# **SB908\_CPSR\_FAV\_EEE\_6Mar2025.pdf**Uploaded by: Alfred Bartlett, MD



**Committee: Education, Energy, and the Environment** 

Testimony on: SB908 "Public Utilities – Electric Distribution System Plans – Establishment

(Affordable Grid Act)"

Position: Favorable Hearing Date: March 6, 2025

The Chesapeake Chapter of Physicians for Social Responsibility (CPSR) submits this testimony in support of SB908, which provides clear and specific requirements for the plans needed to modernize the state's electricity utilities' distribution systems and meet our clean energy and greenhouse gas reduction goals.

Since 2021, CPSR has been an active member of the Public Service Commission (PSC) Work Group on Distribution System Planning. We entered that role in part because since 2015 we had been active members of the PSC Work Group that developed the regulations and monitored implementation of the state's Community Solar Pilot Program. That program brought into sharp focus the limitations of the existing distribution system: many projects found that potentially suitable sites did not have the grid capacity to connect. As the program expanded, distribution grid capacity, along with siting restrictions, became the major limiting factors.

The need to confront climate disruption by moving from fossil fuel-generated electricity to clean renewable energy has paralleled the need for increasing electrification of transportation, homes, and businesses. This has made the limitations of our distribution grid increasingly obvious.

The basic structure of our existing grid was established almost 100 years ago – it's designed to move electricity in one direction, from a small number of large power plants to homes and business customers. Large scale bulk power is carried through high voltage transmission lines. The distribution system is where that power begins to be distributed - the substations and the lines and poles and transformers that we see connecting to our homes and businesses.

### The distribution system we have can't support the modern electricity system we are trying to build. It was not designed to -

- Support the extra demand from things like electric vehicles (EVs) and building electrification,
- Allow community or rooftop solar, or EVs, or batteries, to put substantial amounts of power back onto the system, or
- Manage the complex interaction of customer offtake of electricity and the production of electricity by Distributed Energy Resources (DERs) like solar, batteries, and EV-to-grid.

#### To meet these requirements, a 21st century grid needs to be "smart." It will –

- Use technologies like sensors, smart meters, and two-way communication to monitor and manage electricity flow in real-time;
- Optimize efficiency and reliability by adapting to changing energy demands and integrating multiple renewable sources seamlessly;
- Manage increasing or shifting peak demand without adding costly infrastructure; and,
- Provide the capacity and technology to allow all customers to connect clean and cost-saving technologies like EVs, heat pumps, batteries, and rooftop solar to the grid.
  - Doing this will mean the end of customers' inability to add such technologies because the circuits in their neighborhood are already saturated.

A 21<sup>st</sup> century grid will offer substantial benefits to our electricity system. Combining expansion of Distributed Energy Resources (DERS) like solar and batteries with modern distribution grid planning and technologies actually strengthens and enhances the system in many ways, including <sup>1</sup> –

<sup>&</sup>lt;sup>1</sup> U.S. Department of Energy, National Energy Technology Laboratory; *Modern Grid Benefits* 

- <u>Improved reliability</u> Reducing outage duration and frequency through communication and control elements that sense circuit status, isolate faults, and restore service, including by employing DERs.
- <u>Improved security and safety</u> Reducing vulnerability to terrorist attack and natural disasters through intelligent networking of DERs like solar and batteries, and data acquisition capacity to detect security challenges and initiate corrective steps.
- <u>Improved economics</u> Through market efficiencies (buy low, store, sell high), reducing the cost of energy and capacity to ratepayers.
- <u>Improved efficiency</u> Incorporating Demand Response and technologies like DER Management Systems for more efficient operation and improved grid management at lower cost.
- New options for market participation Opening up more robust electricity markets that will create new
  options and revenue opportunities and enable new load management, distributed generation, energy
  storage, and demand response options.
  - Allowing owners of batteries, EVs, and small solar to put power back onto the grid allows them to gain compensation through aggregation under FERC Order 2222 or participation in a Virtual Power Plant, lowering their own energy cost and overall supply cost.

Good Distribution System planning will save money and lower costs. Modernizing the grid will have payoffs, but also cost – good planning will minimize the costs and maximize the benefits.

- It will minimize the costs by
  - Requiring plans to include cost-effectiveness and cost-benefit analysis;
  - Using modern forecasting tools to plan for increases in load and new distributed generation.
  - Using technologies that increase capacity and reliability without investing in expensive infrastructure, like using battery storage instead of building a new substation.
- It will maximize grid benefits by
  - Increasing reliability and reducing outages through modern system control and communication technologies.
  - Identifying locations where investment in capacity for increased solar or battery storage will add greatest value.
  - Determining where system constraints are limiting uptake of things like EVs.
  - Helping energy developers identify the best places to connect to the grid.
  - Allowing the expanded clean renewable energy that's consistent with our goals.
- Distribution System modernization will also have direct payoffs for customers, by
  - Allowing more homes and businesses to have their own solar, which saves them money.
  - Allowing more families who can't have solar to get Community Solar, which costs less than standard utility service.
  - Allowing more rooftop solar, battery owners, and EV owners to put power back onto the grid, reducing their cost.
  - Allowing large numbers of households to participate in the energy economy by participating in a Virtual Power Plant or aggregated marketing.

#### How Good Distribution System Planning and Modernization Pay Off -

Reducing cost to ratepayers – Vermont's Green Mountain Power Virtual Power Plant (VPP) integrates distributed energy storage with advanced distribution grid management.<sup>2</sup> Over 2,500 customers lease or buy Tesla Powerwalls, storing power when prices or demand are low and using or selling it when high. With 50 MW capacity, the program saves about \$3 million annually, benefiting all 275,000 ratepayers. Its distributed design improves reliability in a tree-heavy state prone to outages, and helps balance renewable energy variability. Reduced reliance on fossil-fuel peaker plants contributes to Green Mountain getting 78% of its electricity from renewables and being 100% carbon-free annually.

<sup>&</sup>lt;sup>2</sup> Green Mountain Power, *GMP's Energy Storage Programs Deliver \$3 Million In Savings for All Customers During 2020 Energy Peaks*; 29 September 2020. <a href="https://greenmountainpower.com/news/gmps-energy-storage-programs-deliver-3-million-in-savings/">https://greenmountainpower.com/news/gmps-energy-storage-programs-deliver-3-million-in-savings/</a>

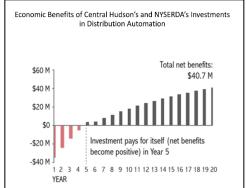
Avoiding or deferring costly infrastructure investments – The Brooklyn-Queens Demand Management (BQDM) program,<sup>3</sup> launched by Con Edison in 2014, used non-wires alternatives (NWAs) to defer a \$1 billion substation. It reduced peak demand to achieve 52 MW of load relief by 2018. Customer-side measures – energy efficiency, demand management, and distributed generation – provided 41 MW. Utility-side solutions, including voltage optimization and battery storage, added 11 MW. This deferred substation construction until 2026, with significant savings to ratepayers.

Investing in modernization instead of traditional infrastructure – With catalytic grant support from New York's State Energy Research and Development Authority (SERDA) program, Central Hudson Gas and

Electric invested in a grid modernization program<sup>4</sup> that included:

- automated transmission and distribution management systems;
- superconducting fault current limiters, which prevent problems associated with faults in power lines by detecting and rerouting power flow around the fault; and,
- sensors, smart inverters and other monitoring and power controls to efficiently integrate renewable energy resources into the grid.

The program is projected over 20 years to produce net economic cost savings of \$40.7 million, reliability benefits of \$7.3 million, and environmental benefits of \$28.0 million. At the projected rate of savings, the program's net economic benefits exceeded costs by year 5.



The planning process being proposed by the PSC won't get us the 21<sup>st</sup> century distribution system we require. The need to remodel the grid to achieve such benefits was first identified by the PSC <u>nine years ago</u> in its 2016 Public Conference 44 (PC44) on "*Transforming Maryland's Electric Distribution Systems*." PC44 identified many of the areas where modern improvements were required, including expanding solar and other Distributed Energy Resources, Energy Storage, improved connection to the grid, better planning of grid investments, and considering impact on limited-income households.

The Maryland utilities were part of PC44; in fact, it was part of the Exelon-Pepco merger approval. However, in the intervening almost 9 years, the utilities have participated in PSC Work Groups and hearings... but <u>have made very little progress in actual grid modernization</u>.

In 2021 the PSC launched a Distribution System Planning (DSP) Work Group to develop regulations for utilities' distribution system planning processes. The state's major electricity utilities and electricity cooperatives have been constant participants, along with a limited number of non-utility stakeholders including the Office of People's Counsel.

Using a state DS planning framework developed (with Maryland PSC input) by a national body of regulatory agencies,<sup>5</sup> the DSP Work Group has:

- Spent almost three years of biweekly meetings having in-depth technical discussions of key elements of modern distribution system planning;
- Had a Commission-organized DS Planning Technical Conference in January of 2024, with participation of state-of-the-art technical experts from organizations including Lawrence Berkeley Laboratory; and,
- Received a consultant firm's detailed analysis of DSP Best Practices being implemented by other states, for each of the plan components under consideration.

The Work Group facilitator filed a "Final Report" on April 30, 2024. However, in response (Order 91256, July 30, 2024) the Commission noted that there were many key areas where "consensus" had not been reached, and directed the Work Group to continue deliberations. In that Order, the Commission did acknowledge that

<sup>&</sup>lt;sup>3</sup> Utility Dive, *BQDM program demonstrates benefits of non-traditional utility investments*; March 11, 2019 <a href="https://www.utilitydive.com/news/bqdm-program-demonstrates-benefits-of-non-traditional-utility-investments/550110/">https://www.utilitydive.com/news/bqdm-program-demonstrates-benefits-of-non-traditional-utility-investments/550110/</a>

<sup>&</sup>lt;sup>4</sup> NYSERDA Smart Grid Evaluation Case Study: *Central Hudson's Grid Modernization Investments*; 8 July 2020 file:///C:/Users/Alfre/Downloads/NYSERDA-GridModernization-CentralHudson-EvaluationCaseStudyReport-July2020.pdf

<sup>&</sup>lt;sup>5</sup> National Association of Regulatory Utility Commissioners/National Association of State Energy Officials (NARUC-NASEO), Task Force on Comprehensive Electricity Planning; *Blueprint for State Action*; February, 2021

"Those areas followed a pattern: Non-utility stakeholders pressed for more utility DSP process and technical capability improvements in addition to enhanced metrics reporting and transparency. The utilities, in many cases, opposed or desired to slow or modify these proposals..." After five more months of deliberation, the Work Group filed a supplementary report containing some additional areas of consensus, but with many remaining non-consensus areas.

In response, the Commission issued an Order (Order 91490) and draft regulations. However, both the Order and the draft regulations are quite general in their requirements. They essentially reflect only the level and content of requirement on which there was "consensus" – meaning only those requirements to which all participants – including the utilities – agreed. They do not reflect the level of detail that the Work Group reached in its deliberations, nor the Best Practices that had been presented to it. This is a shortcoming of the consensus-based process, because the regulated entities actually determine the rate and content of the regulations that govern them.

These draft regulations will not provide the structure that we need to develop a modern distribution system and realize the advancements and benefits it would provide.

And they do not require the actual review and approval of utilities' plans – utilities would develop plans with stakeholder "input," but then simply present and then implement those plans, just saying whether or not they had included that input. There would be no "teeth" – no accountability – in the DS plan process.

**SB908** provides the requirements needed to plan and develop a 21<sup>st</sup> century distribution system. It uses the same NARUC-NASEO framework that the state has identified for distribution system planning. Within that framework, it provides clear specifications for key components of that planning, drawing on state-of-theart experience and Best Practices, including –

- Detailed forecasting of rapidly evolving load requirements;
- Detailed forecasting of EVs, building electrification, battery storage, and distributed generation;
- Expanding "hosting capacity" to connect new distributed energy sources and provide information to help developers plan their investments;
- Cost-effectiveness analysis to identify effective grid improvements that use technology and "non-wires" investments instead of more expensive infrastructure or equipment;
- Coordination of gas and electric system planning to avoid duplicative investment in energy capacity; and,
- Use of defined metrics to monitor, evaluate, and report on progress.
- Robust requirements for transparency and for active participation and input by non-utility stakeholders.

Most importantly, SB908 requires actual review and approval of distribution system plans by the PSC and establishes criteria for such approval. Approval plus required reporting will assure accountability of the grid modernization process as it is implemented.

#### SB908 is consistent with grid modernization requirements in other progressive states.<sup>6</sup>

- Hawaii, New York, Colorado, Minnesota, Nevada, and Vermont require forecasts to include new load from building electrification and EV charging; Vermont includes new load from heat pumps and other "fuel-switching technologies."
- Hawaii, Colorado, California, Nevada and Vermont require system forecasting for demand response, energy storage, distributed generation, demand flexibility (CO), and/or managed EV charging.
- The District of Columbia and 16 states include analysis of non-capital ("non-wires") investments in plan requirements.
- California, Hawaii, Massachusetts, Minnesota, New York, and Michigan require their Public Utility Commissions to approve electric utilities' distribution system plans.

In summary, we need SB908 to move forward. Setting out with a weaker set of regulations will only cost us more time than we have already lost since 2016. Through actions like the Climate Solutions Now Act and the

<sup>&</sup>lt;sup>6</sup> L. Schwartz et al, State Requirements for Electric Distribution System Planning; Berkeley Lab and Pacific Northwest National Laboratory, December 2024

2024 DRIVE the legislature has proven that it can help focus regulatory action. We need to do that now to plan the system that will speed our movement toward the clean energy future we've envisioned.

We therefore respectfully request a favorable report on SB908.

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

# **SB 908 Public Utilities - Electric Distribution Sy** Uploaded by: Cait Kerr



Protecting nature. Preserving life.

