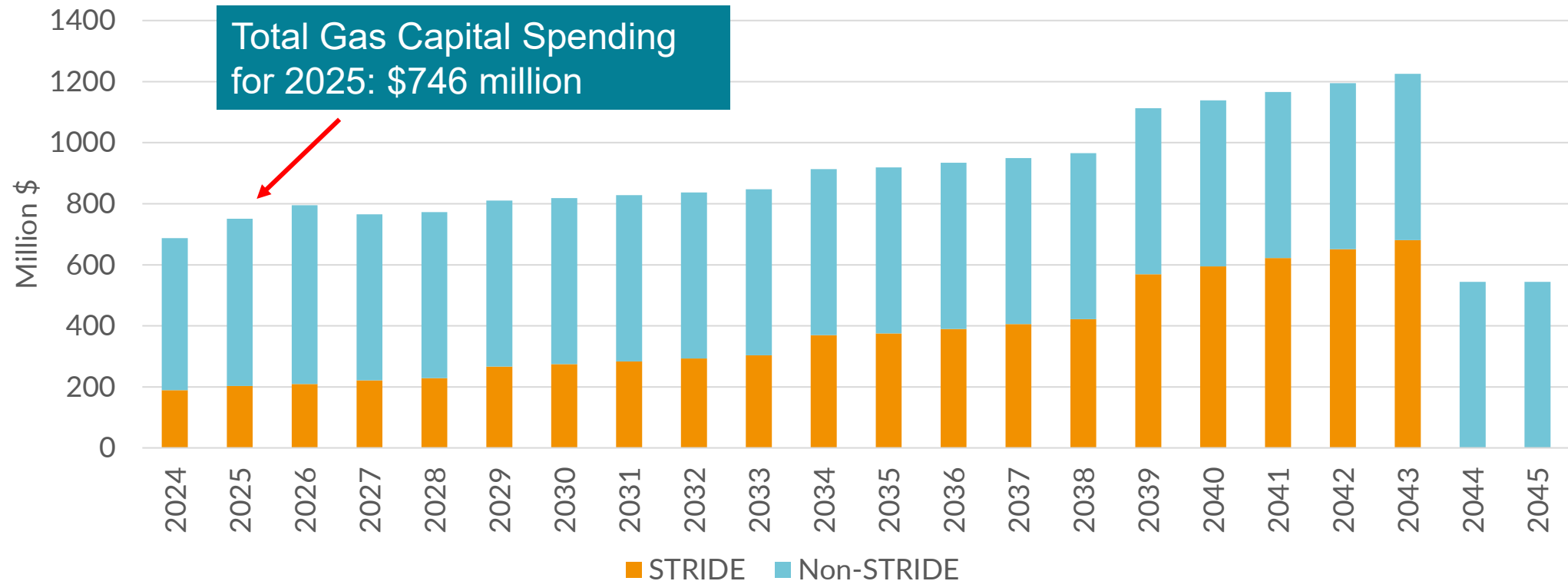
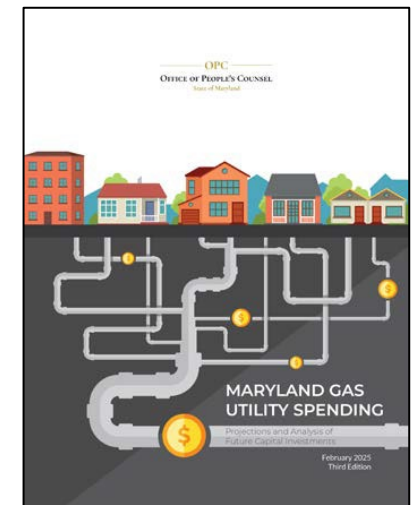
BALTIMORE – The Public Service Commission's June 13, 2025, order granting the Office of People's Counsel's bid to end ratepayer subsidies for connecting new customers to the gas system will save customers of Maryland's two largest gas utilities an estimated \$952 million on their gas bills through 2035, according to an [initial OPC analysis](#).



Click on box to go to documents

Rate Increases: Distribution capital infrastructure spending

Projected Annual Capital Spending of BGE, WGL, and Columbia (million \$)



Gas system planning

- Priority actions
 - Gas line extension policies
 - Customer incentives for purchases of gas appliance
 - Address promotion and marketing of gas
 - Evaluate procurement strategies
 - Reduce unwarranted barriers to customer electrification
- Long-term planning

