DAVID S. LAPP
PEOPLE'S COUNSEL

WILLIAM F. FIELDS
DEPUTY PEOPLE'S COUNSEL

JULIANA BELL
DEPUTY PEOPLE'S COUNSEL

OPC

OFFICE OF PEOPLE'S COUNSEL

State of Maryland

6 ST. PAUL STREET, SUITE 2102
BALTIMORE, MARYLAND 21202
WWW.OPC.MARYLAND.GOV

BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

CARISSA RALBOVSKY
CHIEF OPERATING OFFICER

BILL NO.:	Senate Bill 0951 – Investor-Owned Electric Companies - Generating and Transmission Facilities - Authorization
COMMITTEE:	Education, Energy, and the Environment
HEARING DATE:	March 6, 2025
SPONSOR:	Senators West, Lewis Young, and Watson
POSITION:	Informational

****

The Office of People's Counsel ("OPC") respectfully submits the following informational testimony on Senate Bill 951– Investor-Owned Electric Companies - Generating and Transmission Facilities - Authorization. SB 951 would amend Public Utilities Article § 7-510(c) to permit an investor-owned electric company to construct, acquire, or lease, and operate generation and related transmission facilities without the express authorization of the Public Service Commission ("PSC").

SB 951 does not appear to effect a practical change to existing law. Current law authorizes the PSC to "require or allow" an investor-owned electric company to construct, acquire, or lease, and operate, its own generating facilities and transmission facilities necessary to interconnect the generating facilities to the electric system "[i]n order to meet long-term, anticipated demand in the State for standard offer service and other electricity supply." That permission or requirement is "subject to appropriate cost recovery."

SB 951 largely tracks the existing law by adding a new, similar provision that does not include the qualifier "subject to appropriate cost recovery" or the requirement for the PSC to authorize—or direct—an electric company to construct, acquire, or lease, and operate, its own generating facilities "[i]n order to meet long-term, anticipated demand in the State." It also removes these qualifiers from the existing section 7-510(c)(6) with respect to transmission facilities necessary to interconnect the new generating facilities.

SB 951 would not have a practical effect because a utility could only recover costs associated with investments in generation or transmission facilities from its customers if the PSC (or federal regulators) approved the inclusion of those costs as an addition to existing utility rates. That approval would necessarily involve evaluating the appropriate cost recovery for investments in generating and transmission facilities. Specifically, before increasing rates that utility customers would pay for such investments, the Commission would need to determine whether the costs are just and reasonable to both customers and to the utility and to find that the investments were prudently made. Thus, the new provision that largely incorporates similar language as existing law—but without the "subject to appropriate cost recovery" language—does not appear to substantively change existing law.

Relatedly, in the attached frequently asked questions, also available on [OPC's website](), our office explained that, as a general matter, utility customers are likely to be better off if new generation is built by merchant (non-utility) generation. For merchant generation, private investors provide the capital to fund the development and then to operate and maintain the plant. Maryland law allows private developers to build all types of generating facilities in the State.

When merchant generators build generation, private investors—rather than utility customers—bear all the risks of power market prices that are difficult to predict, particularly far into the future, and of cost overruns. A new dispatchable plant (other than storage) would likely not come on-line for at least five years, and any analysis of its costs or benefits over the plant's life requires projecting market prices at least 20 years following its operational date. Further, unlike with merchant generators where investors assume all risks, when private utility monopolies build and operate power plants, customers are vulnerable to utility requests for cost overruns, which add new rate increases. While merchant plants are incentivized to keep costs low, cost overruns for utilities have the effect of increasing utility profits. Utilities frequently incur such cost overruns for distribution and transmission projects, and we would expect similar cost overruns for utility-owned generation.[1]

OPC appreciates the opportunity to provide these informational comments on SB 951.

---

[1] Utilities frequently request rate increases for costs beyond their budgets and initial projections, in rate cases and other proceedings. OPC can provide examples upon request. Cost overruns also frequently occur for transmission facility costs, which are federally regulated. A recent example is the work being done to replace the capacity provided by the Brandon Shores power plant that is planned for retirement. Exelon's original estimate for completion of the transmission facilities, provided in July 2023, was approximately $740 million. On February 25, 2025, the PJM board approved Exelon's request to more than double the cost to complete the project, to more than $1.5 billion.

Office of People's Counsel • 410-767-8150 / 800-207-4055 • opc@maryland.gov

DAVID S. LAPP
PEOPLE'S COUNSEL

WILLIAM F. FIELDS
DEPUTY PEOPLE'S COUNSEL

JULIANA BELL
DEPUTY PEOPLE'S COUNSEL

OPC

OFFICE OF PEOPLE'S COUNSEL
State of Maryland

6 ST. PAUL STREET, SUITE 2102
BALTIMORE, MARYLAND 21202
WWW.OPC.MARYLAND.GOV

BRANDI NIELAND
DIRECTOR, CONSUMER ASSISTANCE UNIT

CARISSA RALBOVSKY
CHIEF OPERATING OFFICER

(January 28 2025)

Maryland Resource Adequacy FAQs

What is resource adequacy?