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

Thursday, March 6, 2025

**TO:** Brian Feldman, Chair of the Senate Education, Energy, and the Environment Committee; and Committee Members **FROM:** Cait Kerr, The Nature Conservancy, State Policy Manager; and Michelle Dietz, The Nature Conservancy, Director of Government Relations

POSITION: Support SB 908 Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)

The Nature Conservancy (TNC) supports SB 908 offered by Senator Hester. SB 908 seeks to prevent the overbuilding or underbuilding of distribution infrastructure and increase the adoption of lower-cost noncapital and non-wires solutions relative to traditional distribution infrastructure. Maryland is expected to see a spike in energy demand in the near future. It is imperative that utilities upgrade our grid as efficiently, cost-effectively, and as rapidly as possible. We must ensure the grid is ready to meet growing energy demands, and incorporate new technologies that ratepayers are already purchasing and installing, which enhance the grid's efficiency in delivering energy. This is where accurate, adequate, data-driven Distribution System Planning (DSP) comes in.

We need to act now to ensure that our grid is capable of distributing energy to meet increasing demand from the generation source to consumers as efficiently and cost-effectively as possible. There is also a concurrent need to modernize our grid, in order to take advantage of new and emerging technologies that can reduce costs to ratepayers by balancing supply and demand. Many of these technologies, including distributed rooftop solar, battery storage, bidirectional electric vehicle charging, and Virtual Power Plant agreements, are already being added to homes and businesses. These technologies can put more energy back on the grid that doesn't rely on utility-scale generation sources. There are also recent technologies that utilities can add to their distribution grid, including non-wires solutions. One type of non-wires solution is software programs that manage load can increase the grid's stability and reliability at a lower cost than building new poles and wires. Most, if not all, of these modern technologies that reduce demand from utility-scale generation can be added to the grid more quickly than additional utility-scale generation.

When DSP is done ineffectively, utilities run the risk of either significantly overbuilding or significantly underbuilding. Overbuilding takes longer to make upgrades, which delays grid readiness to meet increased energy supply and demand. It also costs more, and these costs get passed on to ratepayers. If utilities underbuild, infrastructure will require replacement earlier than expected. This takes even more time than overbuilding, and costs ratepayers even more in the long run. Underbuilding leads to new customer-sited technologies, such as solar panels and electric vehicle charging equipment, facing delays in becoming interconnected. Neither approach is conducive to optimizing ratepayer dollars.

SB 908 aims to prevent both overbuilding and underbuilding. This bill's goals are to: (1) advance only necessary capital expenditure spending by utilities, which will minimize increases to electricity delivery impacts on ratepayers' energy bills, (2) upgrade the grid faster, which will help us meet increased energy and supply and demand more quickly, as well as reach our clean energy goals more quickly, (3) reduce power outages, (4) accelerate restoration times from power outages when they do occur, (5) increase the grid's ability to withstand extreme weather events, and (6) minimized voltage fluctuations and harmonics.

Six states already require utilities to include building electrification and electric vehicle charging in load forecasts. Five states require utilities to forecast the potential utilization and benefit of energy-saving tools including demand response, energy storage, distributed generation, demand flexibility, and/or managed electric vehicle charging. Sixteen states and The District of Columbia include analysis of non-capital, non-wires, investments in plan requirements. Six states require their Public Utility Commissions to approve electric utilities' distribution system plans. SB 908 allows Maryland to catch our grid up to current and future energy demands and brings us up to speed with other states already taking action to tackle this issue. TNC commends Senator Hester for introducing this bill to advance affordable, efficient, reliable energy distribution in our state.

Therefore, we urge a favorable report on SB 908.

# SB0908\_Affordable\_Grid\_Act\_MLC\_FAV.pdf Uploaded by: Cecilia Plante



# TESTIMONY FOR SB0908 Public Utilities – Electric Distribution System Plans – Establishment (Affordable Grid Act)

Bill Sponsor: Senator Hester

**Committee:** Education, Energy, and the Environment **Organization Submitting:** Maryland Legislative Coalition

Person Submitting: Cecilia Plante, co-chair

**Position: FAVORABLE** 

I am submitting this testimony in strong support of SB0908 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of activists - individuals and grassroots groups in every district in the state. We are unpaid citizen lobbyists and our Coalition supports well over 30,000 members.

Our members feel like what is happening with our electric grid is reactionary. There does not seem to be much planning involved. Given that our requirements for power are growing exponentially, it makes sense to inject some forward planning into the process.

This bill will require electric companies to submit distribution system plans to the Public Service Commission every three years utilizing bottom-up forecasting of projected load requirements and that incorporates increases in vehicle and building electrification and the goals of state and local decarbonization policies. It will also ensure electric companies develop investment plans to modernize and upgrade their assets to meet their forecasted needs and maximize energy efficiency upgrades.

Finally, it will mandate comprehensive planning that considers grid capacity, and prioritizes overburdened communities. This is something we should be doing, but clearly need a push to make sure it happens.

We strongly support this bill and recommend a **FAVORABLE** report in committee.

# **Testimony SB908 Affordable Grid Act.pdf**Uploaded by: Debbie Cohn

Committee: Education, Energy, and the Environment

Testimony on: SB908 – Public Utilities – Electric Distribution System Plans –

**Establishment (Affordable Grid Act)** 

Submitting: Deborah A. Cohn

Position: Favorable Hearing Date: March 6, 2025

#### Dear Chair Feldman and Committee Members:

Thank you for allowing my testimony today in support of SB908. I have been a Maryland resident since 1986. My children and grandchildren are Maryland residents. I am concerned on their behalf to ensure that our distribution grid is sufficient to ensure reliable electrical service at the least cost. Accordingly, my testimony underscores the need to invest prudently in our distribution grid to ensure its planned growth in the most cost effective manner.

While much attention is being paid to developing affordable and reliable renewable energy supplies, we need to be able to access those supplies efficiently and affordably while facilitating decarbonization of our buildings and transportation sectors. We need prudent investment in the electrical grid. HB829 addresses using advanced transmission technologies, such as reconductoring and various grid enhancing technologies, in the CPCN process; SB908 addresses requirements and evaluation criteria that will enable the Public Service Commission (PSC) to ensure prudent build-out of the distribution grid.

The existing distribution system is quite old and as a result, is designed to take electrons in one direction: from big power plants to consumers. A modern grid needs to be a bidirectional grid that takes advantage of digital technologies like sensors, smart meters, demand management, demand flexibility and two-way communications between utilities and end-users. It also needs to take advantage of new technologies, such as grid enhancing technologies<sup>1</sup>, to increase grid efficiency and reliability at the lowest cost.

A bidirectional grid can also facilitate growth of community and residential solar, EV charging and related battery storage that can serve as virtual power plants (VPPs). California successfully used VPPs during heat waves in 2020 and 2022 to reduce blackouts.<sup>2</sup> In New England VPPs are

1

<sup>&</sup>lt;sup>1</sup> Grid enhancing technologies (GETs) include several technologies. Dynamic line rating (DLR), the real time monitoring of wind, humidity, temperature and other factors that impact the amount of electricity that can flow safely through an existing transmission or distribution line, can increase line capacity by an average of 10-30 percent, take three to six months to deploy and cost less than five percent of the price of building new transmission lines. Advanced power flow control devices act like air traffic controllers. They enable the redistribution of power from congested lines to lines with available capacity, increasing capacity by 10-25 percent. Topology optimization addresses congestion in a manner similar to the rerouting of trains along different tracks through controlling switches in the tracks. Topology optimization uses software models of the grid network and real time conditions to trigger high voltage circuit breakers to redistribute power flow more efficiently through the existing grid. https://ceepr.mit.edu/wp-content/uploads/2024/09/MIT-CEEPR-RC-2024-06.pdf.

<sup>&</sup>lt;sup>2</sup> https://rmi.org/clean-energy-101-virtual-power-plants/

used to shave peak demand to avoid reliance on peaker plants.<sup>3</sup> Currently, when local circuits are saturated, the next customer on that circuit who wants to connect a new heat pump, EV charging station or rooftop solar facility is forced to pay the entire cost (roughly \$10,000) of a new circuit. The cost of other utility investments are socialized. To increase reliability at the lowest cost through EV charging stations in residential buildings of all sizes, rooftop solar, smart meters and other resources that can serve as VPPs, investing in new circuit breakers needs to be socialized as well.

Modernizing our distribution grid requires the collaboration of utilities, the PSC, technology developers and a well-trained installer workforce. Existing law does not require the PSC review and approve a utility's distribution plan. Utilities earn a rate of return on infrastructure investments. Lacking muscular oversight, transparency and accountability, this approach risks reliance on unnecessarily costly infrastructure improvements rather more cost effective methods. Importantly, SB908 calls for the PSC to require utilities to submit distribution system plans that the PSC must review and approve.

SB908 draws on best practices for grid planning, drawing on distribution system planning methodologies developed by the National Association of Regulatory Utility Commissioners (NARUC) and the National Association of State Energy Officials and consultation with the Maryland Public Service Commission (PSC). Many of these best practices are already being used effectively by other states and utilities.

**Distribution System Planning**: SB908 requires utilities every three years to submit a distribution system plan for the PSC's approval. The plan must include:

- Data-sharing between electricity and gas utilities (i) to prevent electricity and gas demand from being double-counted and (ii) to coordinate on decarbonization and electrification planning.
- Forecasts and scenarios for predicted load growth (including from DERs and building electrification) and electricity generation capacity
- Analysis of system constraints that impede the incorporation of new technologies and capacity, thereby pinpointing where investment in capacity will facilitate the uptake of DERs.
- Preferred solutions for upgrading the grid and explanations for those decisions, including a cost-benefit analysis comparing solutions requiring capital expenditure with non-capital, or reduced capital solutions.
- Incorporation of technology innovations that will modernize the grid and improve its reliability and resilience.
- Coordination of transmission and distribution.

<sup>&</sup>lt;sup>3</sup> https://www.wbur.org/news/2024/08/28/virtual-power-plants-eversource-massachusetts-batteries-ev-chargers

- Use of funds and incentives to encourage private investment in VPP components and technology
- Identification of sites having greatest value for decarbonization.
- Management of capacity to incorporate Distributed Energy Resources ("hosting capacity")
- Analyses and targets using PSC developed metrics to better enable the PSC to monitor, evaluate and report on progress.

**Transparency and Accountability:** SB908 requires the PSC to review <u>and approve</u> (and implicitly reject or require changes to) each utility's plan. It specifies certain criteria for approval or rejection. It specifically allows the PSC to reject a plan if it is not cost effective or doesn't minimize cost to ratepayers without compromising grid performance. And it requires utilities to provide annual progress reports on implementation of their three-year plans.

- Increases reliability of the grid at lower costs by facilitating development and use of distributed energy resources
- Socialize the cost of construction of new capacity where system constraints limit uptake
  of rooftop solar and battery storage
- Help energy developers identify the best places to connect to the grid.

**Conclusion**: SB908 is a well thought through method for ensuring grid distribution planning that (i) minimizes the risk of unnecessarily costly investments, grid congestion requiring emergency improvements or results in delays in interconnection and (ii) improves distribution grid reliability in a cost-effective manner.

For these reasons I urge this Committee to issue a favorable report on SB908.

# energy planning for state 3-4-25.pdf Uploaded by: Frank Baylor

#### Jennifer Teeter and Frank Baylor 1805 Uniontown Road Westminster, MD 21158 Cell: 443-340-2070

e-mail: jennyteeter@comcast.net

March 4, 2025

RE: SB0908

Dear Committee Representatives:

It is critically important that we develop an energy distribution plan for our state. We have no voice on the Board of PJM, our regional RTO and it is clear that being subject to their Regional Transmission Plan without oversight is not in our best interest. Members of their board of the very utilities they award projects to. On any other board this is considered a conflict of interest.

Maryland is a great state and we can do better than this.

Thank you for approving this important bill. Please contact us if you have questions.

Very sincerely,

Jennifer Teeter and Frank Baylor

# **SB 908 - MoCo DEP - FAV (GA25).pdf**Uploaded by: Garrett Fitzgerald

ROCKVILLE: 240-777-6550 ANNAPOLIS: 240-777-8270

SB 908 DATE: March 6, 2025

**SPONSOR: Senator Hester** 

ASSIGNED TO: Education, Energy, and the Environment Committee

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

POSITION: Favorable (Department of Environmental Protection)

#### Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)

This legislation would require the Public Service Commission (PSC) to adopt regulations or issue orders by December 31, 2025, requiring electric companies to develop electric system distribution plans and establishing a system for monitoring progress and updating those plans.

As electricity prices continue to rise, it is critically important that electric distribution system planning evolve to ensure that future investments are made as cost-effectively as possible with a comprehensive view of achieving and balancing State goals and priorities.

This bill would significantly improve electric distribution system planning in Maryland. It would require utilities to develop scenarios and plans associated with achievement of the State's clean energy and climate goals as well as potential increases in overall electricity demand. Utilities would be required to identify system constraints, geographical areas where the expansion of distributed energy resources might be most valuable, and potential solutions including innovative technologies that may have the potential to more cost effectively improve energy reliability and efficiency. These plans would consider the application and impacts of solar adoption, building electrification, electric vehicles, energy storage capacity, virtual power plants, and other strategies. The bill would also require increased coordination between electric and gas utilities which will be important as progress continues to convert Maryland's building stock from fossil fuel combustion to high efficiency electric technologies for space and water heating.

This bill supports a well-considered approach to deployment of technology and innovation to help achieve State goals and protect ratepayers through important infrastructure planning processes. While this may require some adjustment from current utility approaches to distribution system planning, Maryland will benefit from a more cost-efficient, clean, and reliable energy system.

Montgomery County respectfully requests that the Education, Energy, and the Environment Committee issue a favorable report on Senate Bill 908.

# **IMT Testimony on SB0908.pdf** Uploaded by: Giulianna Di Lauro Position: FAV

### Written Testimony in support of SB0908 Maryland General Assembly

Giulianna Di Lauro - g.dilauro@imt.org
Associate Director of Community Engagement
The Institute for Market Transformation

March 4, 2025

Thank you, Chairman Wilson and members of the Committee, for the opportunity to testify in support of Maryland's Affordable Grid Act (SB0908) We request a favorable report from the Committee on SB0908

My name is Giulianna Di Lauro. I'm the Associate Director of Community Engagement to the Institute for Market Transformation. IMT is a national, non-partisan, nonprofit organization. We partner with government, business, and community to improve the efficiency and performance of buildings for the people inside them and the communities around them. IMT advises all 14 states and localities in the United States that have adopted building performance standards as well as 34 others that have committed to do so. This includes advising the Maryland Department of Environment and Montgomery County on their building energy performance standards.