Solar contributions

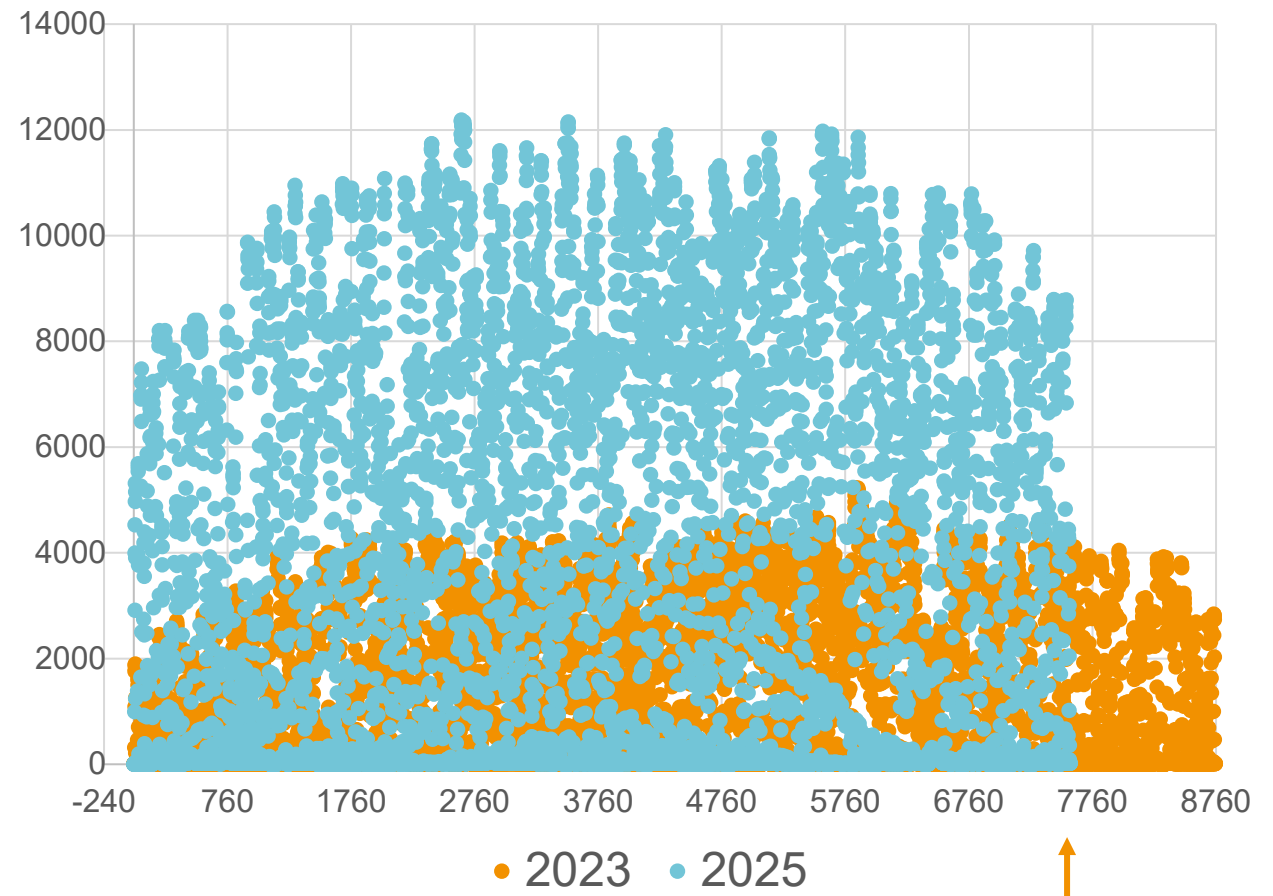
Significant
increase in solar
output in PJM
since 2023

Year-over-year incremental growth of Solar

Solar Max 2025 v 2024 (MW)*	53.2%	Solar Energy 2025 v 2024 (MWhs)*	44.2%
Solar Max 25 v 23 (MW)	133.1%	Solar Energy 25 v 2023 (MWhs)	142.5%
Solar Max 24 v 2023 (MW)	52.1%	Solar Energy 24 v 2023 (MWhs)	67.9%
YoY PJM Peak 2025 v 2024			4.7%
YoY PJM Peak 2024 v 2023			2.2%

