

## Into the Storm: Maryland's Power Struggles and Legislative Solutions

At the end of the 2024 General Assembly Session, I sent out a multi-part report about the issues dealt with during the previous 90 days. I entitled that report "The Calm Before the Storm". The 2025 General Assembly Session begins on Wednesday. Issues that preoccupied us last year but could be dealt with have metastasized during the past nine months and are now confronting us and forcing us to come to grips with very tough decisions. You might subtitle the upcoming legislative session as "Into the Storm We Go!"

Principal among these issues is a \$300 Million deficit in the current year's State Budget that must be covered and an impending \$3 Billion deficit in the Budget that we will have to pass for the fiscal year that will begin on July 1. And in the following years, the State's fiscal posture continues to deteriorate until in 2030, current projections are that the State will be running over a \$6 Billion deficit.

The Governor has been mum about what he thinks we should do about the problem, but his proposed 2026 Budget will be unveiled on January 15th, and at that point, many gallons of ink will be used to chew over the parlous budgetary situation. I'll comment further on fiscal issues once the Governor releases his proposed Budget.

At this time, however, I want to share with you three messages dealing with another very serious issue facing the State of Maryland, one that I have spent considerable time researching and evaluating over the course of the summer and fall.

In February, 2023, PJM Interconnection ("PJM"), the organization responsible for supervising the regional electricity grid, commenced the implementation of an elaborate series of projects to improve, enhance and supplement the grid of electrical transmission lines in the 13 states (plus the District of Columbia) which are its responsibility. Collectively, these projects are known as the "Piedmont Reliability Project". Several of these projects are in Maryland. Easily the most controversial of these projects is the construction of a new long-distance 500 kV electrical transmission line running 70 miles across central Maryland, from northeastern Baltimore County to southern Frederick County. This new line is scheduled to be fully operational by June, 2027, and PJM asserts that if it is not completed on time, there will be rolling brown-outs and black outs. Other components of the Piedmont Reliability Project will upgrade existing transmission lines so they will be able to convey far more electricity than at present. The proposed new transmission line has precipitated considerable anger and anguish on the part of residents of impacted communities.

In the process of delving into the rationale underlying the proposed new transmission line, I learned that Maryland is already desperately in need of more locally-produced electricity and that policies put in place over recent years are unavoidably going to make this situation far worse. Unless something is done, and is done quickly, Maryland residents and businesses are going to incur massively increased electricity costs starting on June 1 and only getting worse and worse in subsequent years.

It has become clear to me that the proposed new transmission line and Maryland's need to import ever increasing amounts of electricity present two separate but ultimately interrelated issues. As a response to these two issues, I have developed six pieces of legislation that I plan to promote in the 2025 Session of the Maryland General Assembly to deal with both of these issues.

The rest of this message will deal with what I have learned about the transmission line. Another message that I plan to send to you tomorrow will deal with Maryland's dire need for more electricity. A third and final message will be sent to you on Wednesday morning, just before the 2025 General Assembly Session convenes. It will describe the six pieces of legislation that I will be promoting to deal with these issues.

Facts associated with the proposed new electrical transmission line.

- 1. PJM is headquartered in Valley Forge, Pennsylvania. PJM is a membership organization, and very few of its members are based in Maryland. Therefore, in formulating the Piedmont Reliability Project, Maryland stakeholders had very little influence and did not have enough votes to push back against the proposed new 70-mile electrical transmission line across central Maryland. The decision to proceed forward with that line was primarily made by people with no connection to Maryland and with absolutely no familiarity with the Maryland property owners who will suffer so seriously if the new line is built.
- 2. PJM has entered into a \$424 million contract with Public Service Electric and Gas ("PSEG"), a central New Jersey utility, to construct the new transmission line across Maryland. PSEG's officers and employees are residents of New Jersey. PSEG stands to make a large profit on this contract. Its interest in coming into Maryland to build the proposed new transmission line is purely mercenary. PSEG's representatives have met with Maryland property owners and elected officials on various occasions and have modestly changed the alignment of the proposed line, but as PSEG is contractually committed to build the new line and expects its work on its contract to be profitable, the objections voiced by Maryland residents to any new transmission line have fallen on deaf ears.
- 3. As explained by PJM, the new transmission line is primarily needed because, while until recently, the growth in the demand for electricity in this region was very slow and steady, a shocking development has occurred which has greatly accelerated the growth in demand for electricity in this region. In November, 2022, artificial intelligence company Open AI released its first version of ChatGPT, triggering the frenetic development of data centers, many of which use AI technology and which consume vast amounts of electricity. In just two years, these data centers have grown to constitute 4% of PJM's summer peak electricity load. Within just the next six years, PJM anticipates that data centers, many of them using AI technology, will constitute 12% of PJM's summer peak electricity load. The magnitude of this development, which was unanticipated just two years ago, is shocking. The consulting firm Bain & Company has recently projected that the market for AI products and services could reach between \$780 billion and \$990 billion within three years.
- 4. A large number of such data centers have been or are being constructed in Loudoun County, Virginia. PJM projects that the Loudoun County data centers currently in existence or under construction will collectively require 6,700 MW of electricity in their annual operations. At present, the entire State of Maryland only has the capacity to generate 11,161 MW of electricity per year, so the new electrical demands of the Loudoun