The Affordable Grid Act represents an important step toward modernizing Maryland's electric grid infrastructure while ensuring cost-effective planning that benefits ratepayers. While grid planning may not be IMT's primary focus, we recognize its critical importance to building decarbonization and electrification - key priorities for Maryland under the Climate Solutions Now Act.

Distribution system planning directly impacts building owners' ability to electrify their buildings and add distributed energy resources like solar and storage. The requirements in HB1225 for utilities to coordinate with gas companies on decarbonization planning and identify locations for electrification will help building owners make informed decisions about equipment upgrades and electrification investments.

Based on our experience working with other states on building decarbonization policies, we have observed that improved distribution system planning transparency can provide valuable data to inform building electrification efforts. However, we also note that the effectiveness of such planning requirements varies across jurisdictions. While increased transparency is valuable, strong oversight and enforcement mechanisms are essential to ensure utilities follow through on identified non-wires alternatives and grid modernization opportunities.

The bill's requirements for utilities to forecast distributed energy resources and identify constraints on DER expansion will help building owners and operators understand where and when they can most cost-effectively electrify their buildings and add clean energy technologies.

The stakeholder engagement provisions will also ensure building owners' perspectives are considered in grid planning decisions that affect their properties.

We appreciate that the bill requires utilities to coordinate planning between gas and electric systems, which is critical for managing the transition of buildings away from fossil fuels. This coordination will help prevent both overbuilding and underbuilding of infrastructure as buildings electrify.

We support the overall goals and approach of **SB0908** and encourage the Committee to ensure the final bill maintains strong requirements for:

- 1. Meaningful stakeholder engagement that gives building owners and operators a voice in planning decisions that affect their properties
- 2. Coordination between gas and electric utilities on electrification planning
- 3. Clear metrics and oversight to ensure utilities follow through on identified non-wires alternatives
- 4. Transparency in hosting capacity analysis to help building owners understand grid constraints

Thank you for the opportunity to provide input on this important legislation. We look forward to continuing to work with Maryland policymakers and stakeholders to advance building decarbonization and grid modernization in a way that benefits all Marylanders.

# Senate Testimony for Affordable Grid Act.pdf Uploaded by: Jamie DeMarco



### Favorable Testimony for The Affordable Grid Act

SB908

Education, Energy, and the Environment Committee 3/6/2025

Jamie DeMarco
Chesapeake Climate Action Network Action Fund
Lobbyist

On behalf of the Chesapeake Climate Action Network Action Fund, I urge a favorable amendments report on SB908. The Affordable Grid Act will help ensure that utilities are adopting best in class technologies that provide the greatest benefit to the system at the least cost. This legislation marks an important step forward in improving the PSC's existing processes for regulating the deployment of grid technologies.

CONTACT
Jamie DeMarco, Lobbyist
jamie@demarcoavocacy.com, 443-845-5601



# Ceres Testimony SB0908 Affordable Grid Act.pdf Uploaded by: Jeff Mauk



#### SB0908 - SUPPORT

Jeff Mauk Ceres jmauk@ceres.org

#### **TESTIMONY SUPPORTING SB0908:**

### Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)

Senate Education, Energy, and the Environment Committee March 6<sup>th</sup>, 2025

Dear Chair Feldman, Vice Chair Kagan, and members of the Education, Energy, and the Environment Committee,

I write today on behalf of Ceres to urge a favorable report from the Committee on SB0908, the Affordable Grid Act. Ceres works with investors, companies, and financial leaders to promote sustainability solutions. Through our Business for Innovative Climate and Energy Policy Network (BICEP), we mobilize over 85 major employers, including several companies with operations and business interests in Maryland, to advocate for more effective climate and clean energy policies.

As Maryland transitions to a cleaner energy future, the electric distribution system faces challenges, but also unprecedented opportunities. SB0908 creates a framework that balances business interests, consumer protection, and carbon emissions reduction goals by requiring utilities to develop comprehensive distribution system plans every three years.

#### **Economic Benefits**

- Reduced Infrastructure Costs: By requiring utilities to evaluate non-wires alternatives and conduct benefit-cost analyses, SB0908 will help avoid unnecessary capital expenditures. The systematic planning approach mandated by this legislation promotes more efficient grid investments rather than reactive, piecemeal upgrades.
- Regulatory Certainty: The three-year planning cycle provides businesses with greater predictability for investment decisions. Companies developing distributed energy resources, electric vehicle charging infrastructure, and grid modernization technologies will benefit from transparent utility planning processes.

Ceres Headquarters: 99 Chauncy Street, Boston, MA 02111 California Office: 369 Pine Street, Suite 620, San Francisco, CA 94104



• Market Development: The bill's information-sharing framework will create a more competitive marketplace for innovative grid services. When developers have access to hosting capacity and constraint information, they can target investments where they provide the most value.

#### **Cost-Effectiveness for Ratepayers**

Maryland businesses of all sizes depend on affordable, reliable electricity. This legislation explicitly prioritizes cost-effectiveness by:

- Requiring utilities to minimize capital infrastructure investments to the greatest extent possible
- Mandating evaluation of non-wires alternatives that are often more cost-effective
- Promoting load flexibility and demand management to reduce peak demand costs
- Ensuring consideration of federal funding and incentives to minimize ratepayer impacts

#### **Grid Reliability and Resilience**

Business operations depend on reliable power. The bill strengthens reliability by:

- Requiring scenario planning for various future load conditions
- Promoting technologies like microgrids, energy storage, and virtual power plants
- Ensuring adequate hosting capacity for distributed energy resources
- Coordinating gas and electric planning for areas transitioning to electrification

#### **Supporting Economic Growth**

The Affordable Grid Act positions Maryland as a leader in grid modernization, which will:

- Attract businesses seeking reliable, clean energy
- Create jobs in energy technology, construction, and infrastructure
- Support Maryland's growing clean energy industry
- Reduce long-term energy costs through more efficient planning

#### Conclusion

Businesses support SB0908 because it strikes the right balance between infrastructure investment, innovation, and cost control. This legislation provides the planning framework needed to modernize the grid while protecting ratepayers and advancing Maryland's environmental goals.

I urge a favorable report on Senate Bill 908.

Respectfully submitted,



Jeff Mauk Director, State Policy, Eastern Region, Ceres

Ceres Headquarters: 99 Chauncy Street, Boston, MA 02111 California Office: 369 Pine Street, Suite 620, San Francisco, CA 94104

# **energy planning for state 3-4-25.pdf**Uploaded by: jennifer teeter

#### Jennifer Teeter and Frank Baylor 1805 Uniontown Road Westminster, MD 21158 Cell: 443-340-2070

e-mail: jennyteeter@comcast.net

March 4, 2025

RE: SB0908

Dear Committee Representatives:

It is critically important that we develop an energy distribution plan for our state. We have no voice on the Board of PJM, our regional RTO and it is clear that being subject to their Regional Transmission Plan without oversight is not in our best interest. Members of their board of the very utilities they award projects to. On any other board this is considered a conflict of interest.

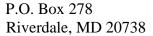
Maryland is a great state and we can do better than this.

Thank you for approving this important bill. Please contact us if you have questions.

Very sincerely,

Jennifer Teeter and Frank Baylor

# **SB0908\_MDSierraClub\_fav\_6March2025.pdf**Uploaded by: Josh Tulkin





Committee: Education, Energy, and the Environment

Testimony on: SB 908, Public Utilities - Electric Distribution System Plans - Establishment

(Affordable Grid Act)

**Position:** Support

Hearing Date: March 6, 2025

The Maryland Chapter of the Sierra Club strongly supports SB 908, the Affordable Grid Act. The Act will require the Public Service Commission (Commission or PSC) to develop rules and regulations to create a rigorous and effective distribution system planning processes in Maryland. The need for an effective distribution planning system that incorporates all resources with specificity and requires Commission approval is critical as the Maryland electric industry transitions to clean energy and as Maryland's transportation and building sectors significantly electrify. Without the enactment of the Affordable Grid Act, the distribution system planning process currently under development in Maryland will not meaningfully update existing distribution planning processes.

Maryland is at a crossroads. The state has set goals of producing clean, affordable, and reliable energy, but rapidly increasing electric demand and the need for new resources are challenging these goals. While most of the attention goes to how power is produced, the electric grid itself plays a huge role. Maryland's electrical grid was designed over 100 years ago when the system needs were simple: produce and distribute electricity to end users. Much of our distribution system infrastructure – the lines and poles – has essentially been in place since the 1940s. Today, the demands on our grid are more complex, onboarding electricity from thousands of sources, and both receiving energy from and providing energy to battery storage systems and electric vehicles. There are also new grid technologies that can help us get more energy, use it more efficiently, and reduce costs. Creating a 21st century grid that addresses all these needs and incorporates new grid technologies is not a simple process, and requires collaboration across utilities, regulators, and other stakeholders, including technology developers and installers. To achieve this change quickly, the state must ensure that Maryland's goals and objectives are incorporated into the utilities' planning process, and that there is transparency and accountability.

It is essential that utilities' distribution system planning processes be calibrated to meet the needs of Maryland's clean energy future. This is a pivotal moment, with hundreds of millions of federal dollars pouring in to install fast chargers along Maryland's highways, and to build charging infrastructure for medium- and heavy-duty electric fleets throughout the state. Maryland has also adopted Building Energy Performance Standards and is developing policies to reduce emissions from fossil combustion in buildings. These policies will require significant additional capacity from the grid. It is essential that utilities adequately "energize" the grid, ensuring they build enough new wires, cables, transformers, and other infrastructure at the scale and timeline to meet Maryland's increased power needs as soon as those needs arise. This Act will require utilities' planning processes to comply with the Climate Solutions Now Act and other relevant state policies that will increase the demand for a modern, upgraded electric system.

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

To create a 21<sup>st</sup> century grid, the Commission has conducted a grid modernization proceeding since 2016. Nearly four years ago, in June 2021, the Commission in Order No. 89865 established the Distribution System Planning Work Group and tasked it with beginning a comprehensive examination of distribution system planning in Maryland. The Work Group has deliberated for over three years on the design of a distribution system planning process. The Commission in Order No. 91490 ordered the Work Group to file proposed regulations by May 1, 2025. While the Sierra Club acknowledges the draft regulations under consideration by the Work Group, the Club believes that core principles of proper electric system planning, especially accountability, are being left out of these regulations.

The Affordable Grid Act establishes "Best Practice" system planning requirements to address these deficiencies in the draft regulations. The Act applies the step-by-step framework that Maryland has established for Distribution System Planning, developed by the National Association of Regulatory Utility Commissioners and the National Association of State Energy Officials, with PSC input. The Act's requirements incorporate the modern approaches and technologies for grid development that are cost-saving, cost-effective, and already being used by other states or utilities. The Attachment summarizes the core provisions within the Act.

The Sierra Club fully supports all of the provisions in the Affordable Grid Act, including:

- Commission review and approval of each utility's proposed plan.
- Annual electric utility progress reports on implementation of their three-year distribution system plans.
- Data-sharing between electricity and gas utilities for the purpose of preventing electricity and gas demand from being double-counted, and to coordinate on decarbonization and electrification planning, including protocols that follow cybersecurity standards.
- Forecasts and scenarios for predicted load and electricity generation capacity.
- An analysis of system constraints that impede the incorporation of new technologies and capacity.
- Incorporation of technology innovations that will modernize the grid and improve its reliability and resilience.
- Coordination of transmission and distribution system planning.
- Management of hosting capacity to incorporate Distributed Energy Resources.
- Analyses and targets using metrics that will be developed by the Commission.

Other states are moving faster than Maryland in transforming their distribution grids. For example, Colorado, Hawaii, Minnesota, New York, Nevada, and Vermont require load forecasts to include the energization needs stemming from building electrification and EV charging. Vermont includes new load from heat pumps and other "fuel-switching technologies" in load forecasts. California, Colorado, Hawaii, Nevada and Vermont require utilities to forecast the potential utilization – and benefit – of tools including energy storage, distributed generation,

demand response or flexibility, and managed EV charging. California, Hawaii, Massachusetts, Minnesota, New York, and Michigan require their public utility commissions to approve electric utilities' distribution system plans.

In summary, the Maryland Chapter of the Sierra Club urges the passage of SB 908, the Affordable Grid Act. Maryland needs comprehensive and accountable electric utility distribution planning, especially in light of its economy-wide electrification and emission reduction goals.

David Kathan Clean Energy Legislative Team dkathan@gmail.com Josh Tulkin Chapter Director Josh.Tulkin@MDSierra.org

### ATTACHMENT A SUMMARY OF CORE PROVISIONS OF SB 908

Section A of the Act provides definitions.

Section B sets forth requirements for PSC regulations that include review for approval of distribution system plans. Commission approval of utility distribution system plans will be essential to ensure that Maryland electric utilities take appropriate actions to improve their distribution system planning processes and investment. Direct inquiry, input, direction and approval from the Commission will ensure that the utility plans are thoroughly vetted, and will allow the Commission the opportunity to steer utility plans to meet Maryland clean energy goals.

**Section C** sets forth appropriate goals for uniform treatment of regulated parties by the PSC regulations while allowing for differences across types of providers and other considerations.

Section D includes required contents for Distribution System Plans. The Act contains multiple required elements of a distribution system plan that are intended to modernize and improve plans. In particular, the Act calls for improved hosting capacity analysis. Hosting capacity refers to the amount of capacity on distribution networks to accommodate distributed energy resources. Detailed analysis of this capacity needs to consider customer load patterns, patterns of use of key resources (such as electric vehicles), and the ability of demand response and distributed energy resources to free up capacity. Among other requirements, the Act also directs coordination of distribution system plans with transmission and PJM plans, and for coordination with gas utilities. These coordination efforts will help ensure that Maryland utility distribution plans reflect broader factors that may impact planning.

Section D also requires detailed forecasts of distributed energy resources and loads. The preparation of detailed load forecasts of individual distributed energy resources and how specific technologies may impact load forecasts is essential for effective planning. For example, electric vehicles will be both new and large loads on distribution networks and an important supply of future power. Good forecasts of the amount and impact of these resources will be essential in designing the right level of infrastructure and not overbuilding. Maryland electric utilities currently offer insufficient assurances that their forecasting will be modernized. Modern, detailed forecasting techniques should be required.

