MEMORANDUM

To: Energy Subcabinet
From: Maryland Energy Advisory Council
Date: June 2026
Re: Urgent Challenges and Potential Solutions to Energy Affordability and Reliability in Maryland Pursuant to Executive Order 01.01.2025.27 Section (C)(2)(e)

Introduction

Section (C)(2)(e) of Executive Order 01.01.2025.27 directs the Energy Advisory Council to identify the most urgent challenges affecting energy affordability and reliability in Maryland and submit a memorandum to the Subcabinet within 180 days of issuance.[1]

Maryland's electricity system is experiencing mounting pressure from a combination of regional market dynamics, rising infrastructure costs, accelerating electricity demand, and delays in the addition of electricity generation resources and transmission. The Advisory Council identified that significant cost drivers originate at the regional wholesale level through PJM Interconnection.These costs increasingly appear in customer bills through higher capacity, transmission, energy and ancillary service charges. The Council also noted that customers are facing rising utility distribution costs, which are separate from wholesale market charges but contribute to overall increases in electricity bills.

At the same time, Maryland faces a dual policy challenge: maintaining reliability under rapidly changing load conditions, while preventing disproportionate cost burdens on residential,commercial and agricultural customers. This is occurring as the state confronts rising summer peak demand, large-load interconnection requests, aging grid infrastructure, and the need for ongoing utility capital investments in electricity generation and transmission. These trends also have important land-use implications, as new generation facilities, transmission corridors, and large-load developments may require significant siting decisions that can disproportionately affect agricultural, rural and undeveloped lands if previously developed or industrial sites are not prioritized for energy infrastructure development. As a result, policymakers must consider both the costs reflected in customer bills and the broader land-use impacts associated with meeting Maryland's future energy needs.

The Council recognizes that many of the cost pressures discussed in this memorandum originate from regional PJM market conditions rather than solely from conditions within Maryland. Forecasts for electricity demand, including projected data center

[1] State of Maryland, Building an Affordable and Reliable Energy Future (December 2025).

development, continue to evolve and may change over time. This memorandum is intended to identify key affordability and reliability challenges facing Maryland consumers and potential policy responses, rather than provide a comprehensive assessment of all factors affecting future electricity costs.

The following sections identify the principal near-term challenges most directly affecting Maryland's energy affordability and reliability outlook, as well as potential solutions identified by the Energy Advisory Council for consideration by the Energy Subcabinet.

Urgent Challenges Facing Maryland

I. Escalating Capacity Costs Through PJM

Maryland's most immediate electricity affordability challenge is the sharp increase within the PJM Interconnection in capacity prices, which are the charges for reserving power generation capacity to ensure grid reliability during times of peak demand. PJM determines wholesale payments made to electricity generators to ensure their commitment to meet future energy needs. In December 2025, capacity prices in the PJM Interconnection's capacity auction hit a $333.44/MW-day price cap[2] across its region, which set a record-high price for the third auction in a row. At this auction, PJM procured 145,777 MW – about 6,625 MW below their 20% installed reserve margin target.[3, 4] Several factors contributed to these outcomes:

- retirement of dispatchable generation resources, including retirements associated with market conditions and capacity price signals that did not support the continued operation of some existing units,
- slower-than-needed new generation entry,
- revised resource accreditation rules,
- increased forecasted peak demand, and
- transmission constraints limiting deliverability.

[2] A capacity auction is a competitive process used in wholesale electricity markets to ensure there is enough reliable power available to meet future electricity demand, especially during peak periods. In the PJM region, the grid operator runs a forward capacity market in tandem with prompt energy markets. While energy markets sell the actual electricity produced, the capacity market pays suppliers for their commitment to be available when needed – not for the energy itself. The PJM price cap refers to a FERC approved limit on how high capacity auction prices can go in a regional capacity auction. It was introduced to prevent excessive price spikes and protect consumers from high capacity costs. For PJM, FERC has approved a price cap of $325/MW-day and a price floor of $175/MW-day, extending through its next two capacity auctions – for the 2028/29 and 2029/30 delivery years. This means no price in the auction can exceed $325/MW-day or fall below $175/MW-day.

[3] Utility Dive, PJM capacity prices hit record high as grid operator falls short of reliability target (December 2025).

[4] One month after the December 2025 auction the peak forecast in PJM for the relevant delivery year was reduced by 3,736 MW narrowing the gap in procurement by 56%.

Because Maryland is part of a regional electricity market, these wholesale market prices affect retail electricity costs.This is exacerbated by Maryland's dependence on imported electricity. Even in the case where Maryland utilities are not building new electricity generation themselves, Maryland customers remain exposed to rising regional capacity obligations. Long-term contracts and other procurement mechanisms can help moderate wholesale market volatility, but they cannot fully insulate customers from regional market conditions. As a result, customers may still experience higher supply costs despite having limited influence over those conditions.

II. Data Center Load Growth and Cost Allocation

Large-load growth associated with data centers is emerging as both a national and regional affordability concern. Demand associated with existing and proposed data center development – both within Maryland and elsewhere in the PJM region – is already influencing electricity capacity forecasts, electric transmission planning, and long-term infrastructure requirements. Because data centers often require substantial continuous electricity supply ("hyperscalers" often requiring 100 MW or more), they create demand growth that often precedes corresponding new generation or transmission additions.