County data centers alone will equal over 60% of all of the electricity generated in Maryland. Virginia does not generate enough electricity to power these data centers.

- 5. There is a single data center planned for Maryland at present. Known as Quantum Loophole, this facility is under development in Frederick County. Once in full operation, it will require 800 MW of electricity. In 2020, when the owners of Quantum Loophole began to work on their project, they entered into conversations with Potomac Edison, a subsidiary of First Energy Corp, headquartered in Ohio. Potomac Edison provides electricity to West Virginia and western Maryland, just as the Baltimore Gas & Electric Company ("BG&E") provides electricity to central Maryland. During those conversations, Potomac Edison assured Quantum Loophole that it could supply Quantum Loophole with all of its electricity needs. That remains true today. I have received written confirmation that Potomac Edison is ready, willing and able to supply Quantum Loophole with all of the electricity it will need to operate. Thus, the proposed new transmission line is not needed because of the Quantum Loophole project.
- 6. PJM's proposed new transmission line would take electricity generated at the Peach Bottom Nuclear Power Plant just over the Pennsylvania line and transmit it from the northeast corner of Baltimore County across northern Baltimore County into northern Carroll County and then southwest across Carroll County into eastern Frederick County, terminating at the Doubs substation just north of the small community of Point of Rocks on the Potomac River. At Doubs, the electricity transmitted along the new line would enter the electrical grid and would be routed through upgraded transmission lines south across the Potomac River into Loudoun County, Virginia to provide power to the data centers in Loudoun County. None of the electricity delivered to Doubs by the proposed new line will be needed by Quantum Loophole or any other Maryland user of electricity. It will all be needed in Loudoun County, Virginia. The new transmission line will therefore be the equivalent of a 70-mile extension cord, delivering electricity from Pennsylvania to Doubs and then into Loudoun County, Virginia.
- 7. All of the benefits of the proposed new transmission line will occur in Virginia. The vast data center complex being developed in Loudoun County, Virginia will generate innumerable jobs and collateral economic development. These employees will pay Virginia income taxes and property taxes. The data center owners will pay their own income taxes and property taxes. The economy of Loudoun County will grow robustly as a result.
- 8. By contrast, as detailed below, Maryland will suffer all of the deleterious consequences associated with the new transmission line and will derive no benefits from it.
- 9. In November, a group of environmental organizations led by the Chesapeake Legal Alliance and Blue Water Baltimore issued a letter calling for the proposed transmission line to undergo a stringent environmental review under the terms of the 1970 National Environmental Policy Act. The letter notes that the line will impact nearly 100 rivers and streams, 30 riparian wetlands and 70 other federally identified wetlands. The letter states, "we cannot tolerate the notion that regulators plowed ahead recklessly and in ignorance of

law, losing more of our waterways, historic properties, cultural resources and critical habitats than we had to."