Significant
increase in solar
output in PJM
since 2023

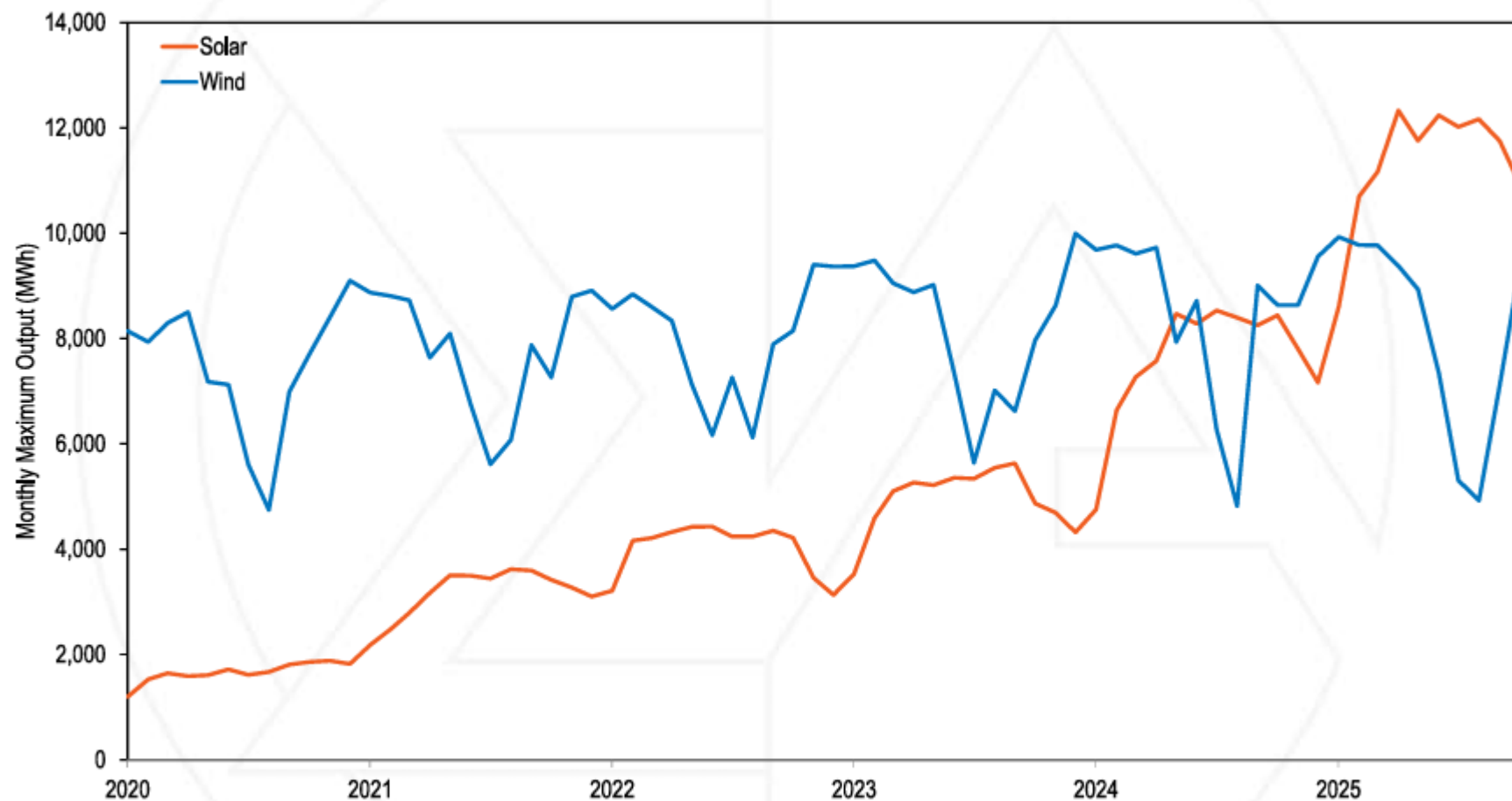
Chronological Hourly Front of Meter Solar Output (MWs) 2025 YTD (11-18-25) v 2023



Source: PJM

(2025 data is through 11-18-25)

Monthly Maximum Solar and Wind Hourly Output



©2025

www.monitoringanalytics.com

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Monitoring Analytics

Exelon 10k SEC filing: Distributed energy is a threat to “current business models”

“Risks Related to Market and Financial Factors”

“The Registrants are **potentially affected by emerging technologies that could over time affect or transform the energy industry** (All Registrants)”

- “Changes in power generation, storage, and use technologies could have significant effects on customer behaviors and their energy consumption.”
- Changes include: “Commercial and residential solar generation installations,” “energy storage technology, including batteries and fuel cells,” “energy efficiency.”
- **“These developments could affect levels of customer-owned generation, customer expectations, and current business models and make portions of the Utility Registrants' transmission and/or distribution facilities uneconomic prior to the end of their useful lives.** Increasing pressure from both the private and public sectors to take actions to mitigate climate change could also push the speed and nature of this transition.”

Overview of the Power Plant Research Program (PPRP)

Briefing before the House Environment and Transportation Committee
January 20, 2026

Presented by: Bob Sadzinski
Director, Power Plant Research Program
443-699-2092

The Power Plant Research Program (PPRP)



PPRP Overview:

- Created in 1972 to be a “one-stop shop” for power plant review and serves as a vital link between agencies.
- PPRP conducts comprehensive, objective assessments based on sound science of electrical generation and transmission lines for the PSC and makes a Project recommendation to the PSC.
- Staff include two part time attorneys and eight Project Managers

PPRP also:

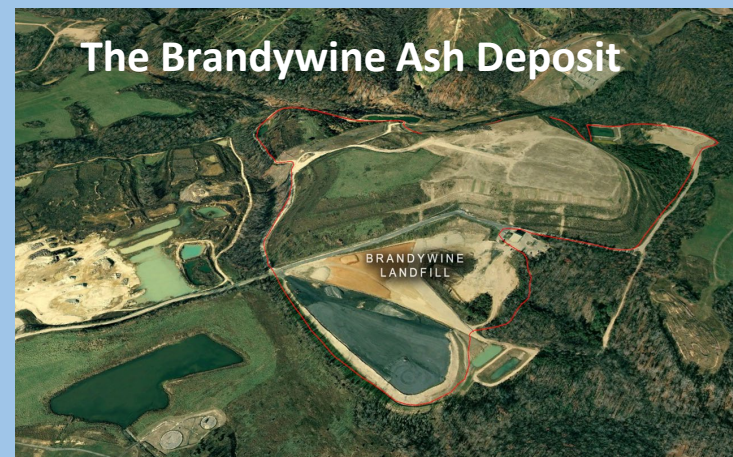
- Writes a Biannual, Cumulative Environmental Impact Report (CEIR)
- Prepare reports as required by the Maryland General Assembly such as the Renewable Portfolio Standard (RPS)
- Analyze PJM queue and energy data mining
- Conduct energy-related studies (matting, pollinators, SWM, mercury, etc.)

