Testimony in support of HB1035 - Public Utilities Uploaded by: Richard KAP Kaplowitz

HB1035_RichardKaplowitz_FAV 02/28/2025

Richard Keith Kaplowitz Frederick, MD 21703

<u>TESTIMONY ON HB#/1035 – FAVORABLE</u> Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy 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#1035, Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

This bill seeks to add nuclear power generation as one of the sources for electricity in Maryland under tight controls. It also adds controls on how electricity supplier or owners of generating stations seek to bypass controls over that electricity provision.

The bill accomplishes these goals by requiring the Maryland Energy Administration, in coordination with the Public Service Commission and the Department of Natural Resources, to pursue certain agreements with neighboring states and federal agencies related to the development of new nuclear energy generation stations. The control of the provision of electricity is provided by prohibiting an electricity supplier or other owner of a certain generating station from entering into a certain contract with a commercial or industrial customer under certain circumstances.

This bill will assist Maryland to meet goals related to how electricity is generated for use in Maryland by promotion of interstate and Federal cooperation in meeting the electricity needs. It will also treat electricity as a public good and not a private benefit for specific commercial or industrial companies.

I respectfully urge this committee to return a favorable report on HB#1035.

SB937 - Next Generation Energy Act Joint Testimony Uploaded by: Senate President Bill Ferguson



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The Senate of Maryland ANNAPOLIS, MARYLAND 21401-1991

SB937 - Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) Testimony of Senate President Bill Ferguson On February 28, 2024 Before the Senate Committee on Education, Energy, and the Environment and House Economic Matters Committee

Why This Bill Matters:

Senate Bill 937, the Next Generation Energy Act, pulls available policy levers at the State-level to ensure we generate more Maryland-made electricity, we do it from cleaner sources, and we do it now to lower utility bill costs for Marylanders. The bills:

- 1. Ensure the affordability for Maryland ratepayers into the future;
- 2. Safeguard the reliability of our energy grid to prevent cascading blackouts at peak hours; and
- 3. Stabilize the predictability of the State's regulatory environment to make Maryland more attractive to private investment.

PJM, the multistate energy grid operator which Maryland is part of, released new electricity demand forecasts which indicate the region "could see a capacity shortage as soon as" June 2026, four years sooner than originally anticipated. Regional electricity demand growth due to data center development to support artificial intelligence, coupled with broader electrification efforts and the retirement of coal and oil generation facilities, is creating the perfect storm for Maryland ratepayers causing utility bills to skyrocket. Expanding in-state generation is critical, but particularly challenging in our State.

Demand for electricity in Maryland and throughout the country is rising at an untenable rate at the same time as coal and oil electric generation stations are retiring. The mismatch between supply and demand led to a 2025/2026 PJM capacity auction where energy prices increased by 800% compared to the prior year (\$269.92/MW-day in 2025/2026 versus \$29/MW-day in 2024/2025). As a result, Marylanders' utilities bills will increase by as much as \$26 per month in June to account for rising prices and new transmission required to keep the lights on. Immediate action to provide relief to ratepayers is critical.

What This Bill Does:

Senate Bill 937 has three main components.

First, it expedites new, cleaner in-state generation to secure our grid by:

- Mandating the PSC solicit bids for and approve new "dispatchable generation" approximately equal to the amount of coal and oil generation in Maryland at peak summer hours.
 - Allows our State to eventually phase off dirtier generation sources with a higher greenhouse gas emission and particulate matter profile compared to the dispatchable generation sources the PSC must approve.
 - Prevents further drastic energy price increases caused by electricity demand outpacing supply as economic forces encourage old coal and oil plants to shut down.
 - Encourages Maryland-made electricity to reduce the risk of relying on other surrounding states for energy.
 - Mitigates the need for additional transmission lines to bring out-of-state electricity in Maryland, thereby impacting private property rights and our natural environment.
- Building a bridge to a net zero generation future while keeping the lights on until technology sufficiently advances.
 - Maintains our ambitious climate goals through requiring that any new natural gas turbines be convertible to run on hydrogen and other zero-emission biofuels when supply-side technology allows for it.
 - Prioritizes new energy projects that include co-located battery storage and/or Tier 1 renewable energy generation (e.g., solar, wind, hydro, geothermal, etc.).
- Setting ambitious timelines for the approval of these projects while expediting the siting and permitting processes to get energy on the grid as quickly as possible, including solar and battery projects that will soon clear the PJM interconnection queue.
 - Creates market predictability to encourage the construction of generation facilities in Maryland compared to surrounding states.
 - Accounts for the public perception that projects, especially those involving fossil fuels, cannot get built in Maryland.

Second, the Next Generation Energy Act ensures large load customers, like hyperscale data centers, pay their fair share towards maintaining our distribution and transmission grids by:

- Prohibiting large load customers energy customers from tapping directly into a generation facility and pulling that energy off the wholesale market for personal use.
- Allowing limited exemptions only if:
 - The large load energy customer is constructing their own generation sufficient to meet their needs; or
 - The customer procures energy from an existing generation facility that increases its output by the same amount of energy the customer is contracting for.

Third, it strengthens Maryland's position to capitalize on new nuclear technology as it advances by:

- Establishing a procurement process for new nuclear energy through a Nuclear Renewable Energy Credit process modeled after Offshore Wind Renewable Energy Credits.
- Mandating Maryland pursue agreements with:
 - Surrounding states to minimize financial and construction risks for the first few new nuclear facilities in the PJM region to demonstrate proof of concept, and reduce costs and timelines for future projects; and
 - Federal government facilities, including military installations, for the siting of new nuclear facilities including small modular reactors.

Why You Should Vote For This Bill:

According to <u>a recent report by the Maryland Energy Administration (MEA)</u>, our State's geography limits the amount of solar or land-based wind that can be constructed while offshore wind's future is uncertain under the Trump Administration. Battery storage technology is developing quickly and should be deployed as rapidly as possible, but may not provide the immediate requisite reliability and ratepayer benefits at scale to compensate for power plant retirements.

New dispatchable generation is the only short-term option for significant new generation that will allow the remaining coal and oil power plants to retire and reduce overall greenhouse gas emissions. We will maintain our environmental commitments through requirements that any new natural gas plants be convertible to run on hydrogen when that technology is sufficiently advanced. We will also prioritize projects with carbon capture and co-located renewable energy or battery storage. At the same time, we need to position Maryland to take advantage of new nuclear technology which will hopefully be available in the next 10-15 years.

New in-state dispatchable generation is the most affordable, reliable, and fastest energy source available to deploy while reducing our reliance on dirtier fossil fuels like coal and oil. More Maryland generation means more control for our State with numerous benefits. Less imported dirty energy from surrounding states with their own policy incentives; and fewer transmission lines impacting private property rights, farmland, and conservation easements.

The Maryland General Assembly's commitment to achieving net-zero generation is unchanged as new turbines will be required to be capable of running on zero-emission hydrogen or other biofuels when that technology is sufficiently advanced, thereby bridging to our ultimate greenhouse gas reduction goals and avoiding issues of stranded assets.

Thank you for your consideration of Senate Bill 937 and I urge the committees to move this bill with a favorable report after incorporating amendments from the various stakeholders who will present this afternoon.

Testimony on the Next Generation Energy Act.pdf Uploaded by: Aiden Holdren

I am flabbergasted that this legislature is even considering the construction of a natural gas plant in Maryland. This is a resounding backward step in the energy transition, a contribution to the desecration of our environment, and an overall terrible idea. It is blatantly wasteful to be spending taxpayer dollars on fossil fuel construction, when cheaper, more effective and more sustainable energy sources are available.

HB1035 SB937 Pavlak FWA next generation energy act Uploaded by: Alex Pavlak

(SB937) (HB1035) Pavlak FWA

Next generation Energy Act Electricity generation planning, procurement, permitting and co-location

POSITIVE

- Encourages the development of nuclear power
- Encourages multistate procurement of new nuclear
- Contemplates a long-term pricing purchase obligation

NEGATIVE

- Much of the bill is based on an imaginary world where storage is claimed to be a dispatchable energy source. In the real world:
 - A little storage can be useful
 - 4 hr Li storage reduces PV cost a little bit in CA and TX but not MD.
 - BGE storage pilots showed that 4 hr storage might have value (yet unproven) to the distribution utility
 - Proven storage technology has little value on a large scale.
 - Storage to replace Brandon shores is not feasible
 - Battery storage is the wrong technology to manage the winter renewable doldrums (Dunklflaute).
- New fossil fuel needs a financial incentive (see attached OpEd)

AMMENDMENT

Exempt 2 GW of new natural gas generation from the requirement to purchase RGGI carbon allowances for 10 years.



Avoiding rolling blackouts and high electricity rates

(originally published by Baltimore Sun, January 6, 2025)

Nationwide, climate policies are systematically shutting down fossil fuel-based baseload generators without providing functional replacements. Maryland has been the <u>national leader</u> in shutting down baseload fossil fuel plants making the loss of firm generation capacity particularly acute. The likely consequence is either rolling blackouts, or skyrocketing electricity costs. However, there are alternatives.

In 2024, Maryland's Regional Greenhouse Gas Initiative (RGGI) and the Renewable Portfolio Standard (RPS) alternative compliance payments, extracted <u>\$274 million</u> (carbon taxes) from its few remaining in-state fossil fuel plants. RGGI revenues are up 67% year on year and are used to fund Maryland's climate mitigation programs.

Remarkably, Maryland's entire fossil fuel industry generated <u>16.7 TWh</u> (trillion watt-hours) of electric power during 2023. This suggests that industry's gross revenues, based on average wholesale prices, would be less than \$600 million. This begs the question: How does a \$600 million a year industry survive a \$300 million a year financial burden when competitive generators across state lines do not have this burden? The answer is that they do not survive, it just takes time to die.

When a fossil fuel plant can no longer compete, the owner dials back on operating expenses to wring as much profit as they can out of a degrading capital equipment base before closing. Over the past decade this is what happened to Maryland coal plants. The last and biggest coal plant, Brandon Shores, filed to close in 2025. But PJM (the regional system operator) concluded they could not let the Brandon Shores plant close and maintain system reliability. So, PJM keeps a zombie plant operational through a costly Reliability Must Run (RMR) contract, <u>billing BGE ratepayers \$250 million a year</u> for as long as necessary to replace firm capacity. <u>According to the Office of Peoples Counsel</u> (OPC), the RMR plus capacity charges will cost BGE ratepayers an additional \$450/yr. But, for how many years?

The evidence of stress is clear. Maryland consumes 7.5% of the electricity produced by PJM. Yet 33% of the units on the <u>PJM deactivation list</u> reside in Maryland, and 4 of the 5 RMRs are Maryland plants. The 5th RMR resides in Delaware, another RGGI PJM State. Coal is gone, the next fossil fuel plants likely to fall are oil fired peakers, followed by combustion turbines, then combined cycle plants.

Maryland is confronted with unprecedented challenges and no good solutions. Options are:

Do nothing – Today, Maryland policy is to shut down all in-state fossil fuel generators. PJM is trying to keep them viable with RMRs to maintain system reliability. If Maryland wins the result is rolling blackouts, if PJM wins the result is sky high electricity rates.

Cancel or dial back RGGI and the RPS – Mayland's RGGI/RPS programs have done their job, coal is gone, natural gas is a cleaner interim fuel. Canceling RGGI/RPS would allow PJM markets to work. After Maryland builds nuclear power, then the natural gas plants can be shut down without harming system reliability.

Pursue a 100% renewables option – Several competent studies are emerging. Our own engineering analysis shows that for a closed system, with no imports/exports, the cost to maintain reliability with intermittent generation escalates exponentially beyond 25-30% penetration (by energy). 100% renewables, is an impractical option.



Import more electric power – Building more transmission to import electricity from out of state generators is not climate friendly, leaves Maryland more vulnerable to the whims of others, and would be resisted by residents affected by the transmission. Transmission is a band aid, the core problem is the lack of in-state clean, firm, baseload generation. Electrical power independence is a better strategy.

Build more natural gas plants to stop the RMRs – This is a practical interim solution provided Maryland stops closing existing natural gas plants. It should be coupled with the closing of RGGI/RPS programs so that the PJM markets can work.

The nuclear option – Some combination of nuclear and hydroelectric power supports the world's eight big clean grids. There is ample evidence that nuclear fission can be safe, affordable, and GHG emission free. With a closed fuel cycle and fast spectrum reactors, nuclear can be sustainable. <u>According to the Energy</u> <u>Department</u> It will take six years to build a reactor, and there is a first mover risk.

Externally imposed solutions – Deep rolling blackouts in the Baltimore/D.C. region are likely to be regarded by the federal government as a national security emergency. The federal government could step in, suspend rules and impose solutions that Maryland does not like. For example, Maryland could lose the authority to choose electric power generation technology.

Maryland policy has created a slow-moving train wreck. The priority should be to stop making things worse. Our recommendation is that Maryland's 2025 legislative session either cancel or dial way back the RGGI/RPS programs, build some new natural gas plants and commit to building nuclear plants.

Alex Pavlak

The writer is a PhD Professional Engineer, Severna Park resident, and the chair of the <u>Future of Energy</u> <u>Initiative</u>, whose mission is to facilitate the development of sustainable, affordable clean energy systems.



SB937 HB1035 PHI FWA 2.28.25.pdf Uploaded by: Anne Klase





February 28, 2025

112 West Street Annapolis, MD 21401

Support with Amendments – Senate Bill 937/House Bill 1035 – Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) support with amendments Senate Bill 937/House Bill 1035 – Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act). Senate Bill 937 and House Bill 1035 requires the Maryland Energy Administration (MEA), in coordination with the Public Service Commission (PSC) and the Department of Natural Resources (DNR), to pursue certain agreements with neighboring states and federal agencies related to the development of new nuclear energy generation stations, incentivizes new generation to be built in the State, and prohibits an electricity supplier or other owner of certain generating station from entering into a certain contract with a commercial or industrial customer under certain circumstances.

Resource adequacy is a growing concern nationwide and particularly critical in Maryland. With limited in-state generation and pending retirements of dispatchable resources, Maryland relies heavily on energy imports to meet demand. The North American Electric Reliability Corporation (NERC) forecasts show electricity peak demand and energy growth between 2024 and 2033 at the highest levels in a decade. PJM is already seeing significant demand growth due to electrification and energy intensive data centers. To maintain reliability, new dispatchable generation, storage, energy efficiency, demand response, and hybrid solutions using clean fuels are essential. Resource additions are not keeping up with generator retirements and demand growth. Winter seasons replace summer as the higher-risk periods due to generator performance and fuel supply issues.

Senate Bill 937 and House Bill 1035 requires electric companies to procure nuclear energy equal to the company's percentage of electric sales each year that will be placed in an escrow managed by the Public Service Commission (PSC). While Pepco and Delmarva Power support mechanisms to incentivize nuclear generation to be built in the State, this requirement should be prospective, so existing Standard-Offer-Service (SOS) contracts are not adversely impacted. Pepco and Delmarva Power respectfully request an amendment to exempt existing SOS obligations or contracts from being impaired and to require this provision to be applied prospectively. Additionally, it is not clear how the PSC's authority will interact with, or whether it will interfere with, the Nuclear Regulatory Commission's current authority as they regulate commercial nuclear power plants and other uses of nuclear materials, such as in nuclear medicine, through licensing, inspection and enforcement of its requirements.

Additionally, Senate Bill 937 and House Bill 1035 takes a needed approach to addressing co-location, one that encourages economic development while prioritizing customer protection and grid reliability, which is essential as we seek to have consistent and fair co-location practices adopted across the nation. Pepco and Delmarva Power believe that co-location can offer real benefits, but our concern is that without appropriate regulation, data centers may evade paying their fair share of costs of the grid and the grid services that they use. This can lead to the reallocation of these costs to existing customers, imposing an unjust financial burden on them – now and into perpetuity.

While Pepco and Delmarva Power support the overall goal of the language in the bill, we will be recommending clarifying language related to how a supplier or other owner of a generating station may enter into a contract for the provision of direct supply and other minor technical changes.

Pepco and Delmarva Power support with amendments Senate Bill 937 and House Bill 1035 and are committed to collaborating with all stakeholders to develop strategies that ensure a dependable electricity supply, maintain affordability, and align with the state's climate objectives.

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.

HB1035_WGL_Todd_FWA.pdf Uploaded by: Brandon Todd



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COMMITTEE: ECONOMIC MATTERS

TESTIMONY ON: HB1035 PUBLIC UTILITIES – ELECTRICITY GENERATION PLANNING – PROCUREMENT, PERMITTING, AND CO-LOCATION (NEXT GENERATION ENERGY ACT)

POSITION: SUPPORT WITH AMENDMENTS

HEARING DATE: FEBRUARY 28, AT 1:30PM

WASHINGTON GAS RESPECTFULLY SUBMITS THIS STATEMENT IN **SUPPORT with amendments** to HB1035 – *Next Generation Energy Act* ("HB1035").

Background

The Maryland General Assembly is considering HB1035, the Next Generation Energy Certainty Act, focuses on enhancing electricity generation planning and procurement, with an emphasis on nuclear and dispatchable energy generation to support Maryland's energy future.

Position

The Company supports HB1035 with proposed amendments to expand the scope of the bill to include all dispatchable generation technologies that can support State climate objectives, such as natural gas-fired generating stations with carbon capture, and renewable natural gas (RNG)-fired generating stations.

RNG is a fully interchangeable lower-carbon alternative to conventional natural gas. According to the United States Department of Energy, RNG is a pipeline-quality gas that is fully interchangeable with conventional natural gas. RNG is essentially biogas (the gaseous product of the decomposition of organic matter) that has been processed to pipeline standards.¹ Capturing, treating, and upgrading RNG from sources of organic matter, including landfills, wastewater treatment facilities, organic food waste, and agricultural operations, to pipeline-quality gas can significantly reduce greenhouse gas (GHG) emissions from the State's GHG emissions; landfills and wastewater treatment plants accounted for approximately 7 million metric tonnes of CO2e, or

¹ DOE <u>Alternative Fuels Data Center</u>

² EPA. <u>Renewable Natural Gas</u> (Aug. 3, 2023).

approximately 8% of the State's gross GHG emissions, as of 2020.³ The Maryland Department of the Environment (MDE) recently found that landfills were the single largest source of methane emissions in Maryland, and that these emissions have been historically underestimated and are approximately four times higher than previously thought.⁴ MDE recently published a final regulation for control of landfill gas emissions from municipal solid waste (MSW) landfills in 2023⁵ establishing support for specific, predictable, and achievable reduction in GHG targets for waste products which can unlock private/public investment and preserve customer energy affordability for alternate fuels. The agriculture sector accounted for 4% of the State's GHG emissions in 2020, and MDE projects these emissions to be relatively constant through 2050 with few abatement options identified.⁶

Conclusion

At Washington Gas Light Company, our core values are safety, collaboration, integrity, inclusion, and learning. The Company supports Maryland's goals to meet its GHG emissions reduction targets while enhancing energy reliability and minimizing ratepayer impacts and is committed to working with stakeholders to help achieve Maryland's GHG emissions reduction targets. RNG can be used to help reduce GHG emissions from current uses for natural gas while it remains an important part of the State's energy system. Natural gas is currently used to provide energy to the residential, commercial, industrial, and transportation sectors and most analyses today indicate this will continue to be the case for decades to come.

For the above reasons, the Company respectfully requests your consideration for the proposed amendments for HB1035 to expand the provisions to support <u>all</u> dispatchable generation technologies which be proven to align with state climate objectives (e.g. natural gas fired generating stations with carbon capture, hydrogen-fired generating stations, RNG-fired generating stations).

Thank you for your consideration of this information.

ADDENDUM: PROPOSED AMENDMENTS

Section 7-211 would establish the State's policy to broadly support new nuclear generating units, as preamble to its support of small modular nuclear reactor.

• Consider modifying Section A which currently reads "The General Assembly finds and declares that it is the State's policy to encourage development of clean, carbonfree, nuclear power, including development through innovative designs" to read as follows in order to maintain the possibility that natural gas-fired generation obtaining

³ MDE. <u>2020 Greenhouse Gas Inventory</u> (Sep. 24, 2022). In the 'Summary' tab, emissions from "Landfills" and "Wastewater Management" add to 7.21748 million metric tonnes of CO2e, which corresponds to 8.4856% of Gross Emissions, which was 85.05523 million metric tonnes of CO2e. All numbers use a 20-year GWP. ⁴ MDE. Climate Pollution Reduction Plan (Dec. 28, 2023). Page 52

⁵ Maryland Code. <u>Section 26.11.42.04</u> - Requirements for Municipal Solid Waste (MSW) Landfills (Feb. 9, 2024).

⁶ MDE. <u>Climate Pollution Reduction Plan</u> (Dec. 28, 2023). Pages 58-59

similar favorable treatment per the subsequent provisions of this bill:

"The General Assembly finds and declares that it is the State's policy to encourage development of clean <u>dispatchable</u>, carbon-free, nuclear power generation, including development through innovative designs"

• Under Section 7-506.1, strike subsection (C) in its entirety as it precludes the ability of large commercial and industrial customers to develop onsite generation and saddles those customers with navigating the processes associated with electric interconnection queue studies and wait times. This may limit the choice of large commercial and Industrial customers to use natural gas-fired generation on their premises. At present, it reads as follows:

"Except as provided by federal law and subsection (D) of this section, an electricity supplier of other owner of a generating station may not enter into a contract for the provision of direct supply of electricity to a commercial or industrial customer in a way that bypasses (1) interconnection with the electric transmission and distribution systems and (2) the distribution services of an electric company"

About Washington Gas Light:

Washington Gas Light Company ("the 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.⁷

Contact:

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

⁷ DOE. <u>Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy</u> (Aug. 28, 2023).

HB 1035 testimony.pdf Uploaded by: Chris Anderson Position: FWA



PLUMBERS AND STEAMFITTERS UA LOCAL UNION 486

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Gary G. Glab Financial Secretary/Treasurer

Harry M. Schleicher Jr. Business Agent

C. Ryan Ambrose Business Agent

Stephen M. Nitsch Business Agent

Christopher D. Anderson, Business Agent Todd E. Eckley Recruiter

Economic Matters Committee

To: Chairman C. T. Wilson, Vice Chair Brian M. Crosby, and Members of the Economic Matters Committee

From: Christopher Anderson, Business Agent, Plumbers and Steamfitter Local 486

Support HB 1035 with amendment - Public Utilities – Electricity Generation Planning – Procurement, Permitting, and Co–Location (Next Generation Energy Act)

On behalf of Plumbers and Steamfitters Local 486, I am writing to express our strong support for Maryland House Bill 1035 with amendment, the "Next Generation Energy Act." This critical piece of legislation represents a significant step forward in ensuring Maryland's energy future is both sustainable and reliable, aligning with our values of promoting job growth, workforce development, and clean energy infrastructure.

As a union representing skilled plumbers, pipefitters, and steamfitters, we recognize the vital role our workforce plays in the development and implementation of energy generation and infrastructure projects. With the push to eliminate fossil fuels, which provide the most reliable energy, we are putting our regional grid in danger. While we support an all the above approach to energy generation (as long as it's built UNION). Wind and solar are not ready to take center stage in our energy production. Nuclear and Natural Gas create enough electron to start to replace other fossil fuel generation that has already been closed, though it takes time to get online as well so the development process needs to start quickly.

HB 1035 not only creates a path for the development of new Nuclear and Natural gas to create a reliable grid, but includes excellent standard to protect ratepayers, workers, and ensure diversity in the industry.

For the above reasons, we ask that you give HB 1035 a favorable Report with amendment.

Sincerely,

Christopher Anderson

BGE_SB937_HB1035_FWA_EEE_ NextGenerationEnergyAct_ Uploaded by: Dytonia Reed

Position Statement



Favorable with Amendments Education, Energy, and Environment Committee 2/28/2025

Senate Bill 937/House Bill 1035- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Baltimore Gas and Electric Company (BGE) supports with amendments *Senate Bill 937/House Bill 1035- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act). Senate Bill 937/House Bill 1035* requires the Maryland Energy Administration (MEA), in coordination with the Public Service Commission (PSC) and the Department of Natural Resources (DNR), to pursue certain agreements with neighboring states and federal agencies related to the development of new nuclear energy generation stations, incentivizes new generation to be built in the State, and prohibits an electricity supplier or other owner of certain generating stations from entering into a certain contract with a commercial or industrial customer under certain circumstances.

BGE is supportive of the bill's goal to increase in-state generation and to offer protections to preserve existing generation, because the availability of reliability source of electric generation is a pressing issue in our region and is of particular concern in Maryland. The retirement of dispatchable electricity generation facilities in Maryland without corresponding new generating facilities is contributing to significant electricity constraints, has increased costs in the capacity market, and has prompted multiple large-scale transmission projects to be constructed to import more energy into the State. Given the limited local generation in Maryland and pending retirements of the dispatchable generation in the state, Maryland is dependent on generation imports to achieve its electric supply. Maryland currently imports 40% of its electricity from out-of-state electricity generators throughout the year to meet the energy demands of residents and businesses, and that number will increase if new generation is not built in the State.

Senate Bill 937/House Bill 1035 requires electric companies to help incentivize the development of new nuclear generation in the state. While BGE supports mechanisms to incentivize nuclear generation in Maryland, this requirement should be prospective, so existing Standard-Offer-Service (SOS) contracts are not adversely impacted. BGE respectfully requests an amendment to remove retroactive RPS provisions and grandfather existing arrangements to protect existing SOS contracts for future delivery.

Additionally, the bill anticipates that new projects will sell energy, capacity, and ancillary services in the PJM markets. However, there may be risks to customers because market revenues are significantly lower than a project developer's cost-based price schedule. The PSC should have the flexibility to adjust long-term pricing schedules and limit cost overruns to mitigate impacts on ratepayers. This flexibility will help ensure that energy remains affordable and reliable in the long term.

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.



Position Statement

Senate Bill 937/House Bill 1035 rightfully addresses the risk of co-location, which involves an existing generating station entering a contract with a large energy user to directly supply electricity – bypassing interconnection with the electric transmission and distribution systems. There is an opportunity to clarify the co-location relationship more technically; BGE will offer an amendment to the bill sponsor. BGE supports the guardrails that will prevent the loss of existing electricity generation to Maryland ratepayers and will ensure large energy users pay their fair share.

BGE respectfully requests the proposed amendments be adopted and urges a favorable report for *Senate Bill 937/House Bill 1035*.

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

MAREC Action House Testimony FAV W Amendments Next Uploaded by: Evan Vaughan



February 28, 2025

Delegate C.T. Wilson, Chair Maryland House Economic Matters Committee

MAREC ACTION TESTIMONY HB1035: FAVORABLE WITH AMENDMENTS

Chair Wilson, Vice Chair Crosby, members of the Economic Matters Committee,

MAREC Action (informally, "Mid-Atlantic Renewable Energy Coalition") writes in support of HB1035, the Next Generation Energy Act (Next Act). Directionally, the Next Act addresses key problems facing Maryland's electricity supply, however we believe significant amendments are needed to maximize results and consumer benefits. MAREC Action is a coalition of over 50 utility-scale solar, wind, and battery storage developers and manufacturers dedicated to the growth and development of renewable energy across the PJM grid region.

Consumer prices are rising across the 13-state PJM region

Maryland's demand for electricity is rising at a time when capacity market supply is diminishing due to retirements and Reliability-Must-Run arrangements at older fossil fuel power plants. A lack of deployment of new energy resources, exacerbated by delays in the PJM queue and years of static electricity demand, adds to these challenges. Maryland is not alone, the entire 13-state PJM region is facing these challenges. Changes should be made to both reform capacity market function and, importantly, increase supply of electricity and dispatchable resources.

Ultimately, Maryland has more control over policies related to in-state generation and transmission assets than it does over the structure of PJM's markets. While there are PJM capacity market reforms that Maryland can and should continue to advocate for, we understand the intent of the Next Act is appropriately aimed at increasing the deployment of in-state energy resources to meet demand and bring down consumer prices.

Solar, wind and energy storage are part of the solution

Providing timely relief for ratepayers requires prioritizing deployment of the most readily available energy technologies. For Maryland, that means focusing on the near-term PJM interconnection queue—which is almost entirely comprised of energy storage and solar. Maximizing the deployment of these projects is the most



viable pathway to deploy new in-state resources and suppress consumer costs through the end of the decade.

As a dispatchable energy resource, energy storage is the most practical and rapidly deployable solution to address Maryland's resource challenge. Other states have successfully deployed energy storage to meet their needs, and Maryland can do the same with the creation of a large-scale storage procurement program.

Maryland's near-term PJM queue of energy projects includes 900 megawatts (MW) of storage capacity that will be out of the PJM queue by the middle of 2026 faster than any other dispatchable energy resource. Creating a pathway to market for these projects will directly increase capacity supply and reduce capacity market prices. <u>These projects are the most viable firm capacity additions that Maryland can</u> <u>invest in over the next 3-4 years.</u>

Adding energy storage in Maryland will have a suppressive effect on capacity market prices, reducing the overall impact of recent market spikes on consumers. Other benefits of deploying energy storage resources include deferred or avoided investments in transmission lines and expensive peak-demand serving natural gas facilities.

The table below lists projects with AH1 and earlier PJM queue positions as of February 24, 2025. In practical terms, these projects could be deployed more quickly than any other dispatchable energy resource, including natural gas.

| Fuel Type | Number of projects | Megawatt (MW) Capacity |
|----------------|--------------------|------------------------|
| Solar | 36 | 1,038.9 |
| Storage | 9 | 900.3 |
| Solar; Storage | 7 | 909.8 |
| Natural Gas | 0 | - |
| Wind | 1 | 11.8 |
| Hydro | 1 | 15.0 |
| Total | 54 | 2,876 |

Table 1: Maryland's PJM queue projects with AH1 and earlier queue positions as of Feb. 24, 2025.

These projects will exit the queue no later than summer 2026 and could become operational within roughly two years of exiting the queue.



Even considering PJM's newly approved Reliability Resource Initiative, (which allows new dispatchable generation projects to jump into the queue in an expedited fashion) projects outside of the scope of Table 1 would, at best, match the deployment speed of the capacity listed above.

We urge the legislature to amend the Next Act to include a competitive procurement program for front-of-the-meter, transmission-connected storage with contracted capacity revenue. Contracted capacity, which is sometimes called a Power Purchase Agreement or a tolling agreement, is critical to trigger investments in Maryland energy storage (and likely any form of new dispatchable generation) because the same capacity market uncertainty facing consumers makes financing new capital-intensive infrastructure projects risky. Power plants operate for decades. Making a decades long investment when capacity prices are volatile means banks and other investors will demand a higher rate of return—raising finance costs and causing projects to not pencil out. From a Maryland consumer standpoint, contracted storage capacity means that Maryland can reclaim control over prices and insulate itself from swings in the PJM capacity market.

Though offshore wind is technically part of Delaware's queue, and doesn't show up in Table 1, it will also directly increase supply of capacity on the Delmarva Peninsula and suppress prices that consumers will be exposed to in the years to come. Offshore wind has a capacity factor around 50 percent, comparable to some fossil fuel power plants (note: capacity factor is an average of how much electricity a power plant produces compared to maximum potential output over the course of a year). Offshore wind's high capacity factor reflects strong, steady winds offshore that produce during key reliability periods during the year, including cold winter months and at night. Looking across the range of options to deliver affordable, reliable and clean electrons to Maryland consumers—offshore wind ranks high and has a head start thanks to efforts over the last decade to establish critical supply chain investments.

PJM isn't lacking for thermal generation, there's a deployment problem

Maryland currently has an all-of-the-above electricity mix, featuring heavy reliance on aging coal, nuclear, oil and gas generation. It is reasonable to maintain a flexible policy for energy generation (without losing sight of decarbonization goals), just as the Next Act proposes. However, renewable energy is not to blame for the sharply rising capacity market prices. We are concerned that the Next Act, as



introduced, unreasonably tips the scales away from Maryland's existing solar and wind energy industries.

It is true that renewable energy technologies have faced deployment challenges in Maryland, but these challenges are not unique to solar and wind. Sluggish demand growth (until this year), inflation, high interest rates, tariffs, supply chain disruptions, local siting challenges, transmission congestion, and PJM queue delays make it difficult to deploy any large energy project in this region. Nationally, solar, wind and energy storage have dominated new capacity installations, representing 76% of all capacity installations over the last five years.¹

Recommended amendments

The best and most cost-effective way to overcome Maryland's projected energy shortfall is to lean in on technologies like storage, solar and wind with policies that right-size incentive levels and encourage flexibility in procurement. We recommend the following amendments to the Next Act to ensure that it maximizes opportunities for ratepayer relief:

- Include a capacity contract procurement mechanism for transmissionconnected, front-of-the-meter energy storage to facilitate deployment of up to 1,600 MW of capacity in Maryland. We support the Affordable Abundant Clean Energy Act (SB316/HB938) storage provisions being amended into the Next Act.
- Reaffirm Maryland's commitment to offshore wind, providing additional flexibility for the Public Service Commission (PSC) to evaluate Offshore Renewable Energy Credits (ORECs). We support the Energize Maryland Act (SB434/HB505) provisions being amended into the Next Act.
- Direct the PSC and MEA to evaluate and pursue (if prudent) the potential for multi-state cooperation in the PJM region on transmission planning to maximize consumer benefits and build greater community buy-in before lines are proposed. The PSC asked for this authority in their Dec. 18th roadmap report.²
- Ensure that new thermal power plant incentives reflect parity with existing clean energy incentives.

¹ ACP Clean Power Annual Market Report 2023.