Although the PJM Independent Market Monitor found that the increase in capacity market revenues was driven by a combination of factors, projected load growth associated with data centers was a significant contributor. In the fall of 2025 PJM's capacity auction resulted in total capacity market revenues increasing by approximately $7.3 billion, or 82%, compared to the prior auction.[5, 6]

Due to these combined dynamics, some analyses have estimated that capacity market outcomes could contribute to higher retail electricity bills over time, with potential impacts varying based on load growth, market conditions, and retail rate structures across the PJM region.[7]

Another affordability concern is cost allocation – specifically, how costs for new energy infrastructure is allocated across different types of customers. Several Advisory Council members identified that costs should be allocated using the principle of "cost causation," namely that costs for new infrastructure development should generally be assigned in a manner that reflects the drivers of system investment needs. At the wholesale level, transmission costs are

[5] Monitoring Analytics, Analysis of the 2026/2027 RPM Base Residual Auction (October 2025).
[6] E3, Understanding the Drivers of Rising Electricity Rates and the Role of Data Centers (May 2026).
[7] Introl, PJM's $100 Billion Rate Shock: How Data Centers Are Rewriting America's Electricity Bills (February 2026)

allocated to load-serving entities through PJM's FERC-jurisdictional cost allocation frameworks. At the retail level, state regulators determine how those wholesale costs, along with distribution and other utility costs, are ultimately assigned across customer classes, including residential, agricultural, commercial, and large-load customers such as data centers.

Without effective alignment between system cost drivers and retail rate design, residential, agricultural, and small business customers may bear a share of infrastructure costs associated with large-load growth, including transmission upgrades and distribution system reinforcement, as well as replacement power costs. To demonstrate the current impact on Maryland energy consumers, a Union of Concerned Scientists Study found that in 2024 data center transmission build out cost customers in the State of Maryland $107.5 million.[8]

Regional stakeholders are pursuing several initiatives intended to address the reliability and cost impacts associated with rapid load growth, including PJM's Reliability Resource Initiative (RRI), Expedited Interconnection Track (EIT), Reliability Backstop Procurement (RBP), and proposed Connect and Manage reforms. These efforts are intended to accelerate resource additions, maintain reliability, and better align the costs associated with new large-load growth with the customers driving those investments.

Maryland has already begun addressing this issue through separate large-load customer treatment at the Maryland Public Service Commission. Maryland also participates in PJM's regional electricity market and transmission system, customers remain exposed to costs associated with regional infrastructure and reliability needs that are allocated pursuant to PJM's approved cost allocation methodologies.[9] This issue is particularly urgent because projected data center growth continues to outpace the development of dedicated supply solutions.

III. Electricity Demand and Slow Generation Connection

Electricity demand growth in Maryland extends beyond the growth in large-load commercial users and reflects broader structural changes across the economy. Maryland is also managing reliability concerns and infrastructure needed to service current electricity users, including the need for adequate generation resources and reliable transmission systems to serve rural areas of the state. As electricity demand grows, these existing challenges may become more

[8] Union of Concerned Scientists, Connection Costs Loophole Costs Customers Over $4 Billion to Connect Data Centers to Power Grid (September 2025).
[9] State of Maryland Public Service Commission, Large Load Customer Regulations and Tariffs Interconnecting to the Electric System Servicing Maryland (June 2025).

pronounced, increasing the importance of investments that support both reliability and affordability.

While Maryland is experiencing growth in electricity demand from transportation electrification, building electrification, and certain large-load customers, many of the near-term supply adequacy and affordability pressures reflected in PJM markets are driven by regional load growth forecasts and resource adequacy conditions across the broader PJM footprint. As a result, Maryland customers may experience higher costs even when the underlying drivers of those costs originate outside the state.

Several factors are increasing electricity demand statewide:

- transportation electrification and build out of electric vehicle charging infrastructure,
- population growth in utility service territories,
- commercial building electrification.

Although demand growth can improve utilization of existing infrastructure under some circumstances, Maryland's current challenge is that electricity demand is rising faster than low-cost supply additions and grid upgrades are being completed.

In wholesale markets such as PJM, rising demand places upward pressure on energy and capacity prices when new generation, and storage capability do not enter the system quickly enough. According to a Rocky Mountain Institute (RMI) report from late 2025, it can take up to eight years to bring new generation online in PJM.[10] This means even moderate statewide electricity demand increases can produce disproportionate affordability impacts when combined with regional electricity supply constraints.

IV. Infrastructure Project Costs

The cost of building new electricity infrastructure has increased materially across all resource categories relevant to Maryland's energy system. Project costs are rising because of higher raw material prices, labor cost escalation, supply chain constraints, elevated financing costs, interconnection expenses, and longer construction timelines. A Boston University study found that the average energy project costs 40% more than expected for construction costs.[11] These pressures affect all types of investments in the energy system.

[10] RMI, PJM's Speed to Power Problem and How to Fix It (November 2025).
[11] BU Institute for Global Sustainability, Investment Risk for Energy Infrastructure Construction Is Highest for Nuclear Power Plants, Lowest for Solar (May 2025)

Higher interest rates have also increased the cost of capital for utilities, independent power producers, and other energy developers, raising the overall cost of financing new generation, transmission, distribution, and resilience investments. Because many of these costs are ultimately recovered through electricity rates or market prices, higher interest rates contribute to rising energy costs for Maryland consumers.

