## SB909-HB1037\_CPSR\_FAV\_EEE-ECM\_28Feb2025.pdf Uploaded by: Alfred Bartlett, MD



# Committee:Education, Energy and the Environment / Economic MattersTestimony on:SB909 / HB1037 "Energy Resource Adequacy and Planning Act"Position:FavorableHearing Date:February 28, 2025

The Chesapeake Chapter of Physicians for Social Responsibility (CPSR) submits this testimony in support of SB909 and HB1037, which will establish a dedicated Integrated Resource Planning Office within our Public Service Commission (PSC) and through that Office develop a long-term Comprehensive Energy Forecast to provide a coherent basis for the state's development and regulation of energy-related resources.

We believe this bill to be one of the most important energy sector bills of the current legislative session. Having a technically sound, multi-sectoral forecasting process is a key missing component of our policy, investment, and regulatory processes. We have already seen that the optimistic projections of the Department of Environment's 2023 *Climate Pathway* report have been overtaken by reality. As the recent modeling by the Maryland Energy Administration shows, we have fallen behind the trajectory needed in clean renewable energy development, while facing rapidly expanding electricity demand.

Ratepayers are experiencing hurtful – in some cases, unmanageable – increases in their bills from factors like the rapid increase in price of natural gas, increasing utility charges, and the constipation of the PJM grid manager's project approval process. The most recent blow comes from the predictable – but not fully prepared for – decision to close the Brandon Shores and Wagner coal-fired generation plants, resulting in huge excess charges for "Reliability Must Run" payments combined with withdrawal of those plants' capacity from the PJM market and the hundreds of millions of dollars cost of otherwise unnecessary transmission infrastructure.

In recent years, in addition to setting goals and targets for clean energy and greenhouse gas reduction, the legislature has passed important pieces of legislation specifying requirements for parts of the energy sector like electric vehicles (EVs), virtual power plants, and energy storage. But these do not have a full comprehensive framework to fit into. Likewise, the PSC's separate groups on components of the electricity system like EVs, interconnection, and building electrification are focused on present day regulatory aspects and neither constitute nor have a comprehensive, multi-sectoral framework.

As recognized by SB909/HB1037, the analysis underlying such a framework needs to include a broad range of factors, from feasibility and cost of in-state generation and storage capacity and demand growth projections, to PJM processes and implementation of the Federal Energy Regulatory Commission's Order 2222 permitting aggregation and capacity market participation of Distributed Energy Resources (DERs), to the projected impact of technologies like "smart" solar inverters and Demand Management... and more.

The bill's required Comprehensive Forecast will also consider financial impact on the state and on ratepayers; projected affordability, reliability, and greenhouse gas emissions; and potential development approaches to generation, distribution, transmission, and storage of electricity. Its broad analysis will include factors so far not comprehensively considered in our planning, such as:

- the role of energy storage as a transmission asset in place of new generation capacity;
- the potential role of an independent distribution operator (including appropriate compensation mechanisms for that role);
- the potential of transmission system modernization to meet more load without additional generation;
- potential siting of new energy generation on former generation sites, state lands, and transportation rights-of-way; and,
- the possibility of new procurement mechanisms to allow the state more direct engagement in energy sector development.

By the end of 2026, with opportunity for public comment, the Office will present its Comprehensive Energy Forecast and resulting recommendations to the legislature. Thereafter, the Forecast will be updated on every two years.

SB909's proposed institutionalization of this multisectoral Comprehensive Energy Forecast process by establishing the Integrated Resource Planning Office is the only way we can successfully navigate the increasingly complex energy environment. Without this comprehensive analysis and planning function, experience indicates that we will face continuing uncertainty and serious obstacles in our efforts to meet our own climate and clean energy goals, building our economy, and protecting our ratepayers.

We therefore respectfully request a favorable report on SB909/HB1037.

Alfred Bartlett, M.D., F.A.A.P. Board Member and Energy Policy Lead Chesapeake Physicians for Social Responsibility <u>alfredbartlett@msn.com</u> 240-383-9109

HB1037 Joint Testimony.pdf Uploaded by: Brian Crosby Position: FAV



### THE MARYLAND GENERAL ASSEMBLY Annapolis, Maryland 21401-1991

## Testimony in Support of SB909/HB1037 - Energy Resource Adequacy and Planning Act

February 28, 2025

Chairman Feldman, Chairman Wilson, and members of the Education, Energy, and the Environment and Economic Matters Committee:

Thank you for your consideration of Senate Bill 909/House Bill 1037, the Energy Resource Adequacy and Planning Act. This bill is a crucial step toward securing Maryland's energy future by establishing an Integrated Resource Planning Office to develop a Comprehensive State Energy and Integrated Resource Plan; a long-overdue, data-driven strategy to ensure reliable, affordable, and sustainable energy infrastructure while advancing Maryland's clean energy goals.

As technology evolves, so must our approach to energy production and consumption. What was once theoretical is now reality, and Maryland must proactively plan for future energy demands. Unlike neighboring deregulated Mid-Atlantic states such as New Jersey, which has implemented a statewide energy strategy, Maryland lacks a coordinated, data-driven approach to anticipate future energy needs and ensure grid stability. Without proactive planning, we face:

- Grid instability, jeopardizing reliability and security;
- Rising energy costs, disproportionately affecting ratepayers; and
- Falling behind on our clean energy commitments, stalling Maryland's progress.

These risks are no longer hypothetical. Just last summer, PJM's capacity auction revealed an alarming 800% increase in capacity demand, translating to nearly \$15 billion in additional costs for consumers across PJM's 15-state region between June 1, 2025, to May 31, 2026.<sup>1</sup> We are all hearing from our constituents that their utility bills are just getting higher and higher. Without strategic planning, these price spikes and reliability concerns will only worsen.

<sup>&</sup>lt;sup>1</sup> "Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland," Office of People's Council, August 2024,

https://opc.maryland.gov/Portals/0/Files/Publications/RMR%20Bill%20and%20Rates%20Impact%20Report\_2024 -08-14%20Final.pdf?ver=V9hZfyTmjLeNVt2Dg3cTgw%3d%3d

To secure Maryland's long-term clean energy future, we must develop a user-friendly, transparent statewide planning model to guide policy and administrative decisions. SB909/HB1037 accomplishes this by establishing an office to enact a long-term, data-driven approach to energy planning that enhances transparency, strengthens grid stability, and protects consumers. Specifically, this legislation will:

## 1) Establish an Integrated Resource Planning Office (IRPO)

- a) The IRPO will be an independent office housed within the PSC, designed to provide reliable and accurate information to inform the General Assembly's energy policy development.
- b) The IRPO will collaborate with key agencies, including the Maryland Energy Administration, the Public Service Commission, the Power Plant Research Program, the Maryland Clean Energy Center, and the Department of the Environment.

## 2) Require the IRPO to Develop and Maintain an Energy Modeling System

a) The IRPO will develop an energy model to analyze electricity prices, resource mix, and commercialization timelines for emerging technologies. This model will provide locational value planning, assess grid reliability, strengthen transmission and distribution systems, and run annual policy scenarios to guide decision-making for the legislature. It will be updated regularly to reflect evolving energy strategies.

## 3) Direct the IRPO to Develop a 25-Year Comprehensive Energy Forecast

- a) Utilizing the model, the IRPO will develop a 25-year Comprehensive Energy Forecast, analyzing energy demand scenarios and policy options to ensure that Maryland's electric distribution system remains reliable and cost-effective in the long term.
- b) The purpose of the forecast is to analyze energy scenarios and policy options for meeting the state's energy needs and greenhouse gas emission reduction goals while ensuring electric distribution system reliability and cost-effectiveness consistent with the long-term energy needs of the State. The bill outlines many items to be included in the forecast, including a ratepayer impact analysis, locational value estimations, an analysis of technologies, load flexibility, and much more.

## 4) Direct the IRPO to Conduct Complementary Energy Studies

a) Simultaneously, we need specific studies conducted to answer the larger questions that the forecast is addressing. These studies will assess Maryland's current energy infrastructure and explore strategies to reduce future energy demand and grid constraints, including reconductoring, energy storage viability, exploring broadening the state's power purchase authority, and more.

## 5) Require Electric Companies to Submit Resource Plans

- a) The PSC will work with the IRPO to develop and enforce regulations requiring electric companies to submit integrated resource plans, ensuring utilities align their strategies with Maryland's long-term energy goals.
- b) This will enhance transparency and consumer protection, minimizing ratepayer impacts while ensuring a resilient energy system.

SB909/HB1037 is not just about establishing another office, it is about getting all of the best minds on energy in our state together to modernize Maryland's energy infrastructure, lower costs for Marylanders, and ensure long-term grid reliability. By passing this legislation, Maryland will take control of its energy future with a proactive and strategic approach.

For these reasons, I respectfully request a favorable report on SB909/HB 1037.

Sincerely,

Kaui Fr Hest

Senator Katie Fry Hester Howard and Montgomery Counties

Delegate Brian Crosby St. Mary's County

## SB 909\_HB 1037\_MDSierraClub\_fav\_28February2025.pdf Uploaded by: Carlo Sanchez



Committee:Education, Energy, and the Environment/ Economic MattersTestimony on:SB 909/ HB 1037, Energy Resource Adequacy and Planning ActPosition:FavorableHearing Date:February 28, 2025

## **Introduction:**

The Maryland Chapter commends General Assembly leadership for addressing our energy challenges head on. Marylanders are facing increasing electricity rates and growing energy demand, and bringing energy generation online is not currently keeping pace. We commend MGA leadership in working hard to find solutions to expand energy generation, improve regulatory oversight, and reduce rates for Maryland ratepayers. Sierra Club supports many provisions proposed in the leadership energy package and appreciates the opportunity to be part of this important conversation.

This testimony provides a summary of our position on the leadership package as a whole, followed by specific comments on SB 937 / HB 1035.

### SB 931/ HB 1036 – Renewable Energy Certainty Act

Sierra Club supports SB 931/ HB 1036, which will create statewide siting standards for solar and battery storage projects and establish consumer protections by setting standards for installers.

### SB 909/ HB 1037 – Energy Resource Adequacy and Planning Act

Sierra Club supports SB 909/ HB 1037, which will build much-needed staff capacity within the Maryland government to engage in assessing resource adequacy and to facilitate long-term scenario planning. Combined with improved utility planning via the Affordable Grid Act (SB 908/ HB 1225), this bill will ensure Maryland is planning for the energy future it wants and has everything it needs to reach that future.

## SB 937 / HB 1035 – Next Generation Energy Act.

Sierra Club appreciates the intent of SB 937/ HB 1035 – to create new incentives and remove regulatory barriers to deploying new energy technologies. We support provisions to restrict out-of-market deals between data centers and energy generators, which could harm Maryland ratepayers. While we commend the broad definition of "dispatchable energy" used in the bill, we believe that the procurement mechanism proposed would not be effective in increasing battery storage deployment in the State. Moreover, we cannot support legislation that would incentivize or accelerate fracked-gas generation or new nuclear power.

## Remarks on SB 909/HB 1037 – Energy Resource Adequacy and Planning Act:

SB 909/ HB 1037 establishes a new independent office with the capability and responsibility to conduct long-term scenario planning for electricity, load forecasting, and inter-agency partnerships. This will ensure that Maryland has the information it needs when establishing and amending state policy, and that the state is not reliant on PJM for critical data. Further, the legislation mandates the creation of a 25-year comprehensive energy plan.

The Maryland Chapter supports the intention behind the bill, especially around the importance of resource adequacy and better planning. The state can more effectively plan for the future, achieve its goal more efficiently, and anticipate and respond to problems through better planning and forecasting. We encourage the committee to consider this legislation alongside its sister bill, the Affordable Grid Act (SB 908/HB 1225), which establishes similar planning for the Distribution System controlled by Maryland's regulated utilities.

### **Integrated Resource Planning and Resource Adequacy**

Establishing the Integrated Resource Planning Office in the Public Service Commission is a thoughtful solution to Maryland's needs. With the projected increases in electricity demand due to the rise in data centers in the region and other market forces, Maryland's ability to conduct a Comprehensive Energy Forecast and the related integrated resource planning is critical. Sierra Club supports the adoption of regulations requiring each electric company to develop an integrated resource plan so that no part of Maryland is left behind during the clean energy transition.

Studying resource adequacy is essential for ensuring Maryland has sufficient power to meet its needs going forward, and that Maryland optimizes the buildout of new power in an efficient and cost-effective way. Maryland's demand for electricity is poised to grow for the first time in 20 years. The decline in demand over the past two decades largely reflects the success of Maryland's energy efficiency programs, like EmPOWER Maryland. However, proposed data centers built to serve the growth in artificial intelligence are driving significant growth. It is important that any resource adequacy study also takes into account Maryland's future deployments of cleaner renewable energy and battery storage, which will create opportunities to site future sources of generation in new locations on the grid.

A resource adequacy study should consider the multiple pathways for Maryland to improve its resource adequacy and grid reliability—and reduce costs to ratepayers—without building new fossil fuel power plants. Just as energy efficiency and demand side management measures in homes can reduce a household's energy bill, there are multiple measures that the PSC can require utilities to take to reduce load on the grid. First, utilities could modernize and bolster existing power lines. This can take the form of reconductoring (i.e. replacing transmission lines with advanced conductors); there is evidence reconductoring can increase grid capacity by four times

its current capacity. Another measure is grid-enhancing technologies, which boost the capacity, efficiency, and reliability of *existing* transmission lines with tools such as sensors, power flow control devices and analytical tools.

Next, a resource adequacy study must consider how utilities can reduce power needs at times of peak demand, which can also significantly save ratepayers money by reducing the need to build new generation resources. Demand management can be passive, in the form of time-of-use pricing, which enables utility customers to pay lower rates if they use the grid at non-peak times. There are also active demand management programs, which provide utilities with more control over when utility customers access the grid. For example, an owner of an electric vehicle (EV) who is flexible as to when their vehicle gets charged could reduce strain on the grid—and pay lower electricity rates—by subscribing to a time-of-use (TOU) rate that reduces the cost of vehicle charging at non-peak times, or enrolling in a smart charge management program through which a utility is able to direct their vehicle to charge at non-peak times.

At a larger scale, utilities can substantially improve resource adequacy by interconnecting new batteries, developing microgrids, and enabling bidirectional vehicle-to-grid charging. These measures improve the grid's ability to store power and draw upon it at times of peak demand—including power generated by distributed energy resources and power stored in electric vehicles' batteries.

Beyond all of these demand-reducing measures, while building new transmission facilities and making large transmission upgrades tend to be more costly and less efficient than improving the capacity of the existing grid, such upgrades would be more cost-effective than building new large fossil fuel power plants. Overall, there is an urgent need to study how to prioritize and combine these multiple measures for improving resource adequacy in Maryland. This study should also consider potential means of collaboration with other states across the PJM region, as well as states' need for PJM to improve its own planning processes. It is important that this study make concrete recommendations as to how PJM can improve its own role in the process. PJM should be more proactive in planning to replace retiring generators; in enabling the interconnection of the gigawatts of renewable energy resources that remain stuck in its interconnection queue; and in building any transmission infrastructure that is necessary to bring online energy from new renewable resources in Maryland, such as offshore wind.

### Considerations

Typically integrated resource plans are a feature of vertically integrated utilities, rather than deregulated states, so the General Assembly and Public Service Commission (Commission or PSC) should consider what this requirement would look like in Maryland. While planning for resource adequacy is important, this planning process may require utilities and the PSC to coordinate with PJM, which operates the regional power grid. Thus far, PJM has not produced

transparent plans for replacing the capacity from Maryland's fossil fuel power plants or interconnecting new large sources of generation, such as offshore wind.

Additionally, we urge that the bill clarify who is responsible for each element of the planning processes laid out in the bill and the role and expectations for utilities, state agencies, and stakeholders.

## SB 909/ HB 1037 should be considered alongside the Affordable Grid Act

The General Assembly and PSC should ensure the resource planning processes outlined in SB 909/ HB 1037 are complementary with the distribution grid process called for in SB 908/ HB 1225, the Affordable Grid Act. The Maryland Chapter of the Sierra Club strongly supports SB 908/ HB 1225, which will require the PSC to develop rules and regulations to create a rigorous and effective distribution system planning processes in Maryland. The need for an effective distribution planning system that incorporates all resources with specificity and requires Commission approval is critical as the Maryland electric industry transitions to clean energy and as Maryland's transportation and building sectors significantly electrify. Without the enactment of the Affordable Grid Act, the distribution system planning process currently under development in Maryland will not meaningfully update utilities' existing distribution planning processes.