#### Sections E, F, and G address public input and Commission approval.

**Section H of the Act addresses Information Sharing**. It calls for secure information sharing between electric and gas companies. Cybersecure sharing of information on the location, specific conditions, and type of gas and electric equipment should result in better and coordinated operation and investments. This information sharing will be particularly important as electrification accelerates in Maryland.

# AGA Case and Cost Savings Examples.docx.pdf Uploaded by: Katie Fry Hester

#### **How Good Distribution System Planning and Modernization Pay Off**

#### **Reducing Cost to Ratepayers:**

Vermont's Green Mountain Power Virtual Power Plant (VPP) integrates distributed energy storage with advanced distribution grid management. Over 2,500 customers lease or buy Tesla Powerwalls, storing power when prices or demand are low and using or selling it when high. With 50 MW capacity, the program saves about \$3 million annually, benefiting all 275,000 ratepayers. Its distributed design improves reliability in a tree-heavy state prone to outages, and helps balance renewable energy variability. Reduced reliance on fossil-fuel peaker plants contributes to Green Mountain getting 78% of its electricity from renewables and being 100% carbon-free annually.

#### **Avoiding or Deferring Costly Infrastructure Investments**

The Brooklyn-Queens Demand Management (BQDM) program,<sup>2</sup> launched by Con Edison in 2014, used non-wires alternatives (NWAs) to defer a \$1 billion substation. It reduced peak demand to achieve 52 MW of load relief by 2018. Customer-side measures – energy efficiency, demand management, and distributed generation – provided 41 MW. Utility-side solutions, including voltage optimization and battery storage, added 11 MW. This deferred substation construction until 2026, with significant savings to ratepayers.

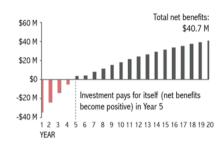
#### Investing in modernization instead of traditional infrastructure

With catalytic grant support from New York's State Energy Research and Development Authority (SERDA) program, Central Hudson Gas and Electric invested in a grid modernization program<sup>3</sup> that included:

- automated transmission and distribution management systems;
- superconducting fault current limiters, which prevent problems associated with faults in power lines by detecting and rerouting power flow around the fault; and,
- sensors, smart inverters and other monitoring and power controls to aid the efficient integration of renewable energy resources into the grid.

The program is projected over 20 years to produce net economic cost savings of \$40.7 million, reliability benefits of \$7.3 million, and environmental benefits of \$28.0 million. At the projected rate of savings, the program's net economic benefits exceeded costs by year 5.

Economic Benefits of Central Hudson's and NYSERDA's Investments in Distribution Automation



<sup>&</sup>lt;sup>1</sup> Green Mountain Power, *GMP's Energy Storage Programs Deliver \$3 Million In Savings for All Customers During 2020 Energy Peaks*; 29 September 2020.

https://greenmountainpower.com/news/gmps-energy-storage-programs-deliver-3-million-in-savings/

<sup>&</sup>lt;sup>2</sup> Utility Dive, *BQDM program demonstrates benefits of non-traditional utility investments*; March 11, 2019 <a href="https://www.utilitydive.com/news/bgdm-program-demonstrates-benefits-of-non-traditional-utility-investments/550110/">https://www.utilitydive.com/news/bgdm-program-demonstrates-benefits-of-non-traditional-utility-investments/550110/</a>

<sup>&</sup>lt;sup>3</sup> NYSERDA Smart Grid Evaluation Case Study: *Central Hudson's Grid Modernization Investments*; 8 July 2020 <u>file:///C:/Users/Alfre/Downloads/NYSERDA-GridModernization-CentralHudson-EvaluationCaseStudyReport-July2020.pdf</u>

# **SB 908 AGA Hester Testimony.pdf** Uploaded by: Katie Fry Hester

### KATIE FRY HESTER Legislative District 9 Howard and Montgomery Counties

Education, Energy, and Environment Committee

Chair, Joint Committee on Cybersecurity, Information Technology and Biotechnology



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### THE SENATE OF MARYLAND Annapolis, Maryland 21401

### Testimony in Support of SB 908 - The Affordable Grid Act

March 6, 2025

Chair Feldman, Vice-Chair Kagan, and Members of the Education, Energy, and the Environment Committee:

Thank you for your consideration of SB 908, the Affordable Grid Act, a critical component of responding to Maryland's energy crisis through long term fixes to our Distribution System Planning Process.

Maryland's electricity distribution system was designed over a century ago for a one-way flow of power—from centralized generation sources to homes and businesses. However, today's energy landscape has dramatically changed, with modern technologies enabling bidirectional energy flow, demand response, and distributed energy resources (DERs) such as battery storage and solar power.

Unfortunately, utility planning methods have not kept pace. Traditional forecasting approaches rely on historical trends, often underestimating the rapid adoption of clean energy technologies. This leads to costly, unnecessary infrastructure investments instead of cost-effective alternatives that better serve ratepayers. modernized distribution planning, we risk inefficiencies that will increase costs for consumers and hinder our ability to meet these targets.

A study commissioned by Atlantic City Electric in 2022 and conducted by The Brattle Group found that a \$347 million investment in modernized grid planning would yield nearly \$1 billion in value over two decades. This model of cost-effective investment is exactly what the Affordable Grid Act establishes for Maryland.

SB 908 requires electric utilities to submit **comprehensive distribution system plans (DSPs) every three years** to the Public Service Commission (PSC) that will protect ratepayers, increase grid resiliency. These plans must:

<sup>&</sup>lt;sup>1</sup> <u>https://www.brattle.com/wp-content/uploads/2024/08/Cost-Benefit-Analysis-of-Electric-Distribution-Investments.pdf</u>

- **Require Detailed System Planning** Utilities must submit forecasts that account for renewable energy adoption, future energy demand, and non-wires solutions that avoid costly infrastructure expansion.
- **Track Progress** Establishes metrics to evaluate grid performance, including reliability, DER integration, and demand response programs. Utilities must submit annual reports explaining their decisions and progress.
- **Engage Stakeholders** Ensures public participation by requiring utilities to host meetings and consider stakeholder feedback in their planning processes.
- **Create Data Transparency** Develops a secure data-sharing system between utilities, third-party service providers, and the public while maintaining cybersecurity protections.

### Additionally, the bill mandates that:

- Utilities assess hosting and load-serving capacity for DERs such as electric vehicles, battery storage, and solar to identify constraints and opportunities, particularly in overburdened communities.
- The PSC creates regulations for standardized reporting metrics, a framework for datasharing, and tailored requirements for different types of utilities (investor-owned, municipal, and cooperative).
- Utilities coordinate planning efforts between gas and electric distribution to avoid redundant investments and improve decarbonization strategies.

This is not without precedent - research shows that many other states are moving towards more comprehensive Distribution System Planning<sup>2</sup>:

- California, Hawaii, Massachusetts, Minnesota, New York, and Michigan require their Public Utility Commissions to approve electric utilities' distribution system plans.
- Six states require utilities to include building electrification and electric vehicle charging in load forecasts.
- Five states require utilities to forecast the potential utilization and benefit of energy-saving tools including demand response, energy storage, distributed generation, demand flexibility, and/or managed EV charging.

If all of this seems slightly familiar - it should! Maryland set ambitious clean energy goals through the Climate Solutions Now Act, which tasked the PSC with adopting regulations on electric distribution planning by December 31, 2025. However the Distribution System Planning Work Group has made slow progress, and you can see that in the timeline attached in my testimony. Key issues remain unresolved, and the PSC has indicated it will not approve distribution plans that lack sufficient detail and technical rigor. Further, the Work Group process has been hindered by consensus requirements that have diluted the strongest provisions. As a

<sup>&</sup>lt;sup>2</sup> https://emp.lbl.gov/state-distribution-planning-requirements

result, stakeholders—including those involved in drafting this legislation—have little confidence that the PSC will finalize regulations with enough enforcement power to maximize cost savings and grid reliability.

Therefore, SB 908 codifies key items from the Work Group and builds upon them to provide solutions for the partial and non-consensus issues that would otherwise go unaddressed. SB 908 ensures that Maryland's electric utilities take a proactive approach to distribution system planning, aligning it with our state's clean energy policies and evolving demand. This bill will:

- **Protect ratepayers** by ensuring utility investments reflect actual energy demand rather than outdated projections that lead to unnecessary spending.
- Enhance grid resilience by integrating modern energy technologies that optimize electricity use and reliability.
- **Improve cost-effectiveness** by prioritizing innovative solutions over expensive infrastructure expansion.

This bill is the result of rigorous collaboration between my office and work group participants and stakeholders. It provides a clear framework for modernizing Maryland's distribution planning process, ensuring our grid is prepared for the clean energy transition while keeping costs low for ratepayers.

For these reasons, I respectfully urge a favorable report on SB 908.

Sincerely,

Senator Katie Fry Hester

Howard & Montgomery Counties

Kari Fr Hear

# 2025.03.06\_SB0908\_Affordable GRID Act\_Advanced Ene Uploaded by: Katie Mettle



# March 6, 2025 Maryland Senate Energy, Education, and the Environment Committee

#### **SB 908**

Public Utilities - Electric Distribution System Plans - Establishment
(Affordable Grid Act)

Sponsor: Senator Katie Fry Hester

### Katie Mettle Policy Principal, Advanced Energy United

#### **FAVORABLE**

Dear Chair Feldman, Vice Chair Kagan, and esteemed members of the Energy, Education, and the Environment Committee:

### Why We Need the Bill

In the coming years, the State of Maryland is expecting to see an increase in energy demand. We have to make sure the grid is capable of distributing that energy from the generation source to people's homes, businesses, and our public buildings as efficiently and as cost-effectively as possible.

There is also a need to modernize the grid to take advantage of new technologies that can save ratepayers money by managing supply and demand – many of which are technologies that ratepayers are already adding to their own homes and businesses.

These include distributed rooftop solar, battery storage, bidirectional EV charging, and Virtual Power Plant agreements. These technologies can put more energy back on the grid that doesn't come from utility-scale generation sources.

There are also technologies that utilities can add to their distribution grid. For example, non-wires solutions such as software programs that manage load can increase the stability and reliability of the grid at a lower cost than building new poles and wires. And most, if not all, of these modern technologies that reduce demand from utility-scale generation can be added to the grid more quickly than additional utility-scale generation.

It is imperative that utilities upgrade the grid as efficiently, cost-effectively, and as rapidly as possible, to ensure the grid is ready to deliver more energy when we need it, and to incorporate these new technologies that ratepayers are already purchasing and installing, and which enhance the grid's efficiency in delivering energy. This is where accurate, adequate, data-driven Distribution System Planning comes in.

To address this need, the PSC formed the Distribution System Planning Work Group (<u>Case No. 9665</u>) in <u>Order No. 89865 on June 23, 2021</u>, as part of its Public Conference (PC) 44 proceedings.

In 2022, the General Assembly enacted Public Utilities Article § 7-804 (the Climate Solutions Now Act), which requires the PSC to adopt regulations on electric distribution planning by July 1, 2025. The Distribution Planning Workgroup has been charged with developing a draft of those regulations. Their deadline was extended to December 31, 2025 in 2024's HB 1393.

The work group's draft regulations so far, in their multiple iterations, have not bred confidence in non-utility stakeholders that the work group will ever arrive at regulations that are detailed and technical enough, or that have enough enforcement power, for utilities to be compelled to design and implement adequate, data-driven, cost-efficient DSPs.

It is relevant to note that the utilities have, for all intents and purposes, a guaranteed rate of return on their distribution system spending that is about 10% -- that's how much the stock market returns in an average year, and twice the annual guaranteed growth in a Maryland State employee's pension. Investor-owned utilities are also publicly traded. They have every incentive to spend as much money as possible on distribution system

upgrades. It is imperative that the PSC serve as a check on that incentive, in order to keep energy bills affordable for ratepayers.

When DSP is done ineffectively, utilities run the risk of either significantly overbuilding or significantly underbuilding. If they overbuild, utilities will take longer to make upgrades, which will delay grid readiness to meet increased energy supply and demand. It will also cost more money, which will get passed onto the ratepayers. This would put ratepayers on the hook for more costs than necessary for decades to come, adding to the rate pressures they're already experiencing.

If utilities underbuild, the infrastructure will need to be replaced earlier than expected, as energy supply and demand increase. This will take even more time than overbuilding, and cost ratepayers even more money than overbuilding, in the long run – but overbuilding is still inefficient and wasteful, too. Underbuilding will result in new customer-sited technologies (such as solar panels and EV chargers) facing delays getting interconnected. The utilities will constantly be in a rush to catch up, making just-in-time or after-the-fact investments that are subject to errors, under-forecasting that requires costly fixes, or lack of rigorous analytical modeling to find the most cost-effective solution. This approach is not conducive to optimizing ratepayer dollars.

### What the Bill Does

This bill is highly technical. Here is a high-level outline:

- 1. Every three years, an electric company must submit a DSP for the PSC's approval.
- The PSC has the authority to stagger when the electric companies submit their DSPs.
- 3. The bill spells out everything that must be included in the DSP. This includes:
  - a. Forecasts for both Distributed Energy Resources and load, for at least three time horizons.
  - b. A proposed portfolio of investments each for at least two scenarios, that minimizes capital infrastructure investments to the greatest extent possible. At least one scenario shall reflect the investments required to meet the State's existing clean energy and greenhouse gas emissions goals, and at least one scenario shall reflect a demand for electricity that is beyond what we are anticipating.
  - c. Analyses of the hosting capacity and load-serving capacity for Distributed Energy Resources (DERs), where DER expansion will provide the greatest

- value, and of existing constraints on the ability to expand DERs, meet anticipated load, and achieve our State's relevant goals.
- d. A cost-benefit analysis of the possible solutions to the constraints identified above.
- e. A list of chosen solutions for upgrading the grid, and explanations for those decisions.
- f. A description of the electric company's plan to incorporate innovations in technology that will modernize the grid and improve its reliability and resilience.
- g. Description of how the electric company will coordinate on transmission and distribution in a manner that is most cost-effective to ratepayers.
- h. Description of how the electric company will use Federal, state, and local resources and incentives to minimize costs to ratepayers.
- i. Identified locations for decarbonization.
- j. Description of electric company's efforts to coordinate with gas companies to identify locations for decarbonization, to facilitate electrification, and to make sure demand by shared customers is not double-counted.
- k. Description of how the electric company will manage its DER hosting capacity.
- l. Description of how the DSP contributes to achieving the State's relevant goals.
- m. Analysis using the metrics to be developed by the PSC.
- n. Compilation of official comments received, and responses to those comments.
- 4. The DSP must be then made available for public comment and stakeholder vetting.
- 5. The electric company must share relevant data to facilitate stakeholder participation in this process.
- 6. The bill lists the criteria for the PSC to determine whether to approve or reject a DSP.
  - a. The electric company must complete the public stakeholder engagement process, and if applicable, provide evidence-based reasons for not incorporating stakeholder input.
  - b. The DSP must advance our State's relevant climate and energy goals.
  - c. The DSP must adequately incorporate non-wires solutions and non-capital investments.