Note: PPRP does not have regulatory authority

PPRP also is involved in:



- Solar and Renewable Energy
- Nuclear
- Hydroelectric - Conowingo
- Wind Energy (On and Offshore wind),
- Grid Reliability including data centers
- Battery Energy Storage Systems (BESS)
- Coal and coal ash (including Coal Combustion Byproducts and Legacy sites)
- Participates in numerous renewable energy, solar, OSW, transmission, etc workgroups and meetings



Generation Station Permits



What must a Generation Station do to construct and operate a Power Plant in MD?

- PJM - Interconnection Agreement
- Public Service Commission – CPCN
- County Permits
- Other State Permits - MDE



What is a CPCN?



- A Certificate of Public Convenience and Necessity (CPCN) provides authority for a person to construct or modify a new generating station or high-voltage transmission lines and is issued by Maryland's Public Service Commission.
- PPRP is responsible for coordinating the state's comprehensive review of proposed power generating and transmission facilities, and presents a consolidated state position before the Public Service Commission in licensing cases (*i.e. PPRP reviews a CPCN application on behalf of the state and the PSC is responsible for final approval/ denial of a CPCN*).

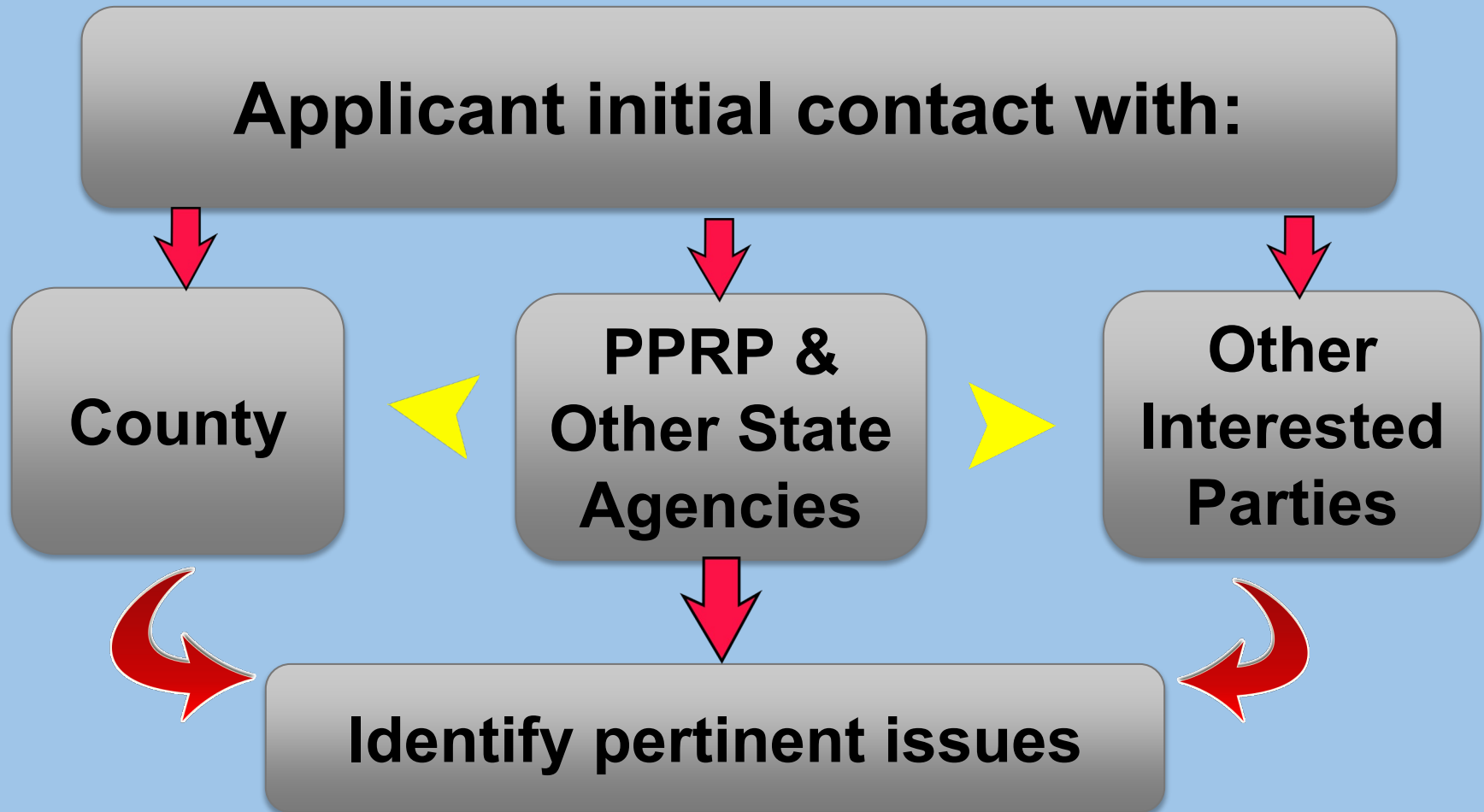
Threshold for when a project requires a CPCN/ PSC approval:

- Generation station: >2MW
- Transmission Lines: >69kV



BEFORE a CPCN

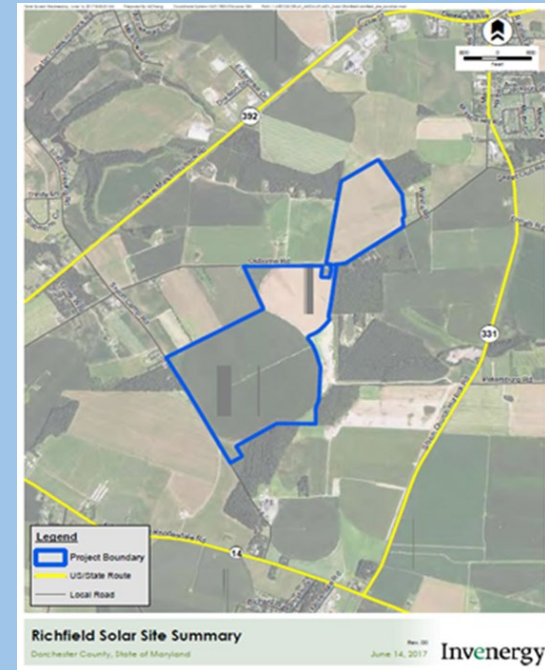
Application is Filed



PPRP's Review Process



- Meet with the Applicant in a Pre-application meeting
 - Application is submitted
- Review the Application for completeness
- Make a Recommendation to the PSC Judge
- Set a Procedural Schedule
- Review application and ask the Applicant questions (Discovery)
- Formulate an analysis of the Project site and any potential impacts
- Draft documents
- Send PAR, RLCs and Secretarial Letter to the Agencies
- Submit them to the PSC



PPRP's Role in the CPCN Process



PPRP investigates ~ 70 Environmental and Socioeconomic Factors on a proposed solar site including:

- Cultural and Historical
- Rare Species
- Wetlands and Streams
- Environmental Justice
- Forests
- Glare
- Decommissioning
- Local Concerns
- Sea level rise/climate change

Each CPCN case has at least one unique situation and most have several.

Interagency Coordination



PPRP Coordinates CPCN Reviews with the “Reviewing State Agencies” including the Departments of -

- Planning
- Commerce
- Environment
- Natural Resources (other units)
- Transportation
- Agriculture and
- The Maryland Energy Administration



Maryland's Solar Siting Process



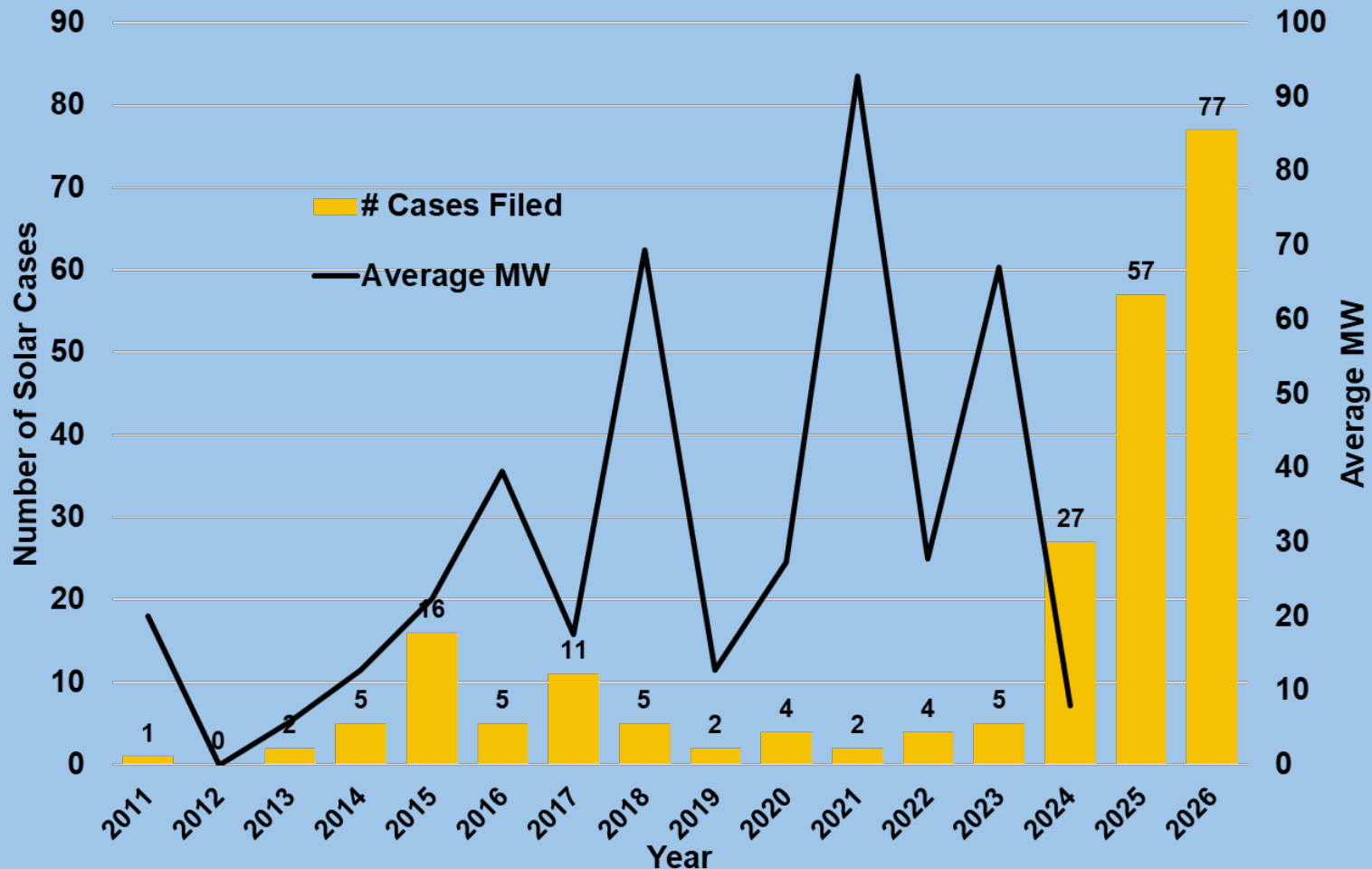
- The state does not site solar or any generation project
 - Since 1999, Maryland is “deregulated”
- Applicants apply to the Public Service Commission after the site has been negotiated with the landowner
- The Applicant has completed a site assessment ~ 200–500-page report as part of their application to the PSC
- PPRP is supported by several long-term contractors