A comprehensive 21st century distribution system planning process, as well as a thorough resource adequacy planning process, will both bring multiple benefits to Maryland: improved reliability and resilience; cost efficiency; integration of renewable energy, including the seamless addition of distributed generation sources like battery storage, bidirectional electric vehicle charging, and solar; and improved power quality (e.g., reduced voltage variability and better frequency control).

## For these reasons, the Sierra Club encourages a favorable report on SB 909/ HB 1037.

Mariah Shriner Climate Campaign Representative Mariah.Shriner@MDSierra.org Josh Tulkin Chapter Director Josh.Tulkin@MDSierra.org

## CCSA testimony\_SB 909 and HB 1037\_2-28-2025.pdf Uploaded by: Charlie Coggeshall



1380 Monroe Street NW, #721 Washington, DC 20010 720.334.8045 info@communitysolaraccess.org www.communitysolaraccess.org

RE: SB 909 and HB 1037 - Energy Resource Adequacy and Planning Act

### Favorable

Chair Feldman, Chair Wilson, and members of the Senate Education, Energy, and Environment Committee and the House Economic Matters Committee,

The Coalition for Community Solar Access (CCSA) provides this written testimony regarding Senate Bill (SB) 909 and House Bill (HB) 1037. CCSA's position on this legislation is Favorable.

CCSA is a national, business-led trade organization, composed of over 100 member companies, that works to expand access to clean, local, affordable energy nationwide through the development of robust community solar programs. Community solar projects involve medium-scale solar facilities that are shared by multiple community subscribers who receive credit on their electricity bills for their share of the power produced.

CCSA has been an active participant in the development and implementation of Maryland's community solar pilot program, and we are grateful to this Committee for supporting the passage of SB 613 and HB 908 in 2023, which made community solar a permanent solution in Maryland. As a result, community solar will play a critical role in helping the state meet its energy requirements while also ensuring electricity cost savings for those that need it most, ensuring at least 40% of all capacity benefits low-and-moderate income customers.

SB 909 / HB 1037 would establish an Integrated Resource Planning Office in the Public Service Commission (Commission), tasked with creating a Comprehensive Energy Forecast that considers different energy scenario policy options for meeting the state's energy needs. It would also require the Commission to establish regulations driving the development of integrated resource plans by each electric company.

CCSA appreciates Senator Hester and Vice Chair Crosby and supports the intent and direction of SB 909 / HB 1037. This legislation takes a responsible approach to understanding Maryland's rapidly growing energy demand and how best to leverage cost-competitive and highly deployable clean energy sources to meet the State's needs. It carries notable synergies with SB 908 and HB 1225, which CCSA also supports.

CCSA urges a favorable report on SB 909 and HB 1037.

Sincerely,

Charlie Coggeshall Mid-Atlantic Director, CCSA charlie@communitysolaraccess.org

## **Testimony HB1037 Energy Resource Adequacy ECM DAC.** Uploaded by: Debbie Cohn

Committee:	Economic Matters
<b>Testimony on:</b>	HB1037 – Energy Resource Adequacy and Planning Act
Submitting:	Deborah A. Cohn
Position:	Favorable
<b>Hearing Date:</b>	February 20, 2024

Dear Chair and Committee Members:

Thank you for allowing my testimony today on HB1037.

The Energy Resource Adequacy and Planning Act addresses an urgent need raised by PJM's management of the three forces impacting electricity rates in Maryland.

First, PJM failed to reform its cumbersome review of new energy projects, creating a lengthy interconnection queue which it ultimately closed to new projects for three years in late 2022. As a result very few new projects have been approved or begun construction since 2020, creating a supply deficit.<sup>1</sup> The vast majority of these are solar or storage.

Second, PJM failed to manage the 2025 retirement of the Brandon Shores and Wagner coal-fired generating plants appropriately. The closure was long foreseen<sup>2</sup> since the plants were no longer cost effective. But the closure created both capacity and reliability problems. The solution arranged by PJM and approved by the Federal Energy Regulatory Commission (FERC) required the plants to keep operating under a costly reliability-must-run (RMR) arrangement until an emergency transmission line to replicate the soon-to-be lost supply from the two plants could be constructed. These two emergency actions have resulted in Maryland ratepayers paying nearly \$800M to keep the plants open and \$1.5B for the new transmission line.<sup>3</sup> The handling of the coal plant closures demonstrates PJM's lack of adequate long-term planning.<sup>4</sup>

Third, last year's efforts by AI developers to build several hyperscale data centers in Maryland has created concern around adequate planning for a significant increase in energy demand. These include proposed and unforeseen new transmission lines, including the Piedmont Reliability

https://advancedenergyunited.org/hubfs/2024%20Advanced%20Energy%20United%20Generator%20Interconnection%20Scorecard%20(1).pdf

<sup>&</sup>lt;sup>1</sup> As of June 2024, there were 157,765 MW of projects submitted to PJM in the previous 49 months, enough to power roughly <u>125 million</u> homes for a year. But only <u>1 MW</u> had actually come online. Indeed, PJM received a D-on Advanced Energy United's Interconnection Scorecard.

<sup>&</sup>lt;sup>2</sup> <u>https://www.sierraclub.org/press-releases/2020/11/sierra-club-and-stoney-beach-association-statements-talen-energy-s-commitment</u>

<sup>&</sup>lt;sup>3</sup> <u>https://www.canarymedia.com/articles/fossil-fuels/zombie-coal-plants-could-threaten-the-us-energy-transition</u>

<sup>&</sup>lt;sup>4</sup> In a separate opinion approving the emergency solutions, FERC Commissioner Allison Clements encouraged PJM to "carefully examine potential changes to planning processes so as to better anticipate reliability risks and plans for them in a more proactive manner, such that a full suite of cost-effective solutions can be more carefully considered." <u>https://www.power-grid.com/td/ferc-approves-pjms-796m-transmission-plan-thwarting-maryland-</u> officials/?utm\_source=powergrid\_weekly\_newsletter&utm\_medium=email&utm\_campaign=2023-11-14

Project, and the potential loss to existing ratepayers of the non-fossil fuel energy produced at Calvert Cliffs.

All three examples illustrate the need for state energy planning independent of PJM.

HB1037 would create an Integrated Resource Planning Office (IRPO) in the Public Service Commission. Its goal would be to develop a 25-year comprehensive energy forecast for Maryland to enable the state "to analyze energy scenarios and policy options for meeting the State's energy needs and greenhouse gas (GHG) emissions reduction goals while ensuring electric distribution system reliability and cost-effectiveness consistent with the long-term energy needs of the state." The IRPO would coordinate with several state agencies with relevant expertise, including MEA and MDE, to develop scenarios from which to develop policies.

HB1037 also sets out planning goals and policy criteria to guide the IRPO's effort. These include meeting state energy needs and GHG emissions reduction goals, assessing the financial effect of each scenario on state budgets and ratepayers, and using best available technologies to meet these goals. These planning goals and policy criteria are clear, thorough and reasonable.

Energy bills have proliferated this year as legislators hear from constituents their concern about projected increases in energy demand, rising utility costs, and fears about electricity reliability. All of these concerns merit your careful attention. The proliferation of policy options, combined with the complexity of the issues, can make identifying the best near and long term solutions difficult. HB1037 would provide a sound, objective base of analysis to allow lawmakers, the executive branch and the public to assess and evaluate the policy options. Establishing the Office of Integrated Resource Planning entails costs, but the investment will provide information to reduce the risk of costly mistakes and reactive responses to emergencies.

For these reasons, I urge a FAVORABLE report in Committee.

## **ECA testimony HB1037 Planning.pdf** Uploaded by: Frances Stewart



HB1037 - SUPPORT Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

## HB1037, Energy Resource Adequacy and Planning Act

Meeting of the Economic Matters Committee

February 28, 2025

Dear Chair Wilson, Vice Chair Boyce, and Members of the Economic Matters Committee, on behalf of Elders Climate Action Maryland, I urge a favorable report on HB

Elders Climate Action is a nationwide organization devoted to ensuring that our children, grandchildren, and future generations have a world in which they can thrive. The Maryland Chapter has members across the state.

Each day, we see the climate crisis more clearly. We know that Maryland is at risk for sea level rise, flooding from intense rainfall, heat waves, and other extreme weather events. Maryland can also be a leader in moving us to a safer, cleaner future where we all can thrive. The clean energy transition is an essential part of that future.

It is also essential that the energy we use be reliable and affordable for all Marylanders.

To have a successful transition, we must have better planning. This bill will create an Integrated Resource Planning (IRP) Office at the Public Service Commission. That office will work with the Maryland Energy Administration, the Maryland Department of the Environment, the Maryland Clean Energy Center and other state agencies to develop a 25-year energy forecast. That forecast will consider load, reliability, affordability, and greenhouse gas emissions and make recommendations to the General Assembly. The forecast and the associated analysis and recommendations will put Maryland in a much better position.

For all of these reasons, we strongly urge a favorable report on HB1037.

Thank you.

## HB 1037 & SB 909 - MoCoDEP\_Fitzgerald\_FAV (GA 25). Uploaded by: Garrett Fitzgerald



## **Montgomery County** Office of Intergovernmental Relations

### ROCKVILLE: 240-777-6550

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HB 1037 / SB 909

DATE: February 28, 2025

HB 1037 SPONSORS: Delegate Crosby

SB 909 SPONSOR: Senator Hester

JOINTLY ASSIGNED TO: House Economic Matters Committee and Senate Education, Energy, and the Environment Committee

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

COUNTY POSITION: Favorable (Department of Environmental Protection)

## **Energy Resource Adequacy and Planning Act**

This legislation would establish within the Public Service Commission (PSC) an Integrated Resource Planning Office and charge that office with developing a long-term comprehensive energy forecast, scenarios and policy options for meeting the State's energy needs and climate goals while ensuring electric system reliability and cost-effectiveness. It would also require the PSC to require each electric company to develop integrated resource plans balancing ratepayer impacts, electric reliability and resilience, climate goals, and air pollution impacts.

Montgomery County is supportive of the general intent of this legislation to improve long-term energy forecasting and planning in Maryland. More comprehensive strategic planning of Maryland's complex energy system could significantly improve outcomes related to energy costs, availability, reliability, and environmental impacts.

The County predicts that implementing the valuable planning efforts described in this bill may require significant new investments in capacity at the PSC, Maryland Energy Administration (MEA), and other agencies. It may also be useful for MEA to play a more central role in the energy planning activities described.

We respectfully request that the House Economic Matters Committee and the Senate Education, Energy, and the Environment Committee issue a favorable report on House Bill 1037 / Senate Bill 909.

## HB1037\_Chaberton\_Miller\_FAV.pdf.pdf Uploaded by: John Miller

## 2 chaberton

February 28, 2025

To: House Economic Matters Committee & Senate Education, Energy, and the Environment Committee

Re: HB1037 / SB0909: Energy Resource Adequacy and Planning Act - FAVORABLE

Dear Members of the Economic Matters Committee and the Education, Energy, and Environment Committee of the Maryland General Assembly:

My name is John Miller. I live in Woodstock, Howard County, Maryland. I represent Chaberton Energy, a local Maryland based renewable energy developer with offices at 1700 Rockville Pike, Suite 305, Rockville, Montgomery County, Maryland. Chaberton is a leading developer in the Maryland Community Energy Generating Systems ("CSEGS") Program and was named the 34<sup>th</sup> fastest-growing private company and 1<sup>st</sup> fastest-growing community solar company in the United States on the 2024 Inc. 5000.

Chaberton Energy was built upon the framework that the State set up with the Community Solar Program. In nearly five years, we have grown and now employ over 50 people. We have multiple solar projects operating in Maryland, as well as a robust pipeline of projects in construction and development.

The projects we develop deliver real and tangible benefits to your constituents, the residents of Maryland. We save Marylanders an average of \$150 annually per household on their utility costs; and each Community Solar project supports well over \$2.5M in savings for subscribers, all of whom reside in Maryland and many of whom are Low to Moderate Income (LMI) subscribers. As an industry, we support ensuring the benefits of solar energy flow to those who need it most. The energy bill savings we can offer to LMI subscribers are often even greater and provide a necessary lifeline to those struggling to meet basic needs, including increased energy costs.

The most recent report on the Renewable Portfolio Standard (RPS) shows that the State is well behind in meeting its energy goals. Specifically, per the latest report for 2023, the State only met ~44% of its obligations of RPS, which led to over \$320M in penalty payments levied on the utilities. It will be necessary for Maryland to meet, and exceed, its clean energy goals to ensure a safe, reliable, cost effective, and equitable energy policy. According to data from the Energy Information Administration, Maryland consumes almost six times more energy than it produces and according to the Tean Year Plan produced by the Public Service Commission Maryland imports approximately 40% of its electricity consumption, meaning that the State is very reliant on energy which Maryland does not generate. This issue has been recently exacerbated by the PJM capacity auction which has already begun to have significant financial impacts on the energy bills for all Marylanders. The optimal kilowatt-hour is one that is both produced and consumed in Maryland.

## Chaberton

We commend Senator Hester and Vice Chair Crosby on the forward thinking in proactively addressing Maryland's energy portfolio. Creating an office with the sole focus of forecasting the energy load in Maryland and addressing what is needed to ensure a safe, reliable, and robust energy mix will allow the State to better shape the future of Maryland's energy markets. The energy portfolio of Maryland is complex and ever changing; it will be beneficial to take a holistic view of Maryland's energy needs, while considering factors such as cost effectiveness, public health, climate change, and grid reliability, among the other factors listed in the legislation.

In order to keep building on the successes of Maryland, and to keep fostering jobs for a strong local economy, stimulating tax revenue, saving the people of Maryland money on their energy bills, it is imperative that the State take a proactive approach to its energy needs. We ask that the Economic Matters Committee issue a favorable report on HB1037 and that the Education, Energy, and the Environment Committee issue a favorable report on SB 0909.

Respectfully Submitted,

John Miller Chaberton Energy Vice President of Development

## EREWG Study Report (pg 27 Recs) -- Energy Resilien Uploaded by: Katie Fry Hester

The findings of this report are generally consistent with the Energy Resilience and Efficiency Working Group (EREWG) Final Recommendations passed on September 10, 2024, and highlight the following for future consideration:

- 1) Maryland must take short term actions to address energy capacity constraints, specifically the state should:
  - a. Establish a process for the PSC to order utilities to purchase and install battery storage and other demand response systems on the distribution grid, provided that they are cost effective in adding reliability to the grid and avoiding or delaying (a) other capacity cost increases and/or transmission upgrades.
  - b. Shift the utility-scale solar program from a REC based subsidy model to a competitive bid similar to NJ, NY, and IL. PSC would consider and award bids at fixed prices. Ratepayers would pay the difference between the energy revenue and the fixed guaranteed price (as the variable priced "REC"). This would also allow the PSC to incorporate locational value of generation as well as incorporate storage in some bids as appropriate.
- 2) In the longer term, the state needs an ongoing, regular process for more holistic energy system assessments. This could be something akin to an integrated resource plan and would provide some direction on achieving clean, affordable, and reliable energy in the future. The plan must include reasonable projections for energy demand and strategies for meeting those demands in a regional context with associated impacts on greenhouse gas emissions, ratepayer impacts and affordability, equity considerations, and reliability and resiliency. The structure must ensure actionable outcomes and include annual or biennial updating of solution sets. The Energy Resilience and Efficiency Working Group shall propose a framework for such a planning mechanism by January 2025.
- 3) In support of the state energy planning framework, Maryland must invest in a userfriendly, transparent model for state-wide planning to inform policy and administrative decisions. The model should enable cost benefit analysis of power prices by resources, be detailed enough to enable location value planning and support the transition to a clean energy workforce. The model should also consider time horizons for commercialization of energy technologies and when those technologies may appear in the market.
- 4) **The State should conduct the following immediate study needs,** in parallel to the extent possible, in order to support long-term energy system assessments and energy planning:
  - a. Study on transmission line reconductoring opportunities in the State;
  - b. Feasibility studies for the placement of Small Modular Reactors (SMRs) on former fossilfueled electricity generator sites;
  - c. Analysis to determine if Maryland's Offshore Wind (OSW) projects that do not have a current interconnection agreement could be interconnected with Salisbury substations and the feasibility of building in-state transmission from the OSW interconnects to Maryland load centers;
  - d. Study on the viability of energy storage-as-a-transmission-asset;
  - e. Analysis of land in the State to identify land suitable for solar energy and storage development.