- 10. A number of public meetings have been held this summer and fall in Baltimore, Carroll and Frederick Counties so affected local residents can express their views about the proposed new transmission line. To say that they have been well attended would be a gross understatement. For example, on two consecutive evenings during the week before Labor Day, the last week of the summer and the first week of the new school year, about 500 people turned out to fill the Hereford High School auditorium and over 1,000 people turned out at the Carroll County Agricultural Center. During those evening-long meetings, not a single person spoke up in favor of the proposed line.
- 11. The objections voiced about the proposed transmission line were varied and were passionately expressed. Citizens told heart-rending stories about the anticipated destruction of their multi-generational family farms and the loss of thousands of acres of productive Maryland farmland. In numerous cases, residents related the fact that they had voluntarily placed their land in permanent conservation easements and preservation easements in order to assure that it would remain forever protected against development. They movingly foresee that the proposed transmission line will result in the clear cutting of forests, the destruction of ground cover and the elimination of wildlife in their conservation and preservation zones. Many predict a serious degradation of the environment, the transformation of some of Maryland's most beautiful rural countryside into a post-industrial landscape, and the endangerment of central Maryland's water supply.
- 12. In May, 2024, the Federal Energy Regulatory Commission ("FERC") adopted a new transmission and cost allocation rule (Order No. 1920) which provided in part that "Customers pay only for projects from which they benefit". PJM asserts that Order No. 1920 does not apply to the Piedmont Reliability Project and therefore that Maryland ratepayers should pay for about 12% of the cost of the new transmission line though they will derive no benefits from the line. Only half of the cost will be allocated to Virginia ratepayers. The sheer unfairness of this is staggering.
- 13. Maryland's Office of People's Counsel ("OPC"), which is charged with representing the interests of the people of Maryland has taken "no specific position" on whether the proposed new transmission line should be approved by the Public Service Commission. Governor Moore has not taken a position on the proposed line, although recent statements show that he has some concerns about the line.
- 14. There are a number of possible alternatives to the proposed new transmission line. The most obvious alternative would be for Virginia to promote the construction of a new electrical generating facility in Loudoun County to service the new data centers in Loudoun County. Unfortunately, PJM does not have the power to force Virginia to construct electrical generating facilities to supply power to its data centers, and the Commonwealth of Virginia thinks it preferable for these Virginia data centers to obtain their electricity from a transmission line stretching 70-miles across Maryland rather than from a local generating

plant in Virginia. Another obvious alternative would be to require the Virginia data centers to get together and build their own co-located power generating facility. Again, PJM has no power to force the Virginia data centers to do this, and as long as PJM is prepared to pay to build a transmission line across Maryland to supply them with electricity, they have no reason to spend their own money to construct a local electrical generating facility.

- 15. As FERC made clear in its Order No. 1920, "an upgrade or rebuild [powerline] project might convert segments or existing overhead powerlines to underground lines". But in this case, it is clear that no thought has been given to putting the new transmission line underground. There are other grid enhancing technologies ("GETS"), including sensors, dynamic line ratings, advanced power flow control devices and analytic tools that can increase line capacity and throughput based on real-time conditions. Again, these options do not seem to have been considered in this case. Another alternative to the destruction of productive farmland would be to construct transmission lines paralleling highways. A 2022 81-page Minnesota study found that underground transmission in existing transportation rights of way (known as "longitudinal siting") can be built at a cost comparable, on a capacity basis, to above ground transmission. Four states have laws on the book prioritizing transmission co-location with existing highway rights of way. This alternative also seems to have not been considered in this case.
- 16. A careful examination of the proposed routing of the new transmission line shows that there is still another alternative that would minimize the disruption to Maryland property owners. For the first half of the new line's route, the line either runs next to or within a short distance of an existing long-distance transmission line not owned by PSEG. The existing line is an old line which uses old technology. PSEG has no right to enter the right of way of the existing line or to touch its transmission infrastructure. But the existing line could be upgraded (the operative term is "reconductored") by its owner using modern technology in order to greatly increase its carrying capacity of electricity. In some cases, the carrying capacity of old lines can be doubled through reconductoring. BG&E is at work doing precisely this form of upgrading to various of its lines under a contract with PJM. From the halfway point along the route of the proposed new line, the existing line heads up into Pennsylvania, but just a short distance away from where that change in direction occurs is an existing substation in Union Bridge from which other existing lines travel west to Thurmont and then due south past the City of Frederick to Doubs. These lines could also be reconductored in order to greatly increase their carrying capacity. Under this alternative, therefore, the only new line construction that would be needed would be along a short stretch in northern Carroll County. In this way, 90% of the disruption to Maryland property owners could be avoided.
- 17. The proposed transmission line cannot move forward unless the Maryland Public Service Commission issues a "Certificate of Public Convenience and Necessity" ("CPCN") to PSEG. PGEG has not yet filed its application for such a CPCN. The CPCN process is a litigated proceeding similar to a trial at which various and diverse parties including the OPC, state environmental regulators, affected counties and municipalities and interested individuals will have the opportunity present evidence. The PSC is already accepting comments on the proposed transmission line at the following internet address:

piedmontcomments.psc@maryland.gov. In order to issue the CPCN, the PSC would have to conclude that the CPCN would provide a public benefit to the people of Maryland. The organization known as STOP MPRP, Inc. is already lining up lawyers and preparing its legal case to oppose PSEG, and other organizations and citizens may be retaining counsel of their own to similarly oppose PSEG.