² Maryland Public Service Commission, pg 35. https://www.psc.state.md.us/wpcontent/uploads/HB1296-Offshore-Wind-Report-and-Recommendations_Final.pdf



Thank you for considering our testimony. We see the Next Generation Energy Act as an important opportunity to reform Maryland's energy policy to meet the moment of rising demand and consumer costs. We ask the committee to take a favorable position on this legislation. With amendments to rebalance the Next Act to maximize Maryland's near-term opportunities to deploy clean and reliable capacity, this legislation will stabilize electricity prices for Maryland residents while delivering them the cleaner and more reliable energy future they want and deserve.

Best regards,

Evan Vaughan Executive Director MAREC Action PO Box 3335 Silver Spring, MD 20918

Marec-EnergyStorage-Sheet-v9-3.pdf Uploaded by: Evan Vaughan



Energy Storage Developers Ready to Start Delivering on Maryland's Storage Goals

As a dispatchable energy resource, energy storage is one of the most practical and rapidly deployable solutions to address Maryland's resource challenges. Other states have successfully deployed energy storage to meet their needs, and Maryland can do the same with the creation of a large-scale storage procurement program.

MAREC Action supports the energy storage provisions in the Abundant Affordable Clean Energy Act (HB398/SB316).

Why Energy Storage?

Reducing Energy Costs & Saving Money for Maryland Residents

By storing energy when the price of electricity is low and discharging that energy later during periods of high demand, energy storage can reduce costs for utilities and save families and businesses money. Also, by enhancing grid resilience and providing back-up power, energy storage can prevent costly disruptions to families and businesses associated with power outages.

Ensuring the Grid Has Energy When Needed

Energy storage is instantly dispatchable to function both as generation and load, so it can help the grid adjust to fluctuations in demand and supply, which optimizes grid efficiency, alleviates transmission congestion, and increases grid flexibility. This reduces overall system costs.

Improving Grid Resilience for Weather Events

Energy storage improves grid reliability and resilience and can prevent or minimize power outages. Similar to household devices operating with back-up batteries, like smoke alarms, or back-up generators, energy storage systems can support entire buildings or even the larger electrical grid during extreme weather events and other disruptions.

Enabling the Clean Energy Transition

Energy storage enables electricity to be saved and used at a later time, when and where it is most needed. By introducing more flexibility into the electrical grid, energy storage supports installations of more clean, renewable power sources.

U.S. States' Energy Storage Operational Capacity



Texas Example: A recent study shows that the recent addition of 5 gigawatts (GW) of energy storage in Texas not only enhanced grid reliability, but also helped keep electricity costs down for consumers—even during record demand and extreme weather events in 2024.

How Can Maryland Increase Energy Storage Deployment?

Maryland has a robust pipeline of projects in the nearterm PJM queue that require a formal program to spur construction. MAREC recommends passing legislation to establish a competitive procurement program for front-of-the-meter, transmission-connected storage with contracted capacity revenue.

Maryland PJM Near-Term Project Queue

The table below lists projects with AH1 and earlier PJM queue positions as of February 24, 2025. In practical terms, these projects could be deployed more quickly than any other dispatchable energy resource, including natural gas. These projects will exit the queue no later than summer 2026 and could become operational within roughly two years of exiting the queue.

| Fuel Type | Number of projects | Megawatt (MW) Capacity |
|----------------|--------------------|------------------------|
| Solar | 36 | 1,038.9 |
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| Solar; Storage | 7 | 909.8 |
| Natural Gas | 0 | - |
| Wind | 1 | 11.8 |
| Hydro | 1 | 15.0 |
| Total | 54 | 2,876 |

The following companies all have near-term queue positions or site control to build transmission-connected energy storage projects in Maryland if a procurement program is established.



For more information please contact Evan Vaughan, Executive Director, MAREC Action (Mid-Atlantic Renewable Energy Coalition) at <u>evaughan@marec.us</u>

HB1035_ FAV WAMEND_PSC.pdf Uploaded by: Frederick Hoover

COMMISSIONERS

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STATE OF MARYLAND



PUBLIC SERVICE COMMISSION

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

RE: HB 1035 – Favorable with Amendments – Electricity Generation Planning – Procurement, Permitting and Co-Location (Next Generation Energy Act)

Dear Chair Wilson and Committee Members:

The Public Service Commission (the Commission) requests a favorable report for HB 1035 with the amendments detailed in this testimony. The Commission supports the intent of the proposed legislation to increase generation deployment within the state and to provide ratepayer protections from negative outcomes that can occur from co-locating with existing generation.

HB 1035 may lead to meaningful deployment of generation resources to help secure additional capacity to assist with meeting Maryland's energy needs. The dispatchable generation proposal is a novel approach that seeks to incentivize new generation without financial guarantee from ratepayers by instead decreasing the time and hurdles associated with receiving a certificate of public necessity and convenience ("CPCN"). Since the generators will not receive financial guarantees, the Commission suggests amendments that still provide regulatory certainty in a single year but minimize the impacts to the CPCN process. This could attract generation to the State without imposing a financial obligation on ratepayers by providing certainty on regulatory review.

HB 1035 further modifies the Commission's role with respect to clean energy development in the State by requiring the Commission to procure nuclear generation resources in lieu of leaving the entire transaction to third-party developers. This modified role resembles the Commission's role in previous offshore wind solicitations. The Commission notes that there is the possibility of upward price pressure on customers' bills to incentivize nuclear power, but this impact may be negated depending upon how any new generation interacts with the electricity power markets. It is important to note that there is some financial risk when entering into any long-term agreements with third party merchant generators.

HB 1035 actively expedites the CPCN process for dispatchable generation (with potential waivers) and provides for the solicitation of nuclear energy. The General Assembly should be cognizant that the location of energy facilities within the State will raise location-specific siting concerns. Historically, the siting of any energy facility has the potential to be a publicly contentious proceeding. The Commission seeks amendments to facilitate the goals of the proposed legislation while attempting to minimize impacts to the CPCN process.

To achieve the elements of HB 1035 related to dispatchable generation and nuclear procurement, the Commission will need additional resources as explained in our fiscal note. Finally, the Commission seeks amendments to the co-location section to clarify the Commission's and State's jurisdiction over such arrangements to avoid legal and regulatory issues at a later date.

The Commission looks forward to working cooperatively with the bill sponsor regarding potential amendments to the proposed legislation. The following are areas of focus to provide highlights for the legislature's consideration.

Co-Location

§ 7-506.1 establishes a prohibition on a commercial or industrial customer with capacity below 100 MW from entering a contract for the provision of direct supply of electricity to their facilities from an electricity supplier or other owner of a generating station that bypasses the transmission and distribution system or distribution service of an electric company. A commercial or industrial customer above 100 MW can enter into such arrangements, provided that the output from the existing generation is increased or new generation is developed to cover 100 percent of the customer's load.

The Commission interprets the above provision to control the type of customer that can enter into one form of a "co-location" arrangement in which a customer directly receives electricity from a generator and does not directly interconnect with the bulk power grid. The Commission provided a report to the legislature on this issue as required by SB1 (2024).¹ In the report, the Commission recommended modification of the existing statute to affirm that loads under this arrangement are retail loads and to clarify how such arrangements interact with utility franchises.² As HB 1035 seeks to allow co-location in certain instances, the Commission requests that the legislature address the statute clarifications sought in the report and provide policy guidance on which aspects of Commission and State rules, programs, and costs (that currently apply to retail loads) should apply to permitted co-located loads as established in the bill. This will help avoid potential regulatory and legal uncertainty with these arrangements in the future. Additionally, as worded, the legislation has the potential to impact other forms of co-location such as microgrids, where loads under 100 MW may seek to be off the grid self-sufficiently but would now be precluded. The legislature could consider amendments to specify the situations when the prohibitions in the statute should come into effect. The Commission also seeks technical amendments to minimize interpretation regarding applicability of the statute depending upon generation and load configuration.

Dispatchable Generation and Expedited CPCN Process

HB 1035 requires the Commission to conduct a procurement-style process for dispatchable generation in 90 days after a 120-day solicitation period to determine if it is appropriate for the dispatchable generation to pursue an expedited 9-month CPCN process. During the 90 days, the Commission must examine the dispatchable generation proposals and consider the cost and benefits, time to come to operation, and location of the proposals to determine if the proposed generation should be eligible for an expedited CPCN (§ 7-1204 and § 7-1205). The 9-month expedited CPCN requires the Commission to prioritize these CPCNs over other matters and for state agencies to expedite or waive any regulatory requirements or decisions to comply with the 9-month CPCN timeline (§ 7-207.4).

¹ Report on Co-Location, Maryland Public Service Commission, December 18, 2024. <u>https://www.psc.state.md.us/wp-content/uploads/SB1-MD-PSC-Report-on-Co-location-V4_20241217.pdf</u>

² *Ibid.* pp. 14 - 17 and Appendix F.
The CPCN process can be a contentious proceeding but is a critical juncture when balancing between the allowance for important infrastructure development and ensuring that negative externalities associated with the infrastructure are studied and potentially mitigated. Because there is no financial guarantee being given to generators by ratepayers or the State, most or all of the 90 days following the solicitation period could be subsumed into the CPCN review process period to help avoid the need for expediting or waiving CPCN requirements, while providing a guaranteed review and decision timeline to developers. The legislature could still retain some or all of the testing parameters under § 7-1204 and § 7-1205 if there are specific CPCN waivers that should be granted as a matter of policy (e.g. such as those under § 7-207.4 (F) for modified or new generation at existing sites).

Should the legislature decide to adopt the structure above, the Commission can provide input on specific amendments. Should the structure remain as introduced, the Commission requests technical and operational amendments to prevent misinterpretation of the legislature's intent and allow limited flexibility. These would focus on the definition of dispatchable energy generation and its consistent use in the bill, flexibility for good cause extensions of deadlines, clarification that an award from the solicitation is not a guarantee of CPCN approval, the factors in determining CPCN approval and the waiver of regulations, and guidance regarding the timing of generators' conversions to emissions neutral fuel sources.

Energy storage CPCN

§ 7-207(b)(1)(i)(3) requires a person to obtain a CPCN for the construction of an energy storage device that is part of a proposal accepted by the Commission during a solicitation period under § 7-1202; the CPCN shall be issued in accordance with § 7-207.4. § 7-207.4(a)(4) defines an energy storage device as stated in § 7-216. Currently, storage devices do not require CPCNs, however, the Commission has established CPCN-like requirements in a recently completed RM85 rule making for certain projects. The Commission proposes that amendments be made to instead reflect the rules that have been developed through RM85. Otherwise, the Commission will need to update these RM85 regulations to address this bill's requirements

Nuclear Procurement

As with the dispatchable generation process, the Commission suggests the bill be modified so that the Commission has the ability to extend its review of applications for good cause and not allow one party to prevent the extension.

§ 7-1212 and § 7-1212(a)(1) require that any approved application must meet various rate impact criteria and be connected to the electric distribution system serving the State. Electric generating systems of this size typically do not directly connect to the electric distribution system but are connected through the transmission system. It may be beneficial for this bill to define an "electric distribution system" to avoid any confusion. Transmission circuits are typically recognized as those operating above 69,000 volts. Large power plants, such as nuclear units, are connected to transmission circuits.

§ 7-1215(a)(1) establishes that if the Commission approves a nuclear generation proposal, the Commission must issue an Order to facilitate the financing of nuclear generation projects. If the intent of the language is to authorize the Commission to establish securitization methods or otherwise create long-term ratepayer obligations for funding the projects, it would be useful to clarify the scope, duration,

and limits on ratepayer bill impacts. Alternatively, if the intent of the proposed legislation is simply to issue an order approving the long-term pricing schedule, as with offshore wind projects, then it may be useful for the legislation to explicitly state this.

§ 7-211 requires the Maryland Energy Administration, in coordination with the Commission and the Department of Natural Resources to pursue cost-sharing agreements with neighboring states in the PJM region to mitigate the risks of developing new nuclear energy generating stations; and agreements with Federal agencies regarding the siting of small modular reactors ("SMR") on Federal land, or on or near Federal facilities, including military and national security installations. §7-2112(A)(1), requires a nuclear energy project approved by the Commission to be connected to the electric distribution system serving the state, essentially establishing a requirement that the project be in Maryland. The Commission suggests the legislature clarify whether Maryland can enter into cost-sharing agreements for nuclear energy generation projects located anywhere in the PJM region or adjacent to Maryland, where the project could reasonably have a substantial positive effect on the availability of energy supply in Maryland, or if the projects must be built in Maryland.

The Public Service Commission appreciates the opportunity to provide testimony for your consideration for bill HB 1035. We request a favorable report with support for the amendments detailed above. 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

SUPPORT with amendment HB 1035 - Public Utilities

Uploaded by: Jason Ascher Position: FWA



7050 Oakland Mills Road Suite 180 Columbia, MD 21046

Phone: 410-290-3890 www.midatlanticpipetrades.o

Economic Matters Committee

To: Delegate CT Wilson, Char; Delegate Brian Crosby, Vice Chair; and Members of the Committee **From:** Jason Ascher, Political Director – Mid-Atlantic Pipe Trades Association

SUPPORT with amendment HB 1035 - Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

On behalf of the Mid-Atlantic Pipe Trades Association and our five United Association of Plumbers and Steamfitters Locals, which represent over 10,000 Plumbers, Steamfitters, Welders, HVAC Techs, and Sprinkler Fitters across Maryland, I ask you to **SUPPORT HB 1035 with Amendment.**

Increasing energy production is vital for ensuring reliable grid. With the push to eliminate fossil fuels, which provide the most reliable energy we are putting our regional grid in danger. While we support and all the above approach to energy generation (as long as it's built UNION). Wind and solar are not ready to take center stage in our energy production repertoire, because there is a lot of construction that needs to be done for that to happen. Nuclear and Natural Gas create enough electron to start to replace other fossil fuel generation that has already been closed, though it takes time to get online as well so the development process needs to start quickly.

HB 1035 not only creates a path for development of new Nuclear and Natural gas to create a reliable grid, but includes excellent standard to protect ratepayers, workers, and ensure diversity in the industry.

For the above reasons, we ask that you give HB 1035 a favorable Report with amendment.

Sincerely

Jason Ascher Political Director Mid-Atlantic Pipe Trades Association



7050 Oakland Mills Road Suite 180 Columbia, MD 21046

Phone: 410-290-3890 www.midatlanticpipetrades.o

HB1035 - CASA Written FAV with AMENDMENTS Testimon

Uploaded by: Jose Coronado Flores Position: FWA



Testimony in SUPPORT of HB1035 Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) House - Economic Matters Committee

Senate - Education, Energy, and Environment Jose Coronado-Flores, On Behalf of CASA

February 28th, 2025

Dear Honorable Chair Wilson, Chair Feldman, and Members of the Committee,

CASA is pleased to offer **favorable with amendments testimony in support of HB1035**. CASA is the largest immigrant services and advocacy organization in Maryland, and in the Mid-Atlantic region, with a membership of over 60,000 Black and Latino immigrants and working families in Maryland. We overwhelmingly represent low-income rate payers.

Our membership is also experiencing rent hikes and are the most energy burdened in the state. We applaud Leadership for taking this issue seriously. However, expansion of gas infrastructure is an absolute regression. Though building out gas or expanding existing or retired facilities may increase electricity supply now, it will only result in another catastrophic rate hike in the coming years when utilities charge customers for the new gas plant and the replacement of the service and transmission lines.

CASA urges the exclusion of any gas expansion.

However, we also offer an incredibly important amendment if gas is inevitable:

"Certificates for Public Convenience and Necessity for fossil fuel power generating stations requested in census tracts with an EJ score higher than 75% or within 1.5 miles of a high EJ census tract shall be rejected by the PSC."

While we are in a rate-hike catastrophe for ratepayers, increasing the local pollution burden in overburdened communities will result in temporarily lower utility rates for all but will guarantee more medical treatment and hospital visits in the areas where gas plants are built or expanded. If no consideration is placed on existing burden in potential siting of new gas, then the state is guaranteeing more sickness in high EJ score communities. New gas is a temporary fix, and new gas in overburdened communities is a promise to make low-income communities of color sick.

Jose Coronado-Flores Research and Policy Analyst jcoronado@wearecasa.org, 240-393-7840

HB1035_Favorable With Amendments_Vistra.docx.pdf Uploaded by: Katie Nash

Position: FWA



HB 1035: Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) Maryland House Committee on Economic Matters Vistra Submitted Testimony: Favorable with Amendments February 28, 2025

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

Vistra appreciates the opportunity to submit these written comments with suggestions for bill amendments.¹ In principle, Vistra supports amendments that will improve the market for generators to bring additional energy capacity to Maryland.

We also urge the Committee to consider the work that is ongoing at the Federal Energy Regulatory Commission (FERC). Understandably, this legislation was drafted prior to significant federal action on this matter and Maryland leaders are taking action.

On February 20th (last week at the time of this submission), FERC voted unanimously to launch a review of issues associated with the co-location of large loads in PJM. Grid reliability and fair costs to consumers are among the matters under consideration. Industry leaders, such as Vistra, are following these proceedings closely.

At this time, based on the complexity of the issue and the proceedings at FERC, we believe it would be appropriate to strike language banning a behind the meter configuration without the conditions specified in the legislation. We look forward to continuing this conversation with stakeholders.

Submitted Respectfully,

Colin Fitzsimmons Director, Government Affairs Vistra Corp.

¹ Vistra is a leading Fortune 500 integrated retail electricity and power generation company. The company brings its products and services to market in 19 states and the District of Columbia, including all major competitive wholesale power markets in the U.S. Vistra retail brands serve approximately 5 million residential, commercial, and industrial retail customers with electricity and natural gas and is one of the largest competitive electricity providers in the country and offers over 50 renewable energy plans across the markets we serve. While Vistra does not own electric generation in Maryland, the company is also the largest competitive power generator in the U.S. with a capacity of approximately 41,000 megawatts powered by a diverse portfolio, including natural gas, nuclear, solar, and battery energy storage facilities. Over 7,500 MW of that generation serves the PJM region, of which Maryland is a part. The company also owns and operates the 750-MW/3,000-MWh battery energy storage system in Moss Landing, California, one of the largest of its kind in the world. Learn more about our environmental, social, and governance efforts and read the company's sustainability report at https://www.vistracorp.com/sustainability/.

SB937_Favorable With Amendments_Final.docx.pdf Uploaded by: Katie Nash

Position: FWA



SB 937: Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) Maryland House Committee on Education, Energy, and the Environment Vistra Submitted Testimony: Favorable with Amendments February 28, 2025

Chair Feldman, Vice Chair Kagan, and members of the Committee,

Vistra appreciates the opportunity to submit these written comments with suggestions for bill amendments.¹ In principle, Vistra supports amendments that will improve the market for generators to bring additional energy capacity to Maryland.

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Data Center Coalition Comments_MD HB 1035 (Favorab Uploaded by: Khara Boender

Position: FWA



February 26, 2025

Maryland General Assembly House Economic Matters Committee 230 Taylor House Office Building Annapolis, MD 21401

Re: HB 1035, Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) (Favorable with Amendments)

Chair Wilson and Members of the House Economic Matters Committee:

I am writing on behalf of the Data Center Coalition (DCC) to encourage a favorable report of HB 1035, with amendments. DCC is the national membership association for the data center industry. Our members include leading data center owners and operators, as well as companies that lease large amounts of data center capacity. Data centers provide the digital infrastructure that keeps us connected in our daily lives and supports many sectors of the 21st-century innovation economy – including artificial intelligence, financial services, advanced manufacturing, cybersecurity, healthcare, and other key industries.

The Next Generation Energy Act is appropriately aimed at finding the best way to encourage new energy generation in Maryland – a critical part of ensuring Maryland's economy remains competitive in the years ahead. As DCC member companies work to expand data center infrastructure to meet unprecedented consumer demand for digital services, advancing access to increasingly clean, affordable and reliable energy is a central priority for DCC.

Co-location is one of several commercial arrangements that can enable data centers to meet their growing power needs in an efficient manner, particularly in regions facing transmission or interconnection constraints. It provides a flexible option that aligns with market competition principles, offering consumers a choice without overburdening the central grid.

Co-location can take several forms, including "behind the meter" (BTM) arrangements with either new or existing generation, as well as in front of the meter co-location at the same transmission bus. In addition to reliability and affordability, co-location aligns with the sustainability goals of many large consumers by allowing direct access to clean energy sources. This can be particularly important for technology companies, which are increasingly setting ambitious carbon reduction targets. DCC has worked closely with its members to develop a set of guiding principles for responsible co-location arrangements, which can ensure that co-location benefits all stakeholders, including power generators, utilities, data center operators, and other ratepayers, while safeguarding grid reliability and stability. Those principles, which DCC has presented to the Federal Energy Regulatory Commission (FERC), include:

- **Open Access:** Data center operators should have the option to co-locate new facilities next to power generation sources in BTM arrangements, in accordance with applicable regulations. This promotes competition and efficiency, particularly as transmission and interconnection challenges intensify in key markets.
- **Grid Impact Assessment:** Before co-location occurs, regulators, transmission owners, and operators should conduct an assessment to determine potential impacts on local grid infrastructure, stability, and reliability. This helps ensure that co-location does not negatively affect the grid or other customers.
- **Ratepayer Protection:** DCC supports just and reasonable cost allocation where data centers pay their full cost of service. Costs directly associated with co-location agreements, including any required transmission upgrades to facilitate that arrangement, must be allocated fairly to the parties involved in the co-location agreement to prevent shifting undue costs onto ratepayers.
- **Environmental Considerations:** Data center operators should strive to mitigate any increase in grid-level emissions resulting from co-location.

With those guiding principles in mind, DCC is concerned with two provisions included in HB 1035. First, starting on page 4, line 11, the bill would prohibit the co-location of large load users unless users are bringing 100% of their own energy to a project. This provision is unnecessarily restrictive and risks rendering Maryland less economically competitive by discouraging innovative co-location arrangements, potentially increasing electric transmission infrastructure, and reducing the amount of choice commercial consumers have in the market, which is a key tenant of Maryland's existing regulatory structure. This prohibition of a specific arrangement type sends a clear negative market signal to the data center market, which could come at the cost of jobs and investment for the state.

Second, on page 14, lines 30-34 explicitly limit small modular nuclear reactors (SMRs) which are intended to serve a single potential load. This provision puts unnecessary restrictions on SMRs which limits innovation and makes Maryland less competitive in utilizing emerging, carbon-free technologies.

With these provisions struck from the bill, DCC believes the Next Generation Energy Act would mark an important step forward for Maryland's energy future. In addition, it would build on Maryland's efforts over the past several years to advance legislation seeking to establish a competitive market that provides the certainty and predictability required to grow data center jobs and long-term capital investment in the state.

Thank you for your consideration.

Sincerely,

Khara Boender Senior Manager, State Policy Data Center Coalition <u>khara@datacentercoalition.org</u>

_SB 937 - MDLCV SUPPORT ONLY WITH AMENDMENTS - Nex

Uploaded by: Kim Coble Position: FWA



Kim Coble Executive Director February 28, 2025

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 SUPPORT ONLY WITH AMENDMENTS

SB 937 The Next Generation Energy Act

Mr. Chair and Members of the Committee:

Thank you for the opportunity to submit this testimony to support the Next Generation Energy Act, only with the inclusion of the following amendments and amendment concepts. Like the Senate President and the Speaker of the House, Maryland LCV is concerned about rising electricity rates and future increases in energy demand. We are not aligned, however, on the solutions proposed to meet these concerns.

Maryland LCV is committed to advancing clean energy solutions that increase grid reliability and decrease ratepayer impacts while achieving the state's climate goals. While the stated intent of SB 937 is to deploy more energy onto the grid to meet rising demand and combat rising utility bills, several of the provisions in the bill are counter to these goals. Namely, opening the door to a new gas-fired power plant. These will be expensive to build and operate, with decades of negative consequences for Marylanders and are in direct conflict to the immediate goal of reducing ratepayers impacts.

Maryland LCV strongly opposes actions that would permit new or expanding energy production from fossil fuel plants. Gas facilities are burdensome to our environment, and saddle ratepayers with costly infrastructure investments that take decades to pay off, driving up their already skyrocketing energy bills.

The language in SB 937 was drafted on the premise that we are facing an energy crisis and need new energy on the grid as quickly as possible, with the conclusion that gas plants will achieve this in the fastest and cheapest way possible. However, there are several indications that we have more time to enact solutions than perceived in this bill, and numerous sources indicate that renewables plus energy storage are the healthier and less expensive path forward.

After the most recent electricity capacity auction at our regional grid operator, PJM, resulted in an 800% increase in system-wide prices, Governors of PJM states, including Governor Moore, appealed to PJM and negotiated a rate cap on capacity charges for the next two years, keeping prices relatively stable in the near-term. It is incumbent on the state, then, to use this two-year period to ensure we are investing in the lowest cost solutions that will have the least impact on ratepayers. HASI, an Annapolis based, public investor in sustainable infrastructure assets, with over \$13 B in assets, is just one company, government entity, or nonprofit organization <u>with the data</u> to show that clean energy resources are the most cost-effective and quickest way forward. In addition, Maryland has already invested \$800M of ratepayer dollars in transmission upgrades to ensure grid reliability as we transition away from fossil fuels. Combined with proposed legislation this session to expand battery storage and solar capacity, these investments create a clear path toward a reliable, clean energy future.



The General Assembly made a commitment to Maryland when they set new clean energy targets. This is not the time to reverse course toward polluting practices of the past, but a time to take actions to achieve a clean energy economy that creates a healthy environment for everyone in Maryland.

We propose two specific amendments below to change the definition of dispatchable energy in the bill to focus on clean and renewable energy, as well as respecting Maryland's existing regulatory processes (i.e. not bypassing important public participation opportunities). Additional amendments we would support in the bill language include:

- Adding the emergency procurement of 1750 MW of battery storage
- Ratepayer protections, including the creation of an escrow account using Alternative Compliance Payments from the state's RPS that would go directly back to ratepayers
- Tightening up the environmental impact analysis language for proposed nuclear power generating facilities
- Increasing load generation of co-located facilities to 150% of the large load customer's expected demand
- Environmental justice provisions to include additional considerations for projects in communities with an EJ score of 75 or above and the surrounding 1.5 miles

Maryland LCV urges the adoption of these amendments and supports a favorable report on SB 937 with the amendments.

PROPOSED AMENDMENTS FOR THE NEXT GENERATION ENERGY ACT

MARYLAND LEAGUE OF CONSERVATION VOTERS

DEFINITION OF DISPATCHABLE ENERGY GENERATION

AMENDMENT 1

PAGE 5 LINES 9 -15:

(B) (i) "DISPATCHABLE ENERGY GENERATION" INCLUDES MEANS A GENERATING STATION OR ENERGY STORAGE DEVICE WITH:

- 1) SOLAR GENERATING FACILITIES HAVING A GENERATING CAPACITY OF AT LEAST 10 MW;
- 2) AN ENERGY STORAGE DEVICE AS DEFINED IN 7-216;
- 3) OFF-SHORE WIND; AND
- 4) ON-SHORE WIND

(ii) DISPATCHABLE ENERGY GENERATION DOES NOT INCLUDE FOSSIL-FUELED GENERATION

RESPECT MARYLAND'S REGULATORY PROCESSES

AMENDMENT 2

PAGE 23 LINES 24-32:

(1)-THE APPLICANT IS EXEMPT FROM THE REQUIREMENTS OF COMAR 20.79.01.04 AND COMAR 20.79.01.05; AND

(2)-THE COMMISSION SHALL PRESUME THE PROPOSED SITE IS APPROPRIATE AND CONSISTENT WITH THE CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR A NEW OR EXPANDED GENERATION STATION.

(G) THE COMMISION, THE DEPARTMENT OF THE ENVIRONMENT THE DEPARTMENT OF NATURAL RESOURCES, AND ANY OTHER IMPACTED STATE AGENCY SHALL WAIVE OR EXPEDITE ANY REGULATORY REQUIREMENT OR DECISION TO COMPLY WITH THE TIME FRAMES SET FORTH IN THIS SECTION.

HB1035 - MDLCV SUPPORT ONLY WITH AMENDMENTS - Next

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Kim Coble Executive Director February 28, 2025

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HB1035: The Next Generation Energy Act

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SB937 HB1035 Next Generation Energy Act SEIA Testi Uploaded by: Leah Meredith

Position: FWA

February 28, 2025



Senator Brian Feldman Chair Senate Education, Energy, Environment Committee 2 West Miller Senate Office Building 11 Bladen Street Annapolis, MD 21401

Delegate C. T. Wilson Chair Economic Matters Committee 231 Taylor House Office Building 6 Bladen Street Annapolis, MD 21401 Senator Cheryl Kagan Vice Chair Education, Energy, Environment Committee 2 West Miller Senate Office Building 11 Bladen Street Annapolis, MD 21401

Delegate Brian M. Crosby Vice Chair Economic Matters Committee 231 Taylor House Office Building 6 Bladen Street Annapolis, MD 21401

RE: SEIA Favorable with Amendments on SB937/ HB398: Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Chair Feldman, Vice Chair Kagan, Chair Wilson, Vice Chair Crosby, and Members of the Senate Education, Energy, and Environment and House Economic Matters Committees:

I am writing on behalf of the Solar Energy Industries Association (SEIA) regarding our position of **Favorable with Amendments** on SB937 (Senate President Ferguson and Feldman)/ HB398 (House Speaker Jones and Wilson), also known as the Next Generation Energy Act. It was referred to the Senate Education, Energy, and Environment (EEE) Committee on February 3, 2025 and to the House Economic Matters (ECM) Committee on February 5, 2025.

Founded in 1974, SEIA is the national trade association for the solar and storage industries, building a comprehensive vision for the advancement of these technologies. SEIA is leading the transformation to a clean energy economy by supporting policy measures that will drive the needed investment in clean, domestic, local job-producing solar generation. We work with our 1,200+ member companies, which include solar and storage manufacturers, service providers, residential, community and utility-scale solar developers, installers, construction firms, and investment firms, as well as other strategic partners, to shape fair market rules that promote competition and the growth of reliable, low-cost energy storage and solar power.

Maryland Energy Landscape

After a history of flat, or even declining, electricity consumption, the U.S. power grid is currently experiencing the largest demand growth in eighty years, due to new manufacturing facilities as well as cutting-edge American innovations in artificial intelligence, data centers, and cryptocurrency mining. This increase in electricity demand is occurring faster than new generation is being brought online. As a result, Maryland now faces significant increases in costs to energy consumers after decades of relatively stable



electricity costs. This spike is exemplified by the recent 2025/2026 PJM capacity auction that saw an 800% increase from previous years, which will eventually be passed on to Maryland ratepayers as a portion of their utility bill.¹

The mismatch in electricity supply and forecasted demand is in large part attributable to years of policy decisions and inactions at PJM, the regional transmission organization and independent system operator that manages the electric transmission grid for thirteen states and the District of Columbia, including Maryland. The PJM interconnection queue is currently so backlogged that, in 2023, PJM announced it would cease to accept applications for new generation projects. As a result, PJM now has a roughly 5 year wait time from application to approval for new generation sources coming online, resulting in hundreds of gigawatts (GW) of planned capacity, largely wind, solar, and storage assets, sitting in limbo rather than being able to service Maryland's electric load requirements. Given this delay, projects which were ready to be deployed at the time of their application are often no longer viable due to changing economic realities by the time of their approval.

Maryland is reliant on electricity generation from the other PJM states. In 2023, the state imported approximately 40% of its electricity.² Meeting Maryland's energy needs and staving off continued dramatic increases in energy costs will require the rapid deployment of an "all of the above" energy strategy. Such a strategy must include solar and energy storage assets, which are among the only energy resources currently primed to cost effectively address the state's *near-term* energy challenges. In 2023, solar made up the majority of additions to the U.S. electric grid, accounting for 55% of all new generation capacity, due, in part, to the 37% decrease in the price of solar photovoltaics over the last decade.³ Utility scale solar, along with onshore wind, continue to be the cheapest sources of new electricity generation in the United States, beating out the cost of coal and fossil gas-fired generation, even when paired with energy storage which allows the electricity generated by wind and solar to be stored and sent back to the electric grid during periods of high demand.⁴

Next Generation Energy Act Recommended Amendments

SB937/ HB1035 requires the Maryland Energy Administration (MEA) to pursue cost-sharing agreements with neighboring states and federal agencies for the development of new nuclear energy generation stations. While this is a worthwhile endeavor to meet Maryland's growing electricity demand over the coming decade, nuclear generation cannot be leveraged on the timeline needed to address the state's

¹ Office of People's Counsel. "Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland." August 2024. <u>https://opc.maryland.gov/LinkClick.aspx?fileticket=keJs-</u> <u>QqaLr0%3D&tabid=63&portalid=0&mid=1480</u>

² United States Energy Information Administration. Maryland State Profile. <u>https://www.eia.gov/state/analysis.php?sid=MD</u>.

³ Wood Mackenzie Power & Renewables and Solar Energy Industries Association. U.S. Solar Market Insights Report. December 2024.

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current resource adequacy challenges. Fortunately, Maryland has a robust pipeline of energy storage projects in the near-term PJM queue that can be deployed more quickly than any other dispatchable energy resource, including natural gas. Because these projects require a formal program to spur construction, SEIA recommends amending SB937/ HB1035 to establish a competitive procurement program for front-of-the-meter (FTM), transmission-connected storage with contracted capacity revenue.