## **SB 909 Joint Testimony.docx (1).pdf** Uploaded by: Katie Fry Hester



### THE MARYLAND GENERAL ASSEMBLY Annapolis, Maryland 21401-1991

## Testimony in Support of SB909/HB1037 - Energy Resource Adequacy and Planning Act

February 28, 2025

Chairman Feldman, Chairman Wilson, and members of the Education, Energy, and the Environment and Economic Matters Committee:

Thank you for your consideration of Senate Bill 909/House Bill 1037, the Energy Resource Adequacy and Planning Act. This bill is a crucial step toward securing Maryland's energy future by establishing an Integrated Resource Planning Office to develop a Comprehensive State Energy and Integrated Resource Plan; a long-overdue, data-driven strategy to ensure reliable, affordable, and sustainable energy infrastructure while advancing Maryland's clean energy goals.

As technology evolves, so must our approach to energy production and consumption. What was once theoretical is now reality, and Maryland must proactively plan for future energy demands. Unlike neighboring deregulated Mid-Atlantic states such as New Jersey, which has implemented a statewide energy strategy, Maryland lacks a coordinated, data-driven approach to anticipate future energy needs and ensure grid stability. Without proactive planning, we face:

- Grid instability, jeopardizing reliability and security;
- Rising energy costs, disproportionately affecting ratepayers; and
- Falling behind on our clean energy commitments, stalling Maryland's progress.

These risks are no longer hypothetical. Just last summer, PJM's capacity auction revealed an alarming 800% increase in capacity demand, translating to nearly \$15 billion in additional costs for consumers across PJM's 15-state region between June 1, 2025, to May 31, 2026.<sup>1</sup> We are all hearing from our constituents that their utility bills are just getting higher and higher. Without strategic planning, these price spikes and reliability concerns will only worsen.

<sup>&</sup>lt;sup>1</sup> "Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland," Office of People's Council, August 2024,

https://opc.maryland.gov/Portals/0/Files/Publications/RMR%20Bill%20and%20Rates%20Impact%20Report\_2024 -08-14%20Final.pdf?ver=V9hZfyTmjLeNVt2Dg3cTgw%3d%3d

To secure Maryland's long-term clean energy future, we must develop a user-friendly, transparent statewide planning model to guide policy and administrative decisions. SB909/HB1037 accomplishes this by establishing an office to enact a long-term, data-driven approach to energy planning that enhances transparency, strengthens grid stability, and protects consumers. Specifically, this legislation will:

## 1) Establish an Integrated Resource Planning Office (IRPO)

- a) The IRPO will be an independent office housed within the PSC, designed to provide reliable and accurate information to inform the General Assembly's energy policy development.
- b) The IRPO will collaborate with key agencies, including the Maryland Energy Administration, the Public Service Commission, the Power Plant Research Program, the Maryland Clean Energy Center, and the Department of the Environment.

## 2) Require the IRPO to Develop and Maintain an Energy Modeling System

a) The IRPO will develop an energy model to analyze electricity prices, resource mix, and commercialization timelines for emerging technologies. This model will provide locational value planning, assess grid reliability, strengthen transmission and distribution systems, and run annual policy scenarios to guide decision-making for the legislature. It will be updated regularly to reflect evolving energy strategies.

## 3) Direct the IRPO to Develop a 25-Year Comprehensive Energy Forecast

- a) Utilizing the model, the IRPO will develop a 25-year Comprehensive Energy Forecast, analyzing energy demand scenarios and policy options to ensure that Maryland's electric distribution system remains reliable and cost-effective in the long term.
- b) The purpose of the forecast is to analyze energy scenarios and policy options for meeting the state's energy needs and greenhouse gas emission reduction goals while ensuring electric distribution system reliability and cost-effectiveness consistent with the long-term energy needs of the State. The bill outlines many items to be included in the forecast, including a ratepayer impact analysis, locational value estimations, an analysis of technologies, load flexibility, and much more.

## 4) Direct the IRPO to Conduct Complementary Energy Studies

a) Simultaneously, we need specific studies conducted to answer the larger questions that the forecast is addressing. These studies will assess Maryland's current energy infrastructure and explore strategies to reduce future energy demand and grid constraints, including reconductoring, energy storage viability, exploring broadening the state's power purchase authority, and more.

## 5) Require Electric Companies to Submit Resource Plans

- a) The PSC will work with the IRPO to develop and enforce regulations requiring electric companies to submit integrated resource plans, ensuring utilities align their strategies with Maryland's long-term energy goals.
- b) This will enhance transparency and consumer protection, minimizing ratepayer impacts while ensuring a resilient energy system.

SB909/HB1037 is not just about establishing another office, it is about getting all of the best minds on energy in our state together to modernize Maryland's energy infrastructure, lower costs for Marylanders, and ensure long-term grid reliability. By passing this legislation, Maryland will take control of its energy future with a proactive and strategic approach.

For these reasons, I respectfully request a favorable report on SB909/HB 1037.

Sincerely,

Kaui Fr Hest

Senator Katie Fry Hester Howard and Montgomery Counties

Delegate Brian Crosby St. Mary's County

## 2025.02.28\_HB1037\_SB909\_Energy Resource Adequacy a Uploaded by: Katie Mettle



February 28, 2025

## Economic Matters Committee Maryland House of Delegates

## Education, Energy, and the Environment Committee Maryland Senate

HB 1037 & SB 909 Energy Resource Adequacy and Planning Act

Katie Mettle Policy Principal, Advanced Energy United

## FAVORABLE

Dear Chair Wilson, Chair Feldman, and esteemed members of the Economic Matters and Education, Energy, and the Environment Committees:

Advanced Energy United is an industry association that represents companies operating in the clean energy space. Our mission is to accelerate the transition to a 100% clean energy economy that is free from fossil fuels. Our members represent the full suite of technologies that are powering this transition. They include, but are not limited to, companies which manufacture, install, and maintain batteries and solar panels, as well as wind turbines, geothermal systems, EVs, EV chargers, and smart grid technologies.

We support this bill. Better planning will allow our state to meet energy demand and keep our grid reliable in the most cost-effective way possible, and as quickly as possible. Empowering the State to do this work will yield the most impartial data. This bill will require the State to comprehensively study the entire energy system: generation, transmission, distribution, and storage. This bill's integrated approach is necessary for our entire system to be upgraded and to operate as efficiently as possible. In particular, we value the inclusion of studying energy storage and reconductoring.

Establishing an Integrated Resource Planning Office will protect ratepayers while allowing our State to meet our energy needs and goals in the most thoughtful, deliberate way possible.

Thank you for your time and consideration.

Best Regards,

Katie Mettle, Policy Principal Advanced Energy United <u>kmettle@advancedenergyunited.org</u> 202.380.1950 x3197

## HB1037 - MDLCV Support - Energy Resource Adequacy Uploaded by: Kristen Harbeson



Kim Coble Executive Director

### 2025 Board of Directors

Patrick Miller, Chair The Hon. Nancy Kopp, Treasurer Kimberly Armstrong Caroline Baker Joe Gill Lynn Heller Charles Hernick The Hon. Steve Lafferty Bonnie L. Norman

### February 28, 2025

### SUPPORT: HB1037 Energy Resource Adequacy and Planning Act

Mr. Chair and Members of the Committee:

Maryland LCV supports HB1037, The Energy Resource Adequacy and Planning Act and thanks Delegate Crosby for his leadership on this issue.

HB1037 proposes creating an Integrated Resource Planning Office in the Public Service Commission that would develop a 25-year comprehensive energy forecast with the purpose of analyzing energy scenarios and policy options for meeting the state's energy needs and greenhouse gas emissions reduction goals while ensuring system reliability and cost-effectiveness.

Maryland faces several challenges including, increasing demand from energy-intensive industries, adverse impacts from climate change and rising electricity rates. The recent electricity capacity auction by our regional grid operator, PJM, resulted in an 800% increase in system-wide prices. In response, Governor Moore joined other PJM states to appeal to PJM and negotiated a rate cap on capacity charges for the next two years. This two-year price cap on capacity charges will likely offer some protections to ratepayers while allowing states to address critical energy challenges.

There is no doubt that decision makers, regulators, energy suppliers, utilities and ratepayers will benefit from the state charting the path forward for data-driven, sensible economic choices that keep the lights on and the air clean. Now is the time for Maryland to develop a comprehensive energy forecast, focused on reliability and affordability. SB 909 outlines extensive considerations for what should go into the forecast. Whether the office is an independent office at the PSC or created through existing resources at our state agencies, Maryland LCV supports the goals of this office.

Maryland LCV is committed to advancing clean energy solutions that increase grid reliability and decrease ratepayer impacts while achieving the state's climate goals. Comprehensive planning across transmission and distribution systems, with strong accountability for the grid operator, energy suppliers, and utilities is key to a safe, reliable, and clean energy future.

Maryland LCV urges a favorable report on this important bill.

### SB 909 - MDLCV Support - Energy Resource Adequacy Uploaded by: Kristen Harbeson

Position: FAV



Kim Coble<br/>Executive DirectorFebruary 28, 2025SUPPORT: SB 909 Energy Resource Adequacy and Planning Act2025 Board of<br/>DirectorsMr. Chair and Members of the Committee:<br/>Maryland LCV supports SB 909, The Energy Resource Adequacy and Planning Act<br/>and thanks Senator Hester for her leadership on this issue.

SB 909 proposes creating an Integrated Resource Planning Office in the Public Service Commission that would develop a 25-year comprehensive energy forecast with the purpose of analyzing energy scenarios and policy options for meeting the state's energy needs and greenhouse gas emissions reduction goals while ensuring system reliability and cost-effectiveness.

Maryland faces several challenges including, increasing demand from energy-intensive industries, adverse impacts from climate change and rising electricity rates. The recent electricity capacity auction by our regional grid operator, PJM, resulted in an 800% increase in system-wide prices. In response, Governor Moore joined other PJM states to appeal to PJM and negotiated a rate cap on capacity charges for the next two years. This two-year price cap on capacity charges will likely offer some protections to ratepayers while allowing states to address critical energy challenges.

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Maryland LCV urges a favorable report on this important bill.

Patrick Miller, Chair The Hon. Nancy Kopp, Treasurer Kimberly Armstrong Caroline Baker Joe Gill Lynn Heller Charles Hernick

The Hon. Steve Lafferty

Bonnie L. Norman

### HB1037\_Energy Resource Adequacy and Planning Act\_E Uploaded by: Laurie McGilvray

Position: FAV



Committee:Joint House Economic Matters and Senate Education, Energy<br/>and the EnvironmentTestimony on:HB1037 – Energy Resource Adequacy and Planning ActOrganization:Maryland Legislative Coalition Climate Justice WingSubmitting:Christine PendzichPosition:FavorableHearing Date:February 26, 2025

Dear Chair and Committee Members:

Thank you for allowing our testimony today on SB909. The Maryland Legislative Coalition (MLC) Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations respectfully urges you to vote favorably on SB909.

The Energy Resource Adequacy and Planning Act squarely addresses an urgent need raised by recent events in Maryland's energy markets. For one thing, PJM has held up hundreds of renewable energy projects in its grid integration queue, thus holding up needed low-cost energy supply. In addition, PJM failed to appropriately manage retirement of the Brandon Shores and Wagner coal plants in 2025 – long foreseen due to the plant's declining efficiency and cost effectiveness – which has resulted in State ratepayers needing to pay nearly \$800M to keep the plants open, and needing to fund construction of a \$1.5B new transmission line mandated by PJM and the Federal Energy Regulatory Commission (FERC). Beyond that, a 2024 campaign by AI developers to build new hyperscale data centers in the state has led to turmoil around the data centers' large expected draw on the State's overall energy supply, the consequent effect on ratepayers and the unforeseen need for major new transmission lines across wide swaths of Maryland territory. These events and others have made plain the need for State energy planning independent of PJM.

SB 909 calls for establishment of an Integrated Resource Planning Office in the Public Service Commission, with the goal of developing a 25-year comprehensive energy forecast for the State of Maryland. The purpose of the forecast is "to analyze energy scenarios and policy options for meeting the State's energy needs and greenhouse gas (GHG) emissions reduction goals while ensuring electric distribution system reliability and cost-effectiveness consistent with the long-term energy needs of the state." The new office is enjoined to coordinate with a range of other State agencies, such as the MEA and the MDE, in its scenario and policy development.

A range of planning goals and policy criteria is also specified. These include meeting state energy needs and GHG emissions reduction goals and assessing the financial effect of each scenario on State budgets and on ratepayers and use of all best available technologies to meet State energy goals. In general, the planning criteria laid out in the bill are balanced and reasonable.

Importantly, SB 909 complements another energy-related bill currently before the Assembly: HB270- Data Center Impact Analysis and Report. HB 270 calls for the MDE and the Maryland Energy Administration to carry out a study of the environmental, energy and economic effects of data center construction in the State. While SB 909 would assess the overall effect of data centers on the State's energy demand, it would not necessarily also evaluate the critical environmental effects, especially on water use. The MLC Climate Justice Wing supports HB 270 as an important complement to SB 909.

The current legislative session has featured a wide range of energy-related bills, from the Governor's ENERGIZE Act through Assembly leadership's three bill package (which includes SB 909) through Delegate Charkoudian's AACE Act, among many others. Lawmakers are hard pressed to decide which bill offers the State and ratepayers the best medium- and long-term solutions. SB 909 would provide a sound, objective base of analysis that would allow lawmakers to assess the bills and evaluate their merits. While setting up the new Office of Integrated Resource Planning does entail some start-up and contract costs, these are a very good investment that would more than pay off for Marylanders in the medium term through the Office's mandated work to identify the most cost-effective paths to energy resource reliability in the State.

For these reasons, the MLC Climate Justice Wing respectfully urges a **FAVORABLE** report in Committee.

350MoCo Adat Shalom Climate Action Cedar Lane Unitarian Universalist Church Environmental Justice Ministry Chesapeake Earth Holders Chesapeake Physicians for Social Responsibility Climate Parents of Prince George's Climate Reality Greater Maryland ClimateXChange – Rebuild Maryland Coalition Coming Clean Network, Union of Concerned Scientists DoTheMostGood Montgomery County Echotopia Elders Climate Action Maryland Fix Maryland Rail Glen Echo Heights Mobilization Greenbelt Climate Action Network HoCoClimateAction IndivisibleHoCoMD Maryland Legislative Coalition Mobilize Frederick Montgomery County Faith Alliance for Climate Solutions Montgomery Countryside Alliance Mountain Maryland Movement Nuclear Information & Resource Service Progressive Maryland Safe & Healthy Playing Fields Takoma Park Mobilization Environment Committee The Climate Mobilization MoCo Chapter Unitarian Universalist Legislative Ministry of Maryland WISE

# hb1037 strategic infrastructure, PSC Integrated En Uploaded by: Lee Hudson

Position: FAV



#### Testimony prepared for the Economic Matters Committee on House Bill 1037 February 28, 2025 Position: Favorable

Mr. Chairman and members of the Committee, thank you for this opportunity to urge responsible public planning for energy demand coherent with Maryland's climate goals. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, Evangelical Lutheran Church in America. We are a faith community of three ELCA judicatories in every part of our State.

Our interest is meeting socially responsible energy needs with environmentally responsible energy production. A publicly developed plan to achieve decarbonized energy production, articulated as regulatory coherence, is a better procedural choice for policy than *per se* debate about this or that commercial advantage. Utilities, previously understood to be public, provide a public good to which all communities are obligated.

We like **House Bill 1037** because it appears to address flaws built into the privatization of the energy sector in 1999 and suggests a process to begin aggregating data and knowledge for rational public decision-making about commodified energy.

Our community can support a developed regulatory protocol to implement goals for a decarbonized energy sector sufficient to demand need. We understand **House Bill 1037** to be implementing that, and therefore, urge your favorable report.

Lee Hudson

### HB1037\_IndivisibleHoCoMD\_FAV\_Alexander.pdf Uploaded by: Peter Alexander

Position: FAV



#### HB1037

#### Energy Resource Adequacy and Planning Act Testimony before Economic Matters Committee February 28, 2025 Position: Favorable

Chair Wilson, Vice Chair Crosby, and members of the committee, my name is Peter Alexander and I represent the 900+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today <u>in support of HB1037</u>. We appreciate the leadership of Vice Chair Crosby for sponsoring this important legislation.

The Energy Resource Adequacy and Planning Act addresses an urgent need raised by recent events in Maryland's energy markets. PJM has held up hundreds of renewable energy projects in its grid integration queue, thus holding up needed low-cost energy supply. In addition, PJM failed to appropriately manage retirement of the Brandon Shores and Wagner coal plants in 2025 resulting in State ratepayers needing to pay nearly \$800M to keep the plants open, Beyond that, a 2024 campaign by AI developers to build new hyperscale data centers in the state has led to turmoil around the data centers' large expected draw on the State's overall energy supply. These events and others have made plain the need for State energy planning independent of PJM.