- d. The PSC may reject the plan if it is not cost-effective, and/or doesn't minimize cost to ratepayers without compromising the grid's performance.
- 7. An electric company must submit annual progress reports on fulfilling their approved DSP, and the bill spells out what must be included in that report.
- 8. The bill also tasks the PSC with creating regulations with respect to:
  - Determining the metrics that electric companies must use in their reporting and analysis;
  - Determining a framework for data-sharing (with appropriate cybersecurity measures in place) between gas and electric utilities for the purpose of not double-counting customers, and for decarbonization and electrification planning;
  - c. Determining whether and how to custom-tailor this bill's requirements for different types of utilities (such as investor-owned, municipal, and cooperative), based on their unique needs.

### Impact the Bill Will Have

This bill will prevent the overbuilding or underbuilding of distribution infrastructure and increase the adoption of lower-cost noncapital and nonwires solutions relative to traditional distribution infrastructure (i.e. poles and wires). Increasing noncapital and nonwires solutions will lead to:

- Lower capital expenditure spending by utilities, which will save ratepayers money.
- Upgrading the grid faster, which will help us meet increased energy demand more quickly.
- Fewer power outages, and faster restoration times from power outages.
- Increased ability for the grid to withstand extreme weather events.

In 2022, Atlantic City Electric, an Exelon-owned utility, commissioned a cost-benefit analysis of a proposed portfolio of distribution system projects. The projects spanned five categories: targeted reliability improvements, smart technology upgrades, infrastructure renewals, DER enablements, and substation improvements. The analysis projected that \$345.7 million of investments over four years would lead to an estimated returned value of \$939 million over twenty years. That value included reduced, shorter, and smaller-scale power outages; lower ongoing operation and maintenance costs, and avoided future distribution system investments. The projects were also projected to reduce peak demand on the grid.

### What Other States Do

- Six states, including Colorado and New York, require utilities to include building electrification and electric vehicle charging in load forecasts.
- Five states require utilities to forecast the potential utilization and benefit of energy-saving tools including demand response, energy storage, distributed generation, demand flexibility, and/or managed EV charging.
- The District of Columbia and 16 states include analysis of non-capital ("non-wires") investments in plan requirements.
- California, Hawaii, Massachusetts, Minnesota, New York, and Michigan require their Public Utility Commissions to approve electric utilities' distribution system plans.

Thank you for your time and consideration. We respectfully request a favorable report.

Best Regards,

Katie Mettle, Policy Principal
Advanced Energy United
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202.380.1950 x3197

### **SB908\_Affordable Grid Act\_EEE\_CJW FAV.pdf**Uploaded by: Laurie McGilvray



**Committee:** Education, Energy and the Environment

**Testimony on:** SB908 – Affordable Grid Act

**Organization:** Maryland Legislative Coalition Climate Justice Wing

Submitting: Laurie McGilvray, Co-Chair

Position: Favorable Hearing Date: March 6, 2024

#### Dear Chair and Committee Members:

Thank you for allowing our testimony today on SB908. The Maryland Legislative Coalition (MLC) Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations urges you to vote favorably on SB908.

The Climate Justice Wing has supported and continues to support bills to promote renewable energy and electrify buildings and the transportation system to move Maryland toward our greenhouse gas reduction goals in a way that is affordable for ratepayers. We also have come to understand the role a modern and efficient grid plays in these achieving these goals. Unfortunately, much of Maryland's distribution system is old and unable to meet present demands. The good news is that there are cost-effective advanced technologies that can help us get more out of our existing distribution grid while seamlessly integrating renewable sources back into the grid (e.g., small residential solar, batteries, and EVs).

SB908 represents a comprehensive approach to modernizing Maryland's electric grid using best practices for distribution system planning and modern approaches and technologies that are cost-effective and currently employed by other states or utilities. The bill requires utilities to submit a Distribution System Plan to the Public Service Commission (PSC) for approval every three years. Plans must be available for public comment and utilities must share relevant data to aid stakeholder participation. A Distribution System Plan must include:

- data-sharing between electric and gas utilities to prevent double-counting electricity and gas demand, and to coordinate decarbonization and electrification planning;
- forecasts and scenarios for predicted load and electricity generation capacity;
- an analysis of system constraints that impede incorporation of new technologies and capacity;
- a list of preferred solutions for upgrading the grid and the rationale for those decisions including the use of funds and incentives;
- use of technology innovations to modernize the grid and improve its reliability and resilience;
- a process for coordinating transmission and distribution systems;
- identification of sites having greatest locational value for decarbonization;

- management of capacity to incorporate Distributed Energy Resources ("hosting capacity"); and
- analyses and targets using metrics that will be developed by the PSC.

SB908 also requires the PSC to review and approve each utilities' plan, and the PSC can reject a plan if it is not cost-effective, and/or does not minimize costs to ratepayers without compromising distribution grid performance.

Maryland is facing considerable energy challenges and must have a grid for the future. The deployment of advanced technologies and modern grid management practices are critical and the distribution system planning required in SB908 will create the road map for the future. For these reasons, the MLC Climate Justice Wing respectfully urges a **FAVORABLE** report in Committee.

#### 350MoCo

Adat Shalom Climate Action

Cedar Lane Unitarian Universalist Church Environmental Justice Ministry

Chesapeake Earth Holders

Climate Parents of Prince George's

Climate Reality Project

ClimateXChange – Rebuild Maryland Coalition

Coming Clean Network, Union of Concerned Scientists

DoTheMostGood Montgomery County

Echotopia

**Elders Climate Action** 

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

### **ECA testimony on SB0908 Affordable Grid Act.pdf**Uploaded by: Leslie Wharton



SB0908- SUPPORT Frances Stewart, MD Elders Climate Action Maryland frances.stewart6@gmail.com 301-718-0446

### SB0908, the Affordable Grid Act

Meeting of the Education, Energy, and the Environment Committee

March 6, 2025

Dear Chair Feldman, Vice Chair Kagan, and Members of the Committee, on behalf of Elders Climate Action Maryland, I urge a favorable report on SB0908. the Affordable Grid Act.

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.

Our electric grid has had the same basic structure for almost 100 years. It was designed to carry power from large power plants to homes and businesses. In many ways, it has been a marvel, but it is now woefully outdated and inadequate for our current and future energy needs.

The grid is composed of two major parts, the transmission grid and the distribution gird. The transmission grid carries bulk power through the state and from other states on large towers. Modernizing the transmission gird is essential and is being addressed in other legislation such as HB0829, the Advanced Transmission Technologies Act, and in Federal Energy Regulatory Commission regulations.

This bill deals with the distribution grid which connects our homes and businesses to the electricity system. We need to move from an antiquated 20<sup>th</sup> Century grid to a 21<sup>st</sup> Century smart grid. A smart grid is designed to make optimal use of distributed energy resources like rooftop solar, community solar, and batteries while managing the increasing demands from electric vehicles, building electrification, data centers, and more. It is one of the indispensable keys to the clean energy future we need for our environment, our health, and our prosperity.

Modernizing the grid will have direct financial benefits to utility customers. It will allow more homes and businesses to save money by adding solar to their roofs. It will also make it easier for families who can't add solar to take advantage of the cost savings from community solar. It will allow customers to manage when they use the most electricity to save on their bills while also benefiting the grid. Many of those customers may choose to save even more by becoming part of a virtual power plant.

In addition to those benefits, a smart grid provides better reliability, enhanced resilience, and improved power quality. The improvements in reliability and resilience are becoming more and more important as we face more frequent and severe extreme weather events. Improved power quality protects our ever-increasing collection of electrical equipment and electronic devices.

Of course, there will be costs in upgrading the distribution grid, but those costs can be minimized and benefits can be maximized with good planning. SB0908 draws on work already done by the state and mandates best practices for distribution system planning as developed by the National Association of Regulatory Utility Commissioners and the National Association of State Energy Officials. These requirements incorporate modern approaches and technologies that are cost-saving, cost-effective, and already in use by other states and utilities.

Each utility will need to submit a three-year distribution system plan for Public Service Commission approval after completing a public stakeholder engagement process. The plan must advance Maryland's climate and energy goals and adequately incorporate non-wires solutions and non-capital investments. The PSC may reject the plan if it is not cost-effective or does not minimize cost to ratepayers without compromising the grid's performance. Each utility must also submit an annual progress report to the PSC.

These steps have been incorporated into distribution planning in other states. For example, sixteen states and the District of Columbia require an analysis of noncapital investments in their plans. California and five other states require approval of utilities' distribution plans by their Public Service Commission.

SB0908 provides a clear path to the smart grid Maryland needs. We strongly urge a favorable report.

Thank you.

### **SB0908\_FAV\_GridAct\_EEE\_HoCoCA.org.pdf**Uploaded by: Liz Feighner



SB0908 - Electric Distribution System Plans - Establishment (Affordable Grid Act)

Hearing Date: March 6, 2025 Bill Sponsor: Senator Hester

Committee: Education, Energy, and the Environment Submitting: Liz Feighner for Howard County Climate Action

Position: Favorable

<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 urge you to vote favorably on the **Affordable Grid Act**, <u>SB0908</u>, which provides a path forward to addressing grid inadequacies in the state and alleviating the burden on Maryland ratepayers for inadequate planning of our out of date grid. The solutions in the bill can be implemented more quickly and cost effectively than ill-conceived 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. There are cost-effective advanced technologies available today that can help us get more out of our existing distribution grid while seamlessly integrating renewable sources back into the grid (e.g., small residential solar, batteries, and EVs).

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 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. We need to get more out of our existing distribution grid while saving ratepayer dollars.

SB908 represents a comprehensive approach to modernizing Maryland's electric grid using best practices for distribution system planning and modern approaches and technologies that are cost-effective and currently employed by other states or utilities. This bill will require electric companies to submit distribution system plans to the Public Service Commission every three years utilizing bottom-up forecasting of projected load requirements and that incorporates increases in vehicle and building electrification and the goals of state and local decarbonization policies. It will also ensure electric companies develop investment plans to modernize and upgrade their assets to meet their forecasted needs and maximize energy efficiency upgrades.

Maryland is facing considerable energy challenges and must have a grid for the future. The deployment of advanced technologies and modern grid management practices are critical and the distribution system planning required in **SB0908** will create the road map for the future without having to resort to out of date solutions like a new climate killing gas-fired power plant.

For all of these reasons, we strongly support **SB0908** and urge a **FAVORABLE report** in Committee.

Howard County Climate Action
Submitted by Liz Feighner, Steering and Advocacy Committee
<a href="https://www.HoCoClimateAction.org">www.HoCoClimateAction.org</a>
<a href="https://www.HoCoClimateAction@gmail.com">HoCoClimateAction@gmail.com</a>

# **SB908 affordable Grid Favorable.pdf** Uploaded by: Paul Verchinski

FAVORABLE – Senate Bill 908 SB 908 – Public Utilities – Electric Distribution System Plans – Establishment (Affordable Grid Act) Education, Energy, and Environment Thursday March 6, 2025

The Honorable Brian J. Feldman Chair, Education, Energy and the Environment Committee Senate Office Building Annapolis, MD 21401

Dear Chairman Feldman and Members of the Committee:

My name is Paul Verchinski. I hope that you take the time to read this. I participated in the Distribution System Planning Work Group (DSP) established by the Public Service Commission (PSC) for 3 years and ultimately resigned (See attachment). I was interested in participating as a volunteer since I was formerly the Director of Planning for the Federal Transit Administration and had developed transportation planning courses at the National Transit Institute at Rutgers University. These planning courses were presented to transit operators and Metropolitan Planning organizations in the United States. I know what plans need to incorporate to be effective.

The first year of the DSP was a disaster. A consultant was hired under a utility contract and the ultimate report ratified the Business As Usual approach of the utilities. Stakeholder input was marginalized in the report. We started a do over in light of the requirements of the Climate Solutions Now Act (CSNA). Our charge was to develop with utility participation a DSP for each of the 5 Maryland utilities and to adopt a Rule in 2025. The participation by the utilities was limited to their constant answer of unless we are required to do X by legislation, we have no intention of offering up ideas to fulfill the CSNA. It is therefore incumbent on the legislature to provide explicit requirements for Utility DSPs through the Affordable Grid Act.

Unfortunately, Phase 2 of the DSP has not gone well and this legislation would address the shortcomings of the DSP. Current utility DSP is siloed and is not Comprehensive, Continuing, and Coordinated. As you know, 3 utilities are owned by Exelon, an Investor Owned Utility (IOU). Over the 3 years, I repeatedly asked the IOU utility representatives about metrics to gauge their progress toward the goals of the CSNA. No metrics were ever offered up nor are there any in current utility DSPs . I commented on this to the PSC and other issues after the Utilities filed their Utility Plans dated November 15, 2024. (See attachment). The Affordable Grid Act would substantially address the shortcomings of utility DSPs.

I ask that the committee report out the bill Favorably.

Paul Verchinski

5475 Sleeping Dog Lane Columbia, MD 21045 Attachments (2)

# SB 908 - MDLCV Support - Affordable Grid Act.pdf Uploaded by: Rebecca Rehr



Kim Coble Executive Director March 6, 2025

### Support SB 908 - The Affordable Grid Act

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 Mr. Chair and Members of the Committee:

Maryland LCV supports SB 908, The Affordable Grid Act, and thanks Senator Hester for introducing this important bill.

