

(SB937) **(HB1035) Pavlak FWA**

Next generation Energy Act

Electricity generation planning, procurement, permitting and co-location

POSITIVE

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

NEGATIVE

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

AMMENDMENT

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



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Avoiding rolling blackouts and high electricity rates

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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