Specifically, SEIA recommends incorporating language from SB316/ HB938, also known as the Abundant and Affordable Clean Energy (AACE) Act, which creates a competitive procurement process in 2026 and 2027 for up to 1,600 MW of in-state battery storage projects, thus ensuring that storage assets become operational *in this decade* and start generating energy cost-savings to Marylanders. These projects will be constructed in Maryland and serve Maryland's peak demand – alleviating the need for comparatively more expensive peaker plants. These projects are also eligible to bid into the PJM capacity market which can, in part, alleviate soaring capacity market costs. The AACE Act's competitive storage procurement process includes significant cost-benefit analyses as a part of any project application to ensure the lowest cost to ratepayers, as well as a Certificate of Public Convenience and Necessity (CPCN) equivalent to ensure rapid deployment upon approval by the PSC. This procurement process includes significant labor protections, including the requirement for community benefit agreements, which include guarantees for hiring practices and wage provisions to ensure Maryland's workforce benefits from these projects. The AACE Act also creates a pathway for the deployment of 150 MW of new in-state FTM distribution-connected energy storage assets, not subject to the delays of the PJM interconnection queue.

As an instantly dispatchable energy resource, energy storage can function as both generation and load, thus helping the electric grid adjust to fluctuations in demand and supply, which optimizes grid efficiency, alleviates transmission congestion, and increases grid flexibility while reducing overall system costs. However, as currently drafted, SB937/ HB1035 does not adequately leverage these assets, despite them standing at the ready to provide near-term solutions to Maryland's resource adequacy challenges. While higher electricity costs are already on the horizon, the cost of policy inaction and failing to bring both energy storage assets and new sources of electricity online in Maryland is far greater. SEIA thus looks forward to working with members of the Administration, Chamber leadership, members of the EEE and ECM committees, as well as other stakeholders, to chart a pathway for cost effectively responding to Maryland's future energy demands while providing near-term solutions to the state's resource adequacy challenges. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Leah Meredith

Leah Meredith Mid-Atlantic Regional Director Solar Energy Industries Association Imeredith@seia.org

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Position: FWA



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Chairman Brian J. Feldman Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, MD 21401

Chairman C.T. Wilson House Economic Matters Committee 231 Taylor House Office Building Annapolis, Maryland 21401

RE: SB 937/ HB 1035 - Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Constellation is the nation's leading energy supplier and largest owner and operator of nuclear energy in the country. Headquartered in Baltimore, Maryland, Constellation generates more clean energy than any other company in the U.S. In addition, Constellation is at the forefront of fueling the emerging data economy, including in its home state of Maryland, which is vital to protecting our nation's national security and driving economic and infrastructure growth. The bills in the leadership energy package that I address in my testimony -- SB 931/ HB 1036, SB 937/ HB 1035, and SB 909/ HB 1037 -- directly impact core elements of Constellation's business.

Study of Incentivizing New Generation through Utility Partnership [SB 931/ HB 1036]:

SB 931 and HB 1036 direct the Maryland Public Service Commission to conduct a study to establish a process by which the Commission may establish partnerships between electric companies and electricity suppliers for electricity generation projects. This study creates an unnecessary burden on the Commission and is improperly focused on only one potential solution that assumes utility ownership is necessary to address a perceived need for new generation. Other solutions including competitive procurements; the PJM market also must be considered, along with the comparative cost to consumers of the various alternatives. Utility solutions have historically proven to be the costliest to consumers, as the state is observing now, and commandeering monopoly utilities to invest in generating capacity will undermine competition from merchant developers and market-based investments. Utilities have not been involved in generation development for over two decades and have no internal resources, experience, or supply chains to support a build-out of new power plants.

The partnership study is also superfluous given the comprehensive study provisions contained in SB 909/ HB 1037, which is also part of the leadership package. The study provisions in SB 909/ HB 1037, among other things, direct the PSC to study the feasibility and efficacy of conducting competitive procurement processes, and "developing electricity procurement plans to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electricity service

at the lowest total cost over time, taking into account any price stability benefits". A study provision that spreads a wider net that could better lead to the most effective and cost-efficient mechanism to bring new resources online would be superior to the narrow study of a more costly utility partnership construct in proposed in SB 931/HB 1036.

Solicitation for Fast-Track CPCN [SB 937/ HB 1035]:

Constellation applauds the Senate President and House Speaker for including in SB 937 and HB 1035 a new policy mechanism to incentivize new generation investment in Maryland that does not involve utilities re-entering the generation business or increasing rates for new generation. The solicitation provision for new generation leverages the existing competitive market by reducing barriers to investment through expedited permitting for select projects meeting specific requirements. This provision is an affordable and flexible solution to the state's resource adequacy challenges by matching the existing investment-inducing market price signals with a commensurate regulatory signal reflected in fast-track permitting for new generation and the related gas and other infrastructure that will be required to serve a new facility. Notably, this solution ensures that competitive generators - and not monopoly utilities - continue to bear the risk of new generation investment, protecting consumers across the state. At a time when utility infrastructure costs and customer bills are skyrocketing, there should be no consideration of utilities re-entering the generation business to put even more costs on the backs of ratepayers. Constellation supports the fast-track permitting solicitation with minor clarifying amendments to make clear that the solicitation is indeed only for expedited permitting (and not any other purpose, such as utility participation and rate recovery) and to clarify that the expedited permitting required to facilitate new generation investment in Maryland includes, when applicable, any permitting for necessary gas infrastructure associated with a project.

New Nuclear Procurement [SB937/HB1035]:

Constellation is a leading participant in efforts around the country to promote and grow new nuclear development, and we are greatly encouraged by Maryland's focus on nuclear energy as the commonsense solution to secure the clean, reliable and affordable generation that Maryland and the rest of the U.S desperately needs. While Constellation supports the concept of a new nuclear procurement in SB 937 and HB 1035, the proposed mechanism appears to be mirrored after the offshore wind procurement structure (the OREC Structure) that was enacted in 2013 that a decade later has not yet resulted in an operational project. Constellation has concerns with the use of this structure for new nuclear development and does not believe it will result in successful procurement. The length of time required to bring a nuclear project to fulfillment, the layers of permitting and licensing approvals, and the financing necessary to achieve commercial operations will not work in a construct where costs cannot be collected until the project is operational and recovery for costs exceeding initial budgets is expressly prohibited. Constellation is working at the federal level and across states to sort through these complex issues and looks forward to continued coordination with Maryland to both preserve our existing nuclear assets and construct a workable procurement structure to successfully achieve the development of new nuclear energy.

Ensuring the Continued Operation of Calvert Cliffs:

Regarding the preservation of existing nuclear, Constellation recommends an amendment that adopts the backstop zero-emission credit (ZEC) program proposed in SB 316/ HB 398, with clarifying changes to more directly align with the federal nuclear production credit that is found in Section 13105 of the Inflation Reduction Act of 2022 and codified in Section 45U of the Internal Revenue Code. The federal nuclear tax credit has stemmed the tide of retirements across the nuclear industry by providing a revenue floor that provides financial stability to the country's most abundant and reliable sources of clean energy. Like nuclear units in other states, the Calvert Cliffs Clean Energy Center qualifies for the federal tax credit until it expires at the end of 2032.

Calvert Cliffs is licensed by the Nuclear Regulatory Commission (NRC) to operate through 2034 and 2036. The regulatory process to renew NRC operating licenses must start five years prior to expiration of current licenses and, therefore, Constellation must take action to extend Calvert's operating life in 2029 as we are approaching the 2032 expiration of the federal tax credit. We also must plan and execute investments in Calvert to prepare the plant to operate reliably and safely over the life of the new 20-year NRC license. Given the 2032 expiration of the federal tax credit, Constellation will not have financial certainty around plant operations at the time these decisions must be made. The proposed Maryland ZEC program would provide a backstop to the federal tax credit program becoming unavailable, and the 2055 expiration of the Maryland ZEC program would match the end of extended 20-year license renewals for Calvert Cliffs. Consistent with SB 316/ HB 398, the proposed amendment incorporating the Maryland ZEC program will remove that post-2032 uncertainty and establish a policy that ensures Calvert's continued operation through 2055.

Protecting Investments in Maryland [SB 937/ HB 1035]:

SB 937 and HB 1035 include a provision that would prohibit direct supply of electricity to a commercial and industrial customer in a way that bypasses interconnection with the electric transmission and distribution systems or distribution services of an electric company (aka a behind-the-meter, or BTM, configuration) except as provided by federal law or when meeting certain requirements. A direct supply arrangement would be permitted if the generator providing electricity to the BTM customer increases output by, or if the load creates new generation output at, 100% of the customer's expected demand.

Constellation is not aware of any new data center or other large load development in Maryland that is seeking to implement the BTM configuration targeted by this provision. However, there are large commercial and industrial customers across Maryland – like the Port of Baltimore, University of Maryland, and hospital systems – that have contracted with third parties for on-site BTM generation to reduce their consumption from the utility distribution systems. This reduction in grid use bypasses the distribution services of the electric companies for the portion of demand powered by the on-site generation. That is the entire point of the on-site generation, increasing reliability and efficiency for the customer by meeting power demands locally. The provision prohibiting BTM configurations in SB 937/ HB 1035 could up-end these arrangements for any customer over the 100 MW threshold.

Meanwhile, the target of the provision – data centers – would not be impacted because no data center is pursuing a BTM configuration Maryland. Data centers pursuing such configurations in other states have prompted proceedings at the Federal Energy Regulatory Commission (FERC)

to establish the rules of the road for grid-connected generators hosting BTM customers. Just last week FERC directed PJM and its transmission-owning utilities – including BGE and Pepco – to submit filings no later than March 24 addressing the rates, terms and conditions for BTM configurations on the transmission system. The provision in SB 937/ HB 1035 would have Maryland take an unnecessary and premature position that gets ahead of open issues playing out at the federal level to the potential detriment of other commercial and industrial customers in the state that are using BTM configurations today. It also would signal to developers seeking to invest billions in Maryland that their projects should go to other states, none of which have this type of requirement.

Moreover, there is no indication in the provision as to what the General Assembly is seeking to achieve through the restriction. To the extent the state is trying to reduce impacts on resource adequacy from the addition of large loads, that goal applies equally to any large load regardless of whether it connects to the power grid or uses a BTM configuration. Any policy to improve resource adequacy must be focused on the actual reliability needs of the power grid. Historical data shows that the resource adequacy risk faced by Maryland and other PJM states essentially boils down to having sufficient resources to meet customer demand in a handful of hours of system stress, usually during cold winter days when the natural gas system is constrained. Over the past few years, these times of system stress have been very limited, as evidenced by the small number of hours in which reserves in the PJM market fell below PJM's requirements:



Any policy adopted by Maryland, whether related to BTM configurations, data centers, large loads, or any other customer arrangement, should be focused on ensuring that generating resources are online and serving the grid during these times of system stress. The large load provisions of SB 937/ HB 1035 would require over-development of generation in a way that is not tailored to any resource adequacy need and that discriminates against a particular type of customer configuration. The provision therefore should be removed.

Sincerely,

Maurice Simpson, Jr.

Maurice Simpson, Jr. Senior Manager, State Government and Regulatory Affairs maurice.simpson@constellation.com
HB 1035 Ray Baker Baltimore DC Building Trades (FA Uploaded by: Ray Baker

Position: FWA



February 28, 2025

The Honorable CT Wilson, Chair The Honorable Brian Crosby, Vice Chair House Economic Matters Committee 230 & 231 Taylor House Office Building Annapolis, MD 21401

Testimony of Ray Baker, Maryland Director, Baltimore-DC Building Trades on HB 1035: Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act) Position: FAVORABLE WITH AMENDMENTS

Thank you Chair Wilson, Vice Chair Crosby, and Members of the House Economic Matters Committee for the opportunity to offer testimony on HB 1035.

My name is Ray Baker. I am the Maryland Director of the Baltimore-DC Building Trades (BDCBT). The BDCBT's 28 affiliates represent more than 30,000 union construction workers across Maryland, Virginia, and the District of Columbia.

BDCBT supports HB 1035 for two main reasons. First, it positions the State of Maryland to take advantage of any changes in federal regulations or laws related to dispatchable energy. For example, the US Senate and the House of Representatives are considering legislation that would permit dispatchable power plants to gain priority in interconnection queues. In addition, the Federal Energy Regulatory Commission is reviewing a proposal by the PJM Interconnection, which serves Maryland, to give 50 generating projects that meet reliability oriented criteria a one-time, fast track interconnection review.

Second, HB 1035 promotes nuclear power generation in Maryland. What we especially appreciate is that the bill mandates the labor standards as well as local and minority business opportunities. In particular, the labor standards will ensure that any nuclear energy generation construction project produces quality jobs for Maryland residents and is delivered on time and on budget for Maryland ratepayers.

However, we do suggest amending the bill to include battery storage, with accompanying labor standards. Battery storage is essential for maximizing the efficiency of existing and new energy generation sources, no matter the type. Battery storage enhances grid stability, ensuring a consistent energy supply, even during fluctuations in generation or demand. It also protects consumers from volatile prices by using stored energy to mitigate price spikes.

The BDCBT urges the committee to issue a "favorable with amendments" report on HB 1035.

Ray Baker Maryland Director, BDCBT <u>RBaker@BDCBT.org</u> 410.585.7862

HB 1035 IBEW 24 FWA.pdf Uploaded by: Rico Albacarys Position: FWA

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS - LOCAL UNION No. 24

AFFILIATED WITH: Baltimore-D.C. Metro Building Trades Council - AFL-CIO Baltimore Port Council Baltimore Metro Council - AFL-CIO Central MD Labor Council - AFL-CIO Del-Mar-Va Labor Council - AFL-CIO Maryland State - D.C. - AFL-CIO National Safety Council



AFL-CI0-CLC

BALTIMORE, MARYLAND 21230

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Written Testimony of Rico Albacarys, Assistant Business Agent, IBEW LOCAL 24 Before the House Economic Matters Committee On HB 1035 Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Favorable with Amendments

February 26, 2025

Chairman Wilson, Vice Chair Crosby, and Committee Members,

My name is Rico Albacarys, and I am a member and employee of IBEW Local 24, writing in reference to HB 1035. The Next Generation Energy Act will enhance Maryland's energy infrastructure by promoting the development of new nuclear energy generation stations and streamlining the procurement and permitting processes.

However, to fully address Maryland's energy needs and enhance reliability, we propose amendments to include a battery storage procurement component and accompanying labor standards. Battery storage is essential for maximizing the efficiency of energy generation sources, no matter the type. This approach enhances grid stability, ensuring a consistent energy supply, even during fluctuations in generation or demand. It also protects consumers from volatility by using stored energy to mitigate price spikes.

Incorporating battery storage into HB 1035 creates a solution that more closely aligns with energy goals while creating quality jobs for Marylanders. We urge the Committee to consider this addition and pass a bill that secures Maryland's energy future through a balanced and forward-thinking strategy.

Thank you for your time and consideration.

Sincerely,

Rico Albacarys Assistant Business Agent IBEW Local 24

M&A_Aaron Bast_Ironworkers Local 5_HB1035 SB937_FW

Uploaded by: Roger Manno Position: FWA



TESTIMONY OF AARON BAST BUSINESS MANAGER & FINANCIAL SECRETARY-TREASURER, IRON WORKERS LOCAL 5

SUBMITTED TO THE HOUSE ECONOMIC MATTERS COMMITTEE & SENATE EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

REGARDING SB937 / HB1035 – SUPPORT WITH AMENDMENTS

Chairs Feldman and Wilson, and esteemed members of the committees, I appreciate the opportunity to testify on behalf of Iron Workers Local 5. Our union represents the hardworking men and women who build and maintain the infrastructure critical to Maryland's economic and energy future. Our workforce, composed of thousands of skilled professionals, contributes daily to the state's energy, industrial, and commercial development.

As Maryland charts its course for long-term energy planning, it is crucial that legislative efforts support economic growth, workforce development, and energy security without unnecessary constraints. This bill, while a step forward, requires key adjustments to ensure Maryland remains competitive and adaptable in an evolving energy landscape.

A significant concern in this legislation is the proposed restriction on behind-the-meter (BTM) configurations for data centers. This provision is not only premature but also potentially damaging to Maryland's economic competitiveness. The conversation around BTM configurations is far from settled at the federal level, with ongoing discussions at FERC shaping the regulatory outlook. Unfortunately, testimony from Maryland Senator Katie Fry Hester at the FERC Colocation Technical Conference mischaracterized the state's position, creating a misleading narrative that does not reflect the broad spectrum of views within the Maryland General Assembly or the energy sector. Our partners, including IBEW Local 26, the Mid Atlantic Pipe Trades Association (UA), the Ironworkers District Council of the Mid-Atlantic States, and represented by attorney Roger Manno, are actively involved in FERC proceedings to ensure that these issues are addressed with the depth and expertise they require. It is imperative that Maryland refrains from implementing state-level restrictions before these matters are resolved at the federal level.

The role of nuclear energy in Maryland's energy future is another critical consideration. While SB937 / HB1035 takes an important step in recognizing the value of nuclear power, its procurement structure lacks the necessary financial stability to attract essential private investment. Iron Workers Local 5 fully supports an amendment put forth by Constellation that introduces a state-level safety net in the event of federal Production Tax Credit (PTC) reductions

www.ironworkers5.org



or eliminations. Ensuring the economic viability of Maryland's existing nuclear facilities, such as Calvert Cliffs, is essential for a reliable, carbon-free energy future. The state must collaborate closely with industry stakeholders to develop a procurement structure that fosters sustainable investment and ensures long-term success in nuclear energy.

Additionally, this bill's study language regarding utility-owned generation is overly restrictive. A narrowly focused study on a single procurement model does not serve Maryland's best interests. Instead, a broader, more comprehensive analysis of energy procurement options—like the approach taken in the Hester/Crosby bill—should be pursued. Maryland needs a fact-based assessment of multiple procurement strategies to determine the most effective, cost-efficient path forward.

Maryland stands at a pivotal moment in shaping its energy strategy. SB937 / HB1035 lays the foundation for progress, but it must be refined to avoid unintended consequences that could hinder economic growth and job creation. Removing the premature restrictions on data centers, strengthening nuclear procurement with Constellation's amendment, and expanding the scope of the utility ownership study are necessary steps to ensure a balanced and future-ready energy policy.

I appreciate your time and consideration and look forward to continued discussions on these vital issues.

Aaron Bast Business Manager & Financial Secretary-Treasurer Iron Workers Local 5

M&A_Chris Madello_HB1035 SB937_FWA.02.26.25.docx.p Uploaded by: Roger Manno

Position: FWA

Journeymen Pipe Fitters and Apprentices



Local Union No. 602

8700 ASHWOOD DRIVE • 2ND FLOOR • CAPITOL HEIGHTS, MD 20743

TELEPHONE: (301) 333-2356 • FAX: (301) 333-1730 AFFILIATED WITH AFL-CIO

TESTIMONY OF CHRIS MADELLO, BUSINESS MANAGER & FINANCIAL SECRETARY-TREASURER, UA STEAMFITTERS LOCAL 602

SUBMITTED TO THE HOUSE ECONOMIC MATTERS COMMITTEE & SENATE EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

SB937 / HB1035 – PUBLIC UTILITIES - ELECTRICITY GENERATION PLANNING -PROCUREMENT, PERMITTING, AND CO-LOCATION (NEXT GENERATION ENERGY ACT)

FAVORABLE WITH AMENDMENTS

Dear Chairs Feldman and Wilson, and honorable members of the Senate Education, Energy, and Environment Committee, and the House Economic Matters Committee:

Thank you for the opportunity to present my testimony. My name is Chris Madello, and I have the privilege of representing UA Steamfitters Local 602, a leader in Maryland's skilled labor force, particularly within the energy sector. While we support SB937 / HB1035, we believe key amendments are necessary to align the legislation with Maryland's long-term energy and workforce needs.

Introduction to UA Steamfitters Local 602

UA Steamfitters Local 602 represents more than 6,000 Journeymen and 1,200 Apprentices, along with 205 signatory mechanical construction and service contractors in the heating, air conditioning, refrigeration, and process piping industry across the Washington, D.C. metropolitan area. In 2024 alone, our members performed over 9 million work hours. Our partnership with contractors through the Mechanical Contractors Association of Metro Washington (MCAMW) fuels local economies, generating approximately \$2 billion in annual revenue and contributing \$500 million in state, federal, and local taxes.

Our expertise extends to constructing and maintaining data centers, power plants, LNG facilities, and other major industrial projects throughout the tri-state region. Given this

CHRISTOPHER M. MADELLO BUSINESS MANAGER FINANCIAL SECRETABY TREASURER SIDNEY O. BONILLA ASSISTANT BUSINESS MANAGER SEAN T. STRASER BUSINESS AGENT GREGORY L. DAVIS BUSINESS AGENT TIMOTHY L. BIGGS BUSINESS AGENT ROBERT T. GIFFORD BUSINESS AGENT

RAYMOND E. BLACK BUSINESS AGENT

B-21

experience, we are uniquely positioned to contribute to discussions shaping Maryland's energy policies.

Data Center Restrictions Are Premature

The bill's restrictions on behind-the-meter (BTM) energy configurations for data centers are deeply concerning. There is no pressing justification for banning this model, particularly while regulatory discussions remain active at FERC. Testimony provided by Maryland Senator Katie Fry Hester at the FERC Colocation Technical Conference, which inaccurately suggested a unified stance on behalf of the State of Maryland, likely influenced both FERC and the Public Service Commission's report on co-location. This misrepresentation may have prejudiced the issue, which remains a subject of ongoing debate within the Maryland General Assembly, among states, and at FERC itself.

UA Steamfitters Local 602, through our regional Mid Atlantic Pipe Trades Association (UA), along with our partners at IBEW Local 26, the Ironworkers District Council of the Mid-Atlantic States, is actively engaged in two separate FERC proceedings on this matter, represented by our attorney Roger Manno. The stakes in these proceedings are high, with significant implications for the tens of thousands of union workers who are integral to the data center industry's expansion. Given the evolving nature of this issue and the ongoing litigation, Maryland should not take premature action to restrict BTM configurations. Instead, we strongly recommend removing this restriction entirely and allowing the federal process to reach a resolution before the state imposes limitations.

Strengthening the Nuclear Energy Procurement Framework

We strongly support Maryland's investment in nuclear energy, but the procurement model in SB937 / HB1035 requires further refinement. The OREC-like structure, modeled after offshore wind, lacks the necessary framework to attract significant nuclear investment. While we favor the approach outlined in Senator Brooks' Decarbonization Infrastructure Solutions Act (SB716), which elevates nuclear to Tier 1 of the Renewable Portfolio Standard (RPS), we also acknowledge the need for ongoing stakeholder engagement to improve the procurement structure in SB937 / HB1035.

Our partnership with Constellation has demonstrated the importance of structuring nuclear policy in a way that ensures economic feasibility and long-term viability. We strongly endorse an amendment proposed by Constellation that would establish a state-level financial safeguard should federal Production Tax Credits (PTCs) be reduced or eliminated. This measure would help ensure the continued viability of Maryland's existing nuclear assets, including Calvert Cliffs, and provide stability for future nuclear investments.

Utility Ownership Study Presents a Limiting Approach

While we have concerns about utilities entering power plant construction without prior experience, our primary objection is to the uncodified study language that narrowly

examines utility-owned generation. This study's scope is too restrictive and does not provide the comprehensive analysis needed to evaluate Maryland's energy future.

A better alternative is the approach outlined in the Hester/Crosby bill, which examines a range of procurement strategies to determine the most effective and cost-efficient solutions for Maryland. We urge the removal of this limited study language in favor of a broader, more inclusive assessment.

Conclusion

Maryland is at a critical juncture in shaping its energy future. SB937 / HB1035 is a step in the right direction, but thoughtful amendments are necessary to ensure that energy policies support reliability, affordability, and strong labor protections. By incorporating Constellation's proffered amendments and removing unnecessary restrictions on data centers, Maryland can develop a responsible, forward-thinking energy policy that benefits both workers and consumers.

We urge the committees to adopt these amendments to support Maryland's workforce and secure a sustainable energy future.

Thank you for your time and consideration. I am available for any further discussions or questions.

lom. Mello

Chris Madello Business Manager / Financial Secretary Treasurer UA Steamfitters Local 602

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Position: FWA



SUBMITTED TO THE HOUSE ECONOMIC MATTERS COMMITTEE & SENATE EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

REGARDING SB937 / HB1035 – SUPPORT WITH AMENDMENTS

Chairs Feldman and Wilson, and distinguished members of the committees, I appreciate the opportunity to submit testimony on behalf of the Mechanical Contractors Association of Metropolitan Washington (MCAMW). Representing 200 construction contractors employing approximately 10,000 workers and 1,000 apprentices across the DMV region, our organization is deeply invested in policies that ensure a sustainable energy future for Maryland while supporting the skilled workforce that powers our infrastructure. Our partnerships with local unions, hiring halls, and apprenticeship training centers under the Mid-Atlantic Pipe Trades Association strengthen Maryland's labor pipeline, contributing to an economic footprint of \$2 billion in annual revenue and generating \$500 million in state, federal, and local tax contributions each year.

This legislation, while well-intentioned, contains provisions that must be refined to ensure Maryland remains competitive in energy infrastructure and job creation. First, the proposed restrictions on behind-the-meter (BTM) configurations for data centers are premature. The regulatory landscape on this issue is still evolving at FERC, and any policy restricting BTM options should be developed only after the federal process is fully resolved. Misrepresentations made at the FERC Colocation Technical Conference by Maryland Senator Katie Fry Hester have influenced ongoing discussions, leading to the mistaken perception that Maryland holds a unified stance on this issue. However, there is no consensus within the Maryland General Assembly or the broader energy sector on this matter. Our signatory union partners at the Mid-Atlantic Pipe Trades Association (UA), as well as IBEW Local 26, the Ironworkers District Council of the Mid-Atlantic States, and represented by attorney Roger Manno, are engaged in active FERC litigation on this matter. Any state-level action should wait until FERC has resolved these issues to ensure Maryland's regulatory decisions are well-informed and aligned with broader market developments.

Second, Maryland's commitment to nuclear energy is commendable, but its procurement model requires refinement. While the framework outlined in SB937 / HB1035 takes a step forward, the OREC-like model is insufficient to attract the necessary private investment. MCAMW strongly supports the approach taken in Senator Brooks' Decarbonization Infrastructure Solutions Act (SB716), which would elevate nuclear energy to Tier 1 of the Renewable Portfolio Standard (RPS). We also support an amendment proffered by Constellation that would establish a state-level safeguard in the event that federal Production Tax Credits (PTCs) are reduced or eliminated. Ensuring the financial sustainability of Maryland's existing nuclear assets, particularly Calvert Cliffs, is critical for maintaining a stable, carbon-free energy supply. Moreover, collaboration with stakeholders—including private sector partners with operational experience—will be necessary to build a procurement structure that fosters long-term investment in Maryland's nuclear sector.

Another pressing concern is the study language regarding utility-owned generation. The scope of this study is too narrow and fails to consider the full range of procurement structures that could serve Maryland's energy needs. Instead of focusing solely on one model, policymakers should adopt a broader evaluation approach, similar to what is outlined in the Hester/Crosby bill, which examines multiple procurement strategies. A robust and data-driven analysis of Maryland's energy procurement options is essential to ensure cost efficiency and reliability.

The energy policy decisions Maryland makes today will have lasting impacts on the workforce, economic growth, and energy stability of the state. While SB937 / HB1035 represents an important step forward, it must be amended to reflect the realities of an evolving energy landscape. Removing unnecessary restrictions on data center energy configurations, strengthening the nuclear procurement framework through Constellation's proposed amendment, and broadening the scope of the utility study will ensure a stronger, more sustainable energy future.

I appreciate your time and consideration and welcome further discussion on these matters.

Thomas Bello Executive Vice President Mechanical Contractors Association of Metropolitan Washington (MCAMW)

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Position: FWA







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HOUSE ECONOMIC MATTERS COMMITTEE & SENATE EDUCATION, ENERGY, AND THE ENVIRONMENT COMMITTEE

SB937 / HB1035 SUPPORT WITH AMENDMENTS

Chair Feldman, Chair Wilson, and Members of the Committees,

On behalf of UA Plumbers & Gasfitters Local 5, representing over 1,900 skilled members and 400 apprentices, I submit this testimony as Support with Amendments to SB937 / HB1035. UA Plumbers & Gasfitters Local 5 is dedicated to representing the expert tradespeople who develop and sustain vital energy and water infrastructure throughout the Washington, D.C. region. Our members are integral to key projects like power plants, data centers, and industrial facilities, ensuring the dependable and safe distribution of energy resources. By driving job creation, boosting revenue, and supporting Maryland's economic expansion, our industry plays a crucial role in shaping the state's future.

Concerns Regarding Data Center Energy Restrictions

A key concern in this legislation is the restriction on behind-the-meter (BTM) energy configurations for data centers. This limitation lacks urgent justification, especially as FERC and other regulatory bodies continue to evaluate the issue. Testimony at the FERC Colocation Technical Conference by Maryland Senator Katie Fry Hester inaccurately suggested a consensus for Maryland, potentially influencing FERC and Public Service Commission reports while disregarding diverse perspectives within the Maryland General Assembly.

UA Plumbers & Gasfitters Local 5, through the Mid Atlantic Pipe Trades Association (UA), along with IBEW Local 26, the Ironworkers District Council of the Mid-Atlantic States, and our attorney Roger Manno, are actively engaged in two FERC proceedings on this matter. The outcome of these cases has significant implications for thousands of union workers in the data center sector. Given ongoing regulatory discussions, Maryland should avoid premature legislative action. We recommend eliminating the BTM restriction entirely and allowing federal resolution before making state-level decisions.

Ensuring a Viable Nuclear Energy Procurement Model

We support Maryland's commitment to nuclear energy expansion but believe SB937 / HB1035 requires refinement for a robust and practical procurement process. The proposed OREC-like framework, modeled after offshore wind, lacks the stability needed for long-term nuclear investment.

Our partnership with Constellation has highlighted the need for structured nuclear policy that ensures economic feasibility and long-term viability. While we support Senator Brooks' Decarbonization Infrastructure Solutions Act (SB716), which elevates nuclear energy to Tier 1 of the Renewable Portfolio Standard (RPS), we urge continued stakeholder discussions to refine SB937 / HB1035. Additionally, we strongly endorse Constellation's proposed amendment to establish a state-level financial safeguard should federal Production Tax Credits (PTCs) be reduced or eliminated. This measure would protect Maryland's existing nuclear assets, including Calvert Cliffs, and provide stability for future investments.

Opposition to a Narrow Utility Ownership Study

Another concern is the bill's inclusion of a restrictive study focused solely on utility-owned generation. This narrow approach fails to provide a comprehensive evaluation of Maryland's procurement options. Instead of limiting the study to a single model, Maryland should conduct a broad, data-driven assessment of various procurement structures to determine the most effective and cost-efficient path forward.

The Hester/Crosby bill presents a more balanced approach by analyzing multiple procurement strategies. We strongly urge the removal of the narrow utility ownership study language in favor of a more inclusive and thorough examination of Maryland's energy future.

Conclusion

Maryland stands at a critical juncture in shaping its energy future. SB937 / HB1035 presents a major opportunity, but necessary amendments must ensure energy reliability, economic efficiency, and strong labor protections. By incorporating Constellation's amendments and removing unnecessary data center restrictions, Maryland can establish a forward-thinking energy policy that benefits both workers and consumers.

We urge the committees to adopt these amendments to support Maryland's workforce and secure a sustainable energy future.

Thank you for your time and consideration.

Michael Canales Assistant Business Manager UA Plumbers & Gasfitters Local # 5

Terriea "T" L. Smalls Business Mgr. / Financial Sec-Treas. Michael S. Canales, Jr. Asst. Business Manager Anthony A. Solis Business Rep. and Organizer Julius Wright Business Rep. and Organizer

HB1035_ SB937_Next Gen Act_Form Energy_FWA Testimo Uploaded by: Rosa Hance

Position: FWA



Committees: House Economic Matters & Senate Education, Energy & Environment

Testimony on: HB1035/ SB937 Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Position: Favorable with Amendments

Hearing Date: February 28, 2025

Form Energy respectfully requests a Favorable With Amendments (FWA) report from the committees on Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act).

The Next Generation Energy Act would set an emergency procurement for dispatchable generation which as defined in the proposed legislation would include long duration energy storage and in doing so set a precedent in the state by recognizing the significance of long duration energy storage. We appreciate the intent of this legislation and respectfully request continued consideration of the innovative and multifaceted nature of the energy storage industry.

Form Energy is a U.S. energy storage technology and manufacturing company that is commercializing a new class of multi-day energy storage system to enable a clean and reliable electric grid. Form Energy's first commercial product is an iron air battery system that can cost-effectively store and discharge energy for up to 100 hours at its rated capacity. Unlike lithium-ion batteries, which can only cost-effectively provide grid-scale energy for a few hours at a time, iron-air batteries can deliver energy for multiple days at a time. Made from some of the safest, cheapest, and most abundant materials on the planet – low-cost iron, water, and air – our battery system provides a sustainable and safe solution to meeting the growing demand for grid security and resiliency. Form Energy has more than 13 GWh of announced projects under contract and development throughout the U.S., the first expected to be deployed in 2025, all of which will be manufactured at Form Factory 1 in West Virginia.

Form Energy's batteries operate on the principle of reversibly rusting iron, which was first invented in the 1960s. Form Energy's batteries, while discharging, use air bubbles to convert iron metal to rust; while charging, the application of an electrical current converts the rust back to iron and the battery releases oxygen. Form Energy's battery system is composed of modules that are grouped together with auxiliary systems in weatherized, factory-assembled enclosures the size of shipping containers. Hundreds of these enclosures make up a modular, megawatt-scale power block that can be sited anywhere and used in a variety of applications including on either the transmission or distribution side of the grid. In December 2024, Form Energy announced that its iron-air battery technology achieved a key benchmark for safety by completing UL9540A safety testing, demonstrating no potential for thermal runaway and no fire risk under extreme abuse conditions, underscoring the safety of iron-air battery systems.

