



SIERRA CLUB

MARYLAND CHAPTER

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Committee: Education, Energy, and the Environment/ Economic Matters
Testimony on: SB 909/ HB 1037, Energy Resource Adequacy and Planning Act
Position: Favorable
Hearing Date: February 28, 2025

Introduction:

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

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

SB 931/ HB 1036 – Renewable Energy Certainty Act

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

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

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

SB 937 / HB 1035 – Next Generation Energy Act.

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

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

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

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

Integrated Resource Planning and Resource Adequacy

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

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

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

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

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

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

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

Considerations

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

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

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

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

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

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

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

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