**HB1037** would establish an **Integrated Resource Planning Office** in the Public Service Commission, with the goal of developing a 25-year comprehensive energy forecast for the State of Maryland. The new office will coordinate with other State agencies (e.g., MEA,MDE) for policy development which would include meeting state energy needs and GHG emissions reduction goals, and assessing the financial effects on State budgets and on ratepayers

Importantly, HB1037 complements another energy-related bill currently before the Assembly: HB 270, the Data Center Impact Analysis and Report. HB 270 calls for the MDE and the Maryland Energy Administration to carry out a study of the environmental, energy and economic effects of data center construction in the State.

HB1037 would provide a sound, objective base of analysis that would allow lawmakers to assess the bills and evaluate their merits.

We respectfully urge a favorable committee report. Peter Alexander, PhD Woodbine, MD

### **Testimony in support of HB1037 - Energy Resource A** Uploaded by: Richard KAP Kaplowitz

Position: FAV

HB1037\_RichardKaplowitz\_FAV 02/28/2025

Richard Keith Kaplowitz Frederick, MD 21703

#### **TESTIMONY ON HB#/1037 – FAVORABLE** Energy Resource Adequacy and Planning Act

TO: Chair Wilson, Vice Chair Crosby and members of the Economic Matters Committee

FROM: Richard Keith Kaplowitz

### My name is Richard K. Kaplowitz. I am a resident of District 3, Frederick County. I am submitting this testimony in support of HB#1037, Energy Resource Adequacy and Planning Act

This bill is an environmental protection measure that seeks to create a body to examine and project the energy needs for Maryland. It will do modeling and force electric companies to provide to Maryland integrated resource plans that can guide the Public Service Commission decision making through reference to those plans.

This bill will permit the development of expertise in energy need forecasting by establishing the Integrated Resource Planning Office in the Public Service Commission. The mission of that office will be met by requiring the Office to develop a Comprehensive Energy Forecast and conduct a certain study to support the development of the Forecast. The process they will utilize is mandated through a requirement that the Office, in consultation with the Commission and the Maryland Energy Administration, complete certain energy modeling. The end product of this work will be satisfied by requiring the Commission, in consultation with the Office, to adopt regulations requiring each electric company to develop a certain integrated resource plan.

Without a plan Maryland would likely fail to properly and adequately allocate resources for the energy needs in the state.

I respectfully urge this committee to return a favorable report on HB#1037.

HB1037 SB909 Pavlak FWA.pdf Uploaded by: Alex Pavlak Position: FWA

### SB909/HB1037 Pavlak FWA

Energy Resource Adequacy and Planning Act

- SB909/HB1037 a sound bill that would benefit from system engineering development discipline
- The development of any unprecedented system begins with CONCEPT DEFINITION to create a vision
  - EXAMPLE For the Wilson Bridge replacement this involved quantifying the options low bridge, high bridge, drawbridge and tunnel.
  - NET-ZERO Given Maryland's renewable and environmental resources, what is the relationship between wind, PV, nuclear, storage, and biofuel for net zero electric power
- My proposed amendment is to add upfront a new up front CONCEPT ANALYSIS task, renumbering succeeding tasks.

#### AMENDMENT

7-1203.(c)(2) A conceptual analysis of the generation cost of reliable net-zero emission electric power systems for Maryland. The purpose is to provide a high-level cost comparison of different combinations of generation technologies. The product informs goals and targets parameter ranges and more detailed analysis and planning. The art of concept analysis is to keep-it-simple, to ignore details (like transmission) that obscures and does not directly impact relationships, to accurately represent details (like intermittency) which does distinguish between generator types. Concept modeling would be based on the following assumptions:

- (I) Generation technologies include different combinations and types of wind, pv, nuclear, storage and green combustion turbines.
- (II) Performance metric is the system cost (fixed + variable) of generation combinations that satisfy historical load.
- (III) Legacy free, ignores existing infrastructure, policy, and markets design.
- (IV) All new construction.
- (V) Unit costs and financial assumptions using the latest NREL/ATB database, R&D case (no subsidies, financial assumptions), tech life capital recovery period.
- (VI) Perfect (no loss, no cost) transmission and distribution (the copperplate assumption).
- (VII) Closed system, no imports/exports across state boundaries. {of course, Maryland has interstate transmission, but this unnecessarily complicates a relative comparison of generator types}
- (VIII) High fidelity renewables representation. 10 years historical hourly renewable resource data from reanalyzed wind and insolation data sets. Empirical models convert wind and isolation to hourly electricity generation profiles.
- (IX) Simple hourly dispatch modeling. The generation configuration technologies must satisfy load for every historical hour.



### PHI-FWA - SB 909\_HB 1037 Energy Resource Adequacy Uploaded by: Allyson Black-Woodson

Position: FWA





February 28, 2025

112 West Street Annapolis, MD 21401

#### Support with Amendments – Senate Bill 909/House Bill 1037 – Energy Resource Adequacy and Planning Act

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) support with amendments **Senate Bill 909/House Bill 1037 – Energy Resource Adequacy and Planning Act**. The bill establishes the Integrated Resource Planning Office (IRP) in the Public Service Commission (Commission). It requires the IRP to develop a 25-year Comprehensive Energy Forecast to analyze energy scenarios and policy options to address the state's climate goals and ensure grid reliability and cost-effectiveness. It also requires the Office, in consultation with the Commission and the Maryland Energy Administration, to complete energy modeling, and requires the Commission to adopt regulations requiring each electric company to develop an integrated resource plan.

Pepco and Delmarva Power support the intent of the legislation to establish structure to the state's energy planning efforts in a manner that carefully considers the state's energy goals and needs. The legislation requires each utility to submit to the Commission an integrated resource plan. The IRP requirements as outlined in the bill fall outside of the utility's existing control or ability to achieve as utilities do not own or operate generating facilities. To meet the bill's directive for utility IRP plan development, the objectives must be clearly defined in a manner that ensures the responsibilities assigned are within the utility's scope and can be feasibly executed.

Additionally, Pepco and Delmarva Power are concerned with the aggressive timeline proposed in the legislation. The bill requires the Commission, in consultation with the IRP, to adopt regulations by December 1, 2025, and for utilities to submit plans by July 1, 2026. The bill outlines numerous detailed considerations and actions that must be incorporated into the IRP process prior to regulation adoption and IRP plan submission. Pepco and Delmarva Power recommend extending the timeline to provide utilities the necessary time to develop thorough plans that consider all critical system planning needs and to ensure the IRP is sufficiently prepared to execute on the directive of the legislation.

The bill's proposal to create the IRP and the appointment of a Director of the Office to oversee the development of a 25-year Comprehensive Energy Forecast, as well as numerous detailed system considerations, would result in substantial changes to the state's existing structure. The state has an existing Distribution System Planning process that has proven to be transparent, inclusive, and considerate of Maryland state policy goals. When considering this proposal, Pepco and Delmarva Power encourages the Legislature to ensure that the transparency, collaboration and progress achieved in the existing process is not compromised. Utilities have an important role in energy planning, which is critical to ensuring system reliability. The proposed changes must be thoughtfully developed due to the important nature of the work and significant impact on Maryland's energy future. Pepco and Delmarva Power encourage the Legislature to consider amending the legislation to make clear that the appointed Director of the Office has proven substantial utility industry and energy planning experience and technical expertise.

Pepco Holdings, the parent company of Pepco, an electric utility serving Washington, D.C., and suburban Maryland; Delmarva Power, an electric and gas utility serving Delaware and portions of the Delmarva Peninsula; and Atlantic City Electric, an electric utility serving southern New Jersey. Anthony and his team are responsible for guiding the company's delivery of reliable and excellent service to more than two million customers in the Mid-Atlantic. Pepco Holdings is a subsidiary of Exelon Corporation, one of the nation's leading energy services companies.

Valencia McClure | Anne Klase | Allyson Black-Woodson | Poetri Deal | 410 980 5347

Pepco and Delmarva Power support the bill with the suggested amendments above and are committed to collaborating with the bill sponsors to advance legislation designed to appropriately resolve the state's resource adequacy challenges.

Pepco Holdings, the parent company of Pepco, an electric utility serving Washington, D.C., and suburban Maryland; Delmarva Power, an electric and gas utility serving Delaware and portions of the Delmarva Peninsula; and Atlantic City Electric, an electric utility serving southern New Jersey. Anthony and his team are responsible for guiding the company's delivery of reliable and excellent service to more than two million customers in the Mid-Atlantic. Pepco Holdings is a subsidiary of Exelon Corporation, one of the nation's leading energy services companies.

Valencia McClure | Anne Klase | Allyson Black-Woodson | Poetri Deal | 410 980 5347

### HB1037\_WGL\_Todd\_FWA.pdf Uploaded by: Brandon Todd

Position: FWA



1000 Maine Avenue, SW | Suite 700 | Washington, DC 20024 | www.washingtongas.com

**COMMITTEE:** ECONOMIC MATTERS

**TESTIMONY ON:** HB 1037 PUBLIC UTILITIES – ENERGY RESOURCE ADEQUACY AND PLANNING ACT

#### **POSITION: SUPPORT WITH AMENDMENTS**

#### HEARING DATE: FEBRUARY 28, AT 1:30PM

WASHINGTON GAS RESPECTFULLY SUBMITS THIS STATEMENT IN **SUPPORT with amendments** to *HB 1037 – Energy Resource Adequacy And Planning Act.* ("HB 1037")

#### **Background**

The Maryland General Assembly is considering HB 1037, the Energy Resource Adequacy and Planning Act, introduced by Delegate Crosby. This bill proposes the establishment of an Integrated Resource Planning Office within the Public Service Commission. The office's mandate is to ensure that Maryland's energy needs are met with cost-effective energy while addressing the State's greenhouse gas emission reduction goals over the long term.

#### **Position**

The Company supports Maryland's commitment to achieving its greenhouse gas emission reduction targets while enhancing energy reliability and minimizing ratepayer impacts, as outlined in HB 1037. The proposal to establish the Integrated Resource Planning Office (the Office) within the Public Service Commission is encouraging, as it aims to ensure Maryland's energy needs are met affordably, considering both electrification and the benefits of the existing gas infrastructure.

The Company proposes amendments to HB 1037 to align the Office's strategies while considering ongoing investments in natural gas infrastructure. Given Maryland's deepening budget challenges, which significantly constrains its ability to invest in climate initiatives, affordable and reliable energy solutions are urgently needed. A concerning 18% of Maryland residents are classified as energy burdened, spending more than 6% of their income on energy bills<sup>1</sup>. Furthermore, the latest

<sup>&</sup>lt;sup>1</sup> Lawmakers and BGE clash over infrastructure costs as residents face soaring energy bills. https://wjla.com/news/local/lawmakers-bge-infrastructure-costs-residents-energy-bills-maryland-natural-gas-rate-payer-protection-act-baltimore

capacity auction by PJM Interconnection resulted in an 800% price increase, potentially raising customer bills by up to 29% starting in mid-2025<sup>2</sup>.

Natural gas remains a strong contender in addressing Maryland's energy reliability and affordability challenges. According to an energy affordability study from the Office of People's Counsel (OPC), for households earning \$29,900 annually, the average residential heating bill only accounts for half of what is considered an affordable energy burden. Additionally, average annual residential bills are lower than they were in 2006, thanks largely to reductions in commodity costs<sup>3</sup>. The Company also offers lower residential distribution and customer charges compared to other gas utilities in the state, further supporting its role as a cost-effective energy source.

Decarbonization strategies that incorporate the State's natural gas infrastructure are among the most cost-effective solutions. Ignoring the benefits of natural gas infrastructure could lead policymakers to favor electrification without fully understanding the repercussions, potentially jeopardizing the State's climate objectives. For example, U.S. households are expected to spend 76% more on electricity than on natural gas for heating this winter<sup>4</sup>. Studies, including those in Maryland, indicate that leveraging existing natural gas infrastructure is more economical than full electrification<sup>5</sup>. In Colorado, Xcel Energy determined that an electrification-centric plan would cost three times more than a hybrid approach<sup>6</sup>. Research by Home Innovation Research Labs also shows that upgrading to high-efficiency gas systems offers significant savings with shorter payback periods compared to electrification<sup>7</sup>.

An "electrify everything" strategy alone is insufficient for Maryland to achieve its climate goals. The integration of lower-carbon fuels is essential. Biomethane projects, or Renewable Natural Gas (RNG), reduce emissions from waste management and agriculture sectors and offer co-benefits for landfills, wastewater treatment facilities, and farms. RNG can replace diesel in vehicles and be injected into the natural gas system for delivery.

#### **Conclusion**

2021).

At Washington Gas Light Company, our core values are safety, collaboration, integrity, inclusion, and learning. The Company is committed to working with stakeholders to help achieve Maryland's GHG emissions reduction targets. Electrification is not the sole solution to climate change in Maryland and should not be treated as such. There is a role for existing and future technology innovation to support diverse pathways to decarbonizing Maryland, and the State's existing gas

<sup>&</sup>lt;sup>2</sup> https://www.integrityenergy.com/about/news-media/pjm-announces-expensive-energy-changes-in-

<sup>2025/#:~:</sup>text=Results%20of%20PJM's%20capacity%20auction,29%25%20starting%20in%20June%202025.

<sup>&</sup>lt;sup>3</sup> https://opc-dc.gov/wp-content/uploads/2022/03/DC-OPC-Energy-Affordability-Study-Population-Characterization-Report-FINAL-12-18-20.pdf <sup>4</sup> EIA. <u>Winter Fuels Outlook 2023–24</u> (Nov. 7, 2023).

<sup>&</sup>lt;sup>5</sup> BG&E modeled its service territory to evaluate plausible options that achieve Maryland's climate goals, consisting of one (1) 'High-Electrification' scenario and two (2) 'Integrated Energy System' scenarios.<sup>5</sup> The 2022 study found that the High-Electrification scenario **could as much as triple the system peak demand on the grid on the coldest winter days, from 6,000 MW today to 18,000 MW by 2045, and could cost customers** approximately 30% more than the scenarios that leverage alternative fuels and the natural gas infrastructure.

<sup>&</sup>lt;sup>6</sup> Xcel Energy created a *Clean Heat Plan* with multiple scenarios and associated costs in order to determine how best to meet the State's mandated GHG emission reduction targets for the energy distribution sector. Xcel Energy. <u>2024-2028 Clean Heat Plan</u> (Aug. 1, 2023).
<sup>7</sup> Home Innovation Research Labs. <u>Cost and Other Implications of Electrification Policies on Residential Construction</u> (Feb.

infrastructure can and should be leveraged to preserve affordability, reliability, safety, and security of energy delivery.

While the Company supports the intent of HB 1037, we respectfully ask for the removal of the political appointment language and consideration of proposed amendments that include lower-carbon fuels and the existing gas infrastructure. With these amendments in place, the Company believes Maryland can better achieve a comprehensive and balanced energy strategy focused on long-term affordability and reliability. With these changes, the Company would support the remainder of HB 1037.

Thank you for your consideration of this information.

#### ADDENDUM: PROPOSED AMENDMENTS

**Section 7-1203(C)** - which requires the proposed Office of Integrated Resource Planning within the MD PSC to develop long-term energy forecasts which are reflective of scenarios in which demand and GHG emissions reduction needs are met- proposes that the Office also develop "A strategy to meet the scenario that the Office determines best meets the [long-term energy] needs..."

