

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

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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</u> <u>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.
- 2. 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:
 - a. 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 co-operative), 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, <u>commissioned a cost-benefit</u> <u>analysis</u> 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 energysaving 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,

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