- 18. On December 31st, PSEG filed its long-awaited Application with the PSC for a CPCN. Despite assurances all along that the proposed new transmission line will produce lots of jobs here in Maryland, the Application discloses that, once the line becomes operational, only 2.4 full time equivalent jobs will be produced by the line! Significantly, the Application states that no effort was made to quantify the significant adverse impacts of the proposed line on Maryland. No estimate was made of the adverse impact on Maryland property value along the 70-mile line, no computation was made of the reduction in property values, no estimate was made of the line on the agricultural value of farms and of interference with farming operations, no quantification was made of the adverse impacts on viewsheds and no accounting was made of the destruction of land that owners have carefully placed in permanent conservation and preservation easements. It's as if these things just don't matter, and the PSC should simply ignore them.
- 19. The PSEG Application also repeats the message it and PJM have been broadcasting all year, namely that the proposed new transmission line must be operational by June, 2027 or else dire consequences will ensue, including brownouts and blackouts. On January 2nd, PSC Chair Fred Hoover was interviewed on Fox 45 TV and stated that this deadline is just unrealistic, that the PSC is not going to rush things, and that the PSC review of the Application will be thorough and will take time. (A suggestion here: if brownouts and blackouts actually become necessary in June, 2027, PJM should visit them on Loudoun County, Virginia, which precipitated this crisis by approving the construction of dozens of data centers in a county without nearly enough electric power to enable them to operate. This is Loudoun County's problem due to its irresponsibility; it is not Maryland's problem!)
- 20. In the event that the PSC issues a CPCN to PSEG, presumably PSEG will use the process known as eminent domain to force landowners along the route to turn their land over to PSEG so the transmission line can be constructed. There are at least three problems that would arise in such a circumstance: 1) PSEG might use Maryland's "quick take" procedure to take private land and start construction of the transmission line across the land, including across land currently held in conservation or preservation easements, before a fair price for the confiscated land can be determined by the courts (and you can bet that the appraisers will place a very low value on land which is undevelopable because it has been placed into conservation and preservation easements, thus giving PSEG an incentive to take as much of this permanently protected land as possible); 2) Maryland law currently provides no relief for land owners living very close to the proposed transmission line and whose properties will suffer serious diminution in value once the line is built but whose properties will not be taken by PSEG through the eminent domain process; and 3) in any eminent domain legal proceeding, the landowner fighting for fair compensation for his land

will need to pay for a lawyer, thus reducing the net amount of money that he will receive at the conclusion of the legal proceeding.

## My Conclusions:

- 1. The proposed new electrical transmission line is being planned and will be built by out-ofstate organizations.
- 2. None of the electricity to be transmitted along the new line is needed in Maryland. It will all go to Loudoun County, Virginia to power data centers there.
- 3. Maryland will derive no benefits from the new line but will suffer all of the harms associated with it and will have to pay for a portion of its costs to boot.
- 4. Alternatives to the new line have not been considered, as PSEG has a signed profitable contract to build the new line and is uninterested in possible alternatives to the new line.
- 5. If the Maryland Public Service Commission issues a Certificate of Convenience and Necessity, enabling PSEG to proceed forward to build the new line, affected land owners will lose their land in eminent domain proceedings in which the "quick take" procedure can be employed, in which neighboring land owners will receive no compensation for the diminished value of their properties and in which any land owner declining to accept an offer made by PSEG will have to pay for attorneys' fees and court costs.

I invite you to read tomorrow's message which will deal with Maryland's dire need to generate more electricity and then to read the message that I am planning to send to you on Wednesday morning, which will summarize the six pieces of legislation that I plan to promote during the 2025 General Assembly Session dealing with the issues discussed in today's and tomorrow's messages.

-Chris.

Auth.: Friends of Chris West, Chris Scholtes, Treas. Friends of Chris West · P. O. Box 144 · Riderwood, MD 21139 · USA

chris@senatorchriswest.com