Form Energy's technology pairs well with a variety of energy resources and other types of short and long duration energy storage to optimize energy system configurations and does not need to be co-located for its benefits to be achieved. With rising energy demand, extreme weather, grid outages, and other prolonged stressors, technology capable of storing energy for multiple days will be critical to ensure grid reliability and lower electric system costs. Duration and reliability should be a strong component of any energy storage procurement program designed to meet the needs of today and tomorrow.

Due to the nature of this technology and the multi-day storage resource class being fundamentally different from other existing battery storage devices common today, we wish to request that in the amendment process the committees continue to recognize that the energy storage industry is not a monolith.

Additionally, we respectfully recommend that the Next Generation Energy Act goes one step further in setting a procurement that would support the development of long-duration and multi-day energy storage devices that would meet a number of needs: enabling the transition to a clean grid with diversified energy resources; bolstering grid reliability and resilience; improving system capabilities to withstand shocks and stressors; lowering electric system costs; and promoting economic development and job creation in Maryland communities.

Below is a brief summary of the amendments Form Energy proposes:

- Adding a long duration and multi-day energy storage procurement program, similar to those envisioned in MA, CA, VA, and others, to send a market signal that Maryland supports deployment of these important reliability resources;
- 2. Set the procurement target at 1,000 MW of long duration and multi-day energy storage resources by 2035 with interim goals in 2029 and 2032 for ensuring progress;
- 3. Ensuring that any final bill recognizes the reliability value of duration by establishing competitive procurements for storage that are based on the lowest cost of stored energy (\$/MWh); and
- 4. Adding criteria to any cost benefit analysis requiring the consideration of reliability value, avoided transmission and distribution costs, and availability of supply chains.

Form Energy stands ready to be of service to Maryland during its transition to clean energy. We respectfully request a Favorable with Amendments report from the relevant committees.

Sincerely,

Sarah Jackson Senior Policy Manager Form Energy, Inc. sjackson@formenergy.com

HB1035_Knishkowy_UNF.pdf Uploaded by: Aaron Knishkowy Position: UNF

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

My name is Aaron Knishkowy and I am a volunteer with the Chesapeake Climate Action Network. I am testifying today in opposition to HB1035, which would open the door to a new gas power plant being built in Maryland.

I can appreciate the fact that lowering the cost of electricity is an important goal this legislative session. I understand that increasing energy production is important for keeping Maryland competitive in attracting new businesses that create jobs and drive economic growth

However, it is essential that we achieve this goal through increased investments in solar power, utility-scale batteries, energy efficiency, and smart-grid technology. Hard data shows these efforts are faster, cheaper, and better for the environment and human health than a proposal to build a large new gas plant in the state.

I did a significant amount of organizing around this bill over the last few weeks. Dozens of Marylanders I spoke with were shocked that the MGA is considering a NEW fossil fuel plant when we've worked so hard to retire outdated, polluting ones. They were even more outraged when they learned that the plant would likely rely on fracked gas, a practice that was wisely banned by this body.

Put simply, a new gas power plant would be expensive to ratepayers, dangerous to nearby communities, and a misuse of state dollars. It would make Maryland's important climate goals significantly harder to reach, and the economic, public health, and environmental harm caused by the plant's carbon emissions would be measured in the hundreds of millions of dollars each year.

Thank you, and I urge an unfavorable report.

SB937-HB1035_CPSR_UNFAV_EEE-ECM_28Feb2025.pdf Uploaded by: Alfred Bartlett, MD

Position: UNF



Committee:Education, Energy and the Environment / Economic MattersTestimony on:SB937 / HB1035 "Public Utilities - Electricity Generation Planning - Procurement,
Permitting, and Co-Location (Next Generation Energy Act)"Position:UnfavorableHearing Date:February 28, 2025

The Chesapeake Chapter of Physicians for Social Responsibility (CPSR) respectfully submits this testimony in opposition to SB937 and HB1035. We appreciate Leadership's urgency in considering the rapidly increasing cost of electricity that is causing hardship for Maryland families. We also recognize the equally urgent intent to capture new jobs and revenue from emerging industries like Data Centers. We acknowledge the Maryland Energy Administration's conclusion that we have fallen far behind our targets for development of clean renewable energy while demand is expected to grow.

However, as an organization focused on addressing major threats to human health and well-being, we cannot agree with the basic propositions of this bill: that the response should be turning our focus and support to electricity production from additional gas-fired plants and from "new nuclear" energy, in the form of Small Modular Reactors (SMRs).

Neither of these solutions are consistent with the bill's name – **because both of them would create** significant risk and harm to *future generations* of Marylanders.

We know that other organizations will write at length about the documented experience that new nuclear electricity production is probably the most expensive form of power:

- ...that U.S. and global experience show that new nuclear plants cost more than twice as many billions of dollars and twice as many years as projected;
- ...that no SMRs have been successfully built in the U.S., and the one proposed project in Idaho was cancelled when costs almost tripled;
- ...that in any case, the long lead time potentially a decade required to build an SMR doesn't respond to our near-term need for more electricity.

But – in addition to those real and immediate concerns – our greatest concern is for the danger and potential harm that expanded nuclear power presents to future generations.

Nuclear energy generates a unique category of waste – in the form of "spent fuel" – that represents both present and generational danger to human and environmental health. Fissionable material (fuel) is removed from a nuclear reactor when it can no longer sustain the chain reaction that produces the reactor's thermal energy. It is then stored, initially in cooling tanks, and then in concrete-surrounded "dry casks." However, although it cannot sustain the reactor's chain reaction, **spent fuel is highly radioactive**.

It is extremely hazardous to human health both now and for centuries, containing long-duration isotopes that are also deadly. These include Plutonium-239, which makes up about half of the radioactive spent fuel and has a half-life of <u>24,000 years</u>. These are readily absorbed if released as particles and inhaled, or if they enter the food chain; they are retained in the body, and have severe long-term health effects including cancer.

Because it is extremely hazardous, spent fuel is kept at the reactor sites where it's generated.

- In 50-plus years, the U.S. government and nuclear industry have not been able to develop a safe "permanent" nuclear waste storage location (Nevadans rejected Yucca Mountain).
- As a result, Maryland has an estimated 1,420 metric tons (about 1,565 U.S. tons) of radioactive

spent fuel stored at Calvert Cliffs since those reactors began operating in 1975 and 1977.¹

Since this urgent push for new nuclear is substantially being driven by the plans to build Data Centers with large electricity demand, consider that:

- Just the three large data centers planned for Frederick, Prince George's, and Montgomery Counties have total projected electricity capacity needs of between 3,520 and 4,767 Megawatts (MW). (Calvert Cliffs total capacity is 1,800 MW.)
- Building a 300 MW SMR at Calvert Cliffs would meet less than 10 percent of this requirement.
- With an average proposed SMR size of 50 to 80 MW, meeting the remaining need for just these three centers will require between 40 and 90 SMRs.

Each new nuclear site will become an additional site for this "Forever radioactive waste;" so every site will be deadly – no matter the cooling system or present-day safety features, SMRs would produce radioactive spent fuel waste like larger reactors. They will therefore require continuous maintenance and security for centuries after any existing or new nuclear facility is "decommissioned." Spent fuel storage is also a potential target for terrorist attack, including the sort of aerial drone attack being widely seen in the Ukraine conflict. The release of radioactive material from such an attack would affect large numbers of people and render a large area uninhabitable. And, Plutonium-239 is the material used for building nuclear weapons – so at some future time the stored Plutonium in spent fuel is likely be a target for dangerous parties wanting to take it without regard to the broader hazard it represents.

In just the 2,000 years of the Christian era, we have seen the fall of whole civilizations – from the Romans to the Aztec; the Dark Ages, Revolutions and Civil Wars, World Wars, Depressions, the Holocaust, use of the Atomic Bomb, collapse of the Soviet Union, brutal ethnic wars in the Balkans and the Middle East. *Which of us can vouch to the generations that follow us for thousands of years that we can keep them safe from the danger we are creating?*

Building additional methane gas plants presents a different, but equally compelling, danger to future generations. Methane is a fossil fuel – burning it to produce electricity produces two main combustion products: water and CO_2 . A 200 MW capacity combined-cycle (most efficient) methane gas-burning plant will burn about 12 billion cubic feet of natural gas each year, producing about 650,000 metric tons (about 720,000 U.S. tons) of CO_2 each year.

However, an equal danger comes from leakage of methane along the pathway from extraction (drilling or fracking) through pipelines, compressor stations, and storage, to end use at the power plant. The amount of such leakage is estimated by the EPA to be about 1.4%;² independent studies suggest a leakage rate 50 percent or more greater, or about 2.3%.³ This means that supplying the methane to the CO₂-emitting plant just described would also release 3,200-5,300 metric tons of methane each year. And, with a near-term (20 year) climate driving potency equal to 84 times the equivalent weight of CO₂,⁴ this methane release from supplying a single plant would add the near-term climate disrupting equivalent of an additional 270,000-450,000 metric tons of CO₂ every year.

Math aside, these calculations simply confirm why adding more gas plants is a threat to future generations: methane and CO₂ drive climate change. And climate change – which is the danger we're trying to reduce - isn't reversible once it happens. So building more gas plants to solve our near term energy problems is like throwing gasoline on a fire to put it out.

¹ Nuclear Decommissioning Collaborative; Calvert Cliffs 1&2 <u>https://decommissioningcollaborative.org/calvert-cliffs-1-2/</u>

² U.S. Environmental Protection Agency; *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022* (published April 2024)

³ Brandt A., Stanford Doerr School of Sustainability, Environmental Assessment and Optimization; *Methane leakage from natural gas systems*; <u>https://eao.stanford.edu/research-project/methane-leakage-natural-gas-</u>systems?utm_source=chatgpt.com

⁴ McDonald J., Annenberg Public Policy Center, FactCheck.org; How Potent Is Methane?; 2018

In any case, methane burning plants are also expensive, and they won't happen quickly – even with "expedited review" by PJM (which has substantial participation by fossil-fuel producing state members), the design, approval, financing, and construction process will take years.

A final note: We might want to step back and question the assumptions underlying the push for these new generation-threatening energy sources.

- Just this week, Microsoft announced that it is beginning to cancel leases and lease options it had developed for Data Centers⁵ – in some cases, only those where the required power was already available or available within a short time made the cut.
- In addition, a recent analysis by Duke University's Energy Center found that managed voluntary curtailment of 0.5 percent of total power usage – a planned curtailment of less than 3 hours at a time – could provide the projected power needed for all anticipated Data Center development.⁶ As noted by one reviewer –

"The result comes just weeks after China's Deepseek AI program went public with a major breakthrough in its computational approach, upending the debate over how much new power capacity is needed in the years to come.

"The 'clearest takeaway' from the Duke study is that we might not need as many new gas power plants in the immediate future—or at all, according to the report's lead author, who said the findings should help bring new data centers online even faster."⁷

We strongly suggest that this General Assembly should pause before approving energy investments that represent such existential threats to our children, our children's children, and so many generations to come.

We instead suggest that legislature support the proposals before it that would allow the thoughtful planning that we need – the *Energy Resources Planning Act* and the *Data Center Impact & Analysis Act*. We further suggest that it support the proposals that will address key constraints and create effective incentives to accelerate development of the truly clean renewable energy that we are committed to – including the *Renewable Energy Certainty Act*, the *Abundant Affordable Clean Energy Act*, and the *Affordable Grid Act*.

We should build a path that our children can follow, not fear.

We therefore respectfully request an Unfavorable report on SB937/HB1035.

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

⁵ Bloomberg; Technology - Microsoft Cancels Leases for AI Data Centers, Analyst Says; 23February2025; https://www.bloomberg.com/news/articles/2025-02-24/microsoft-cancels-leases-for-ai-data-centers-analyst-says

⁶ Norris, TH; Duke University, Nicholas Institute for Energy, Environment & Sustainability; Rethinking Load Growth - Assessing the Potential for Integration of Large Flexible Loads in US Power Systems; February, 2025; <u>https://nicholasinstitute.duke.edu/publications/rethinking-load-growth</u>

⁷ Kaufman, A; Mother Jones Environment; Here's How We Can Power the AI Boom Without Building a Ton of New Gas Plants; 13February2025; <u>https://www.motherjones.com/politics/2025/02/new-duke-study-power-curtailment-ai-data-centers-nuclear-gas-plants/</u>

HB1035_UNFAV_HALL.pdf Uploaded by: Alphonse Hall Position: UNF

Leahhall77799@gmail.com (240) 309-1152

HB1035/SB937- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of my organization, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

HB1035_UNFAV_Preston.pdf Uploaded by: Amanda Preston

Position: UNF

HB1035/SB937 - UNFAVORABLE

Amanda Preston

Private Citizen

amandpa@gmail.com

304-767-8465

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of myself, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. Unfortunately, because of the time that it takes to build and begin operation of a new gas plant, this will not do anything in the near or perhaps even medium term to lower utility bills for Marylanders, who are very much feeling the impact of high energy prices – my last BGE bill was over \$300 for a house under 1700 sq. ft., despite keeping the thermostat under 70 degrees at all times. If the goal is to lower energy bills, a new gas plant is not the most effective strategy. Instead, we need to be investing in clean energy alternatives like batteries or solar, which can be online much faster.

Additionally, the cost of building the type of gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031, and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

Sincerely,

Amanda Preston

UNF.Amelia Farrell

Uploaded by: Amelia Farrell Position: UNF

HB1035/SB937- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee & Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

Allowing for a new gas plant to be built near my community is fiscally irresponsible and a poor solution to the energy problems we are facing. As a youth constituent of District 33C, I want my state to invest in my future, and our energy future. That investment should be in renewables, not fossil fuels.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death¹. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

¹ <u>https://www.epa.gov/power-sector/human-health-environmental-impacts-electric-power-sector</u>

I respectfully request an unfavorable report on HB1035/SB937.

QAC Solar Array Fact Sheet_HB1036_A Moredock Testi Uploaded by: Amy Moredock

Position: UNF


DEPARTMENT OF PLANNING & ZONING

110 Vincit St., Suite 104 Centreville, MD 21617

Telephone Planning: (410) 758-1255 Fax Planning: (410) 758-2905 Telephone Permits: (410) 758-4088 Fax Permits: (410) 758-3972

County Commissioners: James J. Moran, At Large Jack N. Wilson, Jr., District 1 J. Patrick McLaughlin, District 2 Philip L. Dumenil, District 3 Christopher M. Corchiarino, District 4

| To: | The Honorable C.T. Wilson | |
|----------|---|--|
| | Chair, Economic Matters Committee | |
| From: | Amy G. Moredock, Planning Director | |
| Date: | 28 February 2025 | |
| Subject: | OPPOSITION – HB1036/CF SB 931 | |
| - | Consideration of Queen Anne's County, MD Solar Provisions and the | |
| | 2024 Solar Solutions Workgroup as relates provisions outlined in HB1036/CF SB 931 | |

Ordinance No. 17-16 – Utility and Small Scale Solar Arrays

Queen Anne's County has been dedicated to supporting the State of Maryland's Renewable Energy Portfolio Goals as indicated by the enacting of Ordinance No. 17-16 as described below. Queen Anne's County, as well as many Maryland Counties, has been an active partner in ensuring the success of utility scale solar array projects as indicated in the statistics below. Queen Anne's County is a major contributor to the implementation of the REP Goals.

- In December 2017, the Queen Anne's County Commissioners enacted utility and small scale solar provisions creating a Utility Scale Solar Array Overlap (USSA) District Map within a two-mile radius on either side of the electric transmission lines with a capacity equal to or greater than 69 kV. This District permits utility scale solar arrays as a conditional use.
- Small scale solar arrays are limited in size to 2 megawatts and permitted as by-right accessory uses defined as a private use facility or net metering system generating solar energy for a single residential home or community neighborhood, a private entity, business, or institutional use. The system may be ground mounted or roof mounted.
- In 2022, the USSA District provisions were amended to expand the siting of a utility scale solar array that is *partially* located with the USSA.
- These provisions enable the County Zoning Administrator to issue building permits for large and small scale solar array projects.

Utility Scale Solar Array District (see attached map):

- A two-mile radius on either side of the electric transmission lines with a capacity equal to or greater than 69 kV. In total, this district encompasses 106,519 acres.
- After GIS analysis of the USSA, there are approximately <u>30,958 acres</u> of tillable land within the overlay area available for solar development.

Operating Community & Utility Solar Development in QAC:

- Bluegrass approx. 80 megawatts (Pilot program 408.8 acres)
- Lowin Farms approx. 10 megawatts
- Patchett/Cedar Lane approx. 6 megawatts
- Garcia approx. 2 megawatts (Pilot Program 18.5 acres)
- Jones Farm approx. 64 megawatts (Pilot Program 326 acres)
- TOTALapprox. 162 megawatts (Pilot Program 753.3 acres)

Approved Community & Utility Solar Development in QAC:

- Centreville White approx. 2 megawatts
- Red Lion approx. 2 megawatts
- <u>Cedar Lane Solar</u> <u>approx. 2 megawatts</u> TOTAL <u>approx. 6 megawatts</u>

Pending Community & Utility Solar Development in QAC:

• Ruthsburg Solar 1 approx. 5 megawatts

Maryland's Renewable Energy Goal (Renewable Portfolio Standard):

- By 2030: (mandated by law)
 - \circ 50% of the total energy sold in MD shall come from renewable resources.
 - Solar carve-out out of the above requirement, at least 14.5% of the energy shall come from solar facilities.
- By 2035: (Governor's goal, but not law yet)
 - o 100% of the total energy production in MD shall come from renewable resources.
- Acreage of land and megawatts required throughout the State to meet the solar goal of 14.5% by 2030.
 - Approximately anywhere from 11,000 acres to 18,000 acres of Utility-Scale Solar needed to meet the Maryland 2030 standard.
 - There are currently 1,914.44 acres under lease/PILOT/or otherwise dedicated to Utility Scale Solar projects in Queen Anne's County that are operating, under construction, or approved.
 - This represents 13.2% of the acreage needed required from Utility-Scale Solar to meet the Maryland 2030 standard (based on the average projected average needed: 14,500 acres).
 - Approximately 2,274 megawatts required from Utility-Scale Solar to meet the Maryland 2030 standard (per information from the presentation of Bob Sadzinski Director, Power Plant Research Program, at the 2023 MDA Solar Summit).
 - There are currently 168 megawatts of Utility Scale Solar projects in Queen Anne's County that are operating, under construction, or approved.
 - This represents 7.4% of the megawatts required from Utility-Scale Solar to meet the Maryland 2030 standard.

2024 Solar Solutions Workgroup

Queen Anne's County was vested in the 2024 Solar Solutions Workgroup (and in the 2023 Solar Workgroup).

Directly below is a list of the stakeholders who were at the table and/or invited to come to the table. These participants were engaged to varying degrees but with sufficient consistency from the initial 14 June 2024 meeting to the very last meeting on 22 October 2024. We met 6 times, and each meeting was a full-day session. We absolutely worked together and individually in preparation for those work sessions and dedicated at least 100 hours to the Final Draft Bill which was completed in October 2024.

- Administration: Gov's Office, DNR/PPRP, MDA, MDP, MEA, PSC
- Counties: MACo, QAC, FredCo
- Environmental Community: LCV, Forever Maryland
- Industry: CI Renewables, Chaberton, LightStar, REV Renewables, Urban Grid [CHESSA was invited but declined to participate]

Our mission was to put forward a bill in which all parties achieved reasonable transparency, predictability, and compromise and could collectively support a successful piece of solar legislation in the 2025 Session (unlike the same exercise which occurred in 2024 from which the solar industry walked from the table much more quickly and resulted in HB1045/SB1025).

Despite this setback, Queen Anne's County remains committed to continued partnership with a focus on key siting standards agreed upon in October 2024.



UNF.Ann Bristow

Uploaded by: Ann Bristow Position: UNF

SB0937: Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Education, Energy, and the Environment: February 26, 2025

UNFAVORABLE

Testimony submitted by: Ann Bristow, Ph.D., Emeritus Professor, Frostburg State University 92 Carey Run, Frostburg, MD 21532. (Garrett County)

I am a public health professional and served as a **Commissioner on Gov. O'Malley's Marcellus Shale Safe Drilling Initiative**.

I am writing to specifically **oppose natural gas dispatchable energy generation projects** that would be permitted under this bill.

I also object to the section of this bill that **only requires a cost-benefit analysis of environment benefits, health benefits, and environmental impacts of the project to the citizens of the State — NOT HEALTH HARMS** [Section 7-1210 (4) (VI)].

Everything I learned as a Commissioner about public health harms and harms to the environment — especially water sources, moved me to support the 2017 fracking ban in Maryland. Since 2017 I have continued to follow research on public health harms, especially harms to our PA neighbors, as there is ongoing research there.

Sources of fracked gas for MD electricity generation would likely come form PA and WV, as well as TX from the Texas Eastern transmission line to Accident, MD. All three states are known to have few regulations preventing harm to their residents.

And because Maryland has been spared these health and environmental harms, it is irresponsible, if not immoral, to promulgate these harms in other states by importing their fracked gas here to combust for electricity.

HB1035_UNFAV_Manuel.pdf Uploaded by: Anne Manuel Position: UNF

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

I am writing to strongly urge an unfavorable report on HB1035/SB937, the inaptly named "Next Generation Energy Act." I have lived in Silver Spring, Maryland for forty years. As someone who is deeply concerned about the existential threat posed by climate change, I regularly volunteer with the Chesapeake Climate Action Network (CCAN). My number one consideration when deciding how to vote is the candidate's record on climate change.

The core of my objection to the "Next Generation Energy Act" is that it will drag us back to "Last Generation" construction – new methane gas plants. These plants are hardly the energy of the future. More likely they are the energy that will mess with our futures. These plants will be extraordinarily expensive, slow to come on line, damaging to our environment, and will move our climate goals out of reach.

Any new gas plant in Maryland is expected to cost some \$3 billion and to take years before it is ready to distribute power. Meanwhile, there are many renewable energy sources in the cue with PJM. Any of those sources could be brought on line more quickly and at less expense than gas plants.

Moreover, a new methane gas plant would be terribly damaging to our environment. Maryland banned fracking for good reason in 2017. What sense does it make now to build gas plants that will distribute fracked gas from Pennsylvania? Pollution from the plant will be extremely damaging to communities that already face a greater burden from climate change and fossil fuel pollution. Emissions from gas plants will increase rates of pulmonary and cardiovascular diseases as well as asthma and stroke.

Finally, Maryland has committed to have converted to 100% clean energy by 2035. Building any new gas plants will blow a hole in that commitment for decades to come. Clean and economical

alternatives are already here. The only ones who will benefit from new gas plants in Maryland will be the fossil fuel companies – the rest of us will lose.

For these reasons, I respectfully request an unfavorable report on HB1035/SB937.

In addition to helping us to meet the greenhouse gas emission reductions we committed to in the Climate Solutions Now Act, the Better Buildings Act will reduce energy costs and improve public health by requiring all newly constructed buildings to be heated without the use of fossil fuels.

In terms of meeting our climate goals, electrifying all new construction should be a no-brainer. More than half of Maryland's energy-related greenhouse gas emissions come from buildings, 2/5s of that from burning fossil fuels for heating and cooking. Continuing to install gas hookups to new construction would lock us into several more decades of emissions and derail our climate commitments.

Switching to electricity for heating and cooking is becoming increasingly economical with the availability of improved technologies. In trying to do our part for the climate in our 103-year-old house, my husband and I switched to energy efficient heat pumps this year, leading to a noticeable reduction in our heating bills. As everyone on this committee can attest, the early months of 2025 have put any heating system to the test and we have been happy with the outcome. And once summer comes in, our systems become highly effective air conditioners. As soon as our water heater and stove reach the ends of their life spans, we plan to replace them as well with electric appliances.

Research has increased our awareness of the threat to health posed by gas appliances, which emit carbon monoxide, nitrogen dioxide, benzene and formaldehyde into our homes. A study published in the International Journal of Epidemiology found children living in a home with a gas appliance were 42% more likely to develop asthma than those without such exposure. Gas stoves leak chemicals, including the carcinogen benzene, even when turned off. Meanwhile fossil fuel furnaces in Maryland are responsible for three times as much pollution as all the

state's power plants combined. Getting fossil fuels out of our buildings makes sense from an economic, health, and climate viewpoint.

Maryland would hardly be an outlier in approving this legislation. Similar laws have been enacted by more than 100 state and local governments, including several Maryland counties.

At a time when our nation's efforts to fight climate change are under assault, Maryland needs to stand firm and meet our commitments. This effort would be a win for the economy and public health as well.

Thank you for the opportunity to bring my concerns to the committee's attention in support of SB0804..

HB1035_CCAN_Baker_UNF.pdf Uploaded by: Brittany Baker



HB1035/SB937- Public Utilities- Electricity Generation Planning- Procurement, Permitting, and Co-Location (Next Generation Energy Act)

> Testimony of Brittany Baker, Maryland Director Chesapeake Climate Action Network (CCAN) Action Fund UNFAVORABLE February 28, 2025

Chair Feldman, Vice Chair Kagan, Chair Wilson, Vice Chair Crosby, and Members of the Education, Energy, and Environment and Economic Matters Committees,

Rising utility bills are a very salient and crippling problem for Maryland households. The recent utility bill increases that Maryland experienced at the start of 2025 were caused by an intentional increase in spending by utility companies on maintaining gas pipes through the STRIDE program. The additional increases expected this summer can be attributed to the most recent capacity market auction at PJM and will be equally painful. Near-term solutions are needed to protect households from these escalating costs.

At the same time, the escalating climate crisis is affecting households and communities in Maryland. The U.S. Treasury Department analysis of the household level impacts of climate change includes additional rises in utility bills due to increased number of days of temperature extremes, added healthcare costs due to climate-related hospitalization and medical services, and destruction to property due to extreme weather impacts.¹ Maryland is uniquely vulnerable to specific climate impacts such as sea-level rise, saltwater intrusion, and extreme heat because of our 3,000+ miles of coastline, Eastern Shore communities, and large urban populations.

Maryland has codified its commitments to environmental justice and climate action with bolder action each year. This is the year to direct investments into clear energy infrastructure that will lower bills and slow climate change. This is not the year to expedite the \$3 billion construction of a methane gas generation facility.

Chesapeake Climate Action Network (CCAN) Action Fund opposes the Next Generation Energy Act's "Emergency Energy Procurement" for the following reasons:

¹ <u>https://home.treasury.gov/news/press-releases/jy1775</u>

1. <u>New gas would be polluting communities and walking back on our climate commitments.</u>

Gas generation emits climate pollution and local particulate/air pollution. Methane is responsible for around 30% of the rise in global temperature.² The global warming potential (the amount of warming impact of each type of greenhouse gas) is much higher for methane than carbon dioxide.

2. <u>The specifications in the bill lack parity. Although battery storage is listed in the</u> <u>"dispatchable energy" language, the unique needs and features of battery storage</u> <u>limit its ability to gualify for the October 1, 2025 solicitation.</u>

Most of the battery storage projects that are set to be ready for construction in Maryland in the near future are 4-hour battery storage projects. These do not meet the ELCC requirements outlined in the bill. Also, the bill as written does not provide any financial support to ensure battery storage projects will have the financing to ensure deployment.

3. <u>There is no modeling to show that the amount of new generation outlined in the bill</u> is needed in the short term.

The bill suggests that an RFP for the amount of gas generation equivalent to the current combined summer peak capacity profiles of coal and oil is the requirement. This equals 3 gigawatts of gas generation, the same as 2 Brandon Shores powerplants. This amount of gas generation will likely cost upwards of \$3 billion. Fortunately, the bill includes language that prevents these costs from being rate based (paid for by utility customers). However, \$3 billion dollars of clean energy investments would be no-regrets investments into the clean energy future that Maryland has been working toward for over 20 years.

4. <u>Building a new gas generation facility will not lower utility bills in the short term</u> nor ensure stable utility prices in the long term.

A new gas-powered facility would take at least 5-8 years to complete. Battery storage projects can be constructed in less than 3 years. *While the provisions of the Next Generation Energy Act have the potential to lower PJM capacity auction costs many years from now, they do nothing to lower energy costs in the near term.* Further, the gas commodity will always need to be purchased from out-of-state, unless we repeal our fracking ban, which means gas generation facilities will always be exposed to commodity price fluctuations.

5. <u>There are other carbon-free, cheaper, quicker options to upgrade the grid and</u> <u>ensure Maryland has the near-term energy it needs.</u>

These opportunities include battery storage deployment, grid enhancing technologies, reforming the RPS, and changing the Solar Renewable Energy Credit structure. Many of these technologies are outlined in other legislation that is being considered this year. Google recently commissioned a study from Brattle, a respected research firm, to examine the relative cost of different approaches to meeting new energy demand. They compared building a new gas plant to deploying batteries on the transmission and distribution grid. They found that batteries can mean new energy demand at a lower cost than a new gas plant.³

6. <u>An expedited permitting process would practically ensure the new gas generation</u> <u>facility is located in the place where a currently operating facility is retiring- an</u> <u>overburdened and underserved community.</u>

² <u>https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change</u>

³ https://www.brattle.com/insights-events/publications/real-reliability-the-value-of-virtual-power/

The expedited process would further limit the community's ability to fight against the chosen location and advocate for community benefit provisions.

7. <u>The timelines in the bill are too short to ensure that the gas generation build out is</u> <u>prudent and necessary.</u>

The timelines in the bill are for an October 1, 2025 request for proposals, a subsequent 120 day closing date, a 90 decision window, and a 6 month CPCN process.

- 8. Green hydrogen is an unproven, unscaled technology.⁴
- 9. <u>Carbon capture and storage is prohibitively expensive and is not currently being</u> <u>widely adopted.⁵</u>
- 10. <u>We have already paid transmission projects to cover the energy shortfalls that we are expecting from the closing of the Brandon Shores power plant.</u>

The other provisions in the bill could be useful in creating the next generation of energy needed to meet Maryland's shifting energy needs. However, due to the "Emergency Energy Procurement" section, we are unfavorable with the bill as drafted. Attached, please find a list of organizations and Maryland residents who are vehemently opposed to new gas generation in the state.

We ask that you please seriously consider our concerns and are delighted to work together to create a pathway for Maryland's next generation of truly clean energy resources.

Respectfully,

Brittany Baker

Maryland Director

Chesapeake Climate Action Network (CCAN) Action Fund

⁴ <u>https://www.canarymedia.com/articles/hydrogen/the-problem-with-making-green-hydrogen-to-fuel-power-plants</u>

⁵ Institute for Energy Economics and Financial Analysis "Carbon Capture and Storage" Factsheet. 2023. LINK

HB1035_UNFAV_Earth Ministry of the River Road Unit Uploaded by: Bruce Davis



HB1035/SB0937 – Unfavorable Bruce Davis Earth Ministry of the River Road Unitarian Universalist Congregation Bdavis39@comcast.net (240) 477-5324

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of the Senate Education, Energy and the Environment Committee and the House Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees:

The Earth Ministry¹ of the River Road Unitarian Universalist Congregation, in Bethesda, MD, urges the House Economic Matters Committee to issue an **UNFAVORABLE** report on the Next Generation Energy Act, HB1035/SB0937.

The Climate Solutions Now Act of 2022 established ambitious goals for reducing greenhouse gas pollution in Maryland: an interim goal of a 60% reduction below 2006 emissions by 2031, with a requirement to reach net-zero by 2045. The Next Generation Energy Act will needlessly and unjustifiably delay or prevent the achievement of these goals. Therefore, the Committee should report the Next Generation Energy Act **unfavorably**.

The Next Generation Energy Act provides for constructing or expanding "Natural Gas Dispatchable Energy Generation Projects." The goal of these projects is to satisfy peak electricity demands that are now satisfied by existing coal-fueled power plants in Baltimore that are scheduled to be decommissioned. However, there is no exigency for replacing the energy produced by these plants because they will remain in operation until the completion of a power line, now under construction, that will provide replacement power generated elsewhere.

Even more compelling reasons <u>not</u> to build the new gas-burning plants are that: (1) they would be costly to build and supply; (2) they would emit greenhouse gas pollution; (3) they would not come online until they were built, which could take 3-5 years; and (4) they would have useful lives of approximately 30 years, extending beyond Maryland's target date for achieving net zero greenhouse gas emissions (2045).

¹ The Earth Ministry is a member-created committee established in accordance with the Congregation's bylaws. This testimony is submitted by and on behalf of the Earth Ministry. Its members feel a moral obligation to do all they can to put a stop to greenhouse gas pollution that warms the earth, changes its climate, and ultimately brings great injury and suffering to people and all living beings. The Congregation itself has not taken a position regarding the Next Generation Energy Act.

HB1035/SB0937 - Unfavorable

Testimony of the Earth Ministry of the River Road Unitarian Universalist Congregation Hearing date: February 28, 2025

When 2045 arrives, Maryland would be required either to shut down the new gas-fueled plants, which would scrap their remaining useful lives, or to allow them to continue in operation, which would prevent Maryland from achieving its greenhouse gas reduction goals.² Who would pay for a wasteful shutdown? It won't be the power companies. Rate payers, mostly ordinary Marylanders, would pay the costs in the form of increased electricity bills.

Maryland has a better way to satisfy peak electricity demands. The Abundant, Affordable Clean Energy (AACE) Act now before the General Assembly (HB0398/SB0316) proposes increased battery storage as the solution. Power companies would use existing power facilities to charge storage batteries when electricity demand is low; and they would discharge electricity from the batteries back into the grid when electricity demand is high. Battery storage: (1) costs less than new gas-powered electric generation plants; (2) can be brought online sooner than new gas-powered plants; (3) does not emit greenhouse gases; and (4) will not need not be decommissioned in 2045. Battery storage is a "no regrets" solution because the batteries will be needed to stabilize the grid when new, clean wind and solar power come online.