Possible amendments under this header include the following:

- Modify Section 3 (VII) "Sensitivities related to various levels of electrification and the adoption of load flexibility and distributed energy resources" to read as follows: "Sensitivities related to various levels of electrification and the adoption of load flexibility, distributed energy resources, and penetration of biogases and other <u>fuels</u>"
- Seek additional detail by specifying the upstream gas system investments likely needed to facilitate the siting of in-state generation in Section 3(X) which requires that the strategy adopted by a Office of Integrated Resource Planning consider "related investments in electricity and gas infrastructure"
- Seek the addition of more specific language to limit the scope of strategic recommendations that an Office of Integrated Resource Planning might propose:
  - 3(XII) State Financing Options, including State procurement and multi-state procurement
  - $\circ$  3(XIII) Utility business models, tariffs, and cost recovery

**Section 7-1203(D)** directs the proposed Office of Integrated Resource planning to study several different aspects of the electric generation and transmission system. Possible amendments under this header include the following:

• Modify Section 3(II) of this which currently reads as "The Maryland Energy Administration shall study the feasibility of placing small modular nuclear reactors on

former electricity generation sites" to the read as follows:

"The Maryland Energy Administration shall study the feasibility of placing <u>next</u> <u>generation technologies, including natural gas generation with advanced carbon</u> <u>capture and small modular nuclear reactors</u>, on former electricity generation sites"

• Modify Section 3(III) which currently reads "The Power Plant Research program shall study state land suitable for solar energy development" to read as follows:

#### "The Power Plant Research program shall study state land suitable for solar energy development <u>and existing and former dispatchable power generation sites</u> <u>that are suitable for expansion or re-development through the use of natural gas</u> <u>fired generation with advanced carbon capture, or biogases</u>"

**Section 7-1204(A)** directs the proposed Office of Integrated Resource Planning to "complete energy modeling for the strategy and scenarios developed" and for the subsequent changes to that may trigger the need for additional modeling and analyses. Possible amendments include the following:

• **Modify Section (2)** which reads as "Considers the timeline for commercialization of energy technologies and when those technologies may become cost-effective" to read as follows:

"Considers the timeline for commercialization of energy technologies, <u>including</u> <u>carbon capture and sequestration</u>, and <u>commodities, such as renewable biogases</u> and when those technologies may become cost-effective"

#### **About Washington Gas Light**

Washington Gas Light Company provides safe, reliable natural gas service to more than 1.2 million customers in Maryland, Virginia, and the District of Columbia. Washington Gas has been providing energy to residential, commercial, government, and industrial customers for more than 176 years, and currently serves more than 500,000 Maryland customers in Montgomery, Prince George's, Charles, St. Mary's, Frederick, and Calvert Counties. The Company employs over 400 people within Maryland, including contractors, plumbers, union workers, and other skilled tradespeople. We strive to improve the quality of life in our communities by maintaining a diverse workforce, working with suppliers that represent and reflect the communities. The Company, together with other natural gas distribution utilities, are responsible for delivering the primary source of heat to Maryland residential energy consumers, serving approximately one half of all

Maryland households while providing critical energy services to residential, commercial, and industrial customers at one-third the cost of electricity on a per unit basis.<sup>8</sup>

Contact:

Brandon Todd, Vice President, Government Affairs, Policy & Advocacy, Washington Gas M 202-744-0816 | brandon.todd@washgas.com

<sup>&</sup>lt;sup>8</sup> DOE. <u>Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy</u> (Aug. 28, 2023).

### HB1037-ECM\_MACo\_SWA.pdf Uploaded by: Dominic Butchko

Position: FWA



Energy Resource Adequacy and Planning Act

### MACo Position: SUPPORT WITH AMENDMENTS

DIINTI

To: Economic Matters Committee

Date: February 28, 2025

From: Dominic J. Butchko

The Maryland Association of Counties (MACo) **SUPPORTS** HB 1037 **WITH AMENDMENTS**. This bill establishes the Integrated Resource Planning Office within the Public Service Commission, and charges that office with developing a 25-year comprehensive energy forecast.

The 2025 Maryland General Assembly faces an unprecedented set of generational challenges, with energy emerging as a top priority, second only to the daunting budget hurdles and stark changes in federal policies. As the State transitions toward renewable energy sources and full electrification, a predominant concern needs to be ensuring grid reliability and affordability for residents. One of the major faults in regulating Maryland's energy infrastructure has been an over-reliance on federal and regional actors, and insufficient planning at the state level. HB 1037 seeks to rectify this by developing a 25-year comprehensive energy forecast, which would empower Maryland policymakers to better respond to the state's energy needs.

Counties support the forward-thinking nature of HB 1037. As the state's partner in government, county governments are equally eager to better serve our mutual constituents, especially as they navigate these historic increases in energy costs. To that end, counties request a seat at the table as this forecast is developed and updated. As the boots on the ground in each community, counties have unique and nonobvious insights which can prove vital to such an effort.

HB 1037 is a good governance, common-sense bill which will help future policymakers avert the energy challenges currently facing our constituents. For this reason, MACo urges the Committee to give HB 1037 a **FAVORABLE WITH AMENDMENTS** report.

#### MACo Amendment to HB 1037:

On page 2, in line 24 strike "AND"; and in line 25, after ENVIRONMENT" insert ": AND

#### THE MARYLAND ASSOCIATION OF COUNTIES AND APPROPRIATE PROFESSIONALS WITHIN COUNTY GOVERNMENTS.".

### BGE\_FWA\_HB1037\_SB909.pdf Uploaded by: Dytonia Reed

Position: FWA



FAVORABLE WITH AMENDMENTS Education, Energy and Environment 2/28/2025

#### Senate Bill 909/House Bill 1037 - Energy Resource Adequacy and Planning Act

Baltimore Gas and Electric Company (BGE) supports Senate Bill 909/House Bill 1037 - Energy Resource Adequacy and Planning Act with amendments. This legislation proposes the creation of the Integrated Resource Planning Office (IRP) within the Public Service Commission (PSC). The IRP's main role is to develop a 25-year energy forecast, addressing the State's climate goals while ensuring grid reliability and cost-effectiveness. The bill mandates the PSC, in consultation with the IRP, to adopt regulations by December 1, 2025, requiring electric companies to submit integrated resource plans by July 1, 2026.

BGE advocates for transparent energy planning that aligns with State policy objectives. However, the bill's requirement for utilities to submit an integrated resource plan may assign responsibilities to utilities for factors that are outside of utility control. For example, the IRP requirement assigns responsibility for maintaining resource adequacy to utilities. However, utilities are not empowered to build, sustain, nor manage the timeline for retirement of generating facilities in the state. These and other factors make it nearly impossible for an electric company to effectively develop an integrated energy resource plan, as described in the bill. That said, BGE agrees that the planning functions required under the bill are critical and utilities have a role to play. Accordingly, we would support amendments to define an electric company's IRP responsibilities in alignment with the company's span of control.

Senate Bill 909/House Bill 1037 states that the IRP Director will be appointed by the Governor with the State's advice and consent. While BGE supports the policy, we are concerned about changes to the established roles of utilities, PJM, and regulators. The new office may alter the utility's role in energy planning, affecting system reliability, customer experience, and cost of proposed solutions. With the longstanding role of utilities and other stakeholders changing, there should be guardrails in place to ensure that the Director has significant utility industry and technical experience to make informed decisions, ensuring sound engineering decisions are made progress is not delayed.

### The bill requires the PSC and IRP to adopt regulations by December 1, 2025, and for utilities to submit plans by July 1, 2026. Given the diverse requirements across states, BGE suggests

Charles Washington | Brittany Jones | Guy Andes | Dytonia Reed | 410.269.5281

BGE, headquartered in Baltimore, is Maryland's largest gas and electric utility, delivering power to more than 1.3 million electric customers and more than 700,000 natural gas customers in central Maryland. The company's approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC), the nation's largest energy delivery company.



extending the timeline to ensure the IRP Office is fully staffed and prepared. This extension will allow for better resource allocation and give utilities time to develop comprehensive plans that consider the unique needs of Maryland's electric companies. It will also allow the Commission adequate time to navigate the State's procurement process for the required consultants.

BGE will continue collaborating with the bill sponsor to enact a policy that advances state energy planning and addresses the stated concerns. With those amendments, BGE will support this legislation and respectfully request a favorable committee report.

BGE, headquartered in Baltimore, is Maryland's largest gas and electric utility, delivering power to more than 1.3 million electric customers and more than 700,000 natural gas customers in central Maryland. The company's approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC), the nation's largest energy delivery company.

Charles Washington | Brittany Jones | Guy Andes | Dytonia Reed | 410.269.5281

### HB1037\_ FAV WAMEND\_PSC.pdf Uploaded by: Frederick Hoover

Position: FWA

COMMISSIONERS

FREDERICK H. HOOVER, JR. CHAIR

> MICHAEL T. RICHARD KUMAR P. BARVE BONNIE A. SUCHMAN

#### STATE OF MARYLAND



PUBLIC SERVICE COMMISSION

Chair C.T. Wilson Economic Matters Committee 230 House Office Building Annapolis, MD 21401

#### RE: HB 1037 – Favorable with Amendments – Energy Resource Adequacy and Planning Act

Dear Chair Wilson and Committee Members:

The Public Service Commission (the Commission) requests a favorable report for House Bill 1037 (HB 1037) with amendments detailed in this testimony. HB 1037 creates an office of integrated resource planning that will operate within, but independently of the Commission. The office will focus on developing state energy forecasts and studying various scenarios associated with long-term energy planning. Additionally, the proposed legislation requires the utilities under Commission authority to develop and submit integrated resource plans (IRPs) to the Commission.

The Commission agrees with the intent of the proposed legislation to more actively plan for the State's energy future, study the power markets, and develop solutions to avoid potential negative outcomes and reduce costs associated with the power markets, if concerns are identified that policy makers choose to act upon. Given the current status of power generation and resource adequacy, it is prudent for the state to assert more control over the development of energy solutions. While structural changes in the power generation business prevents the complete control as when Maryland utilities were fully integrated, the information obtained by the proposed office will advise all policymakers of future actions.

The magnitude of the envisioned forecasts is extensive in both scale and scope, and accurately and reliably modeling many factors over a 25-year span is challenging. Leveraging outside consultants will be necessary to accomplish the bill's mandates because of the complexity of the modeling and forecasting requirements and the short time frame for delivering results.

The Commission notes that the proposed approach may duplicate some of the work accomplished through existing collaborative efforts among state, federal and regional entities, which leverage both public and private sector resources. The long-term impact on energy markets, consumer costs, and regulatory complexity should be thoughtfully managed to help mitigate potential unintended economic consequences. A focus on improvements to the current regulatory approach, using targeted stakeholder engagements and public conferences to ensure all perspectives are integrated into future planning initiatives may also produce positive results.

The Commission offers amendments to (1) ensure the operationalization of HB 1037 is successful, (2) streamline the policy and study requirements that are required by the proposed legislation, and (3) revise the proposed utility IRP process.

The Commission requests amendments such that the proposed IRP office is either fully independent of the Commission or that the proposed tasks in the appropriate resource in the legislation be parsed between the various State Agencies (e.g. the Commission, Maryland Energy Administration, and Power Plant Research Program) to be completed. As structured, HB 1037 poses managerial, administrative, budgeting, and auditing issues for the Commission due to the requirement for the office and its director to be independent of the Commission, but the Commission is obligated to staff and provided resources for said office.

The Commission notes that it will take time to establish the new office regardless of the integration with the Commission or independently. Some of the timelines within HB 1037 for the new office may be aggressive. The legislature should determine if there are certain tasks that should be prioritized as more short-term actions for the new office or other agencies to cover, or to allow the studying party to extend stated deadlines for good cause.

The Commission notes that the study and modeling requirements listed in § 7-1203 and § 7-1204 appear to be a mixture of what may be found in a state energy plan that would traditionally be created by a state energy office such as MEA and integrated resource plans that would have been overseen by the Commission and PPRP. Additionally, there are specific studies or policies envisioned, such as those under § 7-1203 (D), that could be tools to achieve policies under such plans. The legislature should consider reorganization of the tasks and goals in HB 1037 to better delineate between higher level vs more granular planning and forecasts. The legislature should also consider providing policy guidance as to how they expect the state agencies to utilize the final studies envisioned. The Commission also seeks clarifying amendments to certain tasks or policies to ensure the results reflect the policy guidance.

§ 7-1206 requires the Commission, in consultation with the new IRP office, to adopt regulations by December 1, 2025, for the utilities to develop IRP plans starting July 1, 2026. The Commission supports trying to ensure utility distribution planning integrates generation and transmission planning and could be a forum to potentially avoid costs. Since Maryland is a restructured market, as discussed in the footnote, the need for the utilities to develop individual IRP's for the wholesale market would likely be duplicative.<sup>1</sup> Currently, Maryland distribution utilities do not own generation, have not built or contracted to build generation and cannot force action in PJM markets. Also, such plans may favor solutions that favor utility investment instead of exploring market or non-rate regulated solutions. Instead of requiring individual utility IRPs, the legislature could consider establishing a holistic review process of the wholesale markets that determines what actions could be taken by the state, inclusive of utility actions at the distribution or wholesale level, to mitigate risk decision makers find unacceptable.

Finally, the Commission will need additional time to develop the regulations required by § 7-1206, especially if they are to be developed in coordination with the new IRP office. Additionally, requiring IRPs within six months of enacting the regulations may be an aggressive timeline.

<sup>&</sup>lt;sup>1</sup> Prior to electricity deregulation in Maryland, the Commission considered integrated resource planning in the context of vertically integrated electric utilities that owned generation. The electric utilities were expected to plan, build, and run new resources to meet load needs that grew at a relatively steady pace.

The Public Service Commission appreciates the opportunity to provide testimony for your consideration for bill HB 1037. We request a favorable report with support for the amendments detailed above. We look forward to continuing to work with the sponsor to optimize the legislation for productive enactment. Please contact Christina Ochoa, Director of Legislative Affairs at christina.ochoa1@maryland.gov if you have any questions.

Sincerely,

Frederch & Hove

Frederick H. Hoover, Chair Maryland Public Service Commission

# HB 1037 Energy Resource Adequacy and Planning Act Uploaded by: Humna Sharif

Position: FWA



The Nature Conservancy Maryland/DC Chapter 425 Barlow Pl., Ste 100 Bethesda, MD 20814 tel (301) 897-8570 fax (301) 897-0858 nature.org

#### Friday, February 28, 2025

**TO:** C. T. Wilson, Chair of the House Economic Matters Committee; and Committee Members **FROM:** Humna Sharif, The Nature Conservancy, Director of Government Relations; and Michelle Dietz, The Nature Conservancy, Director of Government Relations **POSITION:** Support with Amendments HB 1037 Energy Resource Adequacy and Planning Act

The Nature Conservancy (TNC) supports with amendments HB 1037 offered by Delegate Crosby. TNC is a global conservation organization working to conserve the lands and waters on which all life depends. In Maryland, our work focuses on delivering science-based, on-the-ground solutions that secure clean water and healthy living environments for our communities, reducing greenhouse gas emissions and increasing resilience in the face of a changing climate. We are dedicated to a future where people and nature thrive together.

HB 1037 enables important energy planning actions that are necessary to ensure the electric distribution system's reliability and the cost-effectiveness of various energy strategies that are compatible with Maryland's long-term needs. This legislation seeks to establish an Integrated Resource Planning Office (the Office) in the Public Service Commission (PSC) to develop a 25–year comprehensive energy forecast; the electricity load and demand projections would run from 2025-2050. This forecast would analyze energy scenarios, policy options, and produce cost estimates for meeting the state's energy needs and climate pollution reduction goals.

Through HB 1037, the Office will identify a best-case scenario for meeting the state's energy goals and develop a strategy for achieving that scenario. Consideration will be given to load forecasts in the PJM region, impact on energy reliability, priority zones for generation and transmission, and the state's climate goals, among others. The Office will also produce short- and long-term recommendations for the General Assembly including ways to streamline regulatory and administrative procedures to achieve greater efficiency in our energy system. By investing resources in long-term energy planning, Maryland will be well positioned to take advantage of existing and upcoming technologies.

While TNC is enthusiastically supportive of the clean energy applications of HB 1037, and we strongly recommend removing references to gas infrastructure on page 4, line 17. Planning for investments in new gas infrastructure is contradictory this legislation's overall energy reliability and climate pollution reduction goals, and the goals and commitments our state has set through prior legislation like the Climate Solutions Now Act (CSNA). TNC also supports the provisions within this bill on page 8, line 3 that minimize localized air pollutants and other climate pollutants in the state, with priority given to underserved and overburdened communities. Gas infrastructure will disproportionally harm communities in the state that already have a high-pollution burden, will increase energy costs for Maryland taxpayers, and continue to pollute our planet– leaving Maryland worse off for future generations.

**TNC recommends amendment language to include provisions from the Abundant Affordable Clean Energy** (AACE) Act (SB 316/HB 398) within this legislation. The AACE Act's proposed pathway brings on new energy projects that will serve Maryland's load requirements within this decade on a least-cost basis, while allowing flexibility to respond to potential shifts in future energy markets through rapid, low-cost, and flexible solutions. Specifically concerning Maryland's historic REC and SREC incentives, which have been a powerful tool to jumpstart renewable generation in the state, but the "one-size-fits-all" approach often results in incentives that are mismatched to specific projects' needs. Within HB 1037, TNC requests including the SREC-II and REC-II provisions of the AACE Act. These provisions will ensure that individual clean energy projects can receive the

incentives they need to come online, while also preventing unneeded incentives from being passed through to ratepayers. **TNC also requests that HB 1037 be amended to maximize the inclusion of all clean energy pathways available to our state and include battery storage in the legislation.** Energy storage can be built faster to address our supply and demand challenges within a shorter time frame.

AACE (SB 316/HB 398) has offered a combination of rapidity, low-cost, and flexibility to create a pathway to achieving resource adequacy to meet current and future electric load requirements. It directs the PSC to create a competitive procurement process in 2026 and 2027 for up to 1,600 MW of total battery storage projects and provides a pathway for these projects to be operational in this decade. It maps out a pathway for 150 MW of distributed storage projects, not subject to the PJM interconnection queue, to be constructed by electric companies, which will provide substantial benefits to residential and other local electric demand. The AACE Act is complimentary to HB 1037 in many ways and we strongly recommend incorporating its provisions into this bill.