Solar CPCN Cases by Year & Associated Total MWs



Projected for 2026



Individual Utility-Scale Solar Projects Ranged from 2-300 MW

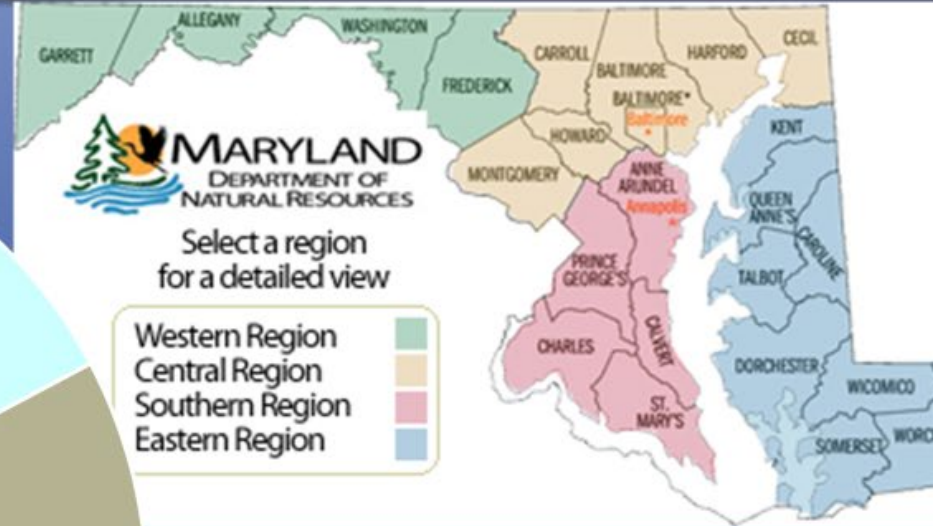
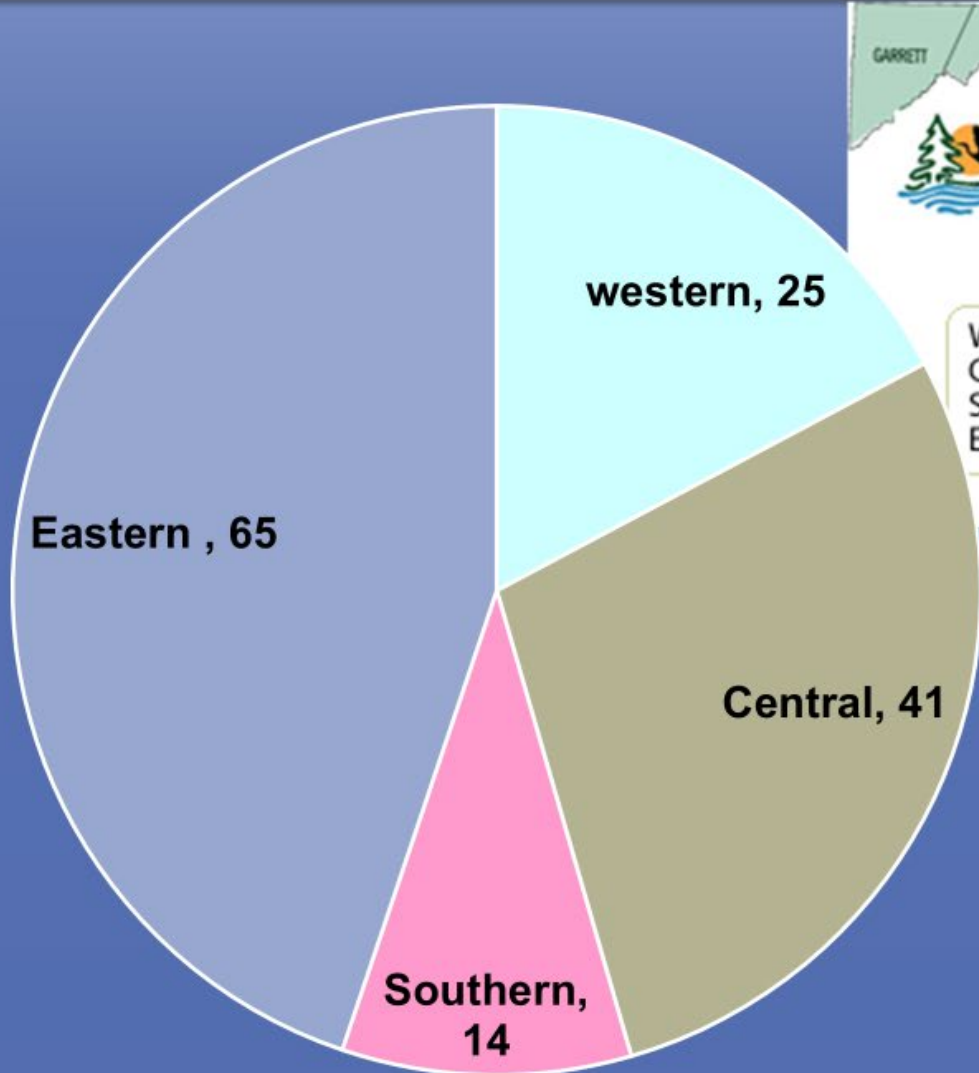
Solar CPCN Summary