For these reasons, the Earth Ministry respectfully requests an **unfavorable** report on the Next Generation Energy Act.

² The Next Generation Energy Act provides that the new gas-fueled power plants must be capable of conversion to new power sources: hydrogen or zero-emission biofuels. However, the feasibility of a hydrogen or biofuel conversion prior to 2045 is speculative. The conversion would depend on development of an affordable and reliable supply of zero-emission fuels produced by technologies and delivered by infrastructure that does not exist and may never exist.

SB 937_HB 1035_MDSierraClub_opp_28February2025.pdf Uploaded by: Carlo Sanchez



| Committee: | Education, Energy, and the Environment/ Economic Matters | |
|----------------------|---|--|
| Testimony on: | SB 937/ HB 1035, Public Utilities - Electricity Generation Planning - | |
| - | Procurement, Permitting, and Co-Location (Next Generation Energy Act) | |
| Position: | Unfavorable | |
| Hearing 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 937/ HB 1035 – Next Generation Energy Act:

Maryland's demand for electricity is poised to grow for the first time in 20 years, due especially to the growth of data centers and on-shoring of manufacturing. The decline in demand over the past two decades largely reflects the success of Maryland's energy efficiency programs; more sophisticated peak-reduction strategies like virtual power plants, should remain part of the solution. But even with these programs, Maryland should focus on accelerating its homegrown energy supply.

Maryland can meet many of its future energy needs through targeted investments in clean energy, battery storage, and smart grid tools like Virtual Power Plants. These strategies will allow Maryland to meet its energy needs while improving public health, protecting ratepayers, and advancing our climate goals. The rapid improvements in clean-energy technology over the past decade means that in most cases, the price of renewables is often cheaper than polluting oil, gas, or coal.¹

Smart deployment of battery storage can work in partnership with increasing clean energy on the grid to increase grid reliability, decrease electricity costs at times of peak demand, and minimize the need for expensive, polluting fossil fuel "peaking" generation. Additionally, long-duration battery storage can help reduce the need for new generation capacity, provide grid reliability, and be more rapidly deployable than building fossil fuel power plants.

The Next Generation Energy Act recognizes the importance of accelerating in-state generation in Maryland, but Sierra Club believes that we can better and more cost-effectively meet our energy needs through deploying clean renewable energy and battery storage, and advocating for more thorough resource and grid planning processes at PJM and on the part of utilities. This focus aligns with steps taken by the Renewable Certainty Act.

We encourage the committee to advance the bulk of the leadership package, including the Renewable Energy Certainty Act (SB 931/ HB 1036) and the Energy Resource Adequacy and Planning Act (SB 909/ HB 1037). We encourage the committee to apply the same principle of urgency reflected in this legislation, SB 937/ HB 1035, but remain focused on deploying clean energy and storage, with policy tools that will work for those technologies.

Further, the General Assembly has many opportunities this session to pass legislation that supports the deployment of solar, wind, battery storage, and energy efficiency – energy solutions that are ready, affordable, and effective today and can be implemented more quickly to address Maryland's energy needs. We urge the General Assembly to act on these opportunities.

¹ Lazard, "Levelized Cost of Energy: Version 16.0." 2023.

https://www.lazard.com/research-insights/2023-levelized-cost-of-energyplus/

Section Analysis:

"Dispatchable Energy" and Fracked Gas

SB 937/ HB 1035 directs the Public Service Commission to facilitate a competitive process for new energy generation, which aligns with the PJM definition of "dispatchable energy", which includes steam, gas, and battery storage. The winners of the process would qualify for an accelerated CPCN application process.

Changes to CPCN Process

Time is money when it comes to energy development, and Maryland should make every effort to streamline its permit and application processes. The application process for a Certificate of Public Convenience and Necessity (CPCN) includes reviewing environmental and economic impacts and gathering public input, and input from key agencies. This process currently takes 12-18 months. Sierra Club supports efforts to review and streamline these processes, however the changes proposed in SB 937/ HB 1035 would undermine critical elements of the CPCN.

The legislation appears to cut key environmental justice (EJ) protections, community engagement requirements, and environmental reporting obligations currently mandated under COMAR 20.79.03.02, if the proposed facility is in the same location as a current or former generation facility (with a higher GHG profile than the proposed facility). Community engagement and environmental review are even more important when new potentially polluting sources are proposed near existing polluting sources.

Further, Maryland is already under a consent decree for a Title VI (civil rights) violation almost a decade ago related to inadequate and inequitable public outreach during the application process for a gas-fired power plant proposed in Brandywine.

Maryland Should Not Incentivize or Accelerate New Fracked Gas Generation.

Sierra Club cannot support any proposal that would seek to accelerate or incentivize construction of new fracked gas-fired generation.

<u>New gas generation is a public health issue.</u> Toxic emissions like nitrogen oxides, mercury, and soot from burning fossil fuels in our power plants, buildings, and vehicles are hazardous to human health and are linked to cancers, heart disease, asthma, and other respiratory diseases. The majority of Marylanders already live in counties with unhealthy air quality levels, and building a new gas-fired power plant would only exacerbate the health risks they face.

<u>New gas generation is incompatible with our climate goals.</u> Methane is the primary component of gas, and is a potent greenhouse gas. In fact, methane has 80 times the climate warming impact (per ton) of carbon dioxide over a 20-year period. Gas is not a bridge fuel and should not be seen as a viable component of Maryland's energy future. Maryland would significantly backslide on its climate goals by approving a new gas plant. The use of fracked gas as a fuel source in a gas plant raises additional concerns, since fracking is associated with pollution of groundwater and promotion of seismic activity among other harms.

<u>Gas is not a reliable resource.</u> After studying the performance of gas-fired power plants, PJM, the regional grid operator, downrated the reliability of gas fired power plants from 92%-95% to 62%-79% because gas plants are more likely to fail during extreme weather. The poor performance of these gas plants has left us with a less reliable grid.

Nuclear Energy

SB 937/ HB 1035 prioritizes new nuclear power through state procurement, permitting, and financing assistance. Upon receipt of an application for a proposed nuclear generation project, the Act directs the Public Service Commission (PSC) to open an application period for other proposed nuclear energy projects, evaluate the submitted projects, and approve subject to the criteria set out in 7-1212(A). Any approved project would include a long-term pricing schedule, not to exceed 30 years, as a cost to be paid by all distribution customers of the relevant electric company. The Act also directs the Maryland Energy Administration (MEA), in coordination with the PSC and the Department of Natural Resources (DNR), to pursue agreements with neighboring states and federal agencies to support the development of new nuclear generating stations.

The Club opposes the State incentivizing and/or facilitating *new* nuclear energy as an energy source. New nuclear development is expensive and takes years to build, so it won't solve our near-term energy supply issues. Nuclear power is two to six times more costly per megawatt-hour than wind and utility-scale solar, and new nuclear plants can take twice as long to come online.²

There are many recent examples of attempted nuclear deployment around the country that highlight the expense and delays inherent in this energy source. For example, the Vogtle nuclear project in Georgia started in 2009 with a predicted cost of \$14 billion. When the final unit started operation in 2024, 16 years later, it had a price tag of more than \$35 billion.³ In another recent

² Lazard, "Levelized Cost of Energy: Version 16.0." 2023.

https://www.lazard.com/research-insights/2023-levelized-cost-of-energyplus/ ³ Bright, Zach, "After Vogtle, what's next for nuclear?" April 30, 2024, E&E News, <u>https://www.eenews.net/articles/after-vogtle-whats-next-for-nuclear/</u>

example, NuScale's small modular reactor project for a small municipal utility in Utah and Idaho saw costs balloon from \$4.2 billion in 2018 to \$9.3 billion in 2023, before being canceled.⁴

Nuclear power is not renewable, clean energy. Nuclear power comes with safety risks and highly hazardous wastes that threaten our drinking water and have no permanent solution in sight. Furthermore, Small Modular Reactors (SMRs) are unproven technology. While new design SMRs are being proposed, there is no commercial scale working project yet.

For these reasons, the Sierra Club encourages an unfavorable report on SB 937/ HB 1035.

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

⁴ Ramana, M.V., "The collapse of NuScale's project should spell the end for small modular nuclear reactors," Utility Dive, Jan 31, 2024. <u>https://www.utilitydive.com/news/nuscale-uamps-project-small-modular-reactor-ramanasmr-/705717/</u>

CCooper_HB1035test_022625.pdf Uploaded by: Charlie Cooper



2359 Nutmeg Terrace Baltimore, MD 21209

To the Environment and Transportation Committee

Please Oppose HB 1035 – Public Utilities – Electricity Generation Planning – Procurement, Permitting, and Co-Location (Next Generation Energy Act)

February 26, 2025

Maryland should not turn its back on a proud history of leading the nation toward renewable energy. Yet, House Bill 1035 would authorize approval of large-scale gas-fired power plants with major carbon emissions. How could such approval be justified? (Note: The summary of the bill on page 1 does not mention building new gas-fired power plants yet pages 5-9 of the bill seem to be devoted to building new gas-fired plants. In 35 years of reviewing bills, I have almost always found the summaries to be quite accurate.)

Is it because utility prices are rising? The Governor and legislature can fix this problem by reforming the Public Service Commission. Mark Ellis, an associate at the American Economic Liberties Project, is an independent consultant and expert witness in finance and economics in utility regulatory proceedings who previously worked for McKinsey, Exxon Mobil, and Southern California Edison. His latest work shows that the rate hikes are the result of excessive power held by big businesses and not by cost factors. Mr. Ellis showsⁱ that corporate power and public utility commission capture have created a crisis in utility rates.

Only 70% of electric utilities are investor-owned, the other 30% are publicly owned, either by cities or cooperatives or some other public ownership model....**Over the past three years, investor-owned utility rates went up 49% more than inflation, whereas publicly owned ones have gone up 44% less than inflation.**

This analysis shows that there needs to be reform in how public utility commissions gather and weigh evidence and particularly in how they assess rate of return for the investor-owned utility monopolies.

Is it because of the massive electricity needs of data centers?

Big tech should pay for that, and Maryland should adhere to its requirements for renewable energy. Big tech's emergency is not our emergency. We, the people, do not profit from ever-expanding databases that record the details of our lives and exploit us economically. Data centers create few jobs.

Is it because of the massive electricity needs for developing AI?

Only about four weeks ago, revelations about a Chinese technology known as Deep Seek showed that AI results might require much less processing power than previously believed. The news resulted in a drastic reduction (about \$450 billion in market capitalization as of this writing) in the stock market price of Nvidia, which makes the most important AI processing chips.

AI in the hands of the existing tech monopolies threatens to exacerbate wealth and income inequality. The General Assembly should not feel compelled to respond to the whims of these giant corporations who are facing a bi-partisan onslaught of anti-trust litigation.

In April of 2024, candidate Donald Trump met with top oil executives and asked for \$1 billion in financial help for his campaign. The *Washington Post* paraphrased what people present at the meeting told its reporters: "You all are wealthy enough, he said, that you should raise \$1 billion to return me to the White House. At the dinner, he vowed to immediately reverse dozens of <u>President Biden</u>'s environmental rules and policies and stop new ones from being enacted, according to people with knowledge of the meeting, who spoke on the condition of anonymity.... Giving \$1 billion would be a 'deal,' Trump said, because of the taxation and regulation they would avoid thanks to him, according to the people."

Maryland should be resisting Trumpism and not doing his work of expanding fossil fuels and undermining renewable energy. The residents of this nation suffer because of carbon emissions and other pollutants from burning fossil fuels. The health impacts are felt by families and are a burden on governmental budgets at all levels.

Maryland should stick to its principles and continue to require renewable energy, which is increasingly cost-efficient. Therefore, I ask that you issue an unfavorable report on HB 1035.

https://www.economicliberties.us/our-work/rate-of-return/#

ⁱⁱ https://www.washingtonpost.com/politics/2024/05/09/trump-oil-industry-campaign-money/

HB1035, SB937, Unfavorable, Saunders.pdf Uploaded by: David Saunders

Testimony Against HB1035/SB937 – Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Long ago, we tamed the flame, A spark that set mankind aflame. With warmth and light, we built, we grew, And fire's gifts, we always knew.

But then we learned to burn much more, Coal and oil—a reckless score. The steam engine roared, the smokestacks rose, And with them, carbon's deadly dose.

Each fire burned, each pipe exhaled, A warming Earth, our fate was nailed. CO₂—a ghost unseen, Wrapped our world in heat obscene.

The sun's own rays, once free to fly, Are trapped beneath a thickened sky. Storms now rage, the waters rise, A warning flashing in our skies.

Droughts take hold, the forests fry, Tornadoes twist, the oceans cry. Hurricanes carve paths of woe, Yet still, we let the carbon flow.

A gas plant here? That makes no sense! With all we know, at such expense? Three billion dollars, tossed away, For fuel that darkens each new day.

Instead, let winds and sun take flight, Their power pure, their future bright. Clean energy—our guiding hand, A greener path for Maryland.

So, I urge you, take a stand, Turn from fire, heal this land. Reject this bill, invest instead In winds that turn and suns that spread.

The time is now, we cannot wait, The choice is ours—decide our fate. Submitted by:

David Saunders, CC-P 18 Roland Green Baltimore, MD 21210 410-456-8542 davidsaunders107@gmail.com Climate Change Professional (CC-P), Certified by the Association of Climate Change Officers Co-author, *Four Days with Dr. Deming* (10th printing)

02/26/2025

Testimony DAC Next Generation Energy HB1035 final. Uploaded by: Debbie Cohn

| Committee: | Economic Matters |
|---------------|---|
| Testimony on: | HB1035 – The Next Generation Energy Act |
| Submitted by: | Deborah A. Cohn |
| Position: | Unfavorable |
| Hearing Date: | February 28, 2025 |

Dear Chair and Committee Members:

Thank you for allowing my testimony today on HB1035.

I recognize that HB1035 has some attractive elements, including efforts to ensure a reliable electricity supply and to address concerns about skyrocketing utility bills. HB1035, however, calls for construction of new gas-fired and nuclear generating stations that would be more costly and less useful in meeting the state's current needs than the main alternative—solar power with energy storage.

Electricity from gas-fired power plants has major disadvantages compared with energy from solar panels combined with utility-scale battery storage.¹ First, it is more expensive.² Second, gas-fired plants can take longer to construct.³ Third gas-fired plants are less reliable when most needed.⁴ During Winter Storm Elliott, nearly 40 percent of gas-fired power plants failed to perform as expected, accounting for 63 percent of the outages and bringing PJM to the brink of rolling blackouts.^{5,6} PJM accordingly downgraded the reliability of this resource for emergency weather conditions from 92-95 percent to 62-79 percent.^{7,8} That increased the amounts of power generation required in the August 2023 capacity auction and pushed up prices. Fourth, gas-fired

outage-data-review.ashx

¹ The current industry standard for lithium ion battery storage is four hour storage, which can be drawn down slowly to extend its availability albeit requiring more storage units. Newer utility scale thermal energy storage, particularly molten salt storage which is the type most frequently paired with solar generating systems, is safer than LI storage and can provide around six to ten hours of storage depending on the system design, with advanced systems reaching longer durations up to 24 hours. <u>https://insideclimatenews.org/news/16012018/csp-concentrated-solar-molten-salt-storage-24-hour-renewable-energy-crescent-dunes-nevada/</u>

² <u>https://www.brattle.com/wp-content/uploads/2023/04/Real-Reliability-The-Value-of-Virtual-Power_5.3.2023.pdf</u>

³ Utility scale solar projects typically take 12-18 months to construct once permits are secured. Utility scale battery storage typically takes one to three years to construct with the entire cycle, including planning, permitting and construction taking two to four years.

⁴ PJM Winter Storm Elliott Continued Outage Analysis, March 9, 2023, <u>https://www.pjm.com/-</u>/media/DotCom/committees-groups/committees/oc/2023/20230309/20230309-item-04a---winter-storm-elliott-

⁵ <u>https://www.nrdc.org/bio/tom-rutigliano/pjms-capacity-market-reforms-almost-not-quite</u>

⁶ PJM Winter Storm Elliot Continued Outage Analysis (March 9, 2023) <u>https://www.pjm.com/-</u> /media/DotCom/committees-groups/committees/oc/2023/20230309/20230309-item-04a---winter-storm-elliottoutage-data-review.ashx

⁷ https://www.nrdc.org/bio/claire-lang-ree/pjms-capacity-auction-real-story;

https://environmentamerica.org/center/articles/electric-bills-are-set-to-increase-in-june-for-65-million-americansheres-why

⁸ <u>https://www.nrdc.org/bio/claire-lang-ree/pjms-capacity-auction-real-story</u>

power plants contribute to climate change⁹ and create local air pollution, including ozone, sulfur dioxide and nitrogen dioxide, which contributes to asthma and cardio-pulmonary conditions. Nuclear energy suffers from three of the same disadvantages. First, it is more expensive. Solar power can now be produced for one-third the cost of nuclear energy,¹⁰ and industrial-scale, thermal energy storage would add only a trivial amount to the cost per kWh delivered to users.¹¹ Actual construction costs have nearly always far exceeded expectations. The Georgia Power Vogtle Units 3 and 4 cost \$36.8 billion, more than twice the projected cost, ¹² and a 2014 academic study, which looked at 180 traditional nuclear power projects around the world, found that 175 exceeded the initial budget by an average of 117 percent.¹³ Small nuclear reactors have not fared better. The Utah Associated Municipal Power Systems NuScale Power small modular nuclear reactor project was initially projected to cost \$3 billion and ultimately rose to \$9.6 billion at which point the project was shelved.¹⁴ Second, nuclear plants take far longer to construct. The Georgia project took 15 years to build, more than twice the project timeline,¹⁵ and the 2014 study cited above found that 175 of the projects took, on average, 64 percent longer to build than estimated. Third, nuclear plants create problems in disposing of the spent fuel. Before calling for new nuclear power facilities, legislators need to consider whether they are willing to store the spent fuel indefinitely in their own neighborhoods or, if not, whether one can ethically impose that risk on anyone else.

Instead of encouraging investments that would result in higher costs, risk power shortfalls because of longer construction periods, continue reliability concerns (in the case of gas-based power plants), and entail environmental issues, Maryland should undertake the one-year integrated energy resource planning envisioned in the Energy Resource Adequacy and Planning Act (SB909/HB1037).

⁹ <u>https://climate.mit.edu/ask-mit/how-much-does-natural-gas-contribute-climate-change-through-co2-emissions-when-fuel-burned</u>; while gas contributes fewer carbon emissions than gas, methane, the main component of gas, turns into CO2 when burned, but before then much escapes into the atmosphere. The U.S. Environmental Protection Agency estimates that about 6.5 million metric tons of methane leak from the oil and gas supply chain each year—around 1% of total natural gas production. At this rate, methane leaks would account for around 10% of gas's contribution to climate change, and CO₂ emissions for the other 90%.

¹⁰ <u>https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024_vf.pdf</u>

¹¹ "Solution to Energy Storage May Be Beneath Your Feet" (March 28, 2024), National Renewable Energy Laboratory (NREL) <u>https://www.nrel.gov/news/features/2024/solution-to-energy-storage-may-be-beneath-your-feet.html</u>

¹² https://thirdact.org/georgia/2024/06/09/plant-vogtle-the-true-cost-of-nuclear-power-in-the-u-s/; https://www.nonukesyall.org/pdfs/Truth%20about%20Vogtle%20report%20May%2030%20release.pdf

¹³ Sovacool, Gilbert and Nugent, "Risk, Innovation, Electricity Infrastructure and Construction Cost Overruns: Testing Six Hypotheses," <u>https://www.sciencedirect.com/science/article/abs/pii/S0360544214008925</u>

¹⁴ <u>https://www.utilitydive.com/news/nuscale-uamps-project-small-modular-reactor-ramanasmr-/705717/</u>

¹⁵ https://thirdact.org/georgia/2024/06/09/plant-vogtle-the-true-cost-of-nuclear-power-in-the-u-s/; https://www.nonukesyall.org/pdfs/Truth%20about%20Vogtle%20report%20May%2030%20release.pdf

To minimize the risk of power outages resulting from delay caused by the integrated resource planning study, the state should enact no-regrets legislation that would accelerate the deployment of new solar projects and long-term power storage.

The State should also enact or participate in:

- State and regional transmission planning
 - HB1225, the Affordable Grid Act,
 - o HB829 Advanced Transmission Technologies
- State legislation to increase renewable energy supply and storage:
 - HB398/SB316 the Abundant, Affordable Clean Energy Act
 - HB827/SB983 distributed generation certificates of public convenience and necessity; ground mount solar and small solar siting
 - HB1233/SB1022 community solar subscription out of service area
 - o HB1036/SB931 Renewable Energy Certainty Act with amendments
- State legislation to build out an affordable, smart distribution grid
 - HB1225/SB908 (Affordable Grid Act) to account for distributed energy resources and take advantage of grid enhancing technologies
- Actively participate in PJM's scenario planning and implementation of FERC Order 1920 to ensure the reliable build out of the transmission grid

For these reasons, I urge an UNFAVORABLE report in Committee.

HB1035_UNFAV_McHale.pdf Uploaded by: Duncan McHale

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

- The act allows for the development of gas plants. This is the wrong direction. In order to mitigate the damage due to climate change we need to develop energy plants that do not use fossil fuels.
- Gas plants are polluting. Clean energy is not.
- Gas plants take a long time to build. We need the plants soon. Clean energy can do the job faster.
- Gas plants are expensive. Clean energy is more affordable.

I respectfully request an unfavorable report on HB1035/SB937.

Duncan McHale 10318 Inwood Avenue Silver Spring MD 20902

Testimony on HB1035 Next Gen Energy.pdf Uploaded by: Elaine Wilson

To:

Re: HB1035 Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

From: Elaine S. Wilson 9910 Hollow Glen Pl Silver Spring, MD. 20910 <u>elaineswils@gmail.com</u> (734) 276-2191 District: 18

UNFAVORABLE

I am a member and co-clerk of Friends Meeting of Washington, the Quaker Meeting in Washington DC, and a resident of Silver Spring, MD, as are many members of our faith community. Quakers have a deep commitment to the stewardship of our planet and in ensuring that every person and living thing has access to clean air and water that are so important to sustaining life and making life worthwhile. I am deeply concerned that we keep to the goals of the Climate Solutions Now Act of 2022 as a path to ensure that we are bequeathing to our children and grandchildren the world we want to live in.

As a faith leader I urge an unfavorable report on HB1035, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

I have been active with the Beyond Gas movement in the region. As such I am acutely aware of the effects that gas has on health and in particularly those of our underserved communities. The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing
the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

Sincerely,

Elaine S. Wilson

HB1035_UNFAV_Chesapeake Climate Action Network.pdf Uploaded by: Elizabeth Beckman

HB1035/SB937- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of the Chesapeake Climate Action Network, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. As a resident of Baltimore, I reject the idea that my neighbors will have to suffer the unfair consequences of a gas plant near their homes. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death¹. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

New gas plants will only exacerbate the climate crisis in the long term and will not effectively lower Marylanders' energy costs in the short term. They will lock us into using the dirty fuels of the past when the renewable transition is already underway, at the cost of a livable future for ourselves and our children. As the aunt of a 1 ½ year old nephew, I believe we must do everything in our power to speed the transition to cheap, abundant, clean energy so that young children today can grow and thrive in a world with a stable climate. Investing in new gas plants in Maryland is the opposite of what we need to do to create that world.

I respectfully request an unfavorable report on HB1035/SB937.

¹ <u>https://www.epa.gov/power-sector/human-health-environmental-impacts-electric-power-sector</u>

SB0937_HB1035_MDP_UNF_Next Generation Energy Act.p

Uploaded by: Emily Scarr Position: UNF



SB0937/HB1035 Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act) Economic Matters and Education, Energy, and the Environment Committees Joint Hearing: February 24th, 2025 Unfavorable

Maryland PIRG is a state based, small donor funded public interest advocacy organization with grassroots members across the state. We work to find common ground around common sense solutions that will help ensure a healthier, safer, more secure future

Marylanders are struggling with unaffordable utility delivery rates and escalating supply rates due to <u>wasteful spending from utilities</u> and <u>mismanagement at PJM</u>, our regional grid operator.

Maryland should increase energy generation and storage in the state, but the Next Generation Energy Act not only misses the mark, it also threatens to increase utility rates and pollution.

We hope the Committees will support legislation to help ratepayers by stopping wasteful utility spending, supporting energy storage and renewable energy, and strengthening the grid. While I am glad the legislature is investigating ways to address supply costs, t

There are four key reasons why we are opposed to this bill as introduced:

1. **There is no immediate supply crisis:** Maryland is <u>already fully committed to an expensive new</u> <u>transmission line</u> that will reduce any near-term strain from the closure of power plants (which PJM has failed to appropriately plan for).

PJM claims our bill increases are caused by not having enough supply available to meet increasing demand for power. But one of the biggest reasons for an impending supply/demand imbalance is that PJM has been <u>holding back</u> hundreds of gigawatts of storage, wind and solar projects that are ready to meet that demand in Maryland and across the grid.

Unfortunately, electric rates are going up this summer, with increases of between \$4 and \$18 a month for the average Maryland customer, depending on their utility. These increases are impermanent and largely due to poor planning and a <u>manufactured crisis at PJM</u>, that should resolve as PJM moves projects off the queue. That's not to say Maryland shouldn't look at ways to increase generation and storage in the state, but it does mean we can be thoughtful in our response and should avoid rushed decisionmaking.

2. Delivery rates are a crisis: If you want to help Marylanders with their energy bills - the smartest option is to address rising delivery rates. Unlike supply costs, which are notoriously volatile, delivery rates have steadily and steeply increased over the past decade, and are hard (if not impossible) to bring down once they rise. Delivery rates for many utilities have escalated faster than inflation in Maryland, particularly for the Exelon owned utilities which deliver electricity and gas to the majority of the state. The legislature and PSC regulate utility rates, but the state has far less ability to impact complicated supply markets.

<u>This bill does nothing to address rising delivery rates.</u> The legislature would be wise to rein in wasteful utility spending that is driving up bills by reforming or repealing STRIDE and ending Multi-year Ratemaking in Maryland which have both exacerbated the utilities' incentive to overspend by virtually guaranteeing utility profits. The PSC also has authority on both, but the

legislature plays a key role in those policy decisions, and thus has a responsibility to intervene.

3. Energy Storage and Renewable Energy: If the legislature wants to increase in-state energy, they have plenty of better options than gas and nuclear power. The quickest and most economical way to address concerns of lack of electric supply to meet peak demand is through increased adoption of energy storage.

Maryland has also been slow to develop wind and solar in the state, and investing in storage not only gives us time to catch up, it sets us up to maximize that renewable energy when it's available. Per dollar of investment, clean energy solutions – such as energy efficiency and renewable resources – <u>are better investments</u> and can come online <u>faster and with less risk</u>.

- 4. **Subsidizing the gas and nuclear industries should be a nonstarter:** it's economically dangerous and threatens our health.
 - a. Encouraging new gas plants doesn't make sense strategically, financially, or for public health. Gas plants are <u>notoriously unreliable during extreme weather</u>, which was one of the factors driving up costs at PJM and their last auction. In the wake of winter storm Elliot, PJM experienced significant <u>unplanned outages</u>, and it became clear that gas plants are not as reliable in extreme weather as previously assumed (<u>63%</u> of PJM outages during the storm were from gas plants).

Gas plants are less flexible, more expensive, and slower to get online than energy storage, which is why <u>states like Texas are making big investments in batteries.</u> By looking at more reliable and more affordable clean energy options Maryland can also avoid air pollution in the state, while still increasing generation and improving reliability through local action.

b. Nuclear power's very survival has required large and continuous government support in the form of subsidies since its inception through the present day. Marylanders already subsidized Calvert Cliffs in 1999 to the tune of nearly \$1 billion. Maryland should not consider offering financial support for a new reactor until a new reactor in the U.S. manages to come online without outrageous cost overruns. No modular reactors have been built in the U.S., and few have been built worldwide.

Last year, Georgia finished building the first new nuclear reactor in the U.S. in decades for <u>more than \$35 billion</u> - \$17 billion more than initially estimated. Georgia Power will likely profit off the overspending, **all of which ratepayers are likely on the hook for**. Their bills have already gone up to pay for it and they'll be paying the astronomical cost for decades to come. Can you think of better ways to spend \$35 billion? I can.

We recommend an unfavorable report.

HB1035_UNFAV_CCAN.pdf Uploaded by: Eric Wurzbacher

Eric Wurzbacher wurzy2@gmail.com 301-233-0889

HB1035/SB937- Public Utilities, Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of CCAN, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

I currently work as a volunteer with Chesapeake Climate Action Network, and so write on the behalf of CCAN. For over the past 50 years, I've supplemented my life-long STEM knowledge bases with those of the many climate change and energy disciplines. I bring that to this letter.

Thirty years in our District 20 Silver Spring home, I write also on behalf of our two children, 16 nieces and nephews, and six grand- nieces and nephews, the oldest of whom is six years old.

This legislation would allow the construction of new gas plants Maryland makes little practical sense, even the shortest term. It won't lower high utility bills because of how long it takes to get a new plant up and running. Such plants may take years before they are creating energy that's distributable to the public. Clean energy alternatives -- batteries and solar especially -- can be online faster and far more cost-effectively, If the goal is to lower our energy bills, a new gas plant is not the most effective strategy.

Moreover, the cost of building the type of gas plant approved in this bill is equal to roughly \$1,000/kilowatt of energy produced. This could end up costing our state \$3 billion dollars: that is far too expensive an investment to make with no immediate relief on utility bills.

In addition, the disruptive and often destructive effects of climate change can only, and will only, accelerate.

Any new gas plant would work against reaching Maryland's climate goals set forth in the Climate Solutions Now Act of 2022: primarily, reducing our greenhouse gas emissions by 60% by 2031. Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To get to either goal, the state should be investing first and foremost in clean and renewable sustainable energy, *not* allowing for any fossil fuel provisions.

And let's not forget the resulting cumulative pollution from such a plant: it would wreak havoc on the quality our air shed and watershed resources on which our economic welfare *and* the health of all Marylanders depends. Most vulnerable? Those of us who live in overburdened and underserved communities, who are already facing the unequal effects of climate change and fossil fuel pollution.

The routine greenhouse gas – methane leakage among them -- and particulate emissions that will be produced by a new gas plant? These could increase Maryland residents' chances of asthma, pulmonary and cardiovascular diseases, strokes... And premature deaths.

This is hardly paying attention to the future we all will share. We the people of Maryland deserve to keep our lights on and appliances running without putting our health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

ECA Testimony HB1035 Next Gen.pdf Uploaded by: Frances Stewart Position: UNF



HB1035 - UNFAVORABLE Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

HB1035, The Next Generation Energy Act

Meeting of the Committee

February 28, 2025

Dear Chair, Vice Chair, and Members of the Committee, on behalf of Elders Climate Action Maryland, I urge an unfavorable report on HB1035.

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.

As elders, we find it odd to encounter a Next Generation Energy Act that promotes the use of a fossil fuel that we all know from childhood. Methane gas is not a clean fuel. Methane is a potent greenhouse gas that leaks during every stage of the process from drilling to combustion. Burning that gas releases another greenhouse gas, carbon dioxide, as well as NOx and other air pollutants that are a significant hazard to people living or working nearby.

Some have proposed carbon capture and storage (CCS) as a solution, but as recent research from Stanford University¹ has shown, that approach is costly and does not address the harms from air pollution. If the CCS is not powered by renewable energy, it will increase carbon dioxide emissions. It also adds to the time required to build a new power plant. Currently, there are no storage facilities or pipelines for the CO_2 in or near Maryland.

Hydrogen has been mentioned as an alternative, but there are many associated problems² with greenhouse gas emissions, costs, and other issues. Biofuels are also mentioned as an alternative, but without carbon capture and storage, they would add significant amounts of CO_2 emissions. Even with CCS, they would be a significant source of NOx, particulate matter 2.5, and other harmful air pollutants.

The energy situation in Maryland is a matter of great concern because of problems with PJM and increasing demand for electricity from data centers and other uses. Costs have risen for ratepayers and will continue to rise. But it also a very fluid situation. The number and size of data centers that may come to Maryland is unknown. Innovations like DeepSeek and improved demand management make their power needs difficult to estimate. A data center study such as the one proposed in HB0270, the Data Center Impact Analysis and Report, would help to clarify those issues.

Also, we are lacking a clear picture of what can be done to improve Maryland's electrical system while meeting the essential goals we committed to in the Climate Solutions Now Act. Adding new nuclear energy to our grid is the most expensive way to increase generation, and a nuclear plant that starts the planning process today may not be online by 2035. There are hopes that new small modular nuclear reactors will be less expensive and more quickly built, but none are yet in commercial use.

There are other options that need to be fully considered before we commit to new nuclear power in Maryland. Those include increased solar generation, increased energy storage, demand management, and virtual power plants.

A study like the one proposed in HB1037, the Energy Resource Adequacy and Planning Act, would be very helpful in clarifying the potential role of nuclear energy and other key issues in Maryland's energy future.

But we shouldn't wait for the study to begin to address these important issues. HB0398, the Abundant, Affordable, Clean Energy Act, offers a no-regrets strategy Maryland can pursue while doing further analysis and planning. The storage provisions and changes to SRECs are particularly important at this time.

For all of these reasons, we strongly urge an unfavorable report on HB1035.