**HB 1037 includes a 45-day public comment period requirement on page 7, line 3. We strongly recommend amending the language to increase the public comment period to at least 90-days.** This amendment would give Marylanders greater access to the opportunity for providing feedback on modelling analyses completed under this legislation. 45-days is too short a time to appropriately reach concerned residents who deserve the opportunity to review and comment on the state's energy plans. We also recommend that the PSC consider other ways to make its findings accessible to the public, including holding listening sessions, publicizing the findings through newspapers and other media, and setting up office hours with the PSC and Office staff.

TNC appreciates the prioritization given to ensuring coordination among the Office, the PSC, and the Maryland Energy Administration. Collaboration among agencies to conduct cost-benefit analysis, and energy modeling for the state is necessary for these planning activities' success. HB 1037 instructs the three entities to study the transition to a distributed renewable energy system and potential vulnerabilities of such a system that need to be addressed.

Our state must move swiftly to meet growing energy demands, as well as our climate commitments and public health obligations. HB 1037 is one step, in a series of actions toward a secure and clean energy future for Maryland. The Nature Conservancy commends Delegate Crosby for introducing this legislation. **Therefore, we urge a favorable report on HB 1037**.

# HB 1037 Energy Resource Adequacy and Planning Act Uploaded by: Humna Sharif

Position: FWA



The Nature Conservancy Maryland/DC Chapter 425 Barlow Pl., Ste 100 Bethesda, MD 20814 tel (301) 897-8570 fax (301) 897-0858 nature.org

### Friday, February 28, 2025

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# HB1037-SB909 Energy Resource Adequacy and Planning Uploaded by: Humna Sharif

Position: FWA



The Nature Conservancy Maryland/DC Chapter 425 Barlow Pl., Ste 100 Bethesda, MD 20814 tel (301) 897-8570 fax (301) 897-0858 nature.org

### Friday, February 28, 2025

TO: Brian Feldman, Chair of the Senate Education, Energy and Environment Committee; C. T. Wilson, Chair of the House Economic Matters Committee; and Committee Members
FROM: Humna Sharif, The Nature Conservancy, Director of Government Relations; and Michelle Dietz, The Nature Conservancy, Director of Government Relations
POSITION: Support with Amendments SB 909/HB 1037 Energy Resource Adequacy and Planning Act

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**TNC recommends amendment language to include provisions from the Abundant Affordable Clean Energy** (AACE) Act (SB 316/HB 398) within this legislation. The AACE Act's proposed pathway brings on new energy projects that will serve Maryland's load requirements within this decade on a least-cost basis, while allowing flexibility to respond to potential shifts in future energy markets through rapid, low-cost, and flexible solutions. Specifically concerning Maryland's historic REC and SREC incentives, which have been a powerful tool to jumpstart renewable generation in the state, but the "one-size-fits-all" approach often results in incentives that are

mismatched to specific projects' needs. Within SB 909/HB 1037, TNC requests including the SREC-II and REC-II provisions of the AACE Act. These provisions will ensure that individual clean energy projects can receive the incentives they need to come online, while also preventing unneeded incentives from being passed through to ratepayers. TNC also requests that SB 909/HB 1037 be amended to maximize the inclusion of all clean energy pathways available to our state and include battery storage in the legislation. Energy storage can be built faster to address our supply and demand challenges within a shorter time frame.

AACE (SB 316/HB 398) has offered a combination of rapidity, low-cost, and flexibility to create a pathway to achieving resource adequacy to meet current and future electric load requirements. It directs the PSC to create a competitive procurement process in 2026 and 2027 for up to 1,600 MW of total battery storage projects and provides a pathway for these projects to be operational in this decade. It maps out a pathway for 150 MW of distributed storage projects, not subject to the PJM interconnection queue, to be constructed by electric companies, which will provide substantial benefits to residential and other local electric demand. The AACE Act is complimentary to SB 909/HB 1037 in many ways and we strongly recommend incorporating its provisions into this bill.

SB 909/HB 1037 includes a 45-day public comment period requirement on page 7, line 3. We strongly recommend amending the language to increase the public comment period to at least 90-days. This amendment would give Marylanders greater access to the opportunity for providing feedback on modelling analyses completed under this legislation. 45-days is too short a time to appropriately reach concerned residents who deserve the opportunity to review and comment on the state's energy plans. We also recommend that the PSC consider other ways to make its findings accessible to the public, including holding listening sessions, publicizing the findings through newspapers and other media, and setting up office hours with the PSC and Office staff.

TNC appreciates the prioritization given to ensuring coordination among the Office, the PSC, and the Maryland Energy Administration. Collaboration among agencies to conduct cost-benefit analysis, and energy modeling for the state is necessary for these planning activities' success. SB 909/HB 1037 instructs the three entities to study the transition to a distributed renewable energy system and potential vulnerabilities of such a system that need to be addressed.

Our state must move swiftly to meet growing energy demands, as well as our climate commitments and public health obligations. SB 909/HB 1037 is one step, in a series of actions toward a secure and clean energy future for Maryland. The Nature Conservancy commends Senator Hester and Delegate Crosby for introducing this legislation.

Therefore, we urge a favorable with amendments report on SB 909/HB 1037.

# HB1037\_FAV\_OceanticNetwork.pdf Uploaded by: John Crye

Position: FWA





February 26, 2025

Delegate C.T. Wilson, Chair Maryland House Economic Matters Committee 230 Taylor House Office Building Annapolis, Maryland 21401

#### Oceantic Network, SEIA: HB1037/SB0909, Favorable with Amendment

Dear Chair Wilson, Vice Chair Crosby and Members of the Economic Matters Committee:

Oceantic Network and the Solar Energy Industries Association (SEIA), organizations representing stakeholders across Maryland's renewable energy industry, take a position of favorable with amendments on the Energy Resource Adequacy and Planning Act, HB1037/SB0909.

**Oceantic Network:** In 2013, Maryland businesses founded the Business Network for Offshore Wind (rebranded to Oceantic Network in 2023) to help companies better understand the opportunities that would come with offshore wind development. Now, as the Oceantic Network, we envision a thriving ocean renewables industry powering strong economies. Our collaborative global nonprofit network advances ocean renewables markets and builds robust supply chains of local companies, with a focus on minority, women, and veteran-owned businesses.

**Solar Energy Industries Association** (SEIA) is the national trade association for the solar and storage industries, building a comprehensive vision for the advancement of these technologies. SEIA works with its 1,200 member companies and other strategic partners to create jobs and shape fair market rules that promote competition and the growth of reliable, low-cost solar power.

On behalf of our organizations, thank you for the opportunity to provide testimony on the Energy Resource Adequacy and Planning Act, SB0909/HB1037.

We particularly endorse the development of a 25-Year Comprehensive Energy Forecast as energy demand is the U.S. is expected to grow 15.8% by 2029.<sup>1</sup> Data centers, AI, and manufacturing will lead to 30 GW of new energy demand by 2029 in the Mid-Atlantic PJM Regional Transmission Organization (RTO).<sup>2</sup>

While the current forecast addresses load-demand planning and strategies to meet projected needs, it omits any mention of ocean renewables energy generation potential. As a coastal state, Maryland has these resources available and are cost-effective components of our renewable energy future to meet rising demand and maximize ratepayer infrastructure investments. We respectfully request an amendment for a study be written into the bill to take the first steps toward including ocean renewable technologies in renewable incentives and energy supply planning off Maryland's Coast.

<sup>1</sup> https://gridstrategiesllc.com/wp-content/uploads/National-Load-Growth-Report-2024.pdf 2 https://gridstrategiesllc.com/wp-content/uploads/National-Load-Growth-Report-2024.pdf

The study should assess the feasibility of ocean renewables, evaluate economic and workforce development potential, identify suitable sea space, mitigate environmental impacts and use conflicts, coordinate with federal agencies, and establish reporting requirements. California has already enacted a similar measure (CA SB605 in 2023<sup>3</sup>) aligned with the innovative CalWave Project<sup>4</sup>, and New Jersey has introduced comparable legislation<sup>5</sup> that supports the market for a company: Ocean Power Technologies—currently valued at a \$90 million market capitalization.<sup>6</sup> These precedents underscore the viability of ocean renewables and their strong growth potential, providing a model for Maryland's own approach.

Offshore energy is essential to meeting our nation's growing energy demand by providing reliable and affordable power to the grid. While offshore wind is sometimes criticized for its variability, ocean renewables, such as wave and ocean current energy, offer a more consistent power supply due to the steady and predictable nature of ocean movements. Additionally, because water is 800 times denser than air, these technologies generate a higher energy output, making them a powerful complement to offshore wind. Oceantic Network's Ocean Renewables Working Group defines 'ocean renewables' as wave, tidal, and ocean current generation; ocean-based energy storage; nearshore and offshore solar; and green hydrogen produced from ocean-based renewable resources (including offshore wind).

These technologies represent an untapped opportunity for Maryland entrepreneurs and innovators, including up to 40 Maryland members of Oceantic Network. These organizations encompass the entire supply chain, from project developers, marine contractors, real estate developers, steel fabricators to tier 3 suppliers. They also represent a powerful intersection of potential for colocation of offshore wind, marine energy conversion as well as aquaculture -- which could potentially overcome strong resistance from local fishing industries, depending on the engagement of local communities.<sup>7</sup>

We thank Delegate Crosby for leadership as a sponsor. Again, Oceantic respectfully requests the Committee issue a favorable report with inclusion of our suggested amendment on the bill.

Sincerely,

Jen Brock Chief of Staff Oceantic Network (410) 812-1503 jen.brock@oceantic.org

Leah Meredith Mid-Atlantic Regional Director Solar Energy Industries Association Mobile: (757) 254-1880 Imeredith@seia.org

<sup>&</sup>lt;sup>3</sup> https://legiscan.com/CA/text/SB605/id/2844364

<sup>&</sup>lt;sup>4</sup> https://www.energy.gov/eere/water/articles/calwave-launches-californias-first-long-term-wave-energy-project

<sup>&</sup>lt;sup>5</sup>https://legiscan.com/NJ/text/A1478/id/2894856

<sup>&</sup>lt;sup>6</sup> https://finance.yahoo.com/quote/OPTT/

<sup>7</sup> https://www.nature.com/articles/s43247-023-01116-6

### CHESSA - MD - ECM EEE Fav with Amend HB1037 SB909

Uploaded by: Robin Dutta Position: FWA



28 February 2025

Delegate C.T. Wilson, Chair Economic Matters Committee Room 231 Taylor House Office Building Annapolis, Maryland 21401 Senator Brian Feldman, Chair Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, Maryland 21401

### Oral and Written Testimony HB1037 / SB909: Energy Resource Adequacy and Planning Act

#### Position: Favorable with Amendments

Chair Wilson, Chair Feldman, Members of the Economic Matters Committee and the Education, Energy, and the Environment Committee, thank you for the opportunity to testify on House Bill 1036 / Senate Bill 931, Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act).

I am Robin Dutta, the Executive Director of the Chesapeake Solar and Storage Association (CHESSA). Our association advocates for our over 100 member companies in all market segments across the solar and energy storage industries. Many members are Maryland-based. Others are regional and national companies with an interest and/or business footprint in the state. Our purpose is to promote the mainstream adoption of local solar, large-scale solar, and battery storage throughout the electric grid to realize a stable and affordable grid for all consumers.

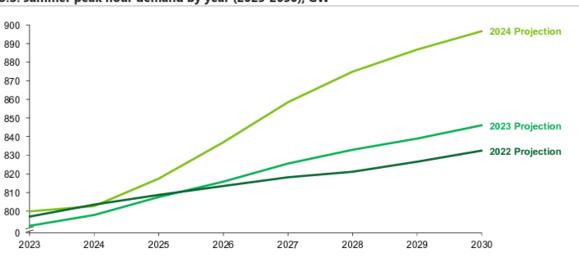
I am here to provide favorable testimony on HB1037/SB909, Energy Resource Adequacy and Planning Act, along with suggested amendments for the consideration of the sponsors and the committees. The Energy Resource Adequacy and Planning Act provides an entirely new process for the Maryland Public Service Commission to evaluate the energy needs of Marylanders, evaluate the full suite of advanced energy technologies and applications, and then better inform the appropriate regulatory proceeds and resulting Commission actions.

#### The Problem: Maryland's Widening Energy Gap

Marylanders are becoming much more sensitive to grid disruptions and electric price spikes. The state is on the path to seeing increasing electric demand over the long term. And, there is already straining in its electric system. Maryland only generates about 60 percent of the electric generation it demands<sup>1</sup>. But, importing electricity isn't an automatic solution. Nine of the 13

<sup>&</sup>lt;sup>1</sup> https://www.eia.gov/state/analysis.php?sid=MD

states in the PJM Interconnection (where Maryland resides) also must import electricity to serve their electric demand. And the Maryland Energy Administration (MEA) is projecting load growth, potentially as much as 2 percent per year<sup>2</sup>. There's growing demand and competition for an energy supply that needs to increase.



#### **Contributing Problem: Higher Electric Demand Across the County**

U.S. summer peak hour demand by year (2023-2030), GW

Source: NERC 2024 Electricity Supply and Demand data

The grid of the not-so-distant future will have the combined roles that today's electricity, natural gas system, and gas stations have. For the grid to serve those roles, it will need to look and act differently. It will have higher statewide electric loads, and greater electric demand in peak periods. And, the higher peak demand gets, the more expensive the electric grid becomes, due to expensive infrastructure expansion and higher peak energy pricing. By lowering peak demand, clean energy can lower the cost of the grid.

<u>A January 2025 report from the U.S. Department of Energy</u> shows that projected peak demand growth is only increasing, with electricity supply and demand data from the North American Energy Reliability Council showing the estimates being revised upwards each year since 2022.<sup>3</sup> If Maryland's electric future follows the projected national trend, it needs to step up the clean energy build-out throughout the state at the same time as handling fossil fuel retirements. That means scaling up statewide solar adoption of all kinds, as soon as possible.

Layering on the problem are the faults within the PJM Interconnection, both with their capacity markets and their interconnection processes. The recent PJM capacity auction could cause electric bills in Maryland to increase as much as 24 percent, according to <u>an August 2024 report</u> from the Maryland Office of People's Counsel. The MEA describes the Baltimore Gas & Electric

<sup>&</sup>lt;sup>2</sup> Maryland Energy Administration. "Reaching 100 Percent Net Carbon-Free Electricity in Maryland". January 2025. p.19

<sup>&</sup>lt;sup>3</sup> U.S. Department of Energy. "Pathways to Commercial Liftoff: Virtual Power Plants 2025 Update". January 2025. p.7

service area as a "congested territory".<sup>4</sup> There are then certain generating units that must run and can drive up capacity prices, as it happened in the most recent PJM capacity auction. The way to relieve congestion and grid strain is to lower peak demand, offset consumer electric load, and build a lot of new local generating capacity.

### **Creating A Better Process**

The previous section is a current snapshot of national load projections, and not Maryland specific. There are near, medium, and long-term considerations for Maryland with regard to load projections, the assumptions that underpin those projections, and making sure that actions taken by the Maryland Public Service Commission, utilities, and energy providers can be coordinated and aligned with the near and long-term needs of the state.

Improving complex processes, such as regulatory proceedings, start by asking better questions and considering all relevant strategies. Having the Commission possess that in-house expertise, energy modeling capability, and the ability to apply the load growth projections and evaluations to inform various related regulatory dockets is hugely valuable for entities working in the Maryland energy sector and eventually for all ratepayers.

This bill possesses a constructive and holistic evaluation of advanced energy technologies, including distributed and large-scale generation, as well as transmission and distribution grid strategies with the explicit outcome of identifying those strategies that can provide the most benefit to Marylanders. CHESSA strongly supports this outcome, especially by not setting aside Maryland's decarbonization goals and renewable targets. CHESSA believes that clean energy, solar and energy storage in particular, can be an effective and scalable solution for Maryland's widening energy gap.

### Further Considerations for the Legislation

CHESSA respectfully suggests that HB1255/SB908 be amended into this legislation. Both pieces of legislation have similar goals to improve regulatory practices, engagement with stakeholders, and create more informed grid strategies that can better benefit Maryland ratepayers. CHESSA believes that both bills can be stronger together.

In particular, we believe that the Integrated Resource Planning office's load forecasting can inform utility plans in distribution planning dockets and other relevant proceedings. Furthermore, we believe that investing in this scope of load forecasting, and a fully litigated distribution systems planning process will create more cost-effective grid strategies, creating cost-savings for ratepayers over business-as-usual.