V. Transmission Project Costs

Transmission planning has not kept pace with changing load patterns, generation shifts, and reliability needs in Maryland and across the PJM region. For Maryland, insufficient transmission investment contributes to higher congestion costs, reduced import flexibility, localized price pressure, and delayed delivery of lower-cost power. At the same time, distribution costs are contributing to affordability challenges and have also been a significant driver of increases in electricity bills, underscoring that there is no single factor that fully explains rising electricity costs.[12]

Transmission project costs are also increasing due to steel and equipment inflation, transformer shortages, financing costs, and permitting delays. However transmission investments can also provide significant benefits by improving reliability, reducing congestion costs, and enabling access to lower-cost generation resources. Maryland ratepayers could face $5.4 billion in costs for transmission built out over five years, beginning in 2031, including both regional and local transmission projects.[13] While regional transmission projects are often designed to deliver broad system benefits, policymakers should continue to evaluate the specific costs, benefits, and oversight mechanisms associated with all transmission investments to ensure they provide value to Maryland customers.

VI. Fuel Prices and Dependency on Natural Gas

Maryland remains exposed to natural gas price volatility because natural gas-fired generation plays a significant role in setting wholesale electricity prices across the PJM region. As of 2025, natural gas was used to produce 39% of the state's electric power,[14] and 44% of total electricity production across PJM. The extent to which wholesale natural gas price fluctuations are reflected in retail electricity costs depends on utility procurement practices, retail market

[12] Between 2023 and present day, there have been thirteen natural gas and electric distribution rate cases filed at the Maryland Public Service Commission, one of which was withdrawn.
[13] Office of People's Counsel, PJM Transmission Cost Impacts on Electricity Customers in Maryland (March 2026).
[14] Energy Information Administration, Electricity data browser - Net generation for all sectors (2025)

structures, and the degree to which customers are insulated from short-term market volatility.

When natural gas prices rise, wholesale electricity prices typically increase even when non-gas resources remain available, because gas units often determine the marginal clearing price.[15] This creates several affordability risks such as winter fuel price spikes, pipeline constraints during extreme weather, and exposure to global liquified natural gas (LNG)-linked pricing.

As U.S. export capacity expands, domestic natural gas prices are expected to become increasingly linked to international markets, creating greater volatility for electricity customers in Maryland.[16] Natural gas dependency therefore remains both an affordability challenge and a reliability consideration.

VII. Rate Pressure and Utility Rate Case Exposure

In addition to wholesale market pressures, Maryland customers face increasing costs from utility distribution rates. Current and pending rate proceedings involving Pepco and Washington Gas reflect rising utility investment needs associated with system modernization, reliability upgrades, aging asset replacement, and storm hardening.

Unlike many wholesale market costs that are determined through regional processes, distribution rates are subject to direct oversight by the Maryland Public Service Commission and therefore represent one of the areas where state policy can most directly influence customer affordability outcomes.

Although the Public Service Commission has taken a more active posture in reviewing utility requests for new infrastructure, the overall direction of cost pressure remains upward because utilities continue to seek recovery for large capital investment programs. This means customer affordability is now shaped simultaneously by wholesale market costs and local distribution investment.

Solutions Identified by the Energy Advisory Council

Through a series of working group meetings and a survey, the Energy Advisory Council identified a set of complementary solutions designed to improve affordability and reliability outcomes while better aligning costs with system drivers. These solutions reflect both actions that can be taken directly by the State of Maryland and those that

[15] Energy Information Administration, U.S. wholesale day-ahead electricity prices rose in 2025 with higher natural gas prices (February 2026).
[16] Former Energy Secretary Granholm, Statement from U.S. Secretary of Energy Jennifer M. Granholm on Updated Final Analyses (December 2024).

will require coordination with regional market operators and federal regulators to implement. The Advisory Council's recommendations are organized according to the Council's five working groups that considered and recommended them.

I. Supply and Demand

Advisory Council members in the Supply and Demand working group emphasized the need to better align load growth with resource adequacy through more proactive and integrated planning. A central recommendation from Advisory Council members was to incorporate confirmed large-load interconnection requests, particularly from data centers, into state and utility planning processes earlier and with greater specificity. This is an area where Maryland has meaningful authority through the Public Service Commission oversight of utility planning and interconnection policies.

The Advisory Council also identified the need to accelerate the deployment of generation, storage, and demand-side resources within Maryland, such as energy efficiency and demand response/load management to reduce the growing imbalance between supply and demand in the state. While the State of Maryland can act at the state level to streamline permitting and siting processes for new resources, the pace at which those resources ultimately come online remains dependent in part on PJM interconnection timelines, requiring regional coordination. In addition, the interconnection of new generation resources often depends on associated transmission network upgrades, which may require approval at the state level through processes such as Certificate of Public Convenience and Necessity (CPCN) proceedings before the Maryland Public Service Commission. Accordingly, Maryland's role in enabling timely deployment of new resources includes both siting of generation and consideration of necessary transmission investments that support interconnection.

This discussion primarily applies to utility-scale resources. Distributed energy resources (DERs) are largely subject to state, local, and utility-level permitting and approval processes, and Maryland plays a more direct role in enabling DER deployment. Any discussion of interconnection timelines should distinguish between utility-scale interconnection through PJM and DER deployment pathways, which are governed primarily at the state and local level.

In addition, the Advisory Council identified that the state could undertake additional efforts to build out and enhance electricity supply by streamlining state siting and permitting procedures for new generation in Maryland. This includes helping to identify appropriate areas/zones for energy development

including underutilized areas like rooftops or reuse of former energy generation and brownfield sites as a first priority before looking to develop agricultural or undeveloped lands, targeting of state funding and incentives to encourage new generation, working with local governments on coordinated project reviews and permitting actions, and ensuring adequate staffing for agencies or entities responsible for permitting.

Some Advisory Council members noted disagreement with the emphasis on state-led site identification, observing that private developers typically conduct their own proprietary siting analyses and that identifying sites for energy infrastructure development may not be a constraint on deployment timelines for some forms of energy generation.