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

Who is responsible for ensuring resource adequacy in Maryland?

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

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

How is resource adequacy achieved in Maryland?

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

What is the resource adequacy situation now?

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

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

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

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

OPC released a report on the 2024 capacity market auction, the RMR arrangements and their impacts on customers in August 2024.[1]

What are the future prospects for resource adequacy in Maryland?

Maryland appears to have sufficient resource adequacy in the near term to meet the peak demands on its system.[2] Any assessment of Maryland's resource adequacy should include an assessment of both generation resources located within each of the LDAs in Maryland

[1] Bill and Rate Impacts of PJM's 2025/2026 Capacity Market Results & Reliability Must-Run Units in Maryland, OPC (August 2024).

[2] Public Service Commission PC66, Comments of the Office of People's Counsel (Jan. 17, 2025).

and an assessment of the power transfer capacity into the LDAs in Maryland using the transmission system. It should also include other measures such as demand response and energy storage, accounting for existing tools the Public Service Commission has to mitigate resource adequacy issues. The contribution to resource adequacy from Maryland-located generation depends, in part, on finalizing RMR arrangements for the Brandon Shores and Wagner power plants near Baltimore—which appears imminent—and the continued availability of the Calvert Cliffs Nuclear Plant to serve existing customers.

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

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

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

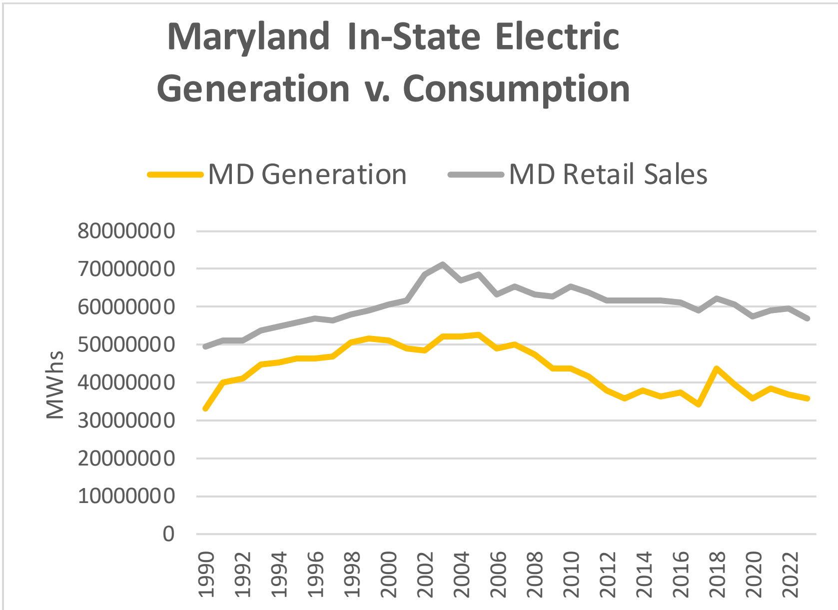
No. Resource adequacy depends only in part on the geographic source of energy production. It is mostly a function of peak demand and the combination of generation and transmission capability to meet that demand. Maryland's status as a net importer speaks to overall energy consumption—at all times of day over the course of a year—and is measured in megawatt-hours (or kilowatt hours), which is a different measurement than used for reliability and system capacity—*megawatts*. Meeting resource adequacy requires having sufficient *megawatts* available at time of highest demand on the system, while Maryland's status as a net importer of 40 percent of its *megawatt hours* speaks only to overall energy consumption.

The relevant available data does not show that there is a near-term need for generation located in Maryland for reliable electric service. The transmission system in place can

[3] *See*, for example, Middle River Power reverses plan to shut 540-MW plant amid record PJM capacity prices, Utility Dive (Sept. 12, 2024). The plant discussed in this article is in Illinois.

import sufficient power into Maryland, and new transmission under development will increase that capability as power plants retire.

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



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

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

It is true, however, that new generation is needed within PJM's broader footprint, considering increasing demand from data centers and potential power plant retirements.[5] Maryland, however, cannot address regionwide resource adequacy issues raised by data center growth elsewhere in PJM without taking on significant costs.