Maryland is anticipating an increase in energy demand in the coming years. We have an opportunity now to make sure the distribution grid is ready, resilient, and able to deliver electricity to people's homes, businesses, and our public buildings as efficiently and cost-effectively as possible.

There is also a need to modernize the grid to take advantage of new technologies that can save ratepayers money by managing supply and demand, which include distributed rooftop solar, battery storage, bidirectional EV charging, and Virtual Power Plant agreements. There are also technologies that utilities can add to their distribution grid, including non-wires solutions such as software programs that manage load that can increase the stability and reliability of the grid at a lower cost than building new poles and wires. And most, if not all, of these modern technologies that reduce demand from utility-scale generation can be added to the grid more quickly than additional utility-scale generation.

We recognize that the Public Service Commission (PSC) has an active working group addressing the Distribution Planning System, but the consensus items of the workgroup have not gone far enough or fast enough to contribute to the 21st century grid that we need. SB 908, The Affordable Grid Act, recommends several important initiatives that the workgroup has discussed, but haven't reached consensus. A consensus-driven process is important for the complex and multidimensional issues the PSC addresses, but it also means that any one member participating in the workgroup can vote "no" and halt the advancement of the recommendations.

The Affordable Grid Act establishes "Best Practice" system planning requirements, accountability, and assures the protection of critical grid information. As we invest in and deploy more clean energy and battery storage, we must be building a 21st century grid.

Maryland LCV urges a favorable report on SB 908, the Affordable Grid Act.

# **SB908 Kranz favorable 3-6-25.pdf**Uploaded by: Rhonda Kranz Position: FAV

Committee: Education, Energy, and Environment

Testimony on: SB-908 - Public Utilities - Electric Distribution System Plans -

**Establishment (Affordable Grid Act)** 

Submitting: Rhonda Kranz Position: Favorable

Hearing Date: February 6, 2025

#### Dear Mr. Chair and Committee Members:

Thank you for accepting my written testimony is support of SB908- Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act). I have lived in Montgomery County Maryland for over thirty years and have seen how our state has grown and with it our energy demands. This bill will prevent the overbuilding or underbuilding of distribution infrastructure and increase the adoption of lower-cost noncapital and non-wires solutions relative to traditional distribution infrastructure (i.e. poles and wires).

Maryland is facing a major challenge; already over-burdened we see exponentially increasing demands from data centers, the transportation sector and other large projects that are already waiting to come on line. Maryland has set strong laudable goals for producing clean, affordable, and reliable energy. Our electric grid is a major component of meeting these goals.

The reality is that our grid can continue as it is. Our electric grid is over 100 years old, and the distribution structures nearly as old. And yet the demands on this system are more complex than ever before. Meeting these demands will require incorporating new grid technologies and new ways of thinking about how we can increase our energy, be more efficient, and decrease costs. It will also require collaboration across all the agencies, utilities, business, and other stakeholders.

The Affordable Grid Act will provide a framework for the transition of Maryland's electric grid to clean energy. We need to insure that our distribution planning process is done right to meet our increasing energy needs and our state's climate goals. I urge you to vote **Favorable** for The Affordable Grid Act SB-908,

### **Testimony in support of SB0908 - Public Utilities**Uploaded by: Richard KAP Kaplowitz

SB0908\_RichardKaplowitz\_FAV 03/06/2025 Richard Keith Kaplowitz Frederick, MD 21703

### TESTIMONY ON SB#/0908 – FAVORABLE

**Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)** 

**TO**: Chair Feldman, Vice Chair Kagan and members of the Education, Energy and the Environment 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 SB#0908, Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)

This bill is submitted to create a framework under which electric companies will need to use integrated distribution system planning and reporting to both government and public bodies the results expected from those plans. It puts in place a process for approval by the PSC that can approve as is or force modifications to plans as submitted.

An Integrated Distribution System Planning (IDSP) process provides a decision framework for developing holistic infrastructure investment strategies for local electricity grids. The planning process involves the determination of grid system requirements that are needed to achieve reliability, resilience, safety, affordability, and other objectives. The process includes the development of a technology roadmap to modernize the grid and enable the integration, utilization, and orchestration of grid-edge technologies like storage, microgrids, and electric vehicles. Given the increasing complexity of demands on grid performance, IDSP provides a platform for holistic decision-making and the formulation of staged investment strategies. <sup>1</sup>

This bill will require the Public Service Commission to adopt regulations or issue orders on or before December 31, 2025, that require electric companies to, every 3 years, develop an electric system distribution plan to be approved by the Commission and provide the Commission with annual progress reports. These reports will mandate the development of analysis metrics for actions to be taken. It will then require the Commission to adopt regulations or issue orders adopting certain metrics to monitor and assess electric distribution system plans. The bill expands the public's ability to hear about and testify for or against the plans of the electric companies. This will occur by requiring an electric company to provide certain public comment opportunities.

I respectfully urge this committee to return a favorable report on SB#0908.

<sup>&</sup>lt;sup>1</sup> https://www.energy.gov/oe/integrated-distribution-system-planning

### **CHESSA - MD - EEE Favorable SB908 Affordable Grid**

Uploaded by: Robin Dutta



6 March 2025

Senator Brian Feldman, Chair Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, Maryland 21401

Written Testimony

SB908: Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid

Act)

Position: Favorable

Chair Feldman, Vice Chair Kagan, Members of the Education, Energy, and the Environment Committee, thank you for the opportunity to testify on Senate Bill 908, Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act).

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

I am here to provide favorable testimony on SB908, Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act).

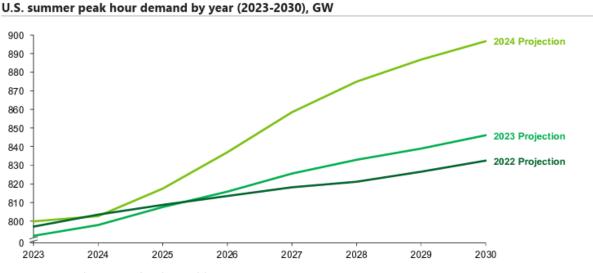
The Affordable Grid Act is designed to update the Public Service Commission dockets, processes, and considerations to include all advanced energy technologies and options. Maryland's widening energy gap, and the increasing competition for electricity in PJM, mean that all options must be on the table. The energy question in Maryland is not about choosing between fossil fuels or renewables. It is about modernizing and reinforcing an electric grid system so that it is affordable, reliable, and resilient in a world of extreme weather where Marylanders are increasingly reliant on that system.

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

Marylanders are becoming much more sensitive to grid disruptions and electric price spikes. The state is on the path to seeing increasing electric demand over the long term. And, there is already straining in its electric system. Maryland only generates about 60 percent of the electric

generation it demands<sup>1</sup>. But, importing electricity isn't an automatic solution. Nine of the 13 states in the PJM Interconnection (where Maryland resides) also must import electricity to serve their electric demand. And the Maryland Energy Administration (MEA) is projecting load growth, potentially as much as 2 percent per year<sup>2</sup>. There's growing demand and competition for an energy supply that needs to increase.

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



Source: NERC 2024 Electricity Supply and Demand data

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

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

Layering on the problem are the faults within the PJM Interconnection, both with their capacity markets and their interconnection processes. The recent PJM capacity auction could cause

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

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

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

electric bills in Maryland to increase as much as 24 percent, according to an August 2024 report from the Maryland Office of People's Counsel. The MEA describes the Baltimore Gas & Electric service area as a "congested territory". There are then certain generating units that must run and can drive up capacity prices, as it happened in the most recent PJM capacity auction. The way to relieve congestion and grid strain is to lower peak demand, offset consumer electric load, and build a lot of new local generating capacity.

### Re-Thinking the Distribution Grid

It is essential that Maryland's distribution grid plans are approved at the lowest cost with the highest value. Not prioritizing such a path could burden already-burdened families with higher costs for electric grid projects that are unnecessary. That requires implementing a proactive strategy of deploying Distributed Energy Resources (DERs), such as distributed solar and storage, across all geographic areas and communities.

As illustrated in a 2023 study from the firm The Brattle Group, DERs can provide capacity resources to utilities at 40-60% of the cost of traditional utility methods. They can act as a "virtual power plant" as described and promoted by the U.S. Department of Energy. When there are more distributed clean energy systems in communities, there is greater potential for not only increased reliability and resiliency assets, but there are also key grid assets that can support local energy demand and help off-set peak demand. Coupled with a build-out of large-scale renewables in and near Maryland, the state can advance its clean energy future while prioritizing a stable and affordable electric grid.

#### A Better Process

Improving complex processes, such as regulatory proceedings, start by asking better questions and considering all relevant strategies. As current trends show, consumers in Maryland and the PJM region are using more electricity and becoming more reliant on the grid for digital communications, the internet, and everyday household tasks. That makes the goals of grid affordability, reliability, and resiliency even more important than it has historically been. Consumers are more sensitive to even small disruptions.

Distribution grid and utility plans all exist to serve the consumer/ratepayer. Any process for grid planning must first look at how and when consumers need energy. The Affordable Grid Act begins that way by requiring load growth forecasts and scenario planning. This must be the first question to start any grid planning process, including testing different assumptions and projections of load growth. That way, the Commission can essentially "stress test" the current grid, available resources, and grid services to determine what load can be served sustainably and then evaluate what additional infrastructure is needed to meet the state's anticipated needs.

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

When evaluating different options, the Commission should have a docket that encourages a comprehensive analysis of the distribution grid and consumer needs. Often, regulatory dockets are narrowly focused. Individual dockets could deal only with electric vehicle charging infrastructure, the Renewable Portfolio Standard, distribution grid poles and wires, peak demand shaving, or any number of other topics. Creating a docket that allows for cross-cutting issues as it pertains to improving the distribution grid is extremely valuable to the ratepayer, without it becoming a full rate case. For example, in such a docket, the Commission could consider the range of benefits that distributed solar and storage resources can provide, in terms of local generation, grid services programs, and peak shaving. In a docket dealing only with the Renewable Portfolio Standard, the grid benefits of solar could easily be outside the scope. And then, all reasonable options should be considered when deciding what is in the best way to serve the ratepayer/consumer.

The concept of "load flexibility" which is defined in the Affordable Grid Act, is a perfect example what a cross-cutting docket can properly evaluate. Consumers can shape their energy consumption with the appliances they purchase, whether those are smart thermostats, rooftop solar, battery storage, electric vehicles, and more. Load flexibility potential can be harnessed and relied upon for the benefit of all ratepayers. It means that homeowners with a combination of advanced energy technologies (ie. solar, storage, smart thermostats) can reduce their demand from the grid, especially in peak grid strain events, without taking their homes offline. This is the same concept as industrial demand response, where manufacturing facilities with back-up power are asked to switch from grid power to backup power during critical events. Those facilities do not stop production when they move to backup generators but help the grid in those moments. Residential and commercial customer load flexibility, including community solar plus storage facilities, can provide that benefit across a wider geography and with more frequency. As the distribution grid's load curve flattens, fewer peak period power lines are needed. That is why virtual power plants are a viable option versus additional natural gas generation capacity. The Commission can better evaluate those strategies if the Affordable Grid Act is passed.

The Affordable Grid Act builds on legislation passed by the Economic Matters Committee, the General Assembly, and signed by the Governor: the DRIVE Act (HB1256 / SB959) and HB1393. The DRIVE Act establishes pilot programs for virtual power plants providing grid services and benefits to Marylanders. HB1393 requires the consideration of demand-side management strategies, such as virtual power plant deployment and enablement, for the benefit of the distribution grid.

### Conclusion

Meeting resource adequacy needs and growing electric demand can be an expensive proposition for the ratepayer. Utility-centric solutions are fully funded by the ratepayer. Wholesale energy solutions do not address local resiliency and reliability needs. A better regulatory process, where the Commission can consider more information and better options for

modernizing the distribution grid, can unlock the means to create downward pressure on Maryland energy costs.

That includes creating strategies where private capital can be leveraged instead of directing ratepayers to foot the entire bill of a grid strategy.

CHESSA asks for a favorable report on SB908. Please reach out with any questions on solar and storage policy. CHESSA is here to be a resource to the committee.

Sincerely,

Robin K. Dutta

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

# SB 908 - Affordable Grid.pdf Uploaded by: Shore Progress Position: FAV



SENATE BILL 908: AFFORDABLE GRID ACT

**POSITION: FAVORABLE** 

Chair Feldman, Vice Chair Kagan, & Members of the Education, Energy, and the Environment Committee

Shore Progress is in strong support of Senate Bill 908, the Affordable Grid Act. This bill is crucial for ensuring a modern, equitable, and resilient electric grid for Maryland's Eastern Shore communities - where our residents have faced persistent energy inequities. Without comprehensive and transparent planning requirements for electric utilities, these disparities will only worsen as energy demand increases and extreme weather events grow more frequent.

SB 908 strengthens grid reliability for rural communities - where aging infrastructure and a lack of investment in local grid resilience leaving residents, businesses, and essential services vulnerable. This bill will ensure that electric companies proactively address weaknesses before failures occur, incorporating modern technologies such as microgrids, energy storage, and distributed energy resources to make our rural communities less dependent on centralized power generation.

**Eastern Shore residents already pay a disproportionate share of their income on energy costs.** The Affordable Grid Act ensures that grid investments are cost-effective and transparent, requiring utilities to demonstrate how their plans will minimize cost to ratepayers while improving grid reliability. Our residents deserve a clean energy future, but one that ensures affordability and reliability for all Marylanders. This legislation establishes a proactive, transparent, and community-focused approach to electric distribution planning.

Shore Progress urges a favorable report.