In particular, the Advisory Council highlighted that expanded use of demand-side management could serve as a near-term, cost-effective solution both for state agencies and for commercial and residential consumers. Scaling demand response programs, time-of-use rates, virtual power plant (VPP) integration, and other load-shifting mechanisms can be implemented largely at the state level and offer a way to mitigate peak demand pressures without requiring significant new infrastructure investment. The survey responses identified VPPs as a promising mechanism because they aggregate distributed energy resources – such as rooftop solar, battery storage, smart thermostats, and electric vehicles – into a dispatchable resource that can improve grid reliability, lower system costs, and defer the need for costly generation and transmission upgrades

II. Transmission and Distribution

The Transmission and Distribution working group focused on improving planning alignment, cost containment, and system efficiency across both regional and local infrastructure. A key recommendation from Advisory Council members in this working group was to strengthen Maryland's engagement in PJM transmission planning and load forecasting processes to ensure that state-specific reliability needs, load growth projections, and policy priorities are more fully reflected, and that broader regional projects that help meet Maryland's needs are prioritized. Because transmission planning and cost allocation are governed at the regional level, implementing this solution will require the state to maintain sustained coordination with PJM, other PJM states, and federal regulators. In particular, the Advisory Council stressed the need for PJM to fully consider whether local transmission and distribution projects are necessary and cost-effective, so that the costs of localized projects that will be reflected in customer rates have full review and consideration. This includes state

engagement with relevant regional and state entity (RSE) processes under FERC Order 1920, which establish opportunities for stakeholders to participate in long-term transmission planning and right-sizing evaluations.[17] These processes may also support more robust assessment of advanced transmission technologies (ATTs) as part of evaluating whether proposed investments represent the most cost-effective solutions.

At the same time, the Advisory Council identified opportunities for Maryland to take a more proactive role in identifying and addressing reliability risks within its borders. Enhanced mapping of congestion and system constraints by the state can help target high-value transmission investments and improve long-term cost outcomes, even where final approval and cost allocation decisions occur regionally.

On the distribution side, the Advisory Council emphasized that Maryland retains clear authority through the Public Service Commission to scrutinize utility capital investment plans. This includes requiring more rigorous cost-effectiveness analyses and expanding the use of non-wires alternatives and ATTs where feasible to defer or reduce traditional infrastructure spending. These actions represent some of the most direct levers the state has to manage upward pressure on customer bills.

III. Energy Burden

The Energy Burden working group of the Advisory Council concentrated on reducing the disproportionate impact of rising energy costs on residential, agricultural, and small commercial customers. The Advisory Council identified the need to provide additional financial resources for affordability programs and improve program targeting to reach more customers, including bill assistance, energy efficiency and weatherization deployment programs and incentives[18]. Another recommendation was the establishment of rate classes for low and medium-income customers as a core state responsibility that can be scaled through existing programs and funding mechanisms.

The Advisory Council recommended that the state place significant focus on rate design and cost allocation among consumers. The Maryland Public Service Commission has authority over retail rate structure and could take additional

[17] ACORE, Incorporating GETs and HPCs into Transmission Planning Under FERC Order 1920 (April 2025).
[18] To provide short term, immediate bill relief, the Utility RELIEF Act reduced surcharges on bills by paying $100 million toward EmPOWER program costs, temporarily reduced electric greenhouse gas reduction targets, and eliminated gas utility efficiency requirements. This short term bill relief was balanced against the impacts of temporarily lowering funding and incentive levels for EmPOWER Maryland's weatherization and energy efficiency initiatives.

action to ensure that rates are aligned with cost causation, particularly in addressing the power needs of large-load customers. The Advisory Council emphasized that without efforts to examine rates and align them with electricity usage, residential customers may continue to bear a share of costs driven by high-demand users. Because distribution costs represent a growing share of customer bills and are largely within state regulatory jurisdiction, continued scrutiny of utility capital spending and cost recovery mechanisms should remain a central component of Maryland's affordability strategy.

At the same time, the Advisory Council recognized that some cost drivers, particularly those embedded in wholesale power market outcomes, cannot be addressed solely at the state level. As a result, efforts to reduce energy burden will also depend on complementary regional reforms. In parallel, Maryland can take direct action to improve customer access to energy usage data and tools that enable more informed energy consumption decisions, helping customers better manage their usage and bills in the near term.

In addition, the use of long-term contracts and other hedging mechanisms, either by the state itself or by wholesale market participants, can help reduce customer exposure to short-term wholesale market volatility by providing greater price stability over time. The extent to which these tools are utilized can therefore play an important role in providing more predictable energy costs for consumers.

IV. Policy

The Policy working group emphasized the importance of clearer and more coordinated state-level frameworks to guide energy decision-making. This includes strengthening requirements for integrated planning that incorporate affordability, reliability, economic impacts, and agricultural and undeveloped land use impacts, alongside environmental considerations. Maryland has direct authority to establish these requirements through legislation, regulatory guidance, and executive action. In particular, the Advisory Council highlighted the need for the state to develop consistent affordability definitions and metrics.

The Advisory Council also identified permitting and siting reform as a critical area for state action. Streamlining approval processes for new energy infrastructure can reduce project delays and associated cost escalation, helping to bring needed resources online more quickly. Additionally, participants emphasized the importance of ensuring that the agencies and entities completing these processes are adequately resourced.