1 https://environmentamerica.org/center/updates/new-study-finds-carbon-capture-ineffective-and-costly-compared-to-investing-in-renewable-energy/ 2 https://maca.earth/gaf/

HB1035-SB937 testimony-Glenn Rabut.pdf Uploaded by: Glenn Rabut

HB1035/SB937- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of the Chesapeake Climate Action Network, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

Finally, to put it in the simplest terms, the reason why renewable energy is so much less expensive in the long run is that it **uses the free energy we get every day from the sun**, while fossil fuel based power plants must **pay every day for the fuel that they run on**. It should be a 'no-brainer' that renewable energy is the only answer to Maryland citzens' outrageously high gas and electric bills.

I respectfully request an unfavorable report on HB1035/SB937.

SB 937-CBF-UNF

Uploaded by: Gussie Maguire Position: UNF



Environmental Protection and Restoration Environmental Education

Senate Bill 937

Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

| Date: | February 28, 2025 | Position: | UNFAVORABLE |
|-------|--|-----------|--------------------|
| То: | Education, Energy, & Environment Committee | From: | Gussie Maguire, |
| | | | MD Staff Scientist |

Chesapeake Bay Foundation (CBF) **OPPOSES** Senate Bill 937, which incentivizes and expedites nuclear and natural gas energy generation projects in the state. CBF understands that Maryland faces energy challenges, especially from new "large load customers", as described in the bill text. That said, additional procurement of energy generation that meets the minimal standard of "a lower greenhouse gas emissions profile than coal or oil" must not be relied upon to answer those challenges.

Despite natural gas's reputation as a "clean burning" fuel, its emissions pose the same threats to the climate as coal and oil, just at slightly lower volume. Natural gas is primarily composed of methane, which is even more effective than carbon dioxide at trapping heat in the atmosphere. Any leaks in pipelines to or equipment at a natural gas-burning facility or other utility customer would result in increased contributions of greenhouse gases in the atmosphere from the state, undermining climate goals. Bill language requiring that a natural gas plant must be able to be converted to a different type of fuel does not guarantee that it will be converted in a timely fashion. Furthermore, fossil fuels and biofuels both produce nitrogen oxides when burned. Nitrogen oxides in the atmosphere fall with precipitation into the state's waterways and contribute to nutrient pollution in the Chesapeake Bay and its tributaries.

The Public Service Commission, the Department of the Environment, and the Department of Natural Resources are all required by this bill to waive or expedite regulatory requirements or decisions in order to meet arbitrary time frames for accelerated energy generation projects. Siting of energy projects, whether fossil fuel, nuclear, solar, or wind, must be carefully considered to ensure that minimum impacts are made upon the environment and upon communities surrounding the sites. State agencies engaged in this important work must not be stripped of the opportunity to make the right decision for each project, for state residents and for the state's valuable natural resources.

CBF urges the Committee's UNFAVORABLE report on SB 937.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

testimony - public utility siting.pages.pdf Uploaded by: Jane Seigler Position: UNF



P.O. Box 606 | Lisbon, Maryland 21797 www.mdhorsecouncil.org

One Common Bond: The Horse One Common Voice: The Horse Council

In the Senate Education, Energy & the Environment Committee, and the House Economic Matters Committee February 28, 2025

Testimony of the Maryland Horse Council on SB 931 and HB 1036

Public Utilities - Generating Stations - Generation and Siting (Renewable Energy Certainty Act)

Unfavorable

The Maryland Horse Council (MHC) is a membership-based trade association that represents the state-wide horse industry in Maryland. Our members include horse farms; horse related businesses; equestrian competitors; trainers; individual enthusiasts; equine-assisted therapy programs; and breed, interest, and discipline associations. We represent over 30,000 Marylanders who make their living with horses, or who just own and love them.

Maryland is home to 16,000 horse properties occupying over 705,000 acres (almost 10% of Maryland"s total land area, and over 25% of Maryland"s agricultural land). There are horse properties in every county in the state. The retention of agricultural land is of the utmost importance to the members of the Horse Council. Additionally, well-maintained horse pastures are second only to forest in preventing excessive and harmful runoff into the Chesapeake Bay.

This proposed legislation puts equestrian agricultural land and its environmental benefits at risk, by removing utility siting decisions from local control, and effectively, from viable constituent input.

We urge an unfavorable report on SB 931/HB 1036.

Respectfully submitted,

THE MARYLAND HORSE COUNCIL (844) MDHORSE (844-634-6773) info@mdhorsecouncil.org

HB1035_J_Knishkowy_UNF.pdf Uploaded by: Jeffrey Knishkowy

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

My name is Jeff Knishkowy. I am a Maryland resident and I am writing today in opposition to HB1035, which would open the door to a new gas power plant being built in Maryland.

Regarding this bill, I can appreciate the fact that lowering the cost of electricity is an important goal this legislative session, and that increasing energy production is important for keeping Maryland competitive in attracting new businesses that create jobs and drive economic growth. However, it is essential that we achieve these goals through increased investments in solar power, utility-scale batteries, energy efficiency, and smart-grid technology. According to, among others, the Chesapeake Climate Action Network, these efforts are faster, cheaper, and better for the environment and human health than a proposal to build a large new gas plant in the state.

I am disappointed that the MGA is considering a NEW fossil fuel plant when we've worked so hard to retire outdated, polluting ones. I was likewise disappointed to learn that the plant would likely rely on fracked gas, a practice that was wisely banned by this body.

A new gas power plant would make Maryland's important climate goals significantly harder to reach. The plant's carbon emissions would lead to economic, public health, and environmental harm in the hundreds of millions of dollars each year. Put simply, such a plant would be expensive to ratepayers, dangerous to nearby communities, and a misguided use of state resources.

Thank you, and I urge an unfavorable report.

2025 HB 1035 Written Testimony for hearing - John Uploaded by: John Garofolo

<u>House Bill 1035 – Oppose</u> <u>Public Utilities – Electricity Generation Planning – Procurement, Permitting,</u> <u>and Co–Location</u> <u>MD House of Delegates</u>

My name is John Garofolo. I am a recently retired federal test and measurement scientist, a computer scientist, an Anne Arundel Watershed Steward, a citizen environmental advocate for my area, and I have previously been on the board of directors of my community association. I also created the volunteer Anne Arundel Patapsco Environmental Coalition because my area of northern Anne Arundel County along the tidal Patapsco River has been struggling with polluters for decades. I have lived in the community of Stoney Beach for 20 years – a beautiful 62-acre peninsula community in Curtis Bay in Northern Anne Arundel County. It would be an oasis if it wasn't surrounded by polluters.

My home and many others are within 1000 feet of the coal-powered Brandon Shores power generation station and even closer to the Wagner power-generation station which was recently converted from coal to other fossil fuels. Our community literally chokes on the fumes of these polluters. We have anecdotal evidence of higher respiratory, cardiac, cancer, and neurological disease in our community and unusual occurrences of these diseases. And I myself suffer from asthma, AFIB, and am a cancer survivor. When the winds from the power plants next to my home blow our direction or is still, I have trouble breathing and my AFIB flares up.

Our community has suffered environmental injustice because of these polluters and many others in our area for decades. **The last thing we want is for these old polluters to be replaced with new polluters that we'll be stuck with for decades.** While natural gas is currently being highly touted, it still emits NO2 which is a respiratory irritant which can contribute to asthma and heart disease. And, if not optimally run, natural gas power plants can emit carcinogenic benzene. They also emit some amount of raw methane – a worse greenhouse gas that CO2. And they emit CO2. They are not climate, environment, or community friendly.

Our community has been communicating with Talen Energy for years to plan an end to the pollution that we're being subjected to. We were thrilled to learn in 2019 that Talen planned to shudder both plants by 2025. And Anne Arundel County promised to rezone the area for a purpose more beneficial to surrounding communities – in the vein of what has been done at virtually all other decommissioned polluting power plants in the state. Sadly, the PJM pushback and RMR that came out of left field was already an unwelcome setback. And the challenge of unquenchable energy demands by data centers not even in our state that we are forced to support is frightening. But, the replacement of these polluters with new polluters would be catastrophic for my community and for communities for miles around.

Our work as engaged citizens began in 2015 with the declaration of the entire greater Baltimore area being declared a non-attainment zone for SO2. We fought hard for a SO2 monitor for our area since

John S. Garofolo | johngstoneybeach@gmail.com

there was none nearby. Unfortunately, the monitor that MDE was forced to install in 2018 through legislation never worked and its data was disregarded by the EPA and it was decommissioned in 2022. So, we still have no idea how much of this toxic chemical we've been exposed to or other toxic and carcinogenic chemicals emitted by these power plants. While the SO2 mitigation system installed on Brandon Shores in 2010 reduced pollutants, it didn't eliminate them and we still see soot and coal dust appearing around our homes.

Unfortunately, the state continues to refuse to implement effective air quality monitoring in our area or conduct a community health study for fear that it might uncover inconvenient truths. Moreover, our health is threatened by many polluters within just 5 miles of our community including the enormous expanding MPA Cox Creek Dredge Material Containment facility, a petroleum/asphalt processing plant, a chemical plant, multiple toxic material dumps, the horribly polluting Curtis Bay Energy medical incinerator - which is the largest in the country, the CSX coal terminal, and even a radioactive Superfund site. And, we are only two and a half miles directly across the Patapsco from Sparrows Point in which cleanup operations from the pollution from Bethlehem Steel have been ongoing for years. And there are countless other highly contaminated legacy pollution sites within our Zip Code. In addition to the smoke from the power plants, I often also smell the horrible odors of sewage from the waste water treatment plant near my community and the toxic plasticky odor of the Curtis Bay Energy medical waste incinerator nearby. We have so many sources of air pollution that we may never escape them. And our soil is contaminated as is the tidal Patapsco and the sediment in it by benzo(a)pyrene – a carcinogenic chemical created from coal burning. We need a break!

Our communities suffer from economic and home value burdens along with the health burdens from all of these sources of pollution. **Even real estate apps now grade communities on their pollution burden. And mine and homes for miles around have a low score.**

And we have no idea how much the pollution around us has impacted our ability to work because of illness or to the organizations which depend on us and the state and municipalities which have to pay for social services when we're unable to work and need uncovered medical care. The health effects of pollution have largely uncaptured impacts on our state's economy – from significant health costs for citizens, insurers, and the state, to sick days and unemployment that impact businesses, to strain on our medical system, and to depressed home values. We have suffered environmental injustice for decades. The last thing we need is more polluters near our homes. The hidden costs of pollution to our communities have not been properly measured and assessed. They most certainly should figure into decisions about permitting polluters and recovering costs from known polluters in ways that support overburdened communities.

While I completely understand the need for reliable energy and the challenges that the state is wrestling with, the weight of the economic and health burdens of that should not be born on the back of environmentally overburdened communities concentrated in particular areas such as the tidal Patapsco. The burden needs to be measured, understood, and fairly shared. Moreover, the negative impacts of

John S. Garofolo | johngstoneybeach@gmail.com

pollution need to be reversed in overburdened communities like those in and near Curtis Bay and around the tidal Patapsco by removing polluters, more heavily monitoring known ones and ensuring their compliance, and constraining permits for modifications which would add to pollution burdens. More effective monitoring can largely be accomplished through automation as pollution sensing technology has improved and become much more economical. Communities need to be made aware of the impacts to their health and the state needs to create an analysis of health data to address the hidden costs of pollution. And communities need to be alerted when there are high-pollution days caused by coal and fossil fuel and waste burning. Part of these critical needs can be addressed by Senate Bill 978.

We've paid for polluting industries with our health for too long. It's time for environmental justice in energy generation permitting, comprehensive compliance monitoring, analysis, and enforcement, and addressing the economic burdens on community health and the cumulative and comprehensive impact of pollution on overburdened communities and the other stakeholders who are indirectly impacted by pollution. And a process is needed that that is more inclusive for impacted communities. Overburdened communities shouldn't have to play jump rope with the existing permitting process that is designed to work against them. And they shouldn't have to continue to pay with their health for the convenience of the rest of the state.

Senate Bill 1035 opens the door to make it easier to replace existing polluting power plants with newer polluting power plants that will never go away. If necessary, I would favor an extension of the RMR while the state takes the proper time to dig into the data and deliberate on creating an energy resiliency plan that is fair and that minimizes the pollution footprint of energy generation in the Maryland – especially for overburdened communities.

I strongly oppose House Bill 1035 and the door it would open for more environmental injustice for overburdened communities. In sharp contrast, the legislation proposed in House Bill 978 would send us on the right trajectory. Maryland can lead the way for environmental justice. We can solve our energy challenges with a carefully thought-out process that doesn't sacrifice the health of already overburdened communities. Maryland should lead the way on leveling the environmental justice playing field for all while it addresses energy resiliency and it should refrain from replacing one polluting power plant with another. We need a fair and just energy generation plan for Maryland.

Sincerely,

John S. Garofolo Stoney Beach, Curtis Bay, MD

2025 HB 1035 Written Testimony for hearing - John Uploaded by: John Garofolo

<u>House Bill 1035 – Oppose</u> <u>Public Utilities – Electricity Generation Planning – Procurement, Permitting,</u> <u>and Co–Location</u> <u>MD House of Delegates</u>

My name is John Garofolo. I am a recently retired federal test and measurement scientist, a computer scientist, an Anne Arundel Watershed Steward, a citizen environmental advocate for my area, and I have previously been on the board of directors of my community association. I also created the volunteer Anne Arundel Patapsco Environmental Coalition because my area of northern Anne Arundel County along the tidal Patapsco River has been struggling with polluters for decades. I have lived in the community of Stoney Beach for 20 years – a beautiful 62-acre peninsula community in Curtis Bay in Northern Anne Arundel County. It would be an oasis if it wasn't surrounded by polluters.

My home and many others are within 1000 feet of the coal-powered Brandon Shores power generation station and even closer to the Wagner power-generation station which was recently converted from coal to other fossil fuels. Our community literally chokes on the fumes of these polluters. We have anecdotal evidence of higher respiratory, cardiac, cancer, and neurological disease in our community and unusual occurrences of these diseases. And I myself suffer from asthma, AFIB, and am a cancer survivor. When the winds from the power plants next to my home blow our direction or is still, I have trouble breathing and my AFIB flares up.

Our community has suffered environmental injustice because of these polluters and many others in our area for decades. **The last thing we want is for these old polluters to be replaced with new polluters that we'll be stuck with for decades.** While natural gas is currently being highly touted, it still emits NO2 which is a respiratory irritant which can contribute to asthma and heart disease. And, if not optimally run, natural gas power plants can emit carcinogenic benzene. They also emit some amount of raw methane – a worse greenhouse gas that CO2. And they emit CO2. They are not climate, environment, or community friendly.

Our community has been communicating with Talen Energy for years to plan an end to the pollution that we're being subjected to. We were thrilled to learn in 2019 that Talen planned to shudder both plants by 2025. And Anne Arundel County promised to rezone the area for a purpose more beneficial to surrounding communities – in the vein of what has been done at virtually all other decommissioned polluting power plants in the state. Sadly, the PJM pushback and RMR that came out of left field was already an unwelcome setback. And the challenge of unquenchable energy demands by data centers not even in our state that we are forced to support is frightening. But, the replacement of these polluters with new polluters would be catastrophic for my community and for communities for miles around.

Our work as engaged citizens began in 2015 with the declaration of the entire greater Baltimore area being declared a non-attainment zone for SO2. We fought hard for a SO2 monitor for our area since

John S. Garofolo | johngstoneybeach@gmail.com

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Unfortunately, the state continues to refuse to implement effective air quality monitoring in our area or conduct a community health study for fear that it might uncover inconvenient truths. Moreover, our health is threatened by many polluters within just 5 miles of our community including the enormous expanding MPA Cox Creek Dredge Material Containment facility, a petroleum/asphalt processing plant, a chemical plant, multiple toxic material dumps, the horribly polluting Curtis Bay Energy medical incinerator - which is the largest in the country, the CSX coal terminal, and even a radioactive Superfund site. And, we are only two and a half miles directly across the Patapsco from Sparrows Point in which cleanup operations from the pollution from Bethlehem Steel have been ongoing for years. And there are countless other highly contaminated legacy pollution sites within our Zip Code. In addition to the smoke from the power plants, I often also smell the horrible odors of sewage from the waste water treatment plant near my community and the toxic plasticky odor of the Curtis Bay Energy medical waste incinerator nearby. We have so many sources of air pollution that we may never escape them. And our soil is contaminated as is the tidal Patapsco and the sediment in it by benzo(a)pyrene – a carcinogenic chemical created from coal burning. We need a break!

Our communities suffer from economic and home value burdens along with the health burdens from all of these sources of pollution. **Even real estate apps now grade communities on their pollution burden. And mine and homes for miles around have a low score.**

And we have no idea how much the pollution around us has impacted our ability to work because of illness or to the organizations which depend on us and the state and municipalities which have to pay for social services when we're unable to work and need uncovered medical care. The health effects of pollution have largely uncaptured impacts on our state's economy – from significant health costs for citizens, insurers, and the state, to sick days and unemployment that impact businesses, to strain on our medical system, and to depressed home values. We have suffered environmental injustice for decades. The last thing we need is more polluters near our homes. The hidden costs of pollution to our communities have not been properly measured and assessed. They most certainly should figure into decisions about permitting polluters and recovering costs from known polluters in ways that support overburdened communities.

While I completely understand the need for reliable energy and the challenges that the state is wrestling with, the weight of the economic and health burdens of that should not be born on the back of environmentally overburdened communities concentrated in particular areas such as the tidal Patapsco. The burden needs to be measured, understood, and fairly shared. Moreover, the negative impacts of

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I strongly oppose House Bill 1035 and the door it would open for more environmental injustice for overburdened communities. In sharp contrast, the legislation proposed in Senate Bill 978 would send us on the right trajectory. Maryland can lead the way for environmental justice. We can solve our energy challenges with a carefully thought-out process that doesn't sacrifice the health of already overburdened communities. Maryland should lead the way on leveling the environmental justice playing field for all while it addresses energy resiliency and it should refrain from replacing one polluting power plant with another. We need a fair and just energy generation plan for Maryland.

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2025 HB 1035 Written Testimony for hearing correct Uploaded by: John Garofolo

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Sincerely,

John S. Garofolo Stoney Beach, Curtis Bay, MD

John Stith CCAN Action Fund Testimony HB1035 Unfav Uploaded by: John Stith

HB 1035 - Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Economic Matters Committee February 28, 2025

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

I live in the Carole Highlands neighborhood of Prince George's County, in Legislative District 47B. My address is 7219 16th Ave, Takoma Park.

Pepco's transmission towers rise more than 100 feet over our neighborhood. Pepco has given us permission to fight a battle in the "meadow" under the towers – a battle against invasive callery pear trees. Our group of volunteers cuts the small trees down one by one, and Pepco's contractor sprays herbicide on the worst clusters. So far our victories only last a few years. The invasive plants keep coming back, ruining the native blackberry bushes, the nesting habitat of field sparrows, and the stands of wildflowers.

As we do this, we see the other battle losses. The bobwhites are gone. The tower fooled a pair of falcons into making a nest in the structure, then the record-hot summer killed their eggs. Air pollution gives us respiratory diseases that kill people. A few of our poor and ill neighbors camp out near the towers. Members of our community fled the droughts that destroyed their farms in Guatemala, El Salvador, and Honduras.

This battle is coming closer to all humans. Droughts are increasing around the world, making it harder to keep global food prices low. Air pollution is so bad in some of the world's cities that people just stay inside. We all need to join in this battle to stabilize our ecosystems, climate, and air quality. For anyone who has trouble breathing or affording food, the stakes are very high.

I see Governor Moore in this fight. He has pledged by 2035 we'll generate as much clean electricity in Maryland as the electricity we use. He respects the Climate Solutions Now Act. His administration is pointing out many actions Maryland can take to deploy clean energy faster, especially off-shore wind and more solar, which will be major sources of electricity.

I see Delegate Charkoudian and Senator Brooks in this fight with their Abundant Affordable Clean Energy (AACE) Act to reform the market and bring savings to rate-payers. I volunteer with the Chesapeake Climate Action Network, so I can be in this fight too.
The portion of the Next Generation Energy Act that pursues new nuclear technologies is part of this fight. And we have just seen huge wins in Texas and California. In 2024 alone, each state brought enough battery energy storage online to cover the amount of summer peak capacity the Next Generation Energy Act seeks to address. The world now has a powerful new tool. "Virtual power plant" policies are also advancing. Electricity generation is one area where we can win this battle, and other states are already winning the battle.

But the openness of this bill to new gas generation is a retreat – a retreat in the face of victory. We are temporarily still burning some coal and gas as we deploy the cleaner technologies, and we can continue to do so to avoid outages. We don't need an additional gas plant. With the many leaks from the natural gas network, and the powerful greenhouse effects of methane pollution, gas plants are no better than coal plants for the climate. Steering the investment of billions of dollars to building new gas capacity is a waste we cannot afford. We need that new investment to go to generation facilities we will actually use for decades.

This bill plans a "cost-benefit analysis" of our health and our racing towards droughts and unaffordable food. The costs of gas are clear and the benefits of clean energy are clear. It's hard to trust a bill and a process that doesn't see that, after decades when the costs of fossil fuels were lied about and ignored, and people died from air pollution as a result of those lies.

There is much to do. Pursuing last-generation energy is a distraction we cannot afford. Across Maryland, we are all doing what we can, like our group protecting our neighborhood's meadow under the power lines. Please finish your fight to have those power lines carry clean electricity.

NextGenEnergy_SB937 & HB1035_Oppose FWW.pdf Uploaded by: Jorge Aguilar



1616 P Street, NW Suite 300 Washington, DC 20036 **T** +202.683.2500 **F** +202.683.2501 **foodandwaterwatch.org**

Oppose SB 937/ HB 1035

Next Generation Energy Act February 28, 2025 Joint Senate Education, Energy, and the Environment Committee & House Economic Matters Committee

On behalf of Food & Water Watch and our 44,000 members in the state, we are submitting this testimony in opposition to the Next Generation Energy Act that seeks to promote and fast track new fracked gas and nuclear energy power plants in Maryland as part of a push for so-called "dispatchable energy."

For years, state leaders have regularly expressed a commitment to achieving a clean energy future that valued reducing electricity costs, greenhouse gas and toxic pollution, as well as preventing the externalized costs to public health and the environment from old, dirty energy power plants. The Next Generation Energy Act completely abandons that commitment and instead promotes building new fossil fuel plants and nuclear reactors as quickly as possible and with fewer protections for the communities that might be impacted.

At a time when rates have continued to increase because of the continued reliance on fossil fuels by the current grid system, this legislation doubles down on building out more methane gas plants and nuclear reactors. This will prove to be more expensive than simply continuing to build out wind and solar, and will ultimately cost Maryland ratepayers billions. Glaringly, the bill even has language that suggests that some cost analysis may be kept confidential.

Unfortunately, the Next Generation Act is also promoting the build out of these new power plants in retired fossil fuel facilities. Under the provisions in the bill, in that scenario, the state would also wave key steps requiring community feedback and protections, including with environmental justice communities, and would also remove formal engagement processes with local municipalities about land use planning. As per the bill language, within a few months a new power plant could get its key Certificate of Public Necessity without needing to engage communities or local officials.

Just as problematically the Next Generation Energy Act contains a very short "community benefits" portion of the legislation that would only apply to entirely new locations. But the section says nothing about the process by which the state would choose the locations of these new facilities, how communities would be consulted, the risk assessment of negative environmental and social impacts, nor how the state would ensure that environmental justice principles would be factored in to protect the most vulnerable communities where these type of dangerous facilities usually end up. Nor does the bill address the potential pipelines or transmission lines that would likely need to be built out across Maryland communities to service these new power plants.

The rush to build out these nuclear reactors is largely about the push to build Artificial Intelligence data centers in Maryland that will require enormous amounts of energy. Again, Maryland families should not have to pay for these to subsidize the tech companies. But it is



particularly telling that there are open discussions about new power plants and reactors being co-located with these data centers or having them built in close proximity to them. But this bill again fails to address siting parameters or protections for communities near potential new power plants that would store radioactive fuel rods on site the same way Calvert Cliffs does and/or methane power plants that emit toxic chemicals into surrounding communities.

It is already widely known that new fracked gas plants and nuclear reactors will emit dangerous chemicals into our air and pollute our waterways. They will also necessitate new hazardous material and emergency planning programs in Maryland communities to deal with the long-lived radioactive and toxic waste from these facilities. The bill does not provide any acknowledgment, planning, or protections for Maryland's communities for these potentially dangerous new realities. Instead, the bill's intention is to approve the facilities as quickly as possible for key permits, potentially over just a few months.

Whether it's new fracked gas plants or nuclear reactors, every credit we give or dollar we spend propping up the energy of our past is a dollar we can't spend on the transition to a clean, safe and affordable energy economy.

For all these reasons, we urge you to oppose this legislation

HB1035_UNFAV_Jennings.pdf Uploaded by: Julie Jennings

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of me and my children, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

Sincerely,

Julie Jennings 9208 Wadsworth Dr Bethesda, MD 20817

HB1035_SB0937_Next Generation Energy Act_Testimony Uploaded by: Karl Held

Committee: Education, Energy, and Environment Testimony on: HB1035 - Next Generation Energy Act Submitting: Karl Held Position: UNFAVORABLE Hearing Date: February 28, 2025

Dear Chair and Committee Members:

Thank you for allowing my testimony today on HB1035. I am concerned about the provisions for building a gas-burning power plant that fast tracks the construction of a projected three GW facility.

The solutions proposed in HB1035 will not result in greater energy reliability in the timeframe needed and will likely increase rather than result in lower electric rates in Maryland. Construction of this gas power plant would cost an estimated 3 billion dollars that would have to be shared by Maryland ratepayers. In addition, the serious and ongoing impacts of climate change can best be mitigated by cheaper, faster, and safer alternatives to gas.

Also, gas generating plants are massive undertakings, even when they are renovating a pre-existing coal plant, and can take upwards of seven years to complete. In 2023, the Virginia utility Dominion proposed building a new gas plant at the location of an existing coal plant, originally promising completion by 2026. Now they say it won't be operational until at least 2030.

A recently commissioned report by Google to assess the least expensive way to meet new electricity demand found that building a new gas power plant is more expensive than zero-emission alternatives, including building new utility scale batteries with a virtual power plant.

Despite some good strides in Maryland clean energy in the past, authorizing construction of a massive gas plant in the 2020's, in a world of rapid global warming, will leave a horrible climate legacy for this General Assembly. You have done as much good as any statehouse to pass climate bills like the Clean Energy Jobs Act and the Climate Solutions Now Act to help lower the cost of solar energy and battery technology, making them cheaper alternatives to the large gas plant proposed in HB1035.

If lawmakers are serious about lowering electricity bills and helping Maryland ratepayers, they should abandon talk of building a large and harmful gas plant. There may be more expeditious and lower cost solutions, such as those proposed in SB316 the Abundant Affordable Clean Energy Act

For these reasons, I respectfully urge an **UNFAVORABLE** report in Committee.

HB1035 SB937 Sugarman unfav.pdf Uploaded by: Kate Sugarman Position: UNF

HB1035/SB937 - UNFAVORABLE

Kate Sugarman, MD resident of D15

katesugarman@hotmail.com

301-343-5724

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

As a family physician I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act. I am an active member of Third Act Maryland.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

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As a public health physician I see in real time the adverse health effects that fossil fuels are causing. As physicians we know that we need to decrease the use of fossil fuels, not build new gas plants.

The pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

Kate Sugarman, MD Potomac, MD D 15

HB1035_Little_UNF.pdf Uploaded by: Kathryn Little Position: UNF

Testimony Opposing HB1035 House Economic Matters Committee February 28, 2025

Position: UNFAVORABLE

Dear Chair Wilson and Members of the Committee,

As a resident of Baltimore City and a person of faith concerned about public and environmental health, I am writing to express my opposition to HB1035, the Next Generation Energy Act.

Lowering electricity rates is a top goal in Maryland. I support achieving that goal through increased investments in solar power, utility-scale batteries, energy efficiency, and smart-grid technology. Hard data shows these efforts are faster, cheaper, and better for the environment and human health than a proposal to build a large new gas plant in the state.

I appreciate that the stated intent of this bill is to "encourage the development of cleancarbon-free nuclear power, including development through innovative designs." The issue is the definition of "dispatchable energy generation." If it were more specific to nuclear power, this would be a responsible bill. However, it leaves open the door for natural gas, and future subsections provide explicit provisions for natural gas plants, making clear the expectation that natural gas companies will provide some – likely up to the quota – of the requested dispatchable energy generation.

Likewise, I appreciate the provision to convert natural gas stations to hydrogen or zeroemissions biofuel when feasible, but it is more responsible to wait until those fuels are feasible and build those plants then. The potential for decades of burning natural gas in a new plant until the Commission deems it feasible to switch fuels is the wrong choice for Maryland.

As you are aware, Maryland and the US need to continually increase the renewable energy portion of our energy portfolio, not build new fossil fuel-burning infrastructure. This bill is a step in the wrong direction and will lock us into natural gas for decades to come.

I urge you to return an unfavorable report on HB1035. Thank you for your time and work.

Regards, Katie Little 881 W Lombard St Baltimore, MD 21201

2025.02.28_HB1035_SB937_Next Generation Energy Act Uploaded by: Katie Mettle



February 28, 2025

Economic Matters Committee Maryland House of Delegates

Education, Energy, and the Environment Committee Maryland Senate

HB 1035 & SB 937 Next Generation Energy Act

Katie Mettle Policy Principal, Advanced Energy United

UNFAVORABLE

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 appreciate that HB 1035 and SB 937 will create an expedited CPCN process for renewable energy generation when paired with at least some types of battery storage, and for all projects that have cleared the PJM interconnection queue, or are still in the queue as of January 1st of this year.

However, on behalf of our member companies and in alignment with our mission to decarbonize the economy, we respectfully request the following amendments to HB 1035 and SB 937:

- 1. In 7-1201 (B) (1), add to the definition of "dispatchable energy generation" storage that exceeds 10 hours. PJM's most recent ELCC class ratings do not include any storage greater than 10 hours.
- 2. In 7-1201 (B) (2), specify that "lower greenhouse gas emissions profile than coal or oil energy generating stations" includes a lifecycle assessment of greenhouse gas emissions each for coal, oil, and proposed dispatchable energy generation. For methane emissions, the calculation of carbon dioxide equivalent greenhouse gas emissions should use the value for its 20-year global warming potential.
- 3. Section 7-218 (D) in the Renewable Energy Certainty Act (HB 1036 and SB 931) requires notification of an application for a solar energy generating station over 2MW be provided to multiple governing bodies and members of the General Assembly, as well as to every resident and property owner within 1 mile of the proposed location. We request that section 7-218 (D) in the Renewable Energy Certainty Act (HB 1036 and SB 931) be duplicated for dispatchable gas and/or nuclear energy generation under HB 1035 and SB 937.
- 4. Section 7-218 (E) in the Renewable Energy Certainty Act (HB 1036 and SB 931) requires public meetings for a solar energy generating station over 2MW that is proposed to be located within an overburdened and underserved area. We request that Section 7-218 (E) in the Renewable Energy Certainty Act be duplicated for dispatchable gas and/or nuclear energy generation under HB 1035 and SB 937.
- 5. In 7-1204 (1), define that a biofuel shall only qualify as "zero-emissions" using a lifecycle greenhouse gas emissions approach.
- 6. Under 7-1204 (1), mandate that a natural gas energy generation station include carbon capture and storage in order to qualify for the expedited CPCN process.
- 7. Under 7-1210 (4), include in the cost-benefit analysis for an application for a nuclear energy generation project a comparison of the proposed nuclear energy generation project to all other energy generation sources that qualify for the expedited CPCN, including renewables paired with battery storage. The comparison

shall include every item listed under 7-1210 (4), plus estimated time elapsed until the new energy generation will come online.

8. Strike the requirement in 7-1217 that electric companies purchase any nuclear energy, let alone a specific amount.

We respectfully request the Committee issue an unfavorable report, unless the amendments we have proposed are incorporated into the bill.

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

SB937_HB1035 Next Generation Energy Act_ECM_EEE_CJ Uploaded by: Laurie McGilvray



| Committee: | Joint House Economic Matters and Senate Education | | | |
|----------------------------|---|--|--|--|
| Energy and the Environment | | | | |
| Testimony on: | HB1035/SB937 - Next Generation Energy Act | | | |
| Organization: | Maryland Legislative Coalition Climate Justice Wing | | | |
| Submitting: | Monica O'Connor, Co-Chair | | | |
| Position: | Unfavorable | | | |
| Hearing Date: | February 26, 2025 | | | |

Dear Chair and Committee Members:

Thank you for allowing our testimony today on HB1035. The Maryland Legislative Coalition (MLC) Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations respectfully urges you to vote unfavorably on HB1035.

We appreciate that Maryland ratepayers are struggling to pay rising utility bills and are looking to the General Assembly for solutions. However, we believe the solutions proposed in HB1035 will not result in greater energy reliability in the timeframe needed and will increase rather than lower electric rates in Maryland. Unlike the clear factors driving up gas utility rates (i.e., excessive investment by BGE in gas infrastructure replacement under the STRIDE law), the factors affecting electric utility costs are more complex and nuanced and affect all electric utilities in Maryland.

Unfortunately, there are misconceptions that the steep jump in electricity costs today are due to the summer 2024 PJM capacity auction and the impending retirements of Brandon Shores and Wagner coal plants. While last summer's PJM capacity auction and omission of these coal plants will result in a <u>future</u> increase of 800% in the capacity pricing portion of our electric bills, <u>starting June 1, 2025</u>, it does not explain the current electric rates, (The <u>capacity portion</u> of our electric bills is 8%). In fact, one reason for increased electricity costs is that Maryland ratepayers are bearing the cost of \$1.5 B in new transmission being built to offset the retirement of the two coal plants – a solution mandated by PJM and FERC. Another significant factor is the excessive delay at PJM in bringing on new solar and storage, as well as Marylanders' share of the cost of new generation and transmission for Virginia data centers. We believe the best policy solutions for Maryland are those that address the real and complex reasons for rising electricity costs.