Distribution grid and utility plans all exist to serve the consumer/ratepayer. Any process for grid planning must first look at how and when consumers need energy. The Affordable Grid Act begins that way by requiring load growth forecasts and scenario planning. This must be the first question to start any grid planning process, including testing different assumptions and

<sup>&</sup>lt;sup>4</sup> Maryland Energy Administration. "Reaching 100 Percent Net Carbon-Free Electricity in Maryland". January 2025. p.22

projections of load growth. That way, the Commission can essentially "stress test" the current grid, available resources, and grid services to determine what load can be served sustainably and then evaluate what additional infrastructure is needed to meet the state's anticipated needs.

#### Conclusion

Meeting resource adequacy needs and growing electric demand can be an expensive proposition for the ratepayer. Utility-centric solutions are fully funded by the ratepayer. Wholesale energy solutions do not address local resiliency and reliability needs. A better regulatory process, where the Commission can consider more information and better options for modernizing the distribution grid, can unlock the means to create downward pressure on Maryland energy costs.

Both HB1037/SB909 and HB1225/SB908 build on legislation passed by the House Economic Matters Committee, the Senate Education, Energy, and the Environment Committee, the General Assembly, and signed by the Governor in 2024: the DRIVE Act (HB1256 / SB959) and HB1393. The DRIVE Act establishes pilot programs for virtual power plants providing grid services and benefits to Marylanders. HB1393 requires the consideration of demand-side management strategies, such as virtual power plant deployment and enablement, for the benefit of the distribution grid.

Along with our suggested amendments, CHESSA asks for a favorable report on HB1037/SB909. Please reach out with any questions on solar and storage policy. CHESSA is here to be a resource to the committee.

Sincerely,

Rebin K. Dutta

Robin K. Dutta Executive Director Chesapeake Solar and Storage Association robin@chessa.org

## OPC Testimony HB1035 & SB0937, HB1036 & SB0931, an Uploaded by: David Lapp

Position: INFO

DAVID S. LAPP PEOPLE'S COUNSEL	OFFICE OF PEOPLE'S COUNSEL	<b>BRANDI NIELAND</b> Director, Consumer Assistance Unit
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<b>JULIANA BELL</b> DEPUTY PEOPLE'S COUNSEL	6 St. Paul Street, Suite 2102 Baltimore, Maryland 21202 www.opc.maryland.gov	CARISSA RALBOVSKY CHIEF OPERATING OFFICER
BILL NO.:	<ul> <li>House Bill 1035/Senate Bill 0937 – Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) <i>The President and Senator Feldman</i> <i>The Speaker and Delegate Wilson</i></li> <li>House Bill 1036/Senate Bill 0931 – Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act) <i>Senator Feldman</i> <i>Delegates Wilson and Crosby</i></li> <li>House Bill 1037/Senate Bill 0909 – Energy Resource Adequacy and Planning Act <i>Senator Hester</i> <i>Delegate Crosby</i></li> </ul>	
COMMITTEE:	Education, Energy, and the Environment Economic Matters	
HEARING DATE:	February 28, 2025	
POSITION:	Informational	

The Office of People's Counsel ("OPC") respectfully offers the following informational comments on the package of energy bills proposed by Senate and House leadership: House Bill 1035/Senate Bill 0937, the Next Generation Energy Act; House Bill 1036/Senate Bill 0931, the Renewable Energy Certainty Act; and House Bill 1037/Senate Bill 0909, the Energy Resource Adequacy and Planning Act. Collectively, these bills seek to encourage the development of in-State energy generation by (1) streamlining the permitting and regulatory processes for priority energy projects; (2) creating an integrated resource planning ("IRP") process to forecast the State's energy needs; and (3) establishing a nuclear energy generation procurement mechanism run by the Public Service Commission ("PSC").

Our comments below (1) describe the pros and cons of long-term, ratepayer-backed procurements for generation projects, (2) discuss provisions in the legislation intended to protect utility customers; and (3) provide context explaining that Maryland is not facing immediate needs for significant expansion of in-State generation to maintain reliable service.

### I. Ratepayer-backed procurements

A stated goal of HB1035/SB0937 is to facilitate construction of new energy generation in Maryland by directing the PSC to (1) hold one or more "solicitations" for the construction or expansion of "dispatchable energy generation," and (2) establish a procurement mechanism for nuclear energy generation, which would function similarly to the State's existing offshore wind ("OSW") renewable energy credit, or OREC, program. These long-term procurements would-like ORECs-be backed by utility ratepayers. Under the OREC model, the price ratepayers will pay for the output of the facility is set before the plant goes into service. If the OREC price is below market prices when the power is delivered, Maryland customers benefit. But ratepayers take on significant risks that the prices locked-in through long-term procurements will exceed market prices when the power is delivered. Whether long-term procurements increase or decrease costs for customers largely depends on whether the solicitation procures energy and capacity at prices that end up being above or below market rates. A procurement during times of high prices could benefit customers if prices remain high over the 20-30 years following the date of commercial operation of the plant—which itself could be more than 10 years from the procurement date. But if the solicitation process locks in prices that are higher than actual market prices in future years, customer bills will be higher than they otherwise would be. This risk for ratepayers exists under any long-term, fixed-price arrangement, and the further out in time the arrangement lasts, the more difficult it is to speculate on future generation markets.

If a new generation facility is owned by a utility—or is otherwise backed by utilities—there is additional risk for ratepayers. For example, it is very difficult to shield customers from cost overruns in the plant development process when the project is owned by the utility. To the extent that the uncodified study directed by HB1036/SB0931 anticipates the possibility that ratepayers—through partnerships between the State's electric utilities and electricity suppliers—will back the development of new generation in the State, these risks are worthy of serious consideration. For additional discussion of the risks of utility-owned generation, please see the attached FAQs, also available on <u>OPC's website</u>.

### II. Protections for utility customers

While there are risks inherent to locking in energy prices through long-term, ratepayer-backed procurements, these risks can be mitigated to some degree.

HB1035/SB0937 includes several provisions to mitigate these risks, some of which could be strengthened, as follows:

- Prohibiting the costs related to the construction or operation of an approved dispatchable energy generation project from being recovered through utility rates. As drafted, the bill does not direct procurement of the energy generated by these projects, and if strictly enforced, this provision could help to prevent ratepayers from bearing the risks of facility investments, including potential cost overruns.
- *Requiring the PSC to determine net rate impact thresholds for the nuclear energy* generation projects procured as a result of the bill. As in the OSW statute, these thresholds can put an upper limit on resulting increases on customer bills. Instead of setting a specific threshold in statute, as the General Assembly did in the case of ORECs, however, HB1035/SB0937 directs the PSC to determine the relevant thresholds and keep them confidential. Although the intent of leaving specific thresholds out of the statute appears to be to keep project applicants from "bidding to the cap," the bill as drafted provides the PSC with no guidance about how to determine an appropriate ratepayer impact threshold, leaving open the potential for an excessively high threshold in order to meet the goals of the bill. As an additional, minimum ratepayer protection, the bill should provide the PSC with some guidance on the level of the allowable ratepayer impact for nuclear procurements. For example, the bill could direct the PSC to base the threshold on its determination of the procurement's value in mitigating customer exposure to future high wholesale market prices, taking into account best estimates of future prices in the capacity, energy, and ancillary service markets.
- *Requiring that a PSC order approving a proposed nuclear project provide that ratepayers and the State be held harmless for any cost overruns associated with the project.* This provision is particularly important given the recent history of nuclear power development in the United States. The most recent completed reactors in the United States— Vogtle units 3&4 in Georgia—were significantly behind schedule and cost \$36.8 billion: \$22 billion more than the initially projected cost of \$14 billion. In December 2023 and May 2024, the Georgia Public Service Commission approved on aggregate a 23.7 percent rate increase and a 47.3 percent expansion in utility rate base, in exchange for only a 7.51 percent expansion in generating capacity for Georgia Power.<sup>1</sup> The electricity from Vogtle is, therefore, the most expensive in the world at \$10,784/kW; typical

<sup>&</sup>lt;sup>1</sup> Georgia Pub. Serv. Comm'n, *Order Adopting Stipulation*, Docket No. 29849, Document Filing No. 217284 (Jan. 31, 2024), <u>https://psc.ga.gov/search/facts-document/?documentId=217284</u>, at 13 (allowing for recovery of financing costs and capital costs).

generation prices for wind, solar, or natural gas range from \$1,000 - \$1,500/kW.<sup>2</sup> Recent developments with small modular nuclear reactors ("SMRs") have not fared any better. In November 2023, NuScale, the developer of a SMR that had been the project closest to reaching commercialization, cancelled its project after significant delays and costs increased from initial estimates of \$3 billion in 2015 to \$9.3 billion at the time of cancellation in 2023.

• Barring payments under a long-term pricing schedule until electricity supply is generated by the project. This provision appears to protect customers from paying for nuclear generation if the project never goes into operation. It should be noted, however, that when a project is completed, it could mean a substantial increase in utility rates at the time of commercialization, depending on market prices.

OPC appreciates these efforts to limit ratepayer exposure to the risk of cost overruns and to prevent customers from paying for projects until the project generates energy.

There are other elements of the three bills intended to provide additional protections for ratepayers, including:

• Prohibiting an electricity supplier or other owner of a generating station from entering into a contract for the provision of the direct supply of electricity to a commercial or industrial customer in a way that bypasses interconnection with the electric transmission distribution systems or the distribution services of an electric *company*. The addition of any facility that consumes a large quantity of electricity in Maryland will have impacts on the grid and on other Maryland customers, regardless of whether a large new customer is interconnected in the traditional way or co-located with generation in a way that bypasses interconnection or the distribution services of an electric company. Although the addition of load in either case can cause the same additional costs, the cost responsibility under federal and state law and regulation may be different depending on whether the load is a behind-the-generator-meter configuration, or a "non-co-located" equivalent load. By prohibiting co-location that bypasses interconnection or an electric company's distribution services, this provision ensures that the PSC has jurisdiction over the facilities serving co-located configurations located within the state of Maryland and may set rates for the collection of transmission costs from co-located load customers. The provision would also limit the possibility that co-located load in Maryland would not be subject to the state's renewable portfolio standards ("RPS") and requirements to procure ORECs and contribute to the Electric Universal Service Program ("EUSP").

<sup>&</sup>lt;sup>2</sup> Patty Durant, Kim Scott, and Glenn Caroll, *Plant Vogtle: The True Cost of Nuclear Power in the United States*, Cool Planet Solutions (May 2024), <u>https://truthaboutvogtle.com/wp-</u>content/uploads/2024/06/Truth-about-Vogtle-report.pdf, at 23.

- Streamlining permitting and other regulatory processes for priority energy projects. Provisions of both HB1035/SB0937 and HB1036/SB0931 seek to eliminate barriers to the development of clean energy generation in the State by streamlining or expediting what can be time-intensive permitting and regulatory processes. To the extent that expediency is appropriately balanced with adequate opportunity for public notice and participation, these measures have the potential to benefit ratepayers by enabling the deployment of more clean energy resources and bringing down the wholesale costs of electricity.
- Integrated resource planning ("IRP"). IRP allows for a transparent, structured, and systematic review of the multiple options available to expand an electric system. In evaluating resource adequacy and the expansion needs of the system, IRP considers holistically the different components of the system—i.e., transmission, generation (including storage), distribution, and non-wires alternatives (such as storage, demand response and energy efficiency)—and permits consideration of different options for preferred expansion of the system. Absent an IRP process or similar planning, there is less assurance that any discrete system expansion or procurement will be cost effective or coordinated with the overall needs of the electric system to allow service for Maryland customers at the lowest possible cost.

## III. No need for immediate action on significant expansion of generation in Maryland

Important context to any legislation that increases risks to Maryland utility customers is that the State does not need to take immediate action to encourage the development of large power plants in the State. Under conservative assumptions, Maryland has sufficient resource adequacy—ability to "keep the lights on"—in the near term to meet the peak demands on its system. Specifically, sufficient transmission and generation resources currently exist to meet the resource adequacy needs for every part of the State through at least 2029.<sup>3</sup> For additional information and context, please see the attached FAQs, also available on <u>OPC's website</u>.

Further out into the future, PJM is not forecasting significant load growth in Maryland. Load growth is forecasted in the Frederick area due to data center projects; however, that area has not historically been transmission-constrained, meaning that there is sufficient existing transmission capacity to allow that area to be served by all the

<sup>&</sup>lt;sup>3</sup> See Office of People's Counsel Comments, Public Service Commission Admin Doc. No. PC66, Submission No. 31 (explaining results of technical analysis). Beyond 2029, additional planned transmission capacity is needed. PJM has already approved construction of transmission—scheduled to come online in 2028—to fill this need. *Id*.

resources in PJM. PJM's forecasts of average annual demand growth through 2045 for the other Maryland zones that have historically been transmission-constrained—including the BGE zone—are modest, ranging from 0.37 percent to 0.67 percent.<sup>4</sup>

Even if new generation—even new *clean* energy generation specifically—is needed, the high prices in PJM capacity market are providing incentives to existing generation—though not limited to clean energy generation—to remain online and to new generation to come online. These resources would be backed by private investors without the set-prices created by the procurement mechanism in HB1035/SB937 that are backed by utility customers. No Maryland laws preclude new generation of any sort from building in Maryland, provided they meet siting and other local requirements. Moreover, any new nuclear energy generation would take many years before commencing operations, likely more than 10-15 years and potentially much longer, extending further out in time the uncertainty of calculating an appropriate cost to which ratepayers would be committed.

OPC appreciates the opportunity to provide this information on HB1035/SB0937, HB1036/SB0931, and HB1037/SB0909.

<sup>&</sup>lt;sup>4</sup> <u>https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf</u>.

DAVID S. LAPP People's Counsel

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### **OFFICE OF PEOPLE'S COUNSEL**

State of Maryland

6 St. Paul Street, Suite 2102 Baltimore, Maryland 21202 www.opc.maryland.gov BRANDI NIELAND DIRECTOR, CONSUMER ASSISTANCE UNIT

**CARISSA RALBOVSKY** CHIEF OPERATING OFFICER

(January 28 2025)

### **Maryland Resource Adequacy FAQs**

### What is resource adequacy?

Resource adequacy requires having enough electricity generation to serve peak demand—including a "reserve margin" buffer for uncertainty—along with enough room on the transmission system to reliably deliver the power to customers.

### Who is responsible for ensuring resource adequacy in Maryland?

PJM Interconnection, LLC (PJM), the regional transmission organization (RTO) for Maryland and 13 other jurisdictions in the region, is responsible for ensuring resource adequacy in Maryland. RTOs like PJM operate the transmission system and the wholesale energy markets and are regulated by the Federal Energy Regulatory Commission (FERC). Subject to FERC's oversight, PJM sets the reserve margin necessary to meet the reliability and resource adequacy criteria established by the North American Electric Reliability Corporation (NERC) and the regional entity to which NERC delegates authority, the Reliability First Corporation, to determine and assess electric reliability, including resource adequacy, for PJM.

PJM evaluates resource adequacy for the PJM region as a whole, as well as smaller zones within the region (called Locational Deliverability Areas or LDAs).

### How is resource adequacy achieved in Maryland?

PJM runs auctions for "capacity" in which generation companies commit to being available to run when needed to meet demand. The capacity auctions (in PJM parlance, the Base Residual Auction, or BRA) are run annually and have the goal of ensuring sufficient generation to meet power needs for the region as a whole (PJM's regional territory) and—based on the ability of the transmission system to import power—for the smaller zones within the region. The auction is designed to enable the procurement of sufficient resources to satisfy the resource adequacy criteria applicable to PJM and Maryland.

### What is the resource adequacy situation now?

PJM ran its latest capacity auction in July 2024. That auction secured enough capacity to meet anticipated customer peak power demands and a sufficient reserve margin for the PJM region as a whole and for most zones in Maryland for the 2025/2026 delivery year—which runs from June 1, 2025, to May 31, 2026. In that auction, the capacity bids to meet PJM's requirements in Baltimore Gas & Electric's service territory zone—called the "BGE LDA"—fell just short because the Brandon Shores and Wagner power plants, having announced an intention to retire, did not bid into the auction. Although these results *do not* indicate expected outages in the BGE LDA, the results *do* indicate a need for more generation or transmission.

PJM ensured reliability in the BGE LDA for the 2025/2026 delivery year by entering into "reliability must-run," or "RMR" arrangements with Brandon Shores and Wagner. RMR arrangements keep the plants online past their intended retirement date and obligate the plants to generate power until planned transmission enhancements add new capabilities to import power into the area. It is reasonable to conclude that the BGE LDA will not have resource adequacy—or reliability—issues for the foreseeable future because of the RMR arrangements and the planned transmission enhancements that will replace the generation lost by these plants' retiring.