At the same time, the Advisory Council highlighted the need for a more formalized and strategic approach to Maryland's participation in regional energy markets. Because many of the most significant cost drivers, such as capacity market outcomes, interconnection processes, and transmission cost allocation, are determined at the PJM and federal level, Maryland's ability to influence these outcomes will depend on sustained and coordinated engagement with regional stakeholders and regulators.

V. Finance and Market Design

The Finance and Market Design working group focused on addressing structural cost drivers and improving how energy infrastructure is financed and paid for. A central recommendation from the Advisory Council is for Maryland to actively advocate for reforms to wholesale market design, particularly in PJM's capacity market, where pricing outcomes are increasingly driving customer costs. These reforms — including changes to accreditation and pricing structures, such as refining effective load carrying capability (ELCC) methodologies, improving compensation for demand response and virtual power plants, and establishing more forward-looking capacity procurement — fall largely under regional and federal jurisdiction, requiring collaboration with PJM and the Federal Energy Regulatory Commission. Within that framework, capacity costs are allocated to load-serving entities (LSEs) at the wholesale level, while the allocation of those costs across retail customer classes, or individual customers, is generally determined through state-level ratemaking and rate design processes.

The Advisory Council also emphasized the need to improve cost allocation frameworks, particularly for transmission investments and large-load customers. At the wholesale level, transmission and capacity-related costs are allocated to load-serving entities (LSEs) through PJM processes under FERC-jurisdictional rules. The allocation of those costs across retail customer classes or individual customers is generally determined at the state level through utility ratemaking and rate design. Aligning costs more closely with beneficiaries therefore involves both regional engagement in PJM/FERC processes and state-level decisions regarding how costs are ultimately recovered from different customer classes, and Maryland can play an important role in shaping both sets of discussions to better protect its ratepayers.

In contrast, the state has more direct control over financing-related solutions. The Advisory Council identified opportunities to leverage public financing tools, such as state-backed financing programs or credit support mechanisms, to reduce the cost of capital for critical infrastructure investments. Additionally,

strategic use of public-private partnerships and other de-risking mechanisms can help lower overall system costs while accelerating deployment of needed resources.

Complete Solution Set Identified by the Energy Advisory Council

The following table details the specific solutions identified by the Energy Advisory Council. When provided by Council members, the table includes references to other state or local policies to consider when reviewing such options for possible implementation in Maryland. The table also includes any additional materials or context on particular solutions provided by Advisory Council members.

State Actions

Solution	Authority	Additional Information
Require economic impact analysis alongside environmental mandates to assess affordability implications	State (MD)	
Align reliability planning with confirmed load growth and realistic construction timelines	State (MD)	
Use public funding and incentives to drive consumer adoption of energy efficiency and smart technologies	State (MD)	
Issue an executive order (EO) requiring demand response implementation at state agencies	State (MD)	Reference Virginia demand response program for public facilities
Establish rate structures for high-demand users to reflect cost causation	State (MD)	Consider large load tariffs, which are pending or in place across 36 states according to the Smart Electric Power Alliance Database of Emerging Large Load Tariffs
Strengthen oversight of utility cost recovery to ensure rising PJM and infrastructure costs are prudently incurred and equitably allocated to customers	State (MD)	
Establish and expand low-income rate structures and affordability programs	State (MD)	Office of People's Counsel, Maryland Low-Income Market Characterization Report (2022)
Reform and clarify state policies affecting generation and infrastructure development	State (MD)	
Rein in unnecessary utility spending on localized transmission projects and prioritize cost-effective infrastructure investments	State (MD)	Consider requiring evaluation of ATTS for local transmission to see if they can meet the need, which is not currently part of FERC Order 1920 or 2023.
Streamline and coordinate permitting and siting processes to reduce delays and costs	State (MD)	
Prioritize development in low-impact areas such as brownfields, rooftops, and previously developed land	State (MD)	
Remove duplicative regulatory requirements, particularly for deployment of distributed resources like rooftop solar	State (MD)	

Align energy efficiency and housing upgrades to improve long-term affordability and system performance	State (MD)	Suggested focus on upgrades to roofing, foundations, electrical wiring, and HVACs Look at Energy Efficiency Maine and Green and Healthy Homes Initiative in Detroit
Improve targeting of high-usage customers using available data to better manage system costs	State (MD)	
Expand access to energy usage data while protecting consumer privacy to enable better decision-making	State (MD)	Reference New Jersey proposed rule, N.J.A.C. 14:5-10
Add Affirmative "Enroll Me in Community Solar Savings" via Section 10 of the OHEP enrollment form, ensure all participating customers are guaranteed at least 20% energy savings, and OHEP receive a $100/customer payment.	State (MD)	Reference State of New York Energy Affordability Program *See Appendix A for additional detail*
Create a "low-income feed in tariff" or LI-FiT, to exclusively serve customers under the low-income mechanism with these distributed solar facilities. A reverse auction for the energy from these facilities would minimize ratepayer impacts other rate classes.	State (MD)	Similar model to Massachusetts SMART Program, whereby utilities paid a fixed dollar/kWh tariff based on competitive bids *See Appendix A for additional detail*
Allow clean energy developers to pay the full costs of clean energy permits, ensuring these projects can be brought online quickly	State (MD)	Prince George's County has successfully implemented this to accelerate building permits *See Appendix A for additional detail*
Control growth in electric and natural gas distribution rates through stronger regulatory oversight	State (MD)	
Prioritize limited-income households in electrification and clean energy program deployment	State (MD)	
Reform retail market structures to improve price stability, transparency, and competition	State (MD)	
Ensure effective implementation and targeting of state incentive programs and funding	State (MD)	Consider developing a "one stop shop" platform to provide information to consumers on available state and federal incentives. See RMI Clean Energy Hub as a model. This could be particularly relevant for distributed solar where the tax credit is phasing out and the requirements have changed