To that end, we support several other bills and policies that offer no-regrets solutions more likely to result in near-term reliability improvements and at lower costs, while also allowing Maryland to reduce greenhouse gas emissions. Examples of these policies include incentives for utility scale battery storage and solar (both utility scale and community solar) and getting more out of the grid we have through grid enhancing technologies and reconductoring. According to the PJM state infrastructure report (see pg.10) Maryland has over 7000 megawatts of solar and battery storage in its capacity queue. The fastest and cheaper option for Maryland is for the legislature to develop the regulatory and planning processes to resolve the various barriers that have made it difficult to deploy renewable energy projects.

The proposed HB1035 provisions to promote new in-state gas generation will neither increase near term reliability or reduce rates, instead burdening Marylanders with polluting and costly investments for decades - particularly those communities (presumably communities near the Brandon Shores and Wagner plants) that will be subject to another 40 -50 years of environmental injustice. Gas generating plants are massive undertakings, even when they are renovating a pre-existing coal plant, which can take upwards of 7 years to complete, particularly as proposed new tariffs will increase costs and exacerbate supply chain issues. In 2023, the Virginia utility Dominion proposed building a new gas plant at the location of an old coal power plant, which they promised would be operational in 2026. Now they say it won't be running until at least 2030. Additionally, a recent commissioned report by Google to determine the least expensive way to meet new electricity demand found that building a new gas power plant is more expensive than prominent zero-emission alternatives, including building new utility-scale batteries and building virtual power plants.

Beyond the barriers of time and expense, pollution from gas power plants drives up costs for Marylanders. The local air pollutants, which include ozone, sulfur-dioxide and nitrogen-dioxide, contribute to asthma and other health conditions that increase healthcare costs. Gas is a fossil fuel that contributes to climate change, effects of which are felt throughout the state. According to a Environmental Defense Fund 2023 <u>report</u>, natural gas pipelines nationwide are leaking as much as 2.6 million tons of methane each year, which has the same climate impact as nearly 50 million passenger cars driven for a year on near-term warming scales. The proposed HB1035 provision to promote one or more new methane gas dispatchable generation projects is a significant step backwards for Maryland and contradicts the Climate Solutions Now Law enacted by this assembly in 2022. It is a false solution to our short term and long term energy needs.

Additionally, the proposed HB1035 provisions to add nuclear energy to the renewable portfolio standard and implement procurement structure for new nuclear generation will not bring new generation to Maryland for years if not decades. The Georgia Power Vogtle Units 3 and 4 took 15 years to build and cost \$36.8 billion, more than twice the project timeline and cost (see <u>costs</u> for Georgia nuclear plant). The Utah Associated Municipal Power Systems <u>NuScale Power</u>

small modular nuclear reactor project was initially projected to cost \$3 billion and ultimately rose to \$9.6 billion at which point the project was shelved. Furthermore, a 2014 <u>academic</u> <u>study</u> looked at 180 nuclear power projects around the world and found 175 of them exceeded the initial budget by an average of 117% and took, on average, 64% longer to build. The levelized capital costs of electricity production of <u>nuclear is three times the cost of solar</u>.

HB1035 allows for a dangerous precedent that enables agencies to forego community engagement, Environmental Justice Screening, risk assessment or municipal consultation to obtain its Certificate of Public Convenience and Necessity (CPCN), waive or expedite regulatory requirements, expedite CPCN and/or follow FERC orders to prioritize dispatchable generation for in-state gas plants and nuclear generation above others in the queue. Therefore, if a company wants to build a new power plant at an old retired or abandoned plant site or a currently operating power plant, the company would not be required to do any community engagement even if the site is already an Environmental Justice zone. Basically saying that if it is a "sacrifice zone" today, it is alright to have it stay a sacrifice zone.

HB1035 will not bring down rates or add near-term reliability. Instead, it will hinder more expeditious and lower cost solutions to relieve ratepayers and bring energy reliability, such as those proposed in SB316 the Abundant Affordable Clean Energy Act, SB37 the Affordable Grid Act, SB37 the Utility Transparency Act, and SB998 the Ratepayer Protection Act. It also seems premature to offer long-term and extremely expensive nuclear and fossil fuel energy solutions, without conducting the integrated energy resource planning envisioned in SB909 Energy Resource Adequacy and Planning Act and a complementary data study bill SB0116.

For these reasons, the MLC Climate Justice Wing respectfully urges an **UNFAVORABLE** report on HB1035 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

HB1035_UNFAV_Trout.pdf Uploaded by: Linda Trout Position: UNF

HB1035/SB937- Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will allow for new gas plants to be constructed in Maryland. This will not solve the issue of high utility bills because of the time that it takes to get a new gas plant up and running. These fossil fuel powered plants may take years before they are creating energy that can be distributed to the public, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is not the most effective strategy.

Additionally, the cost of building the type of a gas plant approved in this bill is equal to \$1000 per kilowatt of energy produced. This means a new gas plant could cost Maryland \$3 billion dollars. This is far too expensive an investment to make with no immediate relief on utility bills.

Furthermore, a new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. The state has set a goal of reducing our greenhouse gas emissions by 60% by 2031 and Governor Moore issued an executive order last spring to create a framework to reach 100% clean energy by 2035. To achieve either of these goals, the state should be investing in clean and renewable energy rather than allowing for gas provisions.

As a resident in the city of Baltimore, I am very concerned that the pollution that will result from a new gas plant will wreak havoc on the health of Marylanders, particularly those who live in overburdened and underserved communities that are already facing the unequal effects of climate change and fossil fuel pollution. The greenhouse gas and particulate emissions that will be produced by a new gas plant will increase Maryland residents' chances of pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. Young children and

seniors like me will be most at risk. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

{Feel free to customize}

HB1035_UNF_Next Gen_ECM_HoCoCA.org.pdf Uploaded by: Liz Feighner



Testimony:HB1035 – Electricity Generation Planning - Procurement, Permitting, and
Co-Location (Next Generation Energy Act)Hearing Date:February 27, 2025Bill Sponsor:The Speaker and Delegate WilsonCommittee:Economic MattersSubmitting:Liz Feighner for Howard County Climate ActionPosition:Unfavorable

<u>HoCo Climate Action</u> is a <u>350.org</u> local chapter and a grassroots organization representing approximately 1,400 subscribers. We are also a member of the <u>Climate Justice Wing</u> of the <u>Maryland Legislative Coalition</u>.

We strongly urge you **to vote unfavorably on HB1035** which "approves" a type of electricity generation that only gas can provide and that is equal to the peak capacity of the 20 existing coal- and oil-fired power plants that are close to retirement in the state equal to 3.109 gigawatts of power. A recent study commissioned by the US Department of Energy found that a modern combined cycle plant of the type this bill envisions now costs nearly <u>\$1000 per kilowatt</u> to build. That comes out to over \$3 billion. Meanwhile, a <u>recent Brattle Group study</u> shows gas as more expensive than battery storage and efficiency.

The better solutions in the The Abundant, Affordable Clean Energy (AACE Act) can be implemented more quickly than ill-conceived resource adequacy proposals like new gas-fired power plants and untested small modular nuclear reactors which would inevitably take longer to come online and jeopardize the state meeting its climate requirements.

Electricity costs are increasing rapidly in large part because of problems with PJM, our grid operator. Proposed clean renewable energy projects have been stuck in <u>PJM's interconnection</u> <u>queue</u> for years and the queue has been so long that they <u>stopped accepting projects</u> at one point. By the time projects clear the queue and are approved, they are no longer financially viable and many are not built. Now, increasing electricity demand due to high-intensity energy use facilities like data centers plays a major role in our rising rates.

This has caused a mismatch between supply and demand that has dramatically increased capacity prices. In the most recent PJM capacity auction, there was an <u>800% increase</u> that will be passed on to Maryland ratepayers.

Provisions in the Abundant, Affordable Clean Energy (AACE Act) <u>HB0398</u> bring on new energy projects that 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. **Building a new gas plant is the most expensive, slowest, and most polluting energy solution available to Maryland.**

In 2023 the Virginian utility Dominion proposed building a new gas plant at the location of an old coal power plant, which they promised would be operational in 2026. Now they say it won't be running until at least 2030. New gas power plants are massive undertakings, even when they are renovating a pre-existing coal plant, which can take upwards of 7 years to complete. New Gas generation cannot provide any additional energy resources to Marylanders in the 2020s.

Batteries, on the other hand, can be deployed in a matter of months, rather than a matter of years, and are already meeting surging energy demand in states like Texas

Renewables and batteries can keep the lights on. A combination of rapidity, low-cost, and flexibility makes AACE a "no regrets" path to achieving resource adequacy to meet current and future electric load requirements in Maryland. AACE's pathway to energy development is in line with the State's carbon reduction goals, allows for the flexibility to respond to future energy demands, and provides solutions to resource adequacy in this decade.

For all of these reasons, we strongly urge **an UNFAVORABLE report for HB1035 and instead**, we urge **strong support for provisions in the AACE ACT**, <u>HB0398</u>.

Howard County Climate Action Submitted by Liz Feighner, Steering and Advocacy Committee <u>www.HoCoClimateAction.org</u> <u>HoCoClimateAction@gmail.com</u>

HB1035-SB937_UNF_Next Gen_ECM_EEE_HoCoCA.org (1).p Uploaded by: Liz Feighner



Testimony:HB1035/SB0937 – Electricity Generation Planning - Procurement,
Permitting, and Co-Location (Next Generation Energy Act)Hearing Date:February 27, 2025Bill Sponsor:The Speaker and Delegate Wilson, The President and Senator FeldmanCommittee:Economic Matters, Education, Energy, and the EnvironmentSubmitting:Liz Feighner for Howard County Climate ActionPosition:Unfavorable

<u>HoCo Climate Action</u> is a <u>350.org</u> local chapter and a grassroots organization representing approximately 1,400 subscribers. We are also a member of the <u>Climate Justice Wing</u> of the <u>Maryland Legislative Coalition</u>.

We strongly urge you **to vote unfavorably on HB1035/SB0937** which "approves" a type of electricity generation that only gas can provide and that is equal to the peak capacity of the 20 existing coal- and oil-fired power plants that are close to retirement in the state equal to 3.109 gigawatts of power. A recent study commissioned by the US Department of Energy found that a modern combined cycle plant of the type this bill envisions now costs nearly <u>\$1000 per kilowatt</u> to build. That comes out to over \$3 billion. Meanwhile, a <u>recent Brattle Group study</u> shows gas as more expensive than battery storage and efficiency.

The better solutions in the The Abundant, Affordable Clean Energy (AACE Act) can be implemented more quickly than ill-conceived resource adequacy proposals like new gas-fired power plants and untested small modular nuclear reactors which would inevitably take longer to come online and jeopardize the state meeting its climate requirements.

Electricity costs are increasing rapidly in large part because of problems with PJM, our grid operator. Proposed clean renewable energy projects have been stuck in <u>PJM's interconnection</u> <u>queue</u> for years and the queue has been so long that they <u>stopped accepting projects</u> at one point. By the time projects clear the queue and are approved, they are no longer financially viable and many are not built. Now, increasing electricity demand due to high-intensity energy use facilities like data centers plays a major role in our rising rates.

This has caused a mismatch between supply and demand that has dramatically increased capacity prices. In the most recent PJM capacity auction, there was an <u>800% increase</u> that will be passed on to Maryland ratepayers.

Provisions in the Abundant, Affordable Clean Energy (AACE Act) <u>HB0398</u> bring on new energy projects that 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. **Building a new gas plant is the most expensive, slowest, and most polluting energy solution available to Maryland.**

In 2023 the Virginian utility Dominion proposed building a new gas plant at the location of an old coal power plant, which they promised would be operational in 2026. Now they say it won't be running until at least 2030. New gas power plants are massive undertakings, even when they are renovating a pre-existing coal plant, which can take upwards of 7 years to complete. New Gas generation cannot provide any additional energy resources to Marylanders in the 2020s.

Batteries, on the other hand, can be deployed in a matter of months, rather than a matter of years, and are already meeting surging energy demand in states like Texas

Renewables and batteries can keep the lights on. A combination of rapidity, low-cost, and flexibility makes AACE a "no regrets" path to achieving resource adequacy to meet current and future electric load requirements in Maryland. AACE's pathway to energy development is in line with the State's carbon reduction goals, allows for the flexibility to respond to future energy demands, and provides solutions to resource adequacy in this decade.

For all of these reasons, we strongly urge an UNFAVORABLE report for HB1035/SB0937 and instead, we urge strong support for provisions in the AACE ACT, <u>HB0398</u>.

Howard County Climate Action Submitted by Liz Feighner, Steering and Advocacy Committee <u>www.HoCoClimateAction.org</u> <u>HoCoClimateAction@gmail.com</u>

HB1035 testimony.pdf Uploaded by: Liz Kato Position: UNF

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

As a Maryland resident, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act makes no sense from any point of view.

- New gas plants will not solve the issue of high utility bills because it will take years to get a new gas plant up and running, whereas clean energy alternatives like batteries or solar can be online much faster. If the goal is to lower energy bills in the state, a new gas plant is NOT an effective strategy.
- 2) This type of a gas plant will cost Maryland \$3 billion dollars. With looming economic devastation from the massive Trump/Musk Federal layoffs and budget cuts, we simply cannot afford to throw away this amount of money for no immediate payoff.
- 3) A new gas plant would be counterproductive in helping Maryland reach its climate goals set forth in the Climate Solutions Now Act of 2022. Only a fool or a hopelessly corrupt person can deny the impact of climate change.
- 4) The pollution from the new gas plants will shorten the lives of Marylanders, particularly those who are already facing the unequal effects of climate change and fossil fuel pollution. It is thoroughly documented that particulate emissions increase pulmonary and cardiovascular diseases, developing asthma, strokes, and premature death. The people of Maryland deserve to keep their lights on without putting their health and climate at risk.

I respectfully request an unfavorable report on HB1035/SB937.

HB 1035 - CBF - UNF.pdf Uploaded by: Matt Stegman Position: UNF



Environmental Protection and Restoration Environmental Education

House Bill 1035 Public Utilities – Electricity Generation Planning – Procurement, Permitting, and Co-Location (Next Generation Energy Act)

| Date: | February 28, 2025 | Position: | UNFAVORABLE |
|-------|----------------------------|-----------|--------------------|
| To: | Economic Matters Committee | From: | Gussie Maguire, |
| | | | MD Staff Scientist |

Chesapeake Bay Foundation (CBF) **OPPOSES** House Bill 1035, which incentivizes and expedites nuclear and natural gas energy generation projects in the state. CBF understands that Maryland faces energy challenges, especially from new "large load customers", as described in the bill text. That said, additional procurement of energy generation that meets the minimal standard of "a lower greenhouse gas emissions profile than coal or oil" must not be relied upon to answer those challenges.

Despite natural gas's reputation as a "clean burning" fuel, its emissions pose the same threats to the climate as coal and oil, just at slightly lower volume. Natural gas is primarily composed of methane, which is even more effective than carbon dioxide at trapping heat in the atmosphere. Any leaks in pipelines to or equipment at a natural gas-burning facility or other utility customer would result in increased contributions of greenhouse gases in the atmosphere from the state, undermining climate goals. Bill language requiring that a natural gas plant must be able to be converted to a different type of fuel does not guarantee that it will be converted in a timely fashion. Furthermore, fossil fuels and biofuels both produce nitrogen oxides when burned. Nitrogen oxides in the atmosphere fall with precipitation into the state's waterways and contribute to nutrient pollution in the Chesapeake Bay and its tributaries.

The Public Service Commission, the Department of the Environment, and the Department of Natural Resources are all required by this bill to waive or expedite regulatory requirements or decisions in order to meet arbitrary time frames for accelerated energy generation projects. Siting of energy projects, whether fossil fuel, nuclear, solar, or wind, must be carefully considered to ensure that minimum impacts are made upon the environment and upon communities surrounding the sites. State agencies engaged in this important work must not be stripped of the opportunity to make the right decision for each project, for state residents and for the state's valuable natural resources.

CBF urges the Committee's UNFAVORABLE report on HB 1035.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at <u>mstegman@cbf.org</u>.

HB1035_SB937_UNFAV_Winston.pdf Uploaded by: Pamela Winston
HB1035/SB937 - UNFAVORABLE

Pamela Winston 8005 Glenside Drive Takoma Park, MD 20912 p.winston@live.com 301-434-5557

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

I have lived in Takoma Park for the past 25 years. I also volunteer with the Chesapeake Climate Action Network (CCAN). I strongly recommend an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

With energy prices rising and Maryland families feeling pressure from increased expenses everywhere, legislators understandably seek to address these concerns. It is critical, however, that the steps we take now actually address the problem in an effective, efficient, responsible, and time-sensitive fashion. It is tempting to jump on solutions that appear responsive and quick to employ. However, many so-called solutions are in fact risky for Marylanders, with under-appreciated negatives for the state, the nation, and the planet we must call home. It is especially important to continue moving our state's energy policy in a responsible and effective direction as we see the federal government abdicate its role to protect and defend us on the national level. Maryland has long been a leader in responsible energy policy and sincere efforts to address the climate crisis. It has never been more important that we continue in this role.

Solutions to our climate crisis are under attack, and policies are being decided at the state and federal levels that will affect all people on earth for generations to come. The irresponsible decisions many policymakers are taking now will have a long reach. My 22-year-old son, who I love more than life itself, is in the crosshairs of this backsliding of efforts to replace fossil fuel plants with renewable energy. Any *new* fossil fuel plants would likely operate until he reaches late middle age, pumping toxic greenhouse gases into the air and accelerating the climate change that is harming him and his peers, all the while bringing the worst effects to the people who did the least to create the problem. This assault on environmental justice makes it all the more important that we take a very different direction from what we are seeing out of Washington. We should be closing down fossil fuel plants, not building new ones!

I therefore reiterate my strong **opposition to a new gas power plant** in Maryland, and my **support for Del. Charkoudian's AACE (Affordable Abundant Clean Energy) Act.** The AACE addresses Maryland's energy needs without saddling my son and others with a costly, polluting methane gas power plant. I also implore you to keep a strong focus on environmental justice in your decisionmaking. While a socalled solution such as a new gas plant may appear to help lower income people economically, in the end its worst environmental and economic impacts will hit them the hardest.

It's also important to keep in mind that the future energy demand for data centers to supply AI and other tech needs is *highly uncertain*. In just the last few days, we are seeing news that data centers may *not* need the energy capacity that had originally been projected. In light of the emergence of the energy-efficient DeepSeek AI model, Microsoft has canceled some leases for data centers, raising questions about energy capacity estimates for the future.

The Next Generation Energy Act would allow for new gas plants to be constructed in Maryland. This is a mistake. Gas plants take on average around 7 years to come online--too long to help with today's high energy bills. Gas plants are very expensive, with costs typically born by ratepayers (and hitting the lowest income the hardest). Gas plants are highly polluting, and are typically located in the lowest income communities, subjecting them to the worst exposures and the worst health effects. Finally, construction of new gas plants would go against the climate goals set forth in the Climate Solutions Now Act of 2022.

Please be skeptical of appeals by the utility companies to support a new gas power plant—they may win with a new plant, but the rest of us lose. There are other options that include renewable energy sources supplemented by battery storage for power as needed at night and other times. These options would be faster to employ, cleaner, and cheaper. Maryland residents need an energy policy that *takes the long view*, not one that falls back on costly, dangerous, inequitable, and obsolete approaches.

I respectfully request an unfavorable report on HB1035/SB937.

Thank you so much for your leadership.

Pamela Winston

HCCA - Testimony HB1035-2025 Nuclear Energy Power Uploaded by: Paul Verchinski

Position: UNF



HB1035 – Public Utilities – Electricity Generation Planning – Procurement, Permitting, and Co-Location (Next Generation Act) Economic Matters Committee Position: Unfavorable Friday, February 28, 2025

Greetings Chairman C.T. Wilson, Vice Chairman Brian Crosby and members of the Economic Matters Committee

My name is Paul Verchinski. I am testifying for the nonprofit Howard County Citizens Association (HCCA). Founded in 1961, HCCA testifies regarding proposed legislation affecting the residents of Howard County and the State of Maryland. This written testimony has been authorized by the HCCA Board. Our website can be found at <u>https://howardcountyhcca.org</u>. While Nuclear Energy may be a green solution for base load generation, there has not been a successful new nuclear plant built in the United States in the past 40 years. Small packaged nuclear plants are now being touted, yet none have been installed and approved by the Federal Nuclear Regulatory Commission. If you proceed with this bill, it should only be done on a very strict Pilot basis instead of the broad language in this proposed bill. Alternatively, the State could authorize a Power Purchase Agreement for electricity from the existing Calvert Cliffs Nuclear Plant, thereby avoiding construction cost risk.

UnFavorable

The Howard County Citizens Association requests an UnFavorable report on HB1035 for the following reasons:

- 1. Haste makes waste. The potential effect on ratepayers is totally ignored. This bill "requires the Commission to approve orders to facilitate the financing of nuclear energy generation projects"
- 2. "The recent Nukegate scandal in South Carolina was a political and legal scandal that arose from the abandonment of the <u>Virgil C. Summer nuclear</u> expansion project in <u>South Carolina</u> by <u>South Carolina Electric & Gas</u> (SCE&G) and the <u>South Carolina Public Service Authority</u> (known as Santee Cooper) in 2017. It was the largest business failure in the history of South Carolina. Before its termination, the expansion was considered the harbinger of a <u>national</u> <u>nuclear renaissance</u>. Under joint ownership, the two utilities collectively invested \$9 billion into the construction of two nuclear reactors in <u>Fairfield County</u>, <u>South Carolina</u> from 2008 until 2017. The utilities were able to fund the project by shifting the risk onto their customers using a state law that allowed utilities to raise consumers' electricity rates to pay for nuclear construction. The debacle left

customers of Virginia-based Dominion Energy, which bought out SCANA in the aftermath, on the hook for more than \$2 billion for reactors that never generated power. "(Quotes and Links from Wikipedia)

- 3. There is still no solution for radioactive disposal of used depleted energy rods from existing nuclear power plants.
- 4. There is no current new proposed nuclear power plant that is financeable from the private sector while solar and wind are both being brought into the energy marketplace without rate payer subsidies.
- 5. Maryland decided not to own any generating plants and had the utilities divest themselves of all generation plants, including the nuclear power plant at Calvert Cliffs (currently owned by EDF Group a French firm) in Maryland. Maryland buys its electricity twice annually in the market and should continue to do so. Attempts to add a 3rd reactor in 2010 by Constellation Energy at Calvert Cliffs were not viable financially since it required a Federal Loan Guarantee for the approximate \$9.6 Billion cost. (It was not granted). This project was not financeable in the private sector and Nukegate only reinforced the perils of building Nuclear Power Reactors.
- 6. Maryland has 5 million people and 5 utilities that have dragged their feet since 2016 (Public Conference 44 Transforming Maryland's Electric Distribution System) in allowing Distributed Energy Resources to be added to their distribution grids in Maryland when those solutions are cheaper and much faster in construction and implementation.

We ask that the committee report out the bill Unfavorably.

Paul Verchinski HCCA Board Member PO Box 89 Ellicott City, MD 21041

HB1035_IndivisibleHoCoMD_UNFAV_Alexander.pdf Uploaded by: Peter Alexander

Position: UNF



HB1035

Next Generation Energy 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 **in opposition to HB1035**.

We appreciate that Maryland ratepayers are struggling to pay rising utility bills and are looking to the General Assembly for solutions. However, we believe the solutions proposed in **HB1035** will not result in greater energy reliability in the timeframe needed and will increase rather than lower electric rates in Maryland. Unfortunately, there are misconceptions that the steep jump in electricity costs today is due to the 2024 PJM capacity auction and the impending retirements of Brandon Shores and Wagner coal plants. We believe the best policy solutions for Maryland are those that address the real and complex reasons for rising electricity costs.

To that end, we support several other bills and policies that offer no-regrets solutions more likely to result in near-term reliability improvements and at lower costs, while also allowing Maryland to reduce greenhouse gas emissions. Examples of these policies include incentives for utility scale battery storage and solar (both utility scale and community solar) and getting more out of the grid we have through grid enhancing technologies and reconductoring.

HB1035 will neither increase near term reliability or reduce rates while burdening Marylanders with polluting and costly investments for decades. Gas generating plants are massive undertakings which take years to complete, In 2023, the Virginia utility Dominion proposed building a new gas plant at the location of an old coal power plant, which they promised would be operational in 2026. Now they say it won't be running until at least 2030.

Worse, **pollution from gas power plants drives up costs for Marylanders**. The local air pollutants contribute to asthma and other health conditions that increase healthcare costs, while gas combustion contributes to climate change. HB1035's provision to promote new methane gas projects is **a significant step backwards** contradicts the Climate Solutions Now Law.

Similarly, adding nuclear energy will not bring new generation to Maryland for years if not decades. The Georgia Power Vogtle Units 3 and 4 took 15 years to build and cost \$36.8 billion.



The levelized capital costs of electricity production of <u>nuclear is three times the cost of</u> <u>solar</u>. (1)

HB1035 will not bring down rates or add near-term stability and will hinder more expeditious and lower cost solutions to ratepayer protection and grid reliability such as those proposed in SB316 the Abundant Affordable Clean Energy Act, SB37 the Affordable Grid Act, SB37 the Utility Transparency Act, and SB998 the Ratepayer Protection Act. It also seems premature to offer long-term and extremely expensive nuclear and fossil fuel energy solutions, without conducting the integrated energy resource planning envisioned in SB909 Energy Resource Adequacy and Planning Act and a complementary data study bill SB0116.

We respectfully urge an unfavorable committee report.

Peter Alexander, PhD District 9A Woodbine, MD

(1) <u>https://www.lazard.com/media/xemfey0k/lazards-lcoeplus-june-2024-vf.pdf</u>

HB1035_SB937AtetoTestimony.pdf Uploaded by: Philip Ateto

Position: UNF

Hello,

I strongly oppose the The Next Generation Energy Act (HB1035/SB937), if we are serious about addressing climate change and meeting our climate change and renewable energy goals, we cannot invest in more fossil fuel infrastructure. Doing so would further condemn our children and future generation to extreme weather events exacerbated by climate change and potentially an unlivable planet for humans and thousands of other species.

Sincerely,

Philip Ateto D30 Annapolis, MD

UNF.Robert Wald

Uploaded by: Robert Wald Position: UNF

HB1035/SB937 - UNFAVORABLE

Robert Wald and Pamela Steele Silver Spring, MD <u>rwald1729@verizon.net</u> 301-326-5181

HB1035/SB937 — Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

We urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

We are tired of electricity rate increases and do not think ratepayers should pay more than is reasonable and necessary to meet normal residential electricity needs, regardless of whether energy-hogging data centers are built in Maryland or not. Moreover, the state has a responsibility to pursue the generation of electricity at the lowest possible cost. The Next Generation Energy Act will enable the generation of electricity at the highest possible cost, through nuclear and methane gas plants.

It is well-documented that solar energy has become the cheapest form of energy generation (and the cost continues to drop). Maryland can meet its future electric energy needs by combining solar and wind generation with battery storage, and we can produce that energy right here in our state, without relying on out-of-state fracked gas.

And then there are the scientifically proven environmental and health consequences associated with burning methane gas and methane gas leaks. It's unconscionable that Maryland lawmakers would deliberately and unnecessarily take us in the opposite direction we need to be going, giving a gift to gas utilities and fracking and pipeline companies in the process.

Please do the right thing for Maryland ratepayers and for our young people, who face a dire future as it is without Maryland legislators polluting earth's atmosphere even more.

We urge an unfavorable report.

UNF.Robert Wald.Third Act Maryland Uploaded by: Robert Wald Position: UNF

HB1035/SB937 - UNFAVORABLE



Robert Wald Third Act Maryland <u>rwald1729@gmail.com</u> 301-326-5181

HB1035/SB937 — Public Utilities - Electricity Generation Planning -Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee February 28, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

On behalf of Third Act Maryland, I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

The Next Generation Energy Act will enable the construction of new methane gas plants in Maryland, which, if built, will put the state wildly off course in (1) reaching the climate goals established by the Climate Solutions Now Act of 2022 and (2) complying with Governor Moore's executive order directing the state to reach 100% clean energy by 2035. Methane gas plants are anything but clean. Not only do they spew carbon emissions into the atmosphere, they also leak methane, which is 81 times more potent a greenhouse gas than CO2.¹

Those emissions will have grave health impacts on Maryland's most vulnerable citizens, including children and seniors, low-income and poor people, and people of color–the very people Maryland's Democratic party leaders purport to stand up for and protect. If a new methane gas plant is built, we will see increases in asthma, cardiopulmonary disease, and deaths, which will in turn burden the state's healthcare system, drive up insurance costs for everyone, cause children to miss school days, and hurt Maryland's economy. These and other social costs of a new gas plant are estimated to be \$425 million annually.²

¹ Beyond CO2 equivalence: The impacts of methane on climate, ecosystems, and health, Environmental Science & Policy, <u>https://www.sciencedirect.com/science/article/pii/S1462901122001204</u>.

² Based on the EPA's estimate of the social cost of carbon at \$190 per ton and an estimated 2,238,480 tons of CO2 emitted per year. <u>https://www.nytimes.com/2023/12/02/climate/biden-social-cost-carbon-climate-change.html</u>.

Moreover, the gas plant will likely increase costs for ratepayers and will take too long to bring online in order to meet Maryland's near- and medium-term electricity needs. Maryland ratepayers would be much better served by electricity generated via solar and wind, which is actually clean and next generation, coupled with battery storage.

Furthermore, no publicly available modeling has yet to find that Maryland needs new gas power to balance the grid. Plus the basis for the proposed gas plant is an increased demand for electricity in coming years, to a large degree based on new data centers to be built in Maryland. Recent reports suggest that demand may be weaker than projected; Microsoft has canceled some leases for data centers, raising questions on energy capacity estimates for the future.

Building methane gas plants to generate electricity is a last generation solution to meet our energy needs for the future. Twenty-five years into the 21st century, it makes no sense to use 20th century technology to generate electricity.

I respectfully request an unfavorable report on HB1035/SB937.

02.25.25 Honorable Feldman and Wilson- SB0931 and

Uploaded by: Ronald Fithian Position: UNF



The County Commissioners of Kent County

Ronald H. Fithian, President | Albert H. Nickerson, Member | John F. Price, Member Shelley L. Heller, County Administrator | Thomas N. Yeager, County Attorney

February 25, 2025

The Honorable Brian Feldman Chair, Education, Energy, and the Environment Committee Maryland State Senate 2 West Miller Senate Office Building Annapolis, MD 21401

The Honorable CT Wilson Chair, Economic Matters Committee Maryland House of Delegates 231 Taylor House Office Building Annapolis, MD 21401

Re: Public Utilities – Generating Stations - Generation and Siting (Renewable Energy Certainty Act) - Letter of Opposition

Chair Feldman and Chair Wilson,

Please accept this letter as part of the testimony submitted for your public review of the Renewable Energy Certainty Act, as set forth in 2025 Senate Bill 931 and House Bill 1036.

Kent County, in agreement with our County colleagues and MACo, opposes this legislation.

The bill as presented creates (1) serious, unaddressed questions surrounding the safety of new battery storage facilities; (2) leaves the local community outside the regular processes of negotiating "good neighbor" screening and siting uses appropriate for adjacent business and residential neighbors; (3) denies the community important new revenues from the growth of industrial uses, which is an important source of revenue for Kent County; (4) siting solar in areas with already constructed water and wastewater facilities planned for new housing, which then go underutilized, raising both operational costs as well as opportunity costs; and (5) a forced fit of large, intensive land uses without careful review to include other Maryland priorities for Bay-friendly, environmental protection, conservation, and green infrastructure could be disruptive to important accomplishments and wasteful of limited resources.

Kent County is concerned that implementation of this bill, as presented, will (1) undermine the Maryland property rights of surrounding neighbors who rely on local zoning; (2) increase local taxes unfairly, since an important, major, new industrial use will be exempted from local taxes while expecting local, volunteer fire departments to provide new, unfunded fire protection services and specialized equipment; (3) endanger members of the public due to the risk of serious, locally unmanageable battery fires; and (4) create a preferred class of Wall Street-funded businesses that will deleteriously impact local Main Street businesses.

R. Clayton Mitchell, Jr. Kent County Government Center

400 High Street, Chestertown, MD 21620 | (410) 778-4600 ext. 4 | kentcounty@kentgov.org | kentcounty.com/government

While we oppose the legislation as drafted, Kent County, like all Maryland counties, remains committed to being the State's partner in government and working alongside the General Assembly to achieve better outcomes for our shared constituents. We support the set of amendments proposed by MACo as an amicable way forward in our partnership.

Please consider our concerns as we look forward to partnering in finding a path forward.

Sincerely, THE COUNTY COMMISSIONERS OF KENT COUNTY, MARYLAND

Ronald H. Fithian, President

Albert H. Nickerson, Member

John F. Price, Member

cc: Governor Westley W. Moore The Honorable Stephen S. Hershey The Honorable Jay A. Jacobs The Honorable Steven J. Arentz The Honorable Jefferson L. Ghrist

HB 1035 Next Gen Energy Act_QVM_Testimony_OPPOSE.d Uploaded by: Sarah Bur

Position: UNF



February 28, 2025

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

Quaker Voice of Maryland is submitting this testimony in OPPOSITION to HB 1035 - Next Generation Energy Act.

