

Committee: Economic Matters
Testimony on: SB474 - Certificate of Public Convenience and Necessity and Related Approvals - Definition of Generating Station (Critical Infrastructure Streamlining Act of 2024)
Submitting: James S. Ballard, Retired PE and FERC Electrical Engineering Subject Matter Expert
Position: Opposed
Hearing Date: February 22, 2024

Dear Chair and Committee Members:

Thank you for allowing my testimony today in opposition to SB474.

SB474 alters and establishes the definition of "generating station" for the purpose of exempting the construction of certain generating facilities used to produce electricity for the purpose of onsite emergency backup and certain test and maintenance operations from the requirement to obtain a certificate of public convenience and necessity or certain other related approvals under certain circumstances; and generally relating to generating stations.

Enactment of SB474 will spur the transfer of Maryland wealth to surrounding PJM States' Investor Owned Utilities of approximately \$1,500,000,000 per year related to data center development increased electric transmission and generation costs. Enactment of SB474 will cause Maryland and its newly developed data centers to forgo the opportunity to collect approximately \$23,000,000 a year from the PJM Capacity Market. This is just related to the first 1500 MW of data center development at the Adamstown MD, Quantum Loophole Campus, which is now expected to demand 5000 MW or more by 2033 (equal to almost all of PEPCO – Montgomery, Prince George's Counties and the District of Columbia). So the expected transfer of wealth from Maryland will likely triple my current estimate by 2033.

Enactment of SB474 will double the expected greenhouse gas emissions caused by Western Maryland Potomac Edison electrical load by 2028. Maryland should expect the related greenhouse gas emissions to quintuple by 2033 with enactment of SB474. Note that Western Maryland is primarily powered by West Virginia coal fired power plants. Hydro, coal and nuclear power baseload capacity powers data centers, because they are baseload. Baseload is the electrical load that is always present, even during minimum grid load conditions. It is economically impracticable to plan to power data centers from any other type of primary power source but baseload capacity.

Enactment of SB474 will lead to electrical grid reliability problems and continuously cause Maryland power import facilities to overload in PJM's planning models and cause electrical rates to increase uncontrollably to Marylanders.

I base my SB474 impact analysis on considered electric power engineering and engineering economic evaluation of:

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20230110/item-06---reliability-analysis-update.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20230110/item-04---data-center-load-planning.ashx>

https://mgaleg.maryland.gov/mgawebsite/Committees/Media/false?cmte=eee&clip=EHE_1_31_2023_meeting_1&ys=2023rs

<https://www.datacenterdynamics.com/en/analysis/quantum-loophole-heads-out-of-virginia-and-into-maryland/>

<https://wired.pjm.com/-/media/library/reports-notice/state-specific-reports/2022/2022-maryland-dc-state-infrastructure-report.ashx>

<https://www.pjm.com/-/media/library/reports-notice/state-specific-reports/2022/2022-west-virginia-state-infrastructure-report.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20231031/20231031-item-15---reliability-analysis-update.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20231205/20231205-2022-rtep-window-3-reliability-analysis-report.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20231205/20231205-2022-rtep-window-3-constructability--financial-analysis-report.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20231205/20231205-pjm-teac-board-whitepaper-december-2023.ashx>

<https://www.pjm.com/-/media/committees-groups/committees/teac/2024/20240206/20240206-item-03---market-efficiency-update.ashx>

Why should you listen to me and not your aspirational climate change and Maryland productivity consciences and not your data center and investor owned utility lobbyists?

My only advocacy is for good decision making that causes the least self-harm to the decision makers and their constituents. Professional engineers should not advocate anything else but good decision making. I used to be the US Navy's fleet-wide ship design electrical safety engineer. Reading reports of electrocuted sailors is not fun, but it is a life mission maker. For most of my career, I was not in the business of making profit at others' expense. My FERC mission was always to protect mom and pop ratepayers by helping decision makers make prudent decisions.

I retired from FERC in April, 2016. My last filed FERC testimony (including a description of my qualifications and work history), Bonneville Power Administration V. PacifiCorp, EL15-13, is here (Generate PDF to read entire document at the links when using accession number file access):

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20160115-5423&optimized=false

Exhibit No. S-5 (List of Cases in Which James Ballard Has Testified) under EL15-13

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20160115-5467&optimized=false

My most interesting and perhaps relevant case to this committee was NorthWestern Corporation v. FERC, ER10-1138, where I analyzed the physical and economic impacts of integrating newly developed wind generation with the Montana electric grid.

My supplemental answering testimony is here:

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20120924-0484&optimized=false

The initial Administrative Law Judge decision is here:

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20120921-3030&optimized=false

The Commission Opinion No. 530 - Order affirming the initial decision is here:

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20140417-3015&optimized=false

The Certified Index to Record (U.S. Court of Appeals, District of Columbia) is here:

https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20160722-0028&optimized=false

The full list of public documents in NorthWestern Corporation v. FERC under ER10-1138 can be found here:

https://elibrary.ferc.gov/eLibrary/search?q=searchText%3D*%26searchFullText%3Dtrue%26searchDescription%3Dtrue%26dateType%3Dfiled_date%26relativeDateType%3Dcustom%26date%3D2009-01-01--2024-02-20%26docketNumber%3Der10-1138%26subDocketNumbers%3D%26eFiling%3Dfalse%26allDates%3Dfalse%26dateRange%3Dcustom