Design rate structures that reflect real-time usage and incentivize customer engagement	State (MD)	
Expand deployment of distributed energy resources, including solar, storage, and heat pumps	State (MD)	Reference Maryland Clean Energy Center Strategic Revolving Fund for solar and energy storage systems
Provide community benefits and compensation for areas hosting large energy-intensive infrastructure	State (MD)	
Reduce regulatory and financial barriers to project development, including pre-development and siting risks	State (MD)	
Conduct comprehensive system cost and asset analyses to inform long-term planning and cost allocation	State (MD)	
Increase public education and transparency around energy infrastructure needs and costs	State (MD)	
Establish clear definitions and metrics for affordability to guide policy decisions	State (MD)	
Ensure policy frameworks consider short-, medium-, and long-term impacts on costs and reliability	State (MD)	
Develop alternative funding mechanisms for infrastructure beyond traditional utility rate structures	State (MD)	Reference California Transmission Infrastructure Accelerator from SB 254 and Transmission Financing and Ownership Report from AB 3264
Incorporate consumer cost impacts into all major infrastructure and policy decisions	State (MD)	
Incorporate distributed energy resources into utility load forecasting and system planning	State (MD)	
Utilize state authority to procure energy resources aligned with policy goals through existing authorities, similar to what Washington D.C. has done	State (MD)	Reference Massachusetts bill H5175 that provides a centralized clean energy procurement authority. Reference Washington D.C. pilot project in collaboration with Pepco to procure renewable energy through a long-term power-purchase agreement (PPA), see DCPSC case FC1017
Expand residential energy efficiency and targeted education, particularly for low-income households and renters	State (MD)	
Provide sufficient resources and staffing for state agencies to engage in planning and regional market processes	State (MD)	
Expand use of non-wires alternatives (NWAs) including distributed energy resources, demand response, energy efficiency, and energy storage	State (MD)	Reference Massachusetts' Connected Solutions+ program

solutions that reduce the need for new power lines		

Actions with Shared Authority

Solution	Authority	Additional Information
Map reliability risks and system constraints to inform planning and investment decisions	Shared (MD + PJM)	Reference North American Electric Reliability Corporation (NERC) 2026 Long-Term Reliability Assessment
Coordinate resource and transmission planning at the PJM regional level rather than solely at the state level	Shared (MD + PJM/FERC)	
Accelerate deployment of new generation, storage, and dispatchable resources	State (MD) + Shared (PJM)	
Streamline pathways for timely interconnection and accreditation of new supply	Shared (PJM/FERC)	Consider engaging with PJM on FERC Order 2023 to ensure that ATTs are fully and consistently evaluated within interconnection and planning processes, as they may enable more efficient and timely integration of new generation resources.
Expand and formalize demand response and virtual power plant (VPP) capacity to reduce peak demand	State (MD) + Shared (PJM)	Reference VPP programs in other states, see Clean Energy States Alliance VPP Programs Summary Table State efforts are underway through the DRIVE Act and associated VPP pilot programs. Consider supporting the progression of DRIVE Act VPP pilots into full, permanent programs.
Encourage greater generation and transmission development within PJM to improve regional supply adequacy	Shared (PJM/FERC)	
Align cost allocation for new generation and transmission investments with cost-causing customers, including large loads	State (MD) + Shared (PJM/FERC)	
Advocate for improved regional cost allocation frameworks at PJM and FERC, particularly for out-of-state load impacts	Regional (PJM/FERC)	
Expand regional and long-term transmission planning to address congestion and future load growth	Shared (MD + PJM/FERC)	
Attract alternative sources of capital and reduce reliance on ratepayer-funded investments	State (MD) + Shared	Some large loads, like data centers, have interest in engaging in this area. Reference Google discussion of the

		challenge of trying to fund infrastructure upgrades in Ohio
Integrate advanced technologies, including AI and machine learning, into system planning forecasting, and the PJM interconnection process	Shared (MD + utilities/coops)	Reference Evergreen Report on how PJM has begun incorporating automation and advanced analytics into interconnection studies in limited ways, but there may be opportunities to expand and systematize these tools to improve the speed, consistency, and cost-effectiveness of interconnection queue processing.
Encourage flexible load management, including demand "gating" and customer-supplied generation	State (MD) + Shared	
Improve forecasting and planning for large-load growth, including data centers	State (MD) + Shared	
Expand use of long-term contracts and procurement mechanisms to support new generation development	State (MD) + Shared	A 20-year fixed price contract for current New England wind farms could have led to 71% lower average market prices during Winter Storm Fern *See Appendix B for additional detail*
Advocate for extension and reform of PJM market incentives and reliability mechanisms	Regional (PJM/FERC)	
Expand transmission innovation and grid optimization technologies-such as advanced transmission technologies(ATTs)- to improve system efficiency	Shared (MD + PJM/FERC)	
Improve coordination, governance, and stakeholder engagement in transmission and grid planning	State (MD) + Shared	
Prioritize bulk transmission investments over incremental local upgrades where more cost-effective	State (MD) + Shared (MD + PJM/FERC)	FERC Order 1920 includes requirements for long-term regional transmission planning and right-sizing evaluations. Active state engagement may help ensure these opportunities are fully considered.
Encourage market reforms that better value reliability and existing system resources	Regional (PJM/FERC)	
Enable tariff and market rule changes that better compensate capacity and transmission value	Regional (PJM/FERC)	

Appendix A

In addition to responding to the survey and participating in the working groups, TurningPoint Energy provided the following concept note identifying four problems and providing potential solutions.