Quaker Voice of Maryland (QVM) is a faith-based advocacy group that advocates for policies that are just, compassionate, equitable, and respectful of the inherent worth of every person and the Earth upon which we live. Quakers across Maryland have shared with our group their concern about climate change. Quakers deeply believe in the stewardship of the Earth, viewing it as a sacred gift from God and we consider it our responsibility to care for all of creation.

Global climate change is real and poses huge threats to life as we know it on earth. It is vitally important, particularly at this time, that Maryland continue to make progress on and expand upon our clean energy goals.

QVM is concerned that HB 1035 is a policy approach that is contrary to Maryland's emissions goals. The provisions in this bill include fast tracking construction of up to 3.1 gigawatts of new gas-fired power plants in Maryland. This will increase greenhouse gas emissions in Maryland for generations, which sets the state back in reaching its lower emissions goals and is unnecessary. Instead, we encourage legislators to support provisions of HB 398, the Abundant, Affordable Clean Energy Act, which addresses our need for more energy through battery storage and bolstering clean energy solutions.

At this time, when federal progress on climate change goals is stalled, it is important for Maryland to be a national **leader in decreasing our reliance on fossil fuels.** Building a new gas fired electricity plant takes Maryland away from being that national leader.

We encourage an UNFAVORABLE report for HB 1035.

Sincerely,

Sarah Bur Working Group Member, on behalf of Quaker Voice of Maryland Personal email: <u>sarahbur2@gmail.com</u> Organization email: quakervoicemd@gmail.com

HB1035_SB937_UNFAV_Cheston.pdf Uploaded by: Susan Cheston

Position: UNF

HB1035/SB937 - UNFAVORABLE

Susy Cheston 7117 Sycamore Avenue Takoma Park, MD 20912 <u>susy.cheston@gmail.com</u> 202-549-3656

HB1035/SB937- Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act)

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

February 28th, 2025

Chair Feldman, Chair Wilson, Vice Chair Kagan, Vice Chair Crosby, and Members of the Education, Energy, and the Environment and Economic Matters Committees,

As a longtime Maryland resident and volunteer with the Chesapeake Climate Action Network (CCAN), I urge an unfavorable report on HB1035/SB937, the Next Generation Energy Act.

When I met with our District 20 legislators on Monday night, it seemed everyone wants to do the right thing. That said, in light of skyrocketing energy costs, legislators feel pressure to look like they are doing something. Yet we are trusting our elected officials to do better than that—to use your leadership position to help others understand that "looking like" you're doing something may be politically expedient, but it's not in your constituents' best interests.

Look, we live in a time when so many elected officials at state and especially federal levels are not rising to the moment. We are asking our leaders to lead!

Climate solutions are under attack, and positions are being taken at the state and federal levels that will affect all people on earth for generations to come. One member of our volunteer lobbying team is in his early 20s, and he expressed it well when he said, "A new gas-fired power plant would likely operate for much of the remainder of my life, pumping toxic greenhouse gases into the environment and advancing climate change while simultaneously raising environmental justice concerns."

I would therefore like to reiterate my strong **opposition to a new gas power plant** in Maryland, and my **support for Del.Charkoudian's AACE (Affordable Abundant Clean Energy) Act** which addresses Maryland's energy needs without saddling future generations with a costly, polluting methane gas power plant. I also want to urge attention to environmental justice in your decision-making.

I also want to alert you to the late-breaking news that data centers may not need the energy capacity that had originally been projected. In light of the emergence of the DeepSeek AI model, Microsoft has canceled some leases for data centers, raising questions on energy capacity estimates for the future.

The Next Generation Energy Act would allow for new gas plants to be constructed in Maryland. This is a bad idea, and Marylanders deserve better. It will take too long to help with high utility bills; it will be very expensive; it will pollute our state, wreaking havoc on the health of Marylanders; and it will go against our climate goals set forth in the Climate Solutions Now Act of 2022.

Please do not be hoodwinked by the utility companies into supporting a new gas power plant that Marylanders do not need and do not want. Please show the people of Maryland that in these trying times, our lawmakers will lead!

I respectfully request an unfavorable report on HB1035/SB937.

Susy Cheston

Testimony SB937-HB1035 - CPSR.pdf Uploaded by: Terrence Fitzgerald

Position: UNF



Testimony on SB 937 / HB 1035 Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location

Joint Meeting of Education, Energy and the Environment Committee and the Economic Matters Committee

Date: February 28, 2025 Position: UNFAVORABLE

Chesapeake Physicians for Social Responsibility (CPSR) is a statewide evidence-based organization of over 900 physicians and other health professionals and supporters that addresses these existential public health threats: nuclear weapons, the climate crisis, and the issues of pollution and toxic effects on health, as seen through the intersectional lens of environmental, racial and social justice.

CPSR strongly opposes SB 937 & HB 1035.

There is a real problem of high and rising electivicity prices. There is also a truly critical problem of worsening climate chaos. It would be reckless and foolish to seek to solve the first problem by worsening the second.

Climate chaos represents an extremely serious threat to our civilization. We are not talking about inconveniences, but very serious changes to the livelihoods of many in the world. The massive fires and hurricanes that we have seen in our country are only part of the picture. Droughts, heat emergencies, and desertification in some regions, and floods and sea level rise in others are already resulting in mass migrations that destabilize nations and trigger wars. As these impacts multiply, there is a real risk of catastrophic changes to our civilization.

In fact, while it is **entirely predictable** that SB 937 / HB 1035 would contribute to worsening climate chaos, it is not even clear that it would lower electricity prices. My colleagues will show that less expensive non-fossil-fuel sources of electrity are readily available. In view of the long term climate and pollution costs of fossils fuels, we should turn to increased efficiency and to these other sources of electricity in order to solve our current problem.

In addition to all of the above considerations we should recognize the immediate medical consequences of increased fossil fuel use. We know quite well that burning fuels results in increased heart and lung disease, especially asthma. Methane may be better than coal and gas, but it is still a significant culprit.¹² Add to that the many tons of polluting methane that are lost to the environment on the way to the power plant.

¹ <u>https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/electric-utilities</u>

² https://www.epa.gov/power-sector/human-health-environmental-impacts-electric-power-sector

Good members of the committees, we have a very serious problem of predictably worsening climate chaos, primarily as a result of our use of fossil fuels. Why would we even cosider increased fossil fuel use as a solution for any other problem ?

Our motto at CPSR, and a fundamental principle of public health, is that **we must prevent what we cannot cure**. The eminent German physician and legislator Rudolf Virchow opined that "politics is nothing else but medicine on a large scale." Therefore, we physicians wish to join you legislators in working to prevent what we cannot cure by taking the step of giving an **unfavorable report on SB 937 & HB 1035**

Terrence T. Fitzgerald, MD

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

Position: INFO

| DAVID S. LAPP People's Counsel | —————————————————————————————————————— | Brandi Nieland Director, Consumer |
|--|---|---|
| WILLIAM F. FIELDS Deputy People's Counsel | OFFICE OF PEOPLE'S COUNSEL ASSISTANCE UN State of Maryland | |
| JULIANA BELL DEPUTY PEOPLE'S COUNSEL | 6 St. Paul Street, Suite 2102 Baltimore, Maryland 21202 www.opc.maryland.gov | CARISSA RALBOVSKY CHIEF OPERATING OFFICER |
| BILL NO.: | 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> | |
| | Generating Stations - Generation and Siting Energy Certainty Act) Senator Feldman Delegates Wilson and Crosby | (Renewable |
| | House Bill 1037/Senate Bill 0909 – Energy J Adequacy and Planning Act Senator Hester Delegate Crosby | Resource |
| 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.¹ The electricity from Vogtle is, therefore, the most expensive in the world at \$10,784/kW; typical

¹ 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.² 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").

² 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 2029.³ 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

³ 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.⁴

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.

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

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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 2024.¹

¹ <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.² 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.³

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

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

³ 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.⁴ 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.⁵

⁴ 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.

⁵ 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 2023.⁶ 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,⁷ 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

⁶ 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.*

⁷ 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 2033.⁸

- 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.⁹
- *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

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

⁹ <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.¹⁰ 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."¹¹ 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.

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

¹¹ <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.¹² 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

¹² 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.¹³

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.

¹³ 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.

HB 1035_MDCC_Next Generation Energy Act_INFO.pdf Uploaded by: Hannah Allen

Position: INFO

House Bill 1035



Position: Information Committee: House Economic Matters Date: February 28, 2025

Founded in 1968, the Maryland Chamber of Commerce (the Chamber) is the leading voice for business in Maryland. We are a statewide coalition of more than 7,000 members and federated partners working to develop and promote strong public policy that ensures sustained economic health and growth for Maryland businesses, employees, and families.

House Bill 1035 (HB 1035) aims to enhance Maryland's energy security by accelerating cleaner in-state electricity generation. The bill directs the Public Service Commission to approve dispatchable energy projects to replace coal and oil, in an effort to ensure grid stability and reducing reliance on out-of-state power. HB 1035 also establishes a nuclear energy procurement process, fosters regional and federal partnerships for new nuclear facilities, and expedites permitting for energy projects, including solar and battery storage. Additionally, the bill ensures large energy users contribute to grid costs by limiting direct connections to an energy facility unless they build or expand their own generation.

The Chamber supports the intent of this legislation to address the state's long-term energy reliability and resource adequacy needs, and we commend legislative leadership for prioritizing this critical issue. Ensuring sufficient in-state generation, grid reliability, and cost-effective energy policies is essential for maintaining a stable and competitive business environment in Maryland.

As discussions on HB 1035 progress, we encourage the General Assembly to engage with the industries and businesses directly affected by these proposed changes. A balanced, industry-informed approach will help ensure that policies effectively support energy generation, affordability, and regulatory efficiency.

We appreciate your consideration of these comments on **HB 1035**.

MDCHAMBER.ORG 60 West Street, Suite 100, Annapolis 21401 | 410-269-0642

HB 1035 SB 937 INFO FCG OCE LS25.pdf Uploaded by: Jessica Fitzwater

Position: INFO

FREDERICK COUNTY GOVERNMENT

OFFICE OF THE COUNTY EXECUTIVE



February 28, 2025

Chair Brian Feldman Senate Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, MD 21401 Chair C.T. Wilson House Economic Matters Committee 230 Taylor House Office Building Annapolis, MD 21401

Dear Chairs Feldman and Wilson and Members of the Senate Education, Energy, and the Environment Committee and House Economic Matters Committee,

As the Frederick County Executive, I am writing to share my perspective on House Bill 1035 and Senate Bill 937 - Public Utilities - Electricity Generation Planning - Procurement, Permitting, and Co-Location (Next Generation Energy Act).

I am a strong supporter of increasing the State's reliable and affordable energy production and capacity. HB 1035/SB 937 aims to invest in a plan to increase the state's renewable energy in a reliable and affordable way.

Importantly, this legislation also acknowledges the need to ensure that high energy users, such as data centers, are paying their fair share in energy costs and assisting with the overall grid load. Frederick County is the site of a brownfield currently under development to be a data center campus, often referred to as the Quantum Loophole campus. While we are proud to host a growing industry in Frederick County, we must balance the benefits of this industry with its impact on our environment, infrastructure, and quality of life.

Early in my term as the County Executive, I created a Frederick County Data Centers Workgroup with the charge to examine existing laws and to provide thoughtful guidance on shaping the growth of a relatively new and rapidly changing industry poised for expansion in Frederick County. This workgroup, which was comprised of community members, industry representatives, organized labor, environmental organizations, business leaders, a representative from the Farm Bureau, and local elected officials, has provided several policy recommendations that are being addressed through our local legislative process. However, there were several matters, such as energy consumption, climate impacts, and transmission infrastructure that should be further addressed in partnership with state agencies and the Maryland General Assembly. HB 1035/SB 937 responds to some of the recommendations from the workgroup, particularly ensuring that data centers do not disproportionately impact our local electricity supply or result in significant ratepayer impacts.

While this legislation addresses some concerns regarding the state's energy capacity, it also undermines local land use authority by allowing the Certificate of Public Convenience and Necessity process to circumvent local land use input. Addressing our energy needs must not be done without regard to local land use planning and decision making. I thank you for your consideration of HB1035/SB 937 and urge you to consider all voices when deliberating on this impactful legislation.

essica tzuate

Jessica Fitzwater, County Executive Frederick County, MD

HB1035_SB0937 - Public Utilities - Electricity Gen Uploaded by: Landon Fahrig

Position: INFO



| TO: | Members of the Senate Education, Energy, and the Environment Committee & the House |
|----------|--|
| | Economic Matters Committee |
| FROM: | MEA |
| SUBJECT: | HB1035/SB0937 - Public Utilities - Electricity Generation Planning - Procurement, |
| | Permitting, and Co-Location (Next Generation Energy Act) |
| DATE: | February 28, 2025 |

MEA Position: LETTER OF INFORMATION

This bill attempts to address concerns around a lack of sufficient dispatchable energy generation in the state. This is in response to potential short-term reliability concerns the state may be facing. These concerns are couched in broader issues related to resource adequacy.

Resource adequacy ensures sufficient generation is available to meet demand. Resource adequacy is defined by the North American Electric Reliability Corporation ("NERC") as "the ability of the electricity system to supply the aggregate electrical demand and energy requirements of the end use customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements."¹ This means the system can supply enough electricity where it is needed at all times, even during severe weather days and when unscheduled outages occur.

To ensure resource adequacy, it is a best practice to identify and prioritize resources that can be more rapidly deployed. This includes energy generators that are already within the PJM queue, which is currently dominated by solar energy generation and energy storage. Energy storage in particular presents an attractive option for enhancing the existing grid. In its report on resource adequacy in a decarbonized power system, the U.S. Department of Energy points out "energy storage can generally be added at the site of existing generators, increasing capacity value while using the same interconnection point."² Additionally, continued expansion of resources such as wind and solar can also provide clean energy, enhance resource adequacy, and create good-paying jobs.

The challenges around resource adequacy are more pronounced in other PJM states. Though there has been a large increase in PJM load forecasts in comparing 2024 to 2025 load forecasts across PJM in its entirety, the majority of the load forecast growth is due to increased demand expectations in

¹ North American Reliability Electric Corporation, 2013a. Reliability Terminology (Aug. 2013)

² U.S. Department of Energy, The Future of Resource Adequacy (Apr. 2024) at p. 12.

the western portion of PJM's footprint.³ The PJM territories for BGE and Pepco show very little increase between 2024 and 2025 load forecasts.⁴

Interstate/Federal Agreements and Reporting

This bill requires the Maryland Energy Administration ("MEA") "in coordination with the Public Service Commission ("Commission") and the Department of Natural Resources," to pursue: (1) cost–sharing agreements with neighboring states in the PJM region to mitigate the risks of developing new nuclear energy generating stations; and (2) agreements with federal agencies regarding the siting of small modular reactors: (i) on federal land; or (ii) on or near federal facilities, including military and national security installations. These provisions are aimed to reduce costs for potential nuclear deployments by sharing cost and risk across jurisdictions, and to identify sites for potential nuclear development that may be more amenable to such deployments.

The bill also requires that on or before December 1, 2026 MEA shall report to the General Assembly on its efforts, "including an assessment of any opportunities to participate with other states, federal agencies, and public or private partners in a multistate procurement of new nuclear energy technology; and (2) an evaluation and status of the nuclear energy procurement process."

Due to the highly technical nature of these evaluations regarding the development of new nuclear energy generation, MEA would need a one time consultant of up to \$150,000 to assist with these matters in FY2026 special funds.

Colocation

The bill also directs how a generator and "large load customer" may colocate, requiring generators to connect directly to the transmission or distribution grid versus directly to the sources of load. Mandating that large-load customers connect to the grid instead of directly to energy generation sources is a measure aimed at protecting ratepayers. Ensuring that large-load customers connect to the grid prevents critical energy resources from being diverted to a specific customer, supporting better reliability of the state's energy infrastructure overall. This follows the Commission's recommendations in its recent Report on Colocation.⁵ An exception is made, however, if a generator increases its generation output from existing levels in order to meet the expected demand of the large load customer, *or* if the generation is new and meets 100% of the large load customer's expected demand.

Energy Production and Storage

Regarding energy storage and production, the legislation requires the Commission to host a competitive solicitation process for "dispatchable energy generation" in the state. As currently defined, "dispatchable energy generation" is not inclusive of some cleaner technologies that are more readily

³ See www.pim.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf at 13, 28-30.

⁴ *Id.* at 15 and 21.

⁵ See www.psc.state.md.us/wp-content/uploads/SB1-MD-PSC-Report-on-Co-location-V4_20241217.pdf

available, such as 4-hour battery storage. The definition also includes combined cycle gas turbines. The solicitation is capped at the historic peak of oil and gas generation, approximately 3 gigawatts.

Building and operational costs cannot be covered by ratepayers under the procurement. However, if a project is qualified as "dispatchable energy generation", the project is exempted from pre-application requirements for a qualifying generating station and pre-application consultation requirements for generating stations under COMAR, and the project is subject to an expedited certificate of public convenience and necessity ("CPCN") process.

The legislation also subjects storage over 2MW to a CPCN requirement, which represents an expansion of the regulatory environment around this new technology. Currently battery storage is subject to local permitting, but a CPCN is not required.

Lastly, similar to SB0434/HB0505, the bill creates a nuclear energy procurement mechanism. This mechanism does provide a financial incentive for the development of new nuclear generation in the state. The procurement mechanism creates a long term pricing schedule, not dissimilar to the state's existing offshore wind renewable energy credit ("OREC") process. A project approved by the Commission is eligible to receive funding based on its generation output, and that is funded by a nonbypassable surcharge.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, directly (<u>landon.fahrig@maryland.gov</u>, 410.931.1537).

hb1035 Electric Generation Planning EM 2-28-2025.p Uploaded by: Lee Hudson

Position: INFO



Comment prepared for the Economic Matters Committee on House Bill 1035 February 28, 2025 Position: as Comment

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.

Unlike *House Bill 1037*, **House Bill 1035** would preemptively obligate rate payers to finance a commercial enterprise that is historically extremely expensive to fabricate in order to meet acceptable public safety requirements, and is *not* clean if its lethal wastes are included in its inherent risks and costs. We also understand what are being described as small modular reactors have not yet been proven to work as promised. It strikes us as a poor choice for trail-and-error experimentation. Given all the questions, this does not appear to address what is Maryland's urgent necessity to get started on clean energy production and transmission.

Lee Hudson

INFO.Megan Gambrel.Reliability First Corporation Uploaded by: Megan Gambrel

Position: INFO



February 28, 2025

Maryland General Assembly Maryland Department of Legislative Services 90 State Circle Annapolis, Maryland 21401

Re: RF Testimony on Technical Reliability Considerations Related to Resource Adequacy

Dear Members of the Senate Committee on Education, Energy, and the Environment and of the House Economic Matters Committee,

As a supplement to ReliabilityFirst Corporation's (RF) upcoming testimony on February 28, 2025, RF respectfully provides comments on technical reliability considerations related to resource adequacy.

RF is one of the six North American Electric Reliability Corporation¹ (NERC) Regional Entities responsible for preserving and enhancing the reliability, resilience, and security of the bulk power system (BPS, or "system").² Collectively, NERC and the Regional Entities comprise the ERO Enterprise. With specific authorities under the Federal Power Act and through a delegation agreement with NERC, RF's mission serves the public good by assuring BPS reliability for over 73 million customers in 13 states (including Maryland) and the District of Columbia.² We audit and enforce the NERC Reliability Standards for more than 300 registered entities. We also provide outreach and education to registered entities in our footprint, and technical expertise to state public utility commissions, legislators, and other stakeholders.

RF's role with the states is to serve as an independent, objective technical resource concerning reliability topics. While energy policy should appropriately prioritize BPS reliability, our statements are not intended, and should not be interpreted, as advocating for a specific policy outcome.

¹ NERC is a not-for-profit international regulatory authority designated by the Federal Energy Regulatory Commission (FERC) to assure the effective and efficient reduction of risks to the reliability and security of the grid. Through delegation agreements and with oversight from FERC, NERC works with six Regional Entities (including RF) on compliance monitoring and enforcement activities.

² RF does not have jurisdiction over the local distribution of electricity, which is a state responsibility.

Public

Resource Adequacy Reliability Considerations

Resource adequacy refers to matching supply with demand to ensure that the grid has adequate resources to supply loads 24 hours per day, 365 days per year, during all operating conditions. NERC annually assesses and reports on the adequacy of the Bulk Electric System in the United States and Canada over a 10-year period. This report, the Long-Term Reliability Assessment (LTRA),³ projects electricity supply and demand and discusses key issues and trends that could affect reliability.



Resource Adequacy Risk Map (including risk drivers and years when shortfalls begin)

Figure 1: The 2024 LTRA risk map by region

Over a ten-year horizon, the 2024 LTRA finds that many areas of North America are at risk of energy shortfalls during extreme weather conditions (designated as "elevated risk" in Figure 1) and even during normal peak conditions (designated as "high risk" in Figure 1). Reliability concerns discussed in the 2024 LTRA include demand growth,⁴ generator retirements (with over 79 GW of fossil-fired and nuclear generator retirements planned through 2034),⁵ capacity shortage from limited dispatchable generation, and the impact of extreme weather events exacerbated by reliance on natural gas supply. From the 2023 to the 2024 LTRA, the PJM region was raised from normal to elevated risk (with the primary concern identified as demand growth, as seen in Figure 1).⁶ The combined factors of generation retirements, rapid demand growth, and slower-than-anticipated online new generation have elevated reliability risks across the country.

³ See, 2024 LTRA, 2024 LTRA infographic.

⁴ 2024 LTRA at p. 8.

⁵ 2024 LTRA at p. 27. These risks may be escalated during the winter peak in the PJM region due to weatherdependent resources and fuel supply issues.

⁶ 2024 LTRA at p. 7.

Demand Growth

There has been a rapid increase in demand, due to the recent rise in data centers, electric vehicles, and the overall electrification of society. For example, in 2024 PJM forecasted an average 2.3% net energy load growth per year over the next 10-year period,⁷ and in 2025 forecasted 4.8% growth (over double the previous year's estimate).⁸ In the 2024 LTRA, NERC states that "electricity peak demand and energy growth forecasts over the 10-year assessment period continue to climb; demand growth is now higher than at any point in the past two decades."⁹ This growth in demand can be difficult to match with new generation and transmission, even with the revitalization of previously retired generation being brought back online to power data centers. Large loads such as data centers can also present planning and operational concerns. NERC is currently working on a white paper on the characteristics and risks of emerging large loads, which will be released this year.

Generator Retirements and Capacity Shortage

In addition to the sharp increase in demand, there is also an increase in generation retirements. We are observing that across the country, traditional baseload generation plants are retiring, and replacement energy is largely being supplied by inverter-based resources (mostly wind and solar) that do not yet have the same operating features essential for reliability (such as ramping, voltage support, and blackstart capability, commonly referred to as Essential Reliability Services). In addition, due to the lower effective load carrying capability (ELCC) values of inverter-based resources, ¹⁰ replacing baseload generation with inverter-based resources requires more overall capacity to ensure grid reliability.¹¹ Generation retirements without sufficient replacements can reduce reserve margins (*i.e.*, available, dispatchable energy that can be quickly brought online to satisfy demand).¹² This can jeopardize reliability during periods of increased demand on the system, and in some cases, retirements can require extensive transmission reinforcement projects to sustain reliability.

The interconnection queue includes substantial sources of new generation, and integrating new resources onto the system expeditiously can help alleviate capacity shortages, provided the integration is done in a manner that ensures reliability. This includes conducting appropriate energy adequacy planning and modeling throughout all seasons.¹³ This planning and modeling evaluates the impact of new generation projects coming online from the interconnection queue on overall grid reliability and resource adequacy, considering factors like variable generation from renewables and load forecasting. Additionally, a diverse fleet of generation sources that

⁷ <u>https://www.pjm.com/-/media/library/reports-notices/load-forecast/2024-load-report.ashx</u> at p.2.

⁸ <u>https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf</u> at p.6.
⁹ 2024 LTRA at p. 8.

¹⁰ https://www.pjm.com/planning/resource-adequacy-planning/effective-load-carrying-capability

¹¹ https://www.rfirst.org/wp-content/uploads/2023/07/Base-Load-Generation-vs-Solar-Plus-Battery.pptx

¹²For example, PJM's <u>"Energy Transition in PJM: Resource Retirements, Replacements & Risks</u>" report focusing on generation retirements and replacements through 2030, states that "For the first time in recent history, PJM could face decreasing reserve margins...should these trends – high load growth, increasing rates of generator retirements, and slower entry of new resources – continue" (p. 17).

¹³ See NERC and the National Academy of Engineering's <u>Evolving Planning Criteria for a Sustainable Power Grid</u> for additional information on this planning and modeling approach.

does not depend on a singular fuel source, supply chain, or common failure mechanism can enhance reliability.

Increased usage of weather dependent inverter-based resources can aid in expanding the diversity of the generation fleet; however, it is important to be aware of the capabilities and limitations of these energy systems, such as their intermittent nature. Battery energy storage systems (BESS) or other storage (e.g., pumped hydro) can help with the intermittent nature of a growing inverter-based generation fleet.¹⁴ Currently the PJM interconnection queue has about 122,000 MW of solar and 50,000 MW of battery storage (the two predominant resources in the queue). While solar and battery storage generally work well in tandem, it is important to study these installations as they relate to resource adequacy, including the impact of charging the batteries.

Extreme Weather & Energy Droughts

Decreased reserve margins can create additional risk during extreme weather events, when power is needed the most. Winter Storm Elliott, where generation outages resulted in demand exceeding supply, was the fifth major storm with reliability impacts in the last eleven years. There were unprecedented electric generation outages coinciding with winter peak electricity demands, resulting in about 5,000 MW of load shed as rolling blackouts. FERC, NERC, and the Regions recently released a Joint Inquiry Report on Winter Storm Elliott with numerous lessons learned and recommendations (which led to the creation of revised cold weather reliability standards and numerous other actions by FERC, NERC, and the industry).¹⁵

Another reliability risk associated with extreme weather is overdependence on a limited range of energy sources. This can be seen during extreme winter weather when natural gas is a key component of the resource mix. A significant percentage of natural-gas fired power plants rely on as-available, non-firm gas supply alongside solid transportation arrangements. However, this supply can be interrupted during extreme cold weather events when demand by both generators and natural gas distribution companies is high. The 2024 LTRA finds that natural gas fired power plants generated over 40% of electrical energy consumed by end use electricity customers over the last two years, with an additional 6,500 MW of new generation expected over the next five years.¹⁶ Given the expanding role of this fuel source, it is important to continue to address natural gas supply risks.

Intermittent resources can also pose concerns during extreme weather conditions, and when two or more resource types simultaneously experience below-normal resource output from weather

¹⁴ In an example that RF uses, a 100 MW baseload generator that would run through an entire day would produce 2400 MWh of power. To achieve that same amount of energy, three 100 MW solar panels plus four four-hour BESS would be needed to produce the same 2400 MWh assuming 8 hours of perfect sunshine, no losses in conversion, and utilizing the battery storage during times of no solar.

¹⁵ See <u>https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-during-december-2022</u>. FERC also released a summary of actions taken in response to the Winter Storm Elliott Joint Inquiry Report:

https://www.ferc.gov/ReliabilitySpotlight#:~:text=FERC%20and%20the%20North%20American,FERC%2DNERC%20winter%20storm%20analyses.

¹⁶ 2024 LTRA at p. 28-29.

conditions, meeting demand can be difficult.¹⁷ These times, called "energy droughts" as seen in Figure 2 below, are more likely to occur during high-demand periods and highlight a need for robust resource adequacy planning.



Figure 2: Daily energy droughts from the 2024 LTRA (Source: Pacific Northwest National Laboratory)

ERO Enterprise Efforts

Given the rapidly changing resource mix and its associated reliability risks, FERC and the ERO Enterprise are working to help mitigate these emerging concerns. The ERO Enterprise and industry are working to create new and revised standards to enhance reliability, such as Project 2022-03: Energy Assurance with Energy-Constrained Resources (revising several standards to require energy reliability assessments to evaluate energy assurance and Corrective Action Plans to address identified risks), and Project 2023-07: Transmission System Planning Performance Requirements for Extreme Weather. There are also several ERO Enterprise working groups working on these risks, such as the Reliability Issues Steering Committee (RISC) and the newly created Large Loads Task Force (LLTF).

NERC and the Regions partnered to perform the Interregional Transfer Capability Study (ITCS),¹⁸ which analyzed total transfer capability (the amount of power that can be transferred between transmission planning regions to improve energy adequacy). It recommends prudent additions to total transfer capability that could strengthen reliability. The complete ITCS was filed with FERC and recently was posted for a public comment period.¹⁹

¹⁸ See Interregional Transfer Capability Study Final Report at <u>https://www.nerc.com/pa/RAPA/Documents/ITCS Final Report.pdf</u>.

¹⁷ As a recent example, the SPP footprint had to declare Conservative Operations throughout multiple days in October based on forecasts of high peak loads due to unseasonably warm temperatures combined with low expected output from wind and other intermittent resources.

¹⁹ https://www.ferc.gov/sites/default/files/2024-11/20241125-3020_AD25-4-000-NERC%20ITCS%20Notice.pdf.

To successfully address the complex reliability challenges emerging as the grid is transformed, NERC, the Regional Entities, and state and federal policymakers will need continued collaboration, coordination, and thoughtful action. Robust resource adequacy planning that acknowledges the benefits of a diverse resource mix and the threat of extreme weather will also help fortify the grid and electricity consumers. As states craft policies for a cleaner, more sustainable grid, we are pleased to serve as a resource to help you remain well informed regarding key reliability topics.

02-26-25 CCS MD Testimony Statement.pdf Uploaded by: Tom Peterson Position: INFO



HB1035/SB937- Public Utilities- Electricity Generation Planning- Procurement, Permitting, and Co- Location (Next Generation Energy Act)

Testimony of Arianna Ugliano, The Center for Climate Strategies (CCS) INFORMATIONAL

February 28, 2025

Chair Feldman, Vice Chair Kagan, Chair Wilson, Vice Chair Crosby, and Members of the Education, Energy, and Environment and Economic Matters Committees

In consideration of SB 937 and related legislation and critical information needs, CCS reviewed a range of studies and information sources related to current forecasts of electricity needs and supply and demand options for Maryland's power sector and has identified a series of key findings.

Results indicate that there is no current shortage of generation capacity, and that the current highly uncertain demand forecast and the existence of a range of power system alternatives in Maryland deserve further study. A study of Maryland's electricity sector needs and alternative can be combined with near term, practical actions to address specific needs while also being useful in the longer term.

Findings are described in a new CCS white paper. The paper and a detailed summary with citations are available at <u>https://www.climatestrategies.us/projects-all/maryland-future-demand</u>.

The Center for Climate Strategies (CCS) is a non-profit, nonpartisan organization based in Washington, DC. Since its formation in 2004, it has provided leadership support, knowledge, and expert technical assistance to governments and stakeholders globally for the design, development, analysis, and implementation of multi objective strategies and actions in all economic sectors to address economic, environmental, and energy needs.

Since 2007, CCS has provided a variety of technical and facilitative support to the state of Maryland and its stakeholders for the development and implementation of policy actions and financing mechanisms. This includes a "Comprehensive Analysis of Maryland's Short- and Long-term Climate Stabilization and Clean Energy Goals and Investment Requirements" in 2023 and a variety of other studies and collaborations.

Key SB 937 review findings:

Maryland power demand forecasts are changing and highly uncertain, especially for data centers and Artificial Intelligence.

• Differing demand forecasts exist for Maryland, and these can significantly affect needs for additional electricity generation and storage capacity.

• Data center and AI technologies are becoming more energy-efficient-, and additional uncertainties exist for data center growth and constraints to data center deployment not related to energy supply.

New natural gas generation construction is costly and involves significant investor risk.

- Construction of 3.1 GW of gas-fired power plants would cost at least \$5-6 billion, not including costs for new natural gas pipeline construction and maintenance or for annual fuel costs.
- Natural gas generation would increase GHG emissions by 1.5-7.3 MMtCO2e annually (2-10% of Maryland's current net emissions); carbon capture and storage is unlikely to be a feasible solution.
- Investors should consider the risk implications of demand shifts for long term investments made in the short term for large, capital-intensive generation capacities.

Nuclear is expensive and will take years to come online.

• Building new nuclear reactors, including traditional and small modular reactors, seems likely to be infeasible in Maryland based on cost considerations, potential difficulties in siting, and the ten or more years likely required to complete new units.

No single solution is likely to address power system needs, and many alternatives exist.

- Transmission and Distribution (T&D) improvements can improve power flows and increase efficiency at lower cost, through changes such as reconducting and the use of high efficiency transmission lines and other components.
- Solar PV is the least expensive form of capacity additions and can be installed in many places. Wind turbine costs are also declining. With investment in improved grid capacity and transmission, offshore wind generation will become increasingly feasible.
- Battery energy storage systems (BESS) have shown rapid technological evolution and cost reductions and can be rapidly installed to support grid capacity and peak power needs.
- Demand side actions, such as efficiency and demand response programs, can cut costs and offer "costs of saved energy" that are far below retail and wholesale grid electricity prices.

Further study is needed along with practical, immediate actions.

- A detailed update of Maryland's power sector demand forecast is needed, including expectations for technology and operations changes for data centers and AI.
- Detailed review of the full scope of all supply and demand management options also is needed, including a full suite of generation and demand-side management capacities.
- Power sector approaches are needed that manage system needs, investor risk, consumer access, economic opportunity, and environmental impact.

We ask that you seriously consider our findings and are delighted to answer questions and work together to create a pathway for sustainable and resilient energy resources in Maryland.

Respectfully,

Arianna Ugliano, CCS