#### **SHORE PROGRESS**

shoreprogress.org info@shoreprogress.org

# **OPC Testimony SB0908.pdf**Uploaded by: William Fields Position: FAV

#### DAVID S. LAPP PEOPLE'S COUNSEL

——— OPC ———

BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

### WILLIAM F. FIELDS DEPUTY PEOPLE'S COUNSEL

## OFFICE OF PEOPLE'S COUNSEL State of Maryland

JULIANA BELL
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CARISSA RALBOVSKY
CHIEF OPERATING OFFICER

BILL NO.: Senate Bill 908 – Electric Distribution System Plans –

Establishment (Affordable Grid Act)

COMMITTEE: Education, Energy, and the Environment

HEARING DATE: March 6, 2025

SPONSOR: Senator Hester

POSITION: Favorable

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The Office of People's Counsel ("OPC") strongly supports Senate Bill 908, the Affordable Grid Act, which would reform the distribution system planning ("DSP") process used by Maryland's electric utilities.

In 2021, the Public Service Commission ("PSC") initiated a work group, with direction to undertake a comprehensive examination of distribution system planning in Maryland. In 2022, the General Assembly charged the PSC with adopting regulations or issuing orders by July 1, 2025 to implement specific policies for DSP and promote State policy goals. Over the last three years, OPC has actively participated in the work group facilitated by the PSC. Following the submission of recommendations by the work group, the PSC issued an order last summer resolving many of the key issues necessary to move forward with regulations. SB 908 seeks to resolve outstanding issues of non-consensus, not previously decided by the PSC, and address certain decisions of the PSC that limit meaningful stakeholder involvement and utility accountability.

DSP processes are currently structured to build a system capable of distributing power generated from distant generation to end users. Maryland's current process lacks the precision, transparency, and accountability needed to efficiently integrate distributed energy resources ("DERs") and non-wires solutions ("NWS") at potentially lower costs than traditional utility investments. In particular, utilities currently plan and build their distribution systems without direct PSC oversight or stakeholder participation—as a

<sup>&</sup>lt;sup>1</sup> Md. PSC Order No. 89865 (June 23, 2021).

<sup>&</sup>lt;sup>2</sup> Md. Code Ann., Pub. Util. Art. §§ 7-802, 7-804.

<sup>&</sup>lt;sup>3</sup> Md. PSC Order No. 91256 (July 30, 2024).

utility's infrastructure spending is only reviewed for prudency in a rate case after the investments have already been made. This leads to unnecessary costs and missed opportunities to enhance grid resilience and reliability by facilitating the deployment and use of DERs. These shortcomings also hinder Maryland's ability to cost-effectively reduce greenhouse gas emissions and ensure that vulnerable communities are included in the energy transition.

Key shortcomings of current electric utility DSP processes include:

- Lack of meaningful stakeholder participation and utility accountability Utilities self-govern their DSP processes, deciding unilaterally if, when, and how investments are made.
- Weak forecasting Utilities lack granular, long-term load and DER forecasts that accurately model electrification trends.
- **Inadequate hosting capacity analysis** Current methodologies fail to reflect how grid capacity changes over time, limiting DER deployment.

SB 908 would address these shortcomings and establish a structured, transparent, and participatory DSP process by requiring:

- Mandatory, three-year DSP plans that are subject to approval by the PSC –
  Utilities would be required to submit comprehensive DSP plans to the PSC for
  approval every three years instead of relying on voluntary, discretionary
  improvements to existing utility DSP processes.
- **Robust performance metrics** The PSC would adopt specific benchmarks for grid reliability, DER integration, and clean energy expansion.
- **Transparent stakeholder engagement** Utilities would be required to provide public comment opportunities and respond to feedback.
- A data-driven planning framework Utilities would have to improve forecasting accuracy, hosting capacity analysis, and consideration of non-wires solutions.
- Coordination with gas distribution system planning Both electric and gas utilities would be required to coordinate their planning to achieve the State's policy goals.

Without these reforms, utilities will continue to plan the grid on their own terms, without meaningful accountability or sufficient consideration of cost-effective, clean energy solutions. SB 908 ensures Maryland ratepayers get a modernized, efficient, and affordable electricity system—one that controls costs while aligning with the state's climate goals.

Recommendation: OPC requests a favorable Committee report on Senate Bill 908.

## IBEW LU 410 Testimony in Support of SB 908.pdf Uploaded by: Brian Terwilliger

Position: FWA



## Local Union 410 International Brotherhood of Electrical Workers

March 4, 2025

Committee: Education, Energy, and the Environment

Testimony on SB 908 – Affordable Grid Act

**Position: In Support with Amendments** 

**Hearing Date: March 6, 2025** 

Good afternoon, Chairman Feldman and members of the EEE Committee:

My name is Brian Terwilliger, and I am the Assistant Business Manager for Local Union 410 of the International Brotherhood of Electrical Workers ("IBEW Local 410" or "the Union").

IBEW Local 410 is a labor organization representing non-managerial utility workers at Baltimore Gas & Electric Company ("BGE"). The Union is the duly elected and recognized exclusive bargaining representative for approximately one-thousand five hundred (1,500) non-managerial employees of BGE, including its non-managerial employees in its five largest departments.

These one-thousand-five hundred (1,500) workers, also called bargaining unit employees ("BUEs"), are among those who contribute daily, directly, and significantly to BGE's efforts to provide safe and reliable service to its customers. These workers are also fellow members of our community. Unlike contracted laborers who are typically part of a transitory workforce who travel from job to job, state to state, these workers are those who live in Maryland, own or aspire to own homes here, and raise their families in our community. These workers are among the many that would be positively impacted should SB 908 be adopted into law.

IBEW Local 410 strongly supports SB 908, also known as the Affordable Grid Act, and sees it as a critical piece of legislation that will enhance our state's ability to integrate and optimize Distributed Energy Resources ("DERs") through improved forecasting mechanisms. The Act's intended purpose—to require electric companies to develop and submit detailed electric distribution system plans every three years—will provide more

Local 410, Int. Brotherhood of Electrical Workers (IBEW) Written Testimony on SB 908 – Affordable Grid Act Position: In Support with Amendments March 4, 2025
Page 2 of 3

transparency to ratepayers, regulators, and legislators on the electric companies' short-, mid-, and long-term plans and investments for their DERs.

These reporting requirements won't just improve transparency: they will also allow for the development of robust forecasting models that will enhance grid reliability, improve energy planning, and maximize the economic and environmental benefits of DERs such as solar, wind, battery storage, and demand response programs. By leveraging advanced forecasting techniques, utilities and grid operators can more effectively anticipate energy production and consumption patterns, reducing inefficiencies and mitigating potential grid disruptions. These may also support a more resilient and adaptive energy infrastructure, enabling a smoother transition to a decentralized and renewable-based energy system. By implementing forward-thinking strategies, SB 908 will not only strengthen energy security but also pave the way for cost savings for consumers and greater sustainability for our communities.

IBEW Local 410 supports two modifications to SB 908:

*First*, the Union supports including language—pulled, with modification, from the WARMTH Act—to ensure contractors and subcontractors working for electric companies on DER projects are qualified contractors. This means that they comply with all State, federal, and local laws, rules, and regulations regarding wages, training, and licensing; offer health care and retirement benefits to their employees; participate in registered apprenticeship programs with the State or U.S. Department of Labor; comply with all State and Public Utility Commission reporting requirements; and are making appropriate efforts to recruit and retain Maryland residents to work on these projects.

**Second**, the Union strongly supports including a prudency review on all reports submitted by electric companies in compliance with SB 908. To that end, the Union proposed adding a description in the report that includes not just what the project costs are, but why the project is planned and how it will serve the public interest. To comply with this requirement, the electric company would include, for each DER: (1) an explanation of the project selection; (2) a description of the intended value to ratepayers the project will provide; (3) a description of the good management judgement to be exercised in the selection of materials and methods to be used to execute the projects; and (4) a description of how the costs—by comparison with alternatives—are justified.<sup>1</sup> The last factor would include a comparison of costs for in-house labor versus contracted labor.

<sup>&</sup>lt;sup>1</sup> These factors were adopted from Public Utility Commission Order 91396.

Local 410, Int. Brotherhood of Electrical Workers (IBEW) Written Testimony on SB 908 – Affordable Grid Act Position: In Support with Amendments March 4, 2025
Page 3 of 3

In support of the above, IBEW Local 410 would like to draw this Committee's attention to a recent Order by the Public Utility Commission of Pennsylvania, which concluded that a "commitment to increase [an electric company's] internal workforce will ensure that properly trained individuals are completing infrastructure projects safely and properly, and at a cost less than what [the electric company] pays for contracted labor. These cost savings will be passed on to ratepayers." <sup>2</sup>

I urge you to support SB 908 and its vital provisions that will improve DER forecasting, enhance transparency, save costs to ratepayers, and ensure that our energy future is both innovative and reliable.

Thank you for your leadership and commitment to advancing our energy policies.

Sincerely,

Brian Terwilliger IBEW Local 410 Assistant Business Manager

<sup>&</sup>lt;sup>2</sup> See Pa. Pub. Util. Comm'n v. FirstEnergy Pa. Elec. Co., Docket No. R-2024-3047068 (Recommended Decision entered Oct. 15, 2024), affirmed, 2024 PA. PUC LEXIS 341 (Order entered Nov. 21, 2024). The Office of People's Counsel on page 36 of its Brief, filed February 24, 2025, in Case Nos. 9645 & 9692, similarly recognized that an overreliance on contract labor, rather than utilizing in-house labor, may show irresponsibility and a lack of good management judgment on the part of an electric company.

### PHI - SB 908 Public Utilities - Electric Distribut

Uploaded by: Allyson Black-Woodson

Position: UNF



delmarva power\*

March 6, 2025

112 West Street Annapolis, MD 21401

## Oppose – Senate Bill 908 – Public Utilities – Electric Distribution System Plans – Establishment (Affordable Grid Act)

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) respectfully oppose Senate Bill 908 Public Utilities – Electric Distribution System Plans – Establishment (Affordable Grid Act). Senate Bill 908 requires the Public Service Commission (Commission) to adopt regulations or issue orders on or before December 31, 2025, that require electric companies to, every three years, develop an electric system distribution plan to be approved by the Commission and provide the Commission with annual progress reports. It also requires the Commission to adopt regulations or issue orders adopting metrics to monitor and assess electric distribution system plans.

Pepco and Delmarva Power oppose this legislation as it is duplicative to the existing thoughtful and inclusive distribution planning process currently active under the direction of the Commission. The Commission's Distribution System Planning (DSP) Work Group is charged with development of the state's DSP process for Maryland electric utilities. The Work Group process has proven to be transparent, inclusive, and considerate of Maryland state policy goals. Since June 2021, it has effectively brought together diverse stakeholders to work collaboratively to address distribution system planning topics such as distributed energy resources/electric vehicle integration, equitable access to clean energy, decarbonization, consideration of non-wires alternatives, demand response, and resiliency, among other topics.

In December 2024, the Work Group filed its latest report with the Commission describing the status of its efforts regarding development of the state's DSP process. On January 21, the Commission issued Order No. 91490, ruling on the remaining recommendations from the DSP Work Group and directed the Work Group to develop draft regulations by May 1, 2025. The Work Group is now actively working towards that May 1 date.

This legislation is not necessary as the current DSP Work Group process allows for diverse perspectives to come to the table and work collaboratively to ensure the State's distribution system planning is done responsibly and thoughtfully. Additionally, the bill is overly prescriptive in ways that would potentially impose transition costs on ratepayers and limit utilities needed decision-making flexibility to maintain system reliability.

If enacted, Senate Bill 908 would derail the inclusive process that has been underway since 2021. Furthermore, it would hamper the Commission and utilities' ability to respond to emerging concerns, opportunities, and technologies in the DSP process.

For these reasons, we respectfully request an unfavorable report for Senate Bill 908.

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.

## BGE\_EEE\_UNF\_SB908 – Public Utilities - Electric Di Uploaded by: Dytonia Reed

Position: UNF

#### **Position Statement**



OPPOSE Education, Energy, and Environment 3/6/2025

## Senate Bill 908 - Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act)

Baltimore Gas and Electric Company (BGE) opposes Senate Bill 908 – Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act). This bill mandates the Public Service Commission (PSC) to adopt regulations or issue orders by December 31, 2025, requiring electric companies every three years to develop an electric system distribution plan and submit annual progress reports to the PSC.

BGE acknowledges the importance of a transparent distribution system planning process that aligns with the State's policy goals. Senate Bill 908, however, would micromanage the distribution planning process in a way that strips the PSC of administrative discretion, and that would dictate that multiple statutory criteria be addressed in an administratively bogged down process that threatens to impede the ability of the transmission planning process to provide timely support to the State's ambitious climate goals. The Bill also fails to recognize the ongoing efforts by the Commission to address distribution planning, in accordance with Maryland Public Utilities Article §7-801. In particular, this bill undermines the progress of existing initiatives and could hinder rather than support efficient progress toward developing distribution planning processes that align with the State's overall goals.

For the past three years, the PSC's Distribution System Planning Working Group (DSPWG), which includes active participation from BGE and other utilities, the Office of People's Counsel, PSC Staff, environmental groups and other interested stakeholders, have expended considerable time and resources, and made considerable progress on developing a distribution planning process that is transparent and inclusive in terms of stakeholder input and participation and that enables distribution planning to support the State's climate goals. The work that has been accomplished thus far strikes an appropriate balance between process and action. Senate Bill 908 threatens to undue the progress that has been accomplished, and to add additional requirements and approvals that will delay, rather than support, the transformation of distribution planning to a process that supports the State's climate goals. Stakeholders in the DSP Working Group have already addressed many of the issues addressed in this bill. The group is currently drafting regulations scheduled to be submitted to the Commission on December 1, 2025, well before the date mandated by this legislation. The Commission's Order 91490, issued on January 21, 2025, comprehensively covers these issues and sets the date for final regulation adoption.

If passed, this legislation would conflict with ongoing Commission activities with regard to distribution system planning. Senate Bill 908 requires definitions under 7-804, which are being

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**



developed by technical work groups at the Commission and should reflect the input of those work groups if included at all. The bill also mandates the Commission to adopt regulations regarding utility DSPs and their support for CSNA goals by December 1, 2025, as part of the DSP Work Group process. There is already a plan for submitting utility DSPs every three years, and metrics are being further developed. The specific metrics suggested in the bill are not useful. For instance, utilities do not plan for "aggregate peak load"—that's a PJM function or are already part of other work groups and reporting to the Commission (e.g., time of use and EV charging). The use of non-wires solutions (NWS) is also part of the DSP reporting and general utility planning. Information exchange with DSP stakeholders is currently under discussion subject to legal limitations regarding customer information and critical energy infrastructure.