Problem: Community solar energy generating systems (CSEGS) are increasingly challenged to connect clean energy savings with low-to-moderate (LMI) income customers. Meanwhile, the Office of Home Energy Programs can use additional resources to enroll eligible households for energy assistance programs.

Solution: Include community solar discounts as another option for energy assistance, and allow local home energy program offices to collect payment from community solar projects for assisting with customer signups.

Background: Community solar projects are required to provide at least 40% of their electricity to low-to-moderate income households, and ensure those households receive no less than a 10% discount from what they would have otherwise paid on their electricity bill. While guaranteed energy savings seems like an easy product to sell, there is significant skepticism to sign up for community solar, in part due to past predatory practices from retail energy suppliers. Investors are avoiding the rural utility territories in Maryland because they are skeptical the project will be able to meet the 40% LMI requirement. This invites the question: leverage private investment to shore up OHEP's reach - solving one problem with another?

Proposal: Add Affirmative "Enroll Me in Community Solar Savings" via Section 10 of the OHEP enrollment form, ensure all participating customers are guaranteed at least 20% energy savings, and OHEP receive a $100/customer payment.

Local Home Energy Program Offices, which receive MEA and EUSP grants, ensure low to moderate income Marylanders have access to a variety of public services. They enjoy the trust of the community and countless eligible households in our system. However, there have been challenges delivering the savings of community solar to OHEP enrollees, especially as many of these customers have been burned by the predatory practices of retail suppliers.

When customers are enrolling for direct energy assistance, they could simply check a box that affirms they would like additional savings from community solar. The local home energy program office would transmit their utility account information to participating community solar projects. The project owner would then ensure these

customers are guaranteed savings of at least 20%, and do not pay an enrollment or termination fee.

Once the customer is enrolled by the community solar project, the local home energy program office would receive a $100 acquisition fee from the project owner. Community solar projects are willing to pay for this – otherwise they would be paying someone to knock on doors or run digital ads to enroll subscribers. Local home energy program offices are underfunded and caseworkers are stretched thin – this process will serve to support these tight budgets.

This fee is a common-sense "public-private partnership" mechanism. It compensates the local energy office for the administrative work of identifying and consenting eligible households, providing a sustainable revenue stream for the agency. It turns solar developers into a source of support for the very energy assistance offices that keep this city running. This can be done in person when the customer visits an OHEP office, telephonically, or on the paper form.

While MEA and OHEP are currently piloting the Clean Energy Connector program via the Department of Energy, there are concerns how many customers will ultimately respond to the “cold call” from the subscription coordinator. Furthermore, given this is a federally-funded program, it is unclear if it will continue to operate in the current Administration.

Problem: The new low-income mechanism, established through PC 59, will cap electricity bills for low-income customers. The cost of this mechanism will be ratebased by the utility. Meanwhile, community solar will reach market saturation in rural utility territories, due to high market penetration and/or the transition away from retail net metering. This means hundreds of potential solar projects that could otherwise be developed will not be built.

Solution: Create a “low-income feed in tariff” or LI-FiT, to exclusively serve customers under the low-income mechanism with these distributed solar facilities. A reverse auction for the energy from these facilities would minimize ratepayer impacts other rate classes.

Proposal: A utility-administered Feed-in Tariff, limited to qualifying distributed energy facilities, where utilities are the sole offtaker, purchasing all project output at a fixed, long-term price based on a reverse auction. Incremental program costs are explicitly dedicated to low-income rate classes, reducing bills and energy burden. Projects

operate outside of NEM and community solar subscription frameworks, insulating them from ongoing retail credit redesign.

The LI-FiT would be narrowly scoped, time-limited, and capacity-capped—designed as a transition tool, not a permanent market overhaul. The purpose is to minimize the cost of the low-income mechanism to other rate classes and incentivize additional distributed energy.

This model is perhaps most similar to the Massachusetts SMART program, whereby utilities paid a fixed dollar/kWh tariff based on competitive bids. However, unlike the model proposed above, Massachusetts dedicated a "low-income adder" to support provision of energy to low income households.

Maryland would not be inventing a new concept, but rather combining best practices from Massachusetts, New York, California, and Oregon into a narrow, equity-driven transition tariff tailored to Maryland's recent NEM reform and low-income mechanism.

Problem: Maryland's state hiring freeze and cumbersome third-party contracting process has tied the hands of key agencies responsible for permitting clean energy.

Solution: Allow clean energy developers to pay the full costs of clean energy permits, ensuring these projects can be brought online quickly.

Background: Due to a sharp upswell in applications in Q4 of 2025, it will now take approximately 18 months for distributed solar (mostly community solar) projects to go through the state permitting process, also known as the Certificate of Public Convenience and Necessity. Until the DG-CPCN (a 4-month community solar project review process) program is implemented, these projects will be stuck in the state permitting process. TPE estimates that at least 250 MW will be impacted by this delay.

Proposal: To ensure no public funds are used to permit clean energy projects, DNR could offer an expedited permitting option to community solar CPCN applications, whereby the applicant covers the entire cost of third-party contractors in order to retain PPRP's previous 12-month review timeline. Such option is available for building permits at the local jurisdiction level; Prince George's County has successfully implemented this to accelerate various permits.

TPE proposes that DNR / PPRP directly retain a contractor to assist in processing these applications, or, the developer and an approved third-party contractor enter into an memorandum of understanding to submit a pre-reviewed application to PPRP.