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

Even though it is likely that there will be sufficient resources in Maryland to meet resource adequacy standards, tight market conditions *throughout* PJM could lead to high

---

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

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

prices for capacity for Maryland customers in upcoming years. A variety of "no-regrets" solutions could enhance resource adequacy, reduce risks to customers of reliability issues, and minimize the chances of paying high prices for potentially unnecessary transmission and generation. These no-regrets measures include:

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

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

- *Energy efficiency*. Maryland could also take measures to require more energy efficient appliances. While energy efficiency can no longer bid into PJM capacity markets,[7] encouraging energy efficiency can still reduce capacity demand. Energy savings means that less capacity is needed to serve the lower peak demand, thus decreasing capacity costs, while also lowering customer bills. An analysis for the EmPOWER energy-efficiency programs found vast quantities of cost-effective energy-efficiency savings are available beyond what the current EmPOWER program alone can provide.

- *Existing transmission enhancements*. The transmission system is part of the resource adequacy equation. Limits on how much electricity can be delivered over any given transmission line are determined by the physical characteristics of the wire. Grid enhancing technologies, also called GETs, refer to a suite of new technologies that provide low-cost methods to make the most of existing transmission infrastructure. GETs can help defer, or even avoid, expensive construction of new transmission lines and enable more generation to connect to the system and serve customers. One study estimates

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

[7] On Nov. 5, 2024, FERC accepted tariff revisions from PJM that prevent energy efficiency from participating in the capacity markets. *See* Docket No. ER24-2995.

that GETs could save $1 billion annually across PJM by 2033.[8]

- *Distributed Energy Resources (DERs)*. Greater deployment of DERs—such as rooftop solar, community solar, and batteries—can also promote resource adequacy and decrease capacity costs. DERs connect to the distribution grid—and not the transmission grid—and so are not impacted by the current delays in PJM's process for connecting generation at the transmission level. DERs can either participate as demand response—by allowing residential customers to draw energy from their battery or "behind-the-meter" solar, rather than the grid, during times of peak demand—or they can be aggregated in a "virtual power plant" (VPP) to act as a generator that can bid capacity into the capacity auction. Studies have shown that virtual power plants can provide great value to the grid, with one study finding that VPPs could save utilities $15-$35 billion in capacity investments over a 10-year period.[9]

- *Energy storage*. Energy storage can "firm up" the capacity value of intermittent renewable generation by allowing energy from solar and wind to be stored and later deployed at moments of peak demand. Energy storage can help avoid costly transmission-system upgrades by pre-flowing energy over a transmission line and storing it on the other side of the line prior to times of peak demand. When demand peaks, energy can then be supplied *both* over the transmission line in real time, and from the batteries.

- *Surplus interconnection service*. PJM is asking FERC to approve more robust surplus interconnection service (SIS), which could also promote resource adequacy and lower costs. Many generators—especially intermittent renewable generation—do not use their full allowable transmission capacity.

  More robust SIS would enable additional generating units to share the interconnection with existing generators so long as the combined generation does not export more than the existing generation's maximum allowed output at any given moment. SIS could allow solar and wind resources to add battery storage to their sites and significantly increase supply in the PJM capacity market. One study estimated that batteries utilizing SIS on existing PJM solar interconnections alone could unlock an additional 5,862 MW of capacity—an amount equivalent to about 90% of Maryland's largest utility's current peak demand.[10] If FERC approves PJM's proposal, State policies to site batteries alongside intermittent generators using SIS could add new capacity within approximately one year.

---

[8] GETting Interconnected in PJM, RMI (February 2024).

[9] Real Reliability: The Value of Virtual Power, Brattle (May 2023), at 25.

[10] ReSISting a Resource Shortfall: Fixing PJM's Surplus Interconnection Service (SIS) to Enable Battery Storage, ACORE (Sept. 18, 2024).

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

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

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

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

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

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

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

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

[11] US Power & Utilities: Year Ahead 2025: Is Past What's Prologue?, Bank of America (January 7, 2025)

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

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

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

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

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

Third, any new gas plant will take years—likely much more than five years—to come online.[12] By that time, planned new transmission is highly likely to be completed that will be available to serve Maryland customers and would allow other generation sources to compete against—and potentially out-compete—a utility-owned generating plant, to the detriment of customers, as the New Jersey example shows.[13]

Finally, although additional new generation anywhere in the PJM region potentially decreases capacity costs by increasing supply, in the case of utility-owned generation, customers themselves do not necessarily benefit from lower prices. Rate-regulated utilities—which have exclusive government monopolies and captive customers—are paid

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

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

on a “cost-plus return” basis, and if the costs are higher than competitor’s costs, the utility is generally entitled to recover those costs plus its return as a matter of law. And because there is great uncertainty with projecting generation market prices over the life of the power plant, it is not possible to know whether utility ownership of generation will benefit customers.

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

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

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

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