Furthermore, Senate Bill 908 mandates the development of distributed energy resource (DER) forecasting. Forecasting over short, medium, and long terms has been extensively covered, which the Commission has already made a determination on January 22 (Order 91490). The Commission has also directed utilities to report on the development of the locational value of DERs (BGE is currently developing a demonstration project). Integration with DERs and PJM planning and gas distribution planning are already part of the Commission's order on "Integrated System Planning". Hosting capacity expansion is under extensive discussion in the Interconnection Work Group, which has already developed the "Maryland Cost Allocation Method" for socializing costs for DER interconnections. None of the changes to load forecasting suggested in the bill are already or being addressed with existing utility planning.

BGE opposes language requiring Commission approval of the utility distribution system plans (DSPs), which is unprecedented in any jurisdiction. This issue has already been extensively debated in the standing DSP Workgroup and before the Commission, which has rejected the notion of approval of Utility DSP plans at this point, noting that final decisions and risks regarding DSPs lie with the utilities. Requiring Commission approval of DSPs would result in utilities' plans being continuously litigated rather than acted upon, to the detriment of our systems and customers—a concern highlighted by National Lab subject matter experts at the DSP Technical Conference held by the Commission last year.

We believe the current Commission's DSPWG should continue its work in developing regulations on the distribution planning process that address the concerns of all stakeholders throughout the State.

For these reasons, BGE requests an unfavorable Committee report on Senate Bill 908.

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.

## FirstEnergy UNFAV SB-908 - Affordable Grid Act.pdf Uploaded by: Timothy Troxell

Position: UNF

10802 Bower Avenue Williamsport, MD 21795

OPPOSE – Senate Bill 0908 SB0908 – Public Utilities - Electric Distribution System Plans - Establishment (Affordable Grid Act) Education, Energy, and the Environment Committee Thursday, March 6, 2025

Potomac Edison, a subsidiary of FirstEnergy Corp., serves approximately 285,000 customers in all or parts of seven Maryland counties (Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington). FirstEnergy is dedicated to safety, reliability, and operational excellence. Its ten electric distribution companies form one of the nation's largest investor-owned electric systems, serving customers in Ohio, Pennsylvania, New Jersey, New York, West Virginia, and Maryland.

#### Unfavorable

Potomac Edison / FirstEnergy appreciates the opportunity to submit this letter in opposition to Senate Bill 0908 - *Public Utilities* - *Electric Distribution System Plans* - *Establishment (Affordable Grid Act)*. While the company appreciates efforts to enhance electric grid planning and infrastructure development, we have several concerns regarding the bill's scope, feasibility, and potential impacts.

#### Potomac Edison / FirstEnergy requests an Unfavorable report on SB-908 for the following reasons.

This legislation could disrupt the collaborative process of the Public Service Commissions (PSC) existing Distribution System Planning (DSP) Work Group. This group has been meeting for over a year, working on what is already in statute, as a result of the Climate Solutions Now Act of 2022. The DSP Work Group has been a collaborative effort between diverse stakeholders and is already making substantial progress towards ideas in this bill.

The complexity and volume of data required by SB-908 would place a significant burden on utilities, without clear benefits. The be in full compliance, the reporting requirement to produce an Electric Distribution System (EDS) Plan every three years, would take nearly three years per cycle to complete -- meaning this becomes a continuous report. The bill's mandate for a circuit-by-circuit review of reserve capacity to develop capacity maps is another area of concern. This requirement is extremely difficult to implement, as hosting capacity analysis varies significantly by circuit, making the process overly complex and resource intensive.

In addition to the EDS Plan, there are separate annual performance updates we believe to be exceedingly burdensome and duplicative of existing work to be done by the PSC and the DSP Work Group. Factoring in the heavy lift of the engineering and forecasting provisions required, the internal labor costs of compliance would be significant, and explicit cost recovery language would be necessary. We assume additional labor costs would also need to be budgeted for the PSC to manage all this additional work.

Information security is also a concern for Potomac Edison / FirstEnergy, as this legislation requires detailed geographic information mapping of electric and gas infrastructure. Providing such data poses a security risk to critical infrastructure and increases vulnerabilities to potential threats. The information-sharing framework outlined in the bill does not include provisions for public access, raising concerns about the intended use and distribution of such data. This type of risk related to critical infrastructure is unacceptable.

We strongly oppose the requirement to include gas utility information in our electric system distribution plans. Relying on a competing industry's cooperation to comply with regulatory reporting requirements is problematic – and having the gas utility involved in our planning processes would likely yield minimal understanding or cooperation.

Given these significant concerns, we respectfully request an <u>Unfavorable</u> report on Senate Bill 0908. The legislation is overly prescriptive in ways that could impose unnecessary transition costs on ratepayers, while limiting the flexibility utilities require to make decisions to maintain system reliability. Potomac Edison / FirstEnergy looks forward to the General Assembly allowing the collaborative DSP Work Group to complete their work and then propose further actions in the 2026 legislative session, if necessary.

# SB 908\_Information\_PSC.pdf Uploaded by: Frederick Hoover Position: INFO

COMMISSIONERS

FREDERICK H. HOOVER, JR.

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



### **PUBLIC SERVICE COMMISSION**

Chair Brian Feldman Education, Energy and the Environment Committee 3 West, Miler Senate Office Building Annapolis, MD 21401

RE: SB 908 - Information - Electric Distribution System Plans - Establishment (Affordable Grid Act)

Dear Chair Feldman and Committee Members:

During the 2022 Legislative session, the Maryland General Assembly passed the Climate Solutions Now Act of 2022 (SB0528), which requires the Public Service Commission (Commission) to establish distribution system planning (DSP) regulations by July 1, 2025, among other things. In the 2024 Legislative session, the Maryland General Assembly passed the Electric System Planning - Scope and Funding Act (HB1393) to make system planning requirements more broadly applicable to "electric system planning" instead of specific to "electric distribution system planning", among other things. In addition, the scope of a Commission annual DSP report due to the General Assembly under PUA §7-802 starting on December 1, 2024, was modified under HB1393 to now require information regarding projects designed to promote the goals of the section in addition to requiring investment in demand-side methods and technology to improve reliability and efficiency, including virtual power plants. Due to the additional requirements in HB1393, the statutory deadline to establish distribution system planning regulations was extended from July 1, 2025, to December 1, 2025.

However, the Commission's efforts to implement a transparent electric system planning process that provides new opportunities for stakeholder participation and feedback predates these legislative initiatives. In 2021, in considering the product of the NARUC/NASEO Taskforce on electric distribution planning and the work of the PC44¹ workgroups, the Commission issued Order No. 89865 and launched the DSP Workgroup. The DSP Workgroup was initially tasked to review existing utility processes and determine how they align with the NARUC/NASEO Taskforce recommendations and where there may be opportunities for early and meaningful stakeholder engagement. Commission workgroup proceedings are open to all participants who wish to join and are intended to develop consensus proposals for the Commission, where possible.

<sup>&</sup>lt;sup>1</sup> See PC44 Docket, In the Matter of Transforming Maryland's Electric Distribution Systems to Ensure that Electric Service is Customer-Centered, Affordable, Reliable, and Environmentally Sustainable in Maryland

The DSP Workgroup scope has expanded over time to include the requirements from SB0528(2022) and HB1393(2024) in addition to several Commission Orders<sup>2</sup> providing direction in response to DSP Workgroup reports. The DSP Workgroup is currently **on-track** [*Emphasis Intentional*] to file its next report with the Commission by May 1, 2025. This report will result in a rulemaking proceeding where any stakeholder can provide supporting or dissenting testimony with a final determination made by the Commission to implement DSP regulations by December 1, 2025, as required by HB1393. The result will be an integrated DSP process<sup>3</sup> that ensures that the Commission and stakeholders have insight and input into the ongoing incremental investments necessary to ensure delivery of electricity in Maryland in support of state policy goals. This will be a significant milestone. While Maryland's electric utilities have always engaged in DSP planning resulting in system investments to provide safe, reliable, and affordable service, historically utility DSP processes have not been transparent and have provided suboptimal opportunities for consideration of stakeholder feedback in the plan development phase. Also, utility DSP plans will now be focused on specific state policy goals in addition to other requirements in SB0528(2022) and HB1393(2024).

SB 908 substantially expands the requirements being contemplated in the current Commission process. While many areas within SB 908 are already being addressed in the current DSP Workgroup, the general requirements of SB 908 are more extensive, requiring more metrics, reporting and meetings than is contemplated in the current DSP Workgroup direction. SB 908 would require the Commission to adopt regulations or issue orders on or before December 1, 2025, that require electric companies to develop an electric system distribution plan to be approved by the Commission, thereby requiring fully litigated DSP cases for each utility, and also provide the Commission with annual progress reports. SB 908 also requires the Commission to adopt certain metrics to monitor and assess electric distribution system plans; requires an electric company to provide certain public comment opportunities; requires the Commission to adopt regulations or issue orders adopting a certain information—sharing framework; and other requirements generally relating to electric distribution in the State.

While the Commission is aligned with the general intent of SB 908 to improve the DSP process in pursuit of state policy goals and to also provide more transparency and opportunities for stakeholder input into DSP plans, the Commission recommends several amendments. Specifically, the Commission seeks amendments to avoid the burden of fully litigated DSP cases which make up the bulk of the Commission's resource needs to implement SB 908. The Commission also seeks amendments that provide more flexibility for the Commission to address the pace of utility development of advanced forecasting and planning capabilities in pursuit of several of the SB 908 objectives. The amendments sought by the Commission do not seek to strike these items from SB 908 completely, but rather provide discretion to the Commission to consider DSP Workgroup recommendations in these areas and allow the Commission to make final determinations on the implementation details and the pace of improvements that consider the inherent differences, individual circumstances, rate impacts and available resources

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<sup>&</sup>lt;sup>2</sup> See Order No. 90777 on Recommendations of Distribution System Planning Work Group, August 2023, Order No. 91256 on Recommendations of Distribution System Planning Work Group. Case No. 9665 in July 2024 and Order No. 91490 on Recommendations of Distribution System Planning Work Group in January 2025.

<sup>&</sup>lt;sup>3</sup> As described by the Regulatory Assistance Project, Integrated DSP "is a process that systematically develops plans for the future of a distribution grid using inputs supplied by the electric utility, the Commission, and interested stakeholders. The planning process is integrated in the sense that all possible solutions to distribution system needs are considered. The objective of the final plan is a distribution system that operates for the public good, meeting the objectives set out by stakeholders in a cost-effective manner." Unlike traditional siloed distribution planning, Integrated DSP will look to the interconnected relationships of the PUA §7-802 policy goals to lead to more effective grid investments.

among investor-owned electric companies, electric cooperatives and municipal electric utilities. We are willing to work with the bill's sponsors on these amendments.

Finally, the Commission seeks an amendment to modify the requirement for DSP regulations to become effective from December 1, 2025, to December 1, 2026. Since SB 908 as it currently exists modifies the intent and items to be covered by the regulations, the Commission believes that the existing December 1, 2025, deadline in PUA §7-804 needs to be extended by 12 months. It is important not to further delay DSP regulations which would further delay the benefits to the state and ratepayers of an integrated DSP process. If we can collaboratively work with the bill sponsors to introduce the amendments we seek, we may be able to mitigate rework and any associated delays in promulgating regulations and enforcing utility compliance for new DSP requirements. We are still in the early phases of this journey to implement new DSP processes. It's important to keep on-track to implement our current DSP Workgroup initiatives while retaining flexibility in implementing the objectives of the bill's sponsors in addition to any lessons learned once we start the new DSP process.

The Public Service Commission appreciates the opportunity to provide informational testimony on SB 908. Please contact the Commission's Director of Legislative Affairs, Christina M. Ochoa, if you have any questions.

Sincerely,

Frederick H. Hoover, Chair

Maryland Public Service Commission

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## **SB0908 (HB1225) - LOI - Public Utilities - Electri** Uploaded by: Landon Fahrig

Position: INFO



**TO:** Chair Wilson, Vice Chair Crosby, and Members of the Education, Energy and the

**Environment Committee** 

FROM: MEA

**SUBJECT:** SB 908 - Public Utilities – Electric Distribution System Plans – Establishment

(Affordable Grid Act)

**DATE:** March 6, 2025

#### **MEA Position: LETTER OF INFORMATION**

This bill requires the Public Service Commission (Commission) to alter the electric distribution system planning (DSP) process established in Md. Code, Pub. Util. Art. §7-804. The bill also requires extensive alterations in the regulations mandated by existing law, which are due in December 2025. These regulations are currently under review in the DSP Workgroup (PC44/Case No. 9665), within an internal due date of May 2025. The draft regulations are the product of numerous meetings and Commission orders to address consensus and non-consensus positions among stakeholders. The Commission filed a status report on the utilities' distribution system plans in December 2024.

This bill differs from current Commission orders in several ways. For example, the bill requires utilities to submit distribution plans every three years for Commission approval, along with annual progress reports. The Commission, on the other hand, ordered annual technical conferences, not a litigated approval process. *See* Order No. 91256 on Recommendations of Distribution System Planning Work Group. Case No. 9665 and PC44, July 30, 2024. The bill also requires that gas utilities integrate their plans with the plans of electric distribution utilities, which is something that the Commission recently stated it would not require at this time but would address later. *See* Order No. 91490, PC 44, Case No. 9665, January 21, 2025. Broadly speaking, MEA supports both of these bill proposals.

There are, however, numerous other areas of overlap, omission, or discrepancy between the draft DSP regulations, Commission orders, stakeholder opinions, and the details in this bill. Just a few examples include: definitions of several key terms; time horizon beyond 10 years; forecast scenarios; granularity at the feeder level; and mention of resource retirement, modernizing forecasts, publishing hosting capacity maps, or the process for developing a locational value analysis. It is not clear that these nuances and discrepancies are best resolved in a legislative, rather than administrative, setting.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Joyce Lombardi, joyce.lombardi1@maryland.gov, 443-401-1081.

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<sup>&</sup>lt;sup>1</sup> https://www.psc.state.md.us/wp-content/uploads/Electric-System-Planning-Report.pdf