Model A — Fixed-Fee (Full Cost Recovery)

Under the Fixed-Fee option, a CPCN applicant electing the expedited track pays a single supplemental fee per project at intake to cover the estimated cost of third-party technical support through Final Order. The fee is set by the State using historical workload data and periodically recalibrated. Upon payment and completeness, PPRP assigns work to vendors from a state-managed, pre-qualified pool and directs all scopes, methods, and deliverables. Contractors provide technical analyses (e.g., environmental and cultural resource surveys, GIS constraints mapping, alternatives analysis), but PPRP retains authorship of conclusions and maintains full approval authority throughout.

Model B — Escrow (Time & Materials)

Under the Escrow option, the developer funds a project-specific escrow account upon submission of the CPCN application. PPRP issues task orders to pre-qualified vendors and authorizes draws from escrow as work is completed; each draw is documented with deliverables and time records, and any unused balance is returned at close-out. As with Model A, vendors are directed by PPRP, which controls scope, methods, and quality, and only the State can render findings or recommendations used to support the Final Order.

This model is well-suited for projects with uncertain or variable complexity (e.g. agrivoltaics, brownfields, additional field visits). It allows PPRP to adjust tasking without renegotiating a fixed price. Either model can be piloted alongside the standard track, with quarterly reporting on timeline, cost, quality, and stakeholder feedback to inform a durable long-term policy.

Problem: Maryland is facing sky-high capacity prices, which will continue to rise due to load growth and retiring thermal generation. While gas peaker plants remain an expensive reliability tool, battery storage connected to the distribution system directly reduces peak load, which lowers system-wide costs for all customers. But there is currently no market pathway to deploy of front-of-meter energy storage.

Solution: Create a walk-up grid services tariff and associated incentive for front-of-meter energy storage, and require utilities to amend their tariffs at PJM to pass along the value of reduced capacity and transmission costs.

Background: Distributed energy is the fastest and least-expensive means to achieve Maryland's resource adequacy needs. However, there currently is no market structure enabling the deployment of front-of-meter distribution-connected energy storage. While the Maryland Energy Storage Program (MESP) is working to submit a walk-up grid

services tariff by June, additional actions are needed to create a financeable, competitive energy storage market that will deliver maximal ratepayer benefit.

Proposal: Maryland can unlock significant ratepayer savings, grid reliability, and emissions reductions by enabling distribution-connected (DG) standalone battery storage to operate as a load-reducing resource in PJM—based on Illinois' Clean and Reliable Grid Affordability Act. By compensating batteries for capacity, transmission, and energy price suppression, Maryland utilities and customers benefit while avoiding new transmission and peaker generation investments.

Background: Batteries that reduce demand on the local (distribution) grid are more valuable than power plants connected to the high-voltage transmission system because they prevent costs from being incurred in the first place. When these batteries discharge during peak hours, the grid needs less backup power, fewer reserve resources, and less investment in transmission lines—saving money for everyone. Transmission-connected generators can only add supply after those costs are already baked in, while local load reducers directly lower peak demand where costs are created. As a result, distribution-level batteries deliver bigger savings, reduce the need for new infrastructure, and do so with less risk to customers.[19]

What needs to happen?

First, Maryland would need to align utility tariffs and peak-load accounting rules with policy intent. Illinois accomplished this by directing ComEd to amend its PJM tariff treatment to allow negative Peak Load Contributions (PLC and NSPL) and to pass through capacity and transmission savings. Maryland utilities would similarly need PSC-approved tariff modifications that (1) allow behind-the-meter or distribution-connected batteries to register net load reductions during PJM and zonal coincident peaks, and (2) credit those reductions at the cleared PJM capacity price and applicable transmission rates. Without adjusting peak accounting and settlement rules, Maryland cannot unlock the ratepayer value that comes from batteries acting as load reducers rather than generation resources.

[19] In PJM, peak load drives the amount of capacity the system must procure, which equals forecast peak demand plus an approximately 20% installed reserve margin. As a result, each 1 MW reduction in distribution-level load avoids 1.2 MW of capacity procurement. By contrast, transmission-connected generation resources are credited using Effective Load Carrying Capacity (ELCC), an administratively determined metric that reflects expected availability during peak hours. Due to duration limits and performance uncertainty, battery storage ELCC values in PJM are materially discounted, commonly around 50-60% of nameplate capacity. Thus a 1 MW battery operating as a load-reducing resource offsets the full peak obligation plus reserves, while the same battery treated as a generation resource offsets less than half of that obligation. Thus distribution-side load reduction is substantially more effective at reducing system capacity costs than adding equivalent generation on the transmission system.

Second, the General Assembly, with support of the Governor and the Maryland Energy Administration, would need to create a durable compensation stack that de-risks investment while protecting ratepayers, closely tracking what Illinois layered together under CRGA. That includes retail pass-through of hourly wholesale energy prices, explicit capacity and transmission value payments tied strictly to verified performance. However, legislation may be necessary to provide an upfront grid-services payment to recognize avoided infrastructure and reliability costs that are otherwise difficult to monetize. Illinois designed these payments to be performance-based, ensuring that developers are paid only when storage actually discharges during the system's most expensive and constrained hours. Maryland would need to adopt the same "pay-for-performance" discipline to maintain regulatory and political durability.

TurningPoint Energy affirms that a market structure – such as the one proposed – is the most efficient and effective means of rapidly deploying energy storage to the benefit of ratepayers.

Appendix B

In addition to responding to the survey and participating in the working groups, Oceantic provided the following fact sheet on the effect of long-term contracts on market prices.