Under RMRs, generators commit not to retire their power plants at their announced retirement date and are guaranteed payment at a regulated rate which is almost always much higher than the market rate. They are paid that higher rate even if their exclusion from the capacity market increases the clearing price for the capacity market.

Following the summer 2024 auction, OPC and many others challenged PJM's policy of excluding Brandon Shores and Wagner from the auction, and PJM is now seeking to change that policy to include RMR units in the auction. Doing so should reduce the costs for ratepayers in the region, who currently functionally pay for the capacity of the power plants twice: once through the inflated capacity market prices, and again through the RMR arrangement that also ensures the units act as capacity.

OPC released a report on the 2024 capacity market auction, the RMR arrangements and their impacts on customers in August 2024.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> <u>Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in</u> <u>Maryland, OPC</u> (August 2024).

### What are the future prospects for resource adequacy in Maryland?

Maryland appears to have sufficient resource adequacy in the near term to meet the peak demands on its system.<sup>2</sup> Any assessment of Maryland's resource adequacy should include an assessment of both generation resources located within each of the LDAs in Maryland and an assessment of the power transfer capacity into the LDAs in Maryland using the transmission system. It should also include other measures such as demand response and energy storage, accounting for existing tools the Public Service Commission has to mitigate resource adequacy issues. The contribution to resource adequacy from Maryland-located generation depends, in part, on finalizing RMR arrangements for the Brandon Shores and Wagner power plants near Baltimore—which appears imminent—and the continued availability of the Calvert Cliffs Nuclear Plant to serve existing customers.

Based on information received from Maryland utilities, PJM is not forecasting significant data center growth in Maryland. Some data center growth in the Frederick area will occur, but that area is not transmission-constrained, which means that existing and planned transmission for those data centers will ensure resource adequacy there. <u>PJM's</u> forecasts of average annual demand growth through 2045 for the other Maryland zones—including the BGE zone—are modest, ranging from 0.37% to 0.67%. PJM's transmission solutions for planned power plant retirements intend to address the resource-adequacy impacts of those retirements. Further, all of Maryland's coal-fired power plants have already retired or announced plans to retire. Higher capacity market prices across PJM also are incentivizing plants to remain online or come out of retirement.<sup>3</sup>

PJM is scheduled to run its next auction in June 2025 for the 2026/2027 delivery year that runs June 1, 2026, to May 31, 2027. Some analysts are predicting that there will not be enough capacity to meet the expected demand and reserve margins for PJM as a whole in that auction. These predictions are due to forecasts of data center growth mostly outside of Maryland and present issues largely beyond Maryland's control.

### Does Maryland's status as a "net importer" of generation mean more in-State generation is needed for resource adequacy?

No. Resource adequacy depends only in part on the geographic source of energy production. It is mostly a function of peak demand and the combination of generation and transmission capability to meet that demand. Maryland's status as a net importer speaks to overall energy consumption—at all times of day over the course of a year—and is measured in megawatt-hours (or kilowatt hours), which is a different measurement than used for reliability and system capacity—*megawatts*. Meeting resource adequacy requires

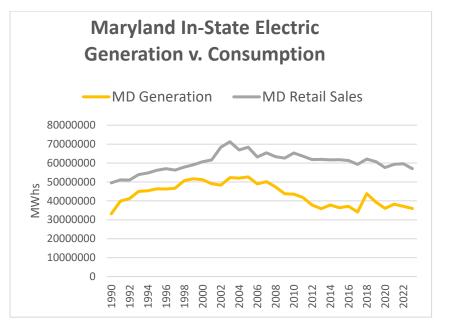
<sup>&</sup>lt;sup>2</sup> <u>Public Service Commission PC66, Comments of the Office of People's Counsel</u> (Jan. 17, 2025).

<sup>&</sup>lt;sup>3</sup> See, for example, <u>Middle River Power reverses plan to shut 540-MW plant amid record PJM capacity</u> prices, <u>Utility Dive</u> (Sept. 12, 2024). The plant discussed in this article is in Illinois.

having sufficient *megawatts* available at time of highest demand on the system, while Maryland's status as a net importer of 40 percent of its *megawatt hours* speaks only to overall energy consumption.

The relevant available data does not show that there is a near-term need for generation located in Maryland for reliable electric service. The transmission system in place can import sufficient power into Maryland, and new transmission under development will increase that capability as power plants retire.

Maryland has imported a portion of its power needs for many decades through both periods of high and low energy costs.<sup>4</sup> In fact, more states in PJM are energy importers than exporters. D.C. imports about 98 percent of energy, and Delaware about 57 percent. As long as there is enough capacity in the region and sufficient transmission to deliver the electricity, importing part of Maryland's energy needs poses no risk to Marylanders.



Maryland, like many states in PJM, has long imported more electricity than it generated.

In fact, Maryland customers benefit from being part of a diverse regional system and market, and it has been part of PJM for more than 60 years.

It is true, however, that new generation is needed within PJM's broader footprint, considering increasing demand from data centers and potential power plant retirements.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> See <u>State Electricity Profiles, EIA, Table 10.</u> Maryland has been a net energy importer of electricity every year since 1990 (the EIA only provides data going back to the '90s). In 2013, Maryland imported 30,881,323 MWh, or 46% of its total electricity from other states, the highest annual import to date. 1998 was the lowest year of imports since 1990, with 13,945,102 MWh, or 22% imported into the state. In 2023, 24,139,011 MWh, or 40% of the state's demand, was imported.

<sup>&</sup>lt;sup>5</sup> At least some of this demand may be illusory. *See*, e.g., <u>Investors may overestimate benefits to utilities</u> <u>of datacenter boom</u>, <u>S&P Global</u> (June 18, 2024). Regardless, because PJM has accepted projected load growth from data centers, it has increased the capacity requirements to meet the reliability requirement.

Maryland, however, cannot address regionwide resource adequacy issues raised by data center growth elsewhere in PJM without taking on significant costs.

### How can Maryland lower the costs of assuring resource adequacy for customers?

Even though it is likely that there will be sufficient resources in Maryland to meet resource adequacy standards, tight market conditions *throughout* PJM could lead to high prices for capacity for Maryland customers in upcoming years. A variety of "no-regrets" solutions could enhance resource adequacy, reduce risks to customers of reliability issues, and minimize the chances of paying high prices for potentially unnecessary transmission and generation. These no-regrets measures include:

• *Demand flexibility and response*. Foremost among "no regrets" solutions are measures to enhance demand flexibility and response. Demand response refers to programs that pay or credit consumers for decreasing their energy use during peak demand hours. Estimates from the EmPOWER future programming work group indicate that it would be cost effective to deploy more than four times the amount of demand response utilities paid for in 2023.<sup>6</sup> Demand response can bid into PJM's capacity market, and so, in addition to decreasing the real-time cost of electricity, can decrease capacity costs for consumers.

The electric system is built for—and resource adequacy is measured based on—peak demands on the system. Programs that encourage consumption more evenly across the day would decrease peaks that drive resource adequacy needs and thereby decrease system costs.

- *Energy efficiency*. Maryland could also take measures to require more energy efficient appliances. While energy efficiency can no longer bid into PJM capacity markets,<sup>7</sup> encouraging energy efficiency can still reduce capacity demand. Energy savings means that less capacity is needed to serve the lower peak demand, thus decreasing capacity costs, while also lowering customer bills. An analysis for the EmPOWER energy-efficiency programs found vast quantities of cost-effective energy-efficiency savings are available beyond what the current EmPOWER program alone can provide.
- *Existing transmission enhancements*. The transmission system is part of the resource adequacy equation. Limits on how much electricity can be delivered

<sup>&</sup>lt;sup>6</sup> Utilities procured 125 MW of demand reduction in 2023. *See <u>The EmPOWER Maryland Energy</u> <u>Efficiency Act Report 2024, Public Service Commission</u> (May 2024), at 15. It would be cost effective to procure more than 500 MW of demand response. <i>See <u>Maryland GHG Abatement Study Final Response</u>, <u>Applied Energy Group</u> (Dec. 2, 2022), at 40. Originally submitted to the PSC under maillog number 300426.* 

<sup>&</sup>lt;sup>7</sup> On Nov. 5, 2024, FERC accepted tariff revisions from PJM that prevent energy efficiency from participating in the capacity markets. *See Docket No. ER24-2995*.

over any given transmission line are determined by the physical characteristics of the wire. Grid enhancing technologies, also called GETs, refer to a suite of new technologies that provide low-cost methods to make the most of existing transmission infrastructure. GETs can help defer, or even avoid, expensive construction of new transmission lines and enable more generation to connect to the system and serve customers. One study estimates that GETs could save \$1 billion annually across PJM by 2033.<sup>8</sup>

- Distributed Energy Resources (DERs). Greater deployment of DERs—such as rooftop solar, community solar, and batteries—can also promote resource adequacy and decrease capacity costs. DERs connect to the distribution grid—and not the transmission grid—and so are not impacted by the current delays in PJM's process for connecting generation at the transmission level. DERs can either participate as demand response—by allowing residential customers to draw energy from their battery or "behind-the-meter" solar, rather than the grid, during times of peak demand—or they can be aggregated in a "virtual power plant" (VPP) to act as a generator that can bid capacity into the capacity auction. Studies have shown that virtual power plants can provide great value to the grid, with one study finding that VPPs could save utilities \$15-\$35 billion in capacity investments over a 10-year period.<sup>9</sup>
- *Energy storage*. Energy storage can "firm up" the capacity value of intermittent renewable generation by allowing energy from solar and wind to be stored and later deployed at moments of peak demand. Energy storage can help avoid costly transmission-system upgrades by pre-flowing energy over a transmission line and storing it on the other side of the line prior to times of peak demand. When demand peaks, energy can then be supplied *both* over the transmission line in real time, and from the batteries.
- *Surplus interconnection service*. PJM is asking FERC to approve more robust surplus interconnection service (SIS), which could also promote resource adequacy and lower costs. Many generators—especially intermittent renewable generation—do not use their full allowable transmission capacity.

More robust SIS would enable additional generating units to share the interconnection with existing generators so long as the combined generation does not export more than the existing generation's maximum allowed output at any given moment. SIS could allow solar and wind resources to add battery storage to their sites and significantly increase supply in the PJM capacity market. One study estimated that batteries utilizing SIS on existing PJM solar interconnections alone could unlock an additional 5,862 MW of capacity—an

<sup>&</sup>lt;sup>8</sup> <u>GETting Interconnected in PJM, RMI</u> (February 2024).

<sup>&</sup>lt;sup>9</sup> <u>Real Reliability: The Value of Virtual Power, Brattle (May 2023)</u>, at 25.

amount equivalent to about 90% of Maryland's largest utility's current peak demand.<sup>10</sup> If FERC approves PJM's proposal, State policies to site batteries alongside intermittent generators using SIS could add new capacity within approximately one year.

## Are there other measures that Maryland should take to assess or address resource adequacy?

Maryland can require greater information about large customers—such as data centers that plan to locate in Maryland and take measures to ensure that new big customers do not harm existing customers. For example, Maryland could require large customers to provide for their own generation needs and contribute to State policies and programs such as the Electric Universal Service Fund, EmPOWER, and the State's clean energy goals. Further, data centers that have flexible power needs could bring benefits to the system.

Also, the State could take actions to promote more accurate forecasts of future loads, and State agencies can advocate for beneficial changes to PJM and FERC policies. OPC is very active as a member of PJM, engaging daily in PJM workgroups and processes and advocacy before the FERC.

### Is now a good time for Maryland to require in-State generation?

No. Interest rates are high, supply chain challenges are ongoing, and the high prices in PJM capacity market are providing incentives to existing generation to remain online and new generation to come online without ratepayer backing. As has long been the case for Maryland, if it's profitable because it's needed, private generation companies can provide the investor backing for new generation plants.

Moreover, any new baseload generation would take many years before commencing operations, likely more than six years and potentially longer, extending further out in time the uncertainty of calculating an appropriate cost that ratepayers would be committed to.

Further, the data on load forecasts is fraught with speculation. Demand growth is likely to "fail to materialize as forecast," a January 2025 analysis from Bank of America concludes, and when this happens "there are significant risks to overbuild of resources with no demand to serve."<sup>11</sup> Without an immediate urgency, Maryland would be better off waiting to see how projections for increasing electricity demand in other parts of PJM play out.

<sup>&</sup>lt;sup>10</sup> <u>ReSISting a Resource Shortfall: Fixing PJM's Surplus Interconnection Service (SIS) to Enable Battery</u> <u>Storage, ACORE</u> (Sept. 18, 2024).

<sup>&</sup>lt;sup>11</sup> <u>US Power & Utilities: Year Ahead 2025: Is Past What's Prologue?</u>, Bank of America (January 7, 2025)

Finally, as described above, **there is no immediate resource adequacy issue requiring Maryland to take action that risks further increases to utility customer bills**. Most Maryland utility customers are already facing some of the highest bills they've ever seen because of massive rate increases over recent years, as described in our <u>June 2024 rates</u> <u>report</u>.

## Would allowing Maryland's utility monopolies to build and own power plants enhance resource adequacy and, if so, at what cost?

As noted above, Maryland does not need to take action to encourage the building of large power plants within the State. While any generation may lower costs in the medium to long term, utility-owned generation would likely do so at a higher cost than relying on independent power producers to construct more generation in the competitive market or making the most of the alternatives described above. In Maryland, law in place since 1999 allows utilities to build and own generation subject to Public Service Commission approval, but this law has not been utilized.

Allowing utilities to build generation poses significant risks to Maryland's utility customers, with few offsetting benefits.

*First*, utility ratepayers could bear uneconomic costs. Maryland ratepayers would still have to cover power plant costs (plus a profit margin) if the units sit unused because there are other lower-cost generators available to serve customers or they are incompatible federal or State climate goals. Indeed, data shows that New Jersey customers narrowly avoided paying nearly a half billion dollars above the market over the last ten years because a proposal to build out-of-market generation was overturned by the courts.

*Second*, utilities have no inherent advantages in constructing generation over non-utilities other than their ability to recover all their costs—no matter how high—from their captive customers. Non-utility generation companies, in fact, purchase the equipment to build generating plants from the same vendors as a Maryland utility would. Also, many non-utility companies have much greater experience actually building generation, which utilities have not done for about three decades.

*Third*, any new gas plant will take years—likely much more than five years—to come online.<sup>12</sup> By that time, planned new transmission is highly likely to be completed that will be available to serve Maryland customers and would allow other generation sources to

<sup>&</sup>lt;sup>12</sup> See Silverman et. al, <u>Outlook for Pending Generation in the PJM Interconnection Queue</u> (May 2024) at 9, (finding that "[A]bsent significant reforms or market innovations, most projects entering PJM's queue today are unlikely to come online before 2030.").

compete against—and potentially out-compete—a utility-owned generating plant, to the detriment of customers, as the New Jersey example shows.<sup>13</sup>

*Finally*, although additional new generation anywhere in the PJM region potentially decreases capacity costs by increasing supply, in the case of utility-owned generation, customers themselves do not necessarily benefit from lower prices. Rate-regulated utilities—which have exclusive government monopolies and captive customers—are paid on a "cost-plus return" basis, and if the costs are higher than competitor's costs, the utility is generally entitled to recover those costs plus its return as a matter of law. And because there is great uncertainty with projecting generation market prices over the life of the power plant, it is not possible to know whether utility ownership of generation will benefit customers.

What *would* be certain, however, is that captive utility customers bear all the risks that the future costs paid to the utilities would be higher than market prices. That is the opposite of how risks are allocated currently to the investors of competitive generation companies.

### Would it be different if Maryland directed its utilities to competitively procure new in-State generation through purchase power agreements?

Requiring a competitive procurement for generation rather than simply requiring utility generation investments would be more protective of utility customers because it would avoid some—though not all—of the problems described immediately above.

Most importantly, it would not avoid the guesswork about future market prices that puts ratepayers at risk. As the New Jersey example noted above illustrates, locking in prices with private generation companies shifts the risks of low future market prices to customers. One simply cannot know what the future capacity and energy markets will do. As with utility ownership, what *would* be certain is that captive utility customers would bear all the risks that the future costs of the procurement would be higher than market prices.

<sup>&</sup>lt;sup>13</sup> There is currently 427.9 MW of capacity associated with projects that are not yet constructed but that do have signed interconnection service agreements (ISAs) in Maryland. These plants can come online and are not impacted by the queue delays. Queue delays are holding back a much larger tide of generation that wants to interconnect. There is 6,122.0 MW of capacity in the queue in Maryland, and 152,384.0 MW of capacity in the queue or under construction in PJM. *See* <u>Serial Service Request Status</u>, PJM.