- 145 Total Solar Applications over the last twelve years
- 78 have a final PSC order
- 22 Operational
- 54 Projects under review
- 577 MWs operational
- 3,815 Acres currently in solar
- 8,723 acres in proposed solar
- Cecil County has the highest number of applications - 14

Backbone Solar <https://cpv.com/our-fleet/cpv-backbone-solar/> accessed
14 Jan 2026

Number of Solar Cases by Region



Why Has the CPCN Caseload Increased?



Solar:

- Community solar, smaller than 5 MWs (25 acres of panels) connects to local distribution lines
 - No PJM interconnection Study
- A recent applicant has stated: *Maryland is the Friendliest state for Community Solar*
 - Federal and state incentives
 - Project size increased to 5 MW
- The CPCN process is a time-tested efficient review process



Transmission - 300% increase:

- Driven by increased demand and large loads

PPRP's Environmental Trust Fund (EFT)



- The EFT was initiated in 1972 through legislation and is PPRP's only source of funding.
- The EFT is funded through a surcharge of ~ 14 cents per month on residential ratepayers (*a flat rate that is not tied to energy prices*)
 - The surcharge has decreased twice since its original inception
- Capped at \$1,000 per month for large manufactures (To PPRP's knowledge, there are no parties that currently that pay the maximum surcharge)
- The ETF reserve, enough for two years. Increasing caseloads have put a strain on PPRP's resources.

Key Issues Confronting PPRP



- >800% increase in caseload (103 solar cases in pre-app)
 - Staff including attorneys are at capacity
 - Large Scale transmission cases still forthcoming
- Consistent change
 - Each CPCN Case is unique for each Project
- Additional Cases: 8 TLs, 3 Gas, and 5 Battery
- 2025 Legislative Initiatives:
 - DGCPCN
 - Dispatchable Generation: three new projects
 - Smart DG+ updates
 - Research into Priority Preservation Areas
 - Battery Storage Projects into the CPCN
 - Nuclear: cost-sharing WG



PPRP's Approach to Increased Caseload

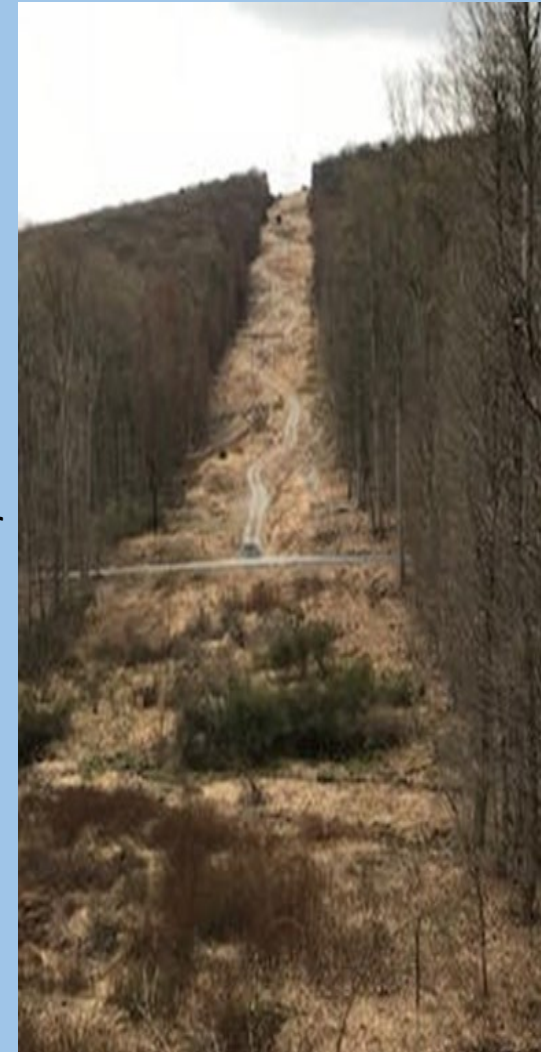


Currently:

- Created an application checklist for CPCN Solar applicants (Working on a battery one too)
- Focused resources to higher profile cases - Transmission and large utility-scale solar Projects
- Focused on completing 2025 legislative deadlines: DGCPCN, Smart DG upgrades and several workgroups
- “No grace” in our completeness review
- Extended our CPCN review times from 6 months to a year or more
- Increasing expenditures on existing contracts

Future Considerations:

- Dispatchable Generation - three gas projects and numerous Energy Storage coming our way
- Small Modular Reactors
- Eight transmission cases in “pre-app”



PPRP Website



<https://dnr.maryland.gov/pprp/Pages/default.aspx>



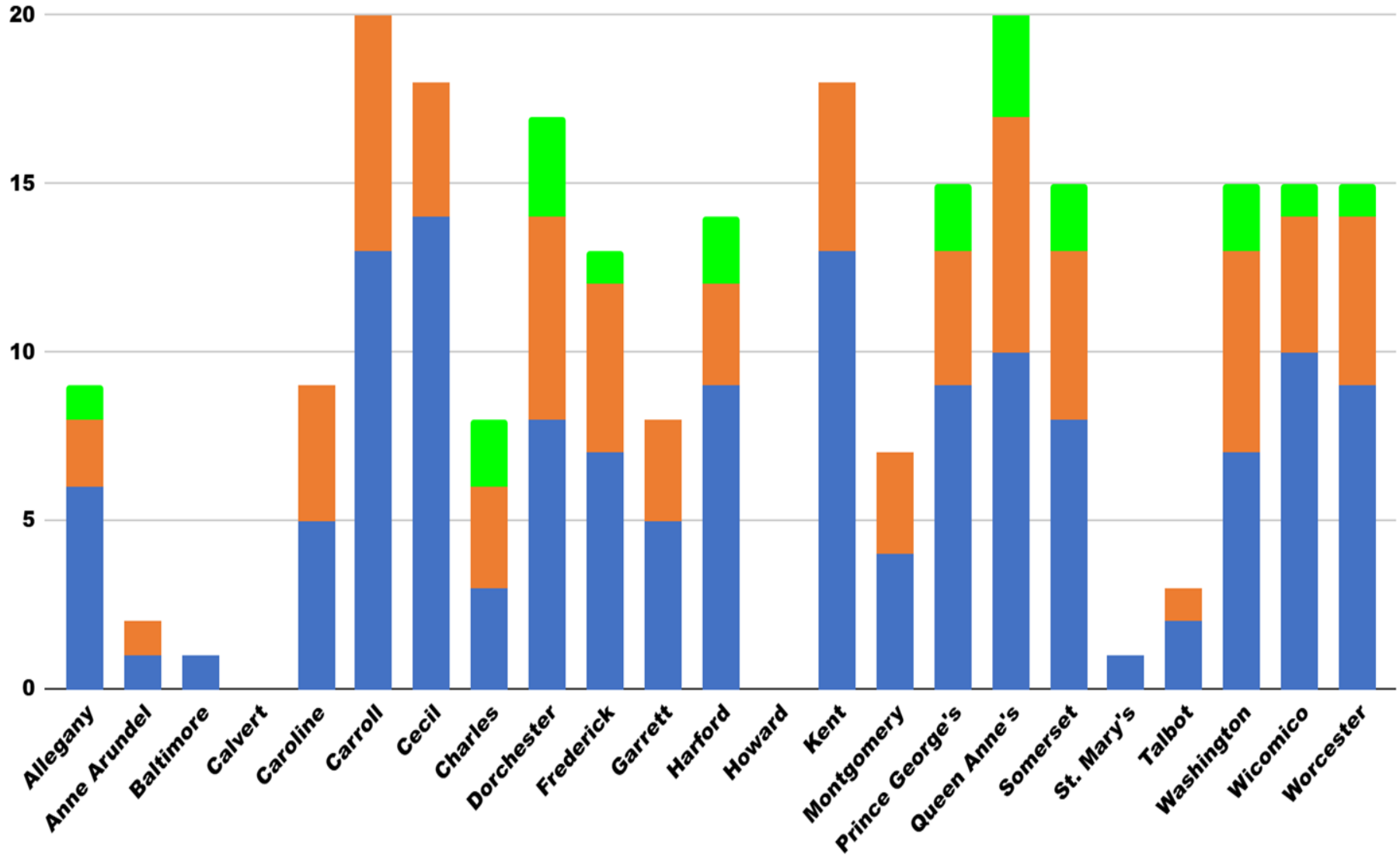
Bob Sadzinski - Director PPAD

bob.sadzinski@maryland.gov

443-699-2092

Solar Cases by County

Operational Order Granted Filed



New Tools for Site Visits

