

Reckless

HB793/SB781 proposes power purchase agreement (PPA) of up to \$190/MWh (2012\$, \$242/MWh 2022\$) for up to 8 million MWh/yr of OSW. This is a big proposal, energy equivalent to about 60% the size of Calvert Cliffs. The PPA discounts to a present value of \$35 billion. There are several problem areas:

- The proposed PPA price cap is 24.2 cts/kWh (2022\$) is 2x the retail price, 3x the blended OSW-2 OREC price that MPSC awarded in December 2021, 5x the PJM market clearing price several years ago.
- Stop spinning social cost of carbon, ignoring transmission costs.
- OSW remains an unproven technology at scale. [Zero Carbon PJM](#) system modeling shows that OSW is the highest cost option and unlikely to be a minor player on a zero-carbon PJM system.
- There is no risk assessment or ratepayer impact. Data is necessary to evaluate risks like that of [OSW harming whales](#). This issue should be resolved before committing \$35 billion.

Recommendations:

1. **Unfavorable SB781/HB793** until evidence emerges that OSW is affordable, reliable and low risk.
2. **Build OSW-1** for the purpose of acquiring risk mitigation data: a test platform to support research on the impact of OSW on whales and marine life; local resistance to transmission; maintenance costs in a North Atlantic (NA) marine environment; capacity factors; production profiles; structural requirements for Northeasters and hurricanes.
3. **Independent audit the OSW-2 award.**,- Did MPSC exceed the ratepayer statutory cap by a factor of 4 as suggested by OpEds is [Maryland Matters](#) and the [Washington Post](#)?
4. **Upgrade Maryland's goal** to be zero carbon electric power (not net-zero or 100% renewables). Net-zero & 100% Renewables are political goals; that can be satisfied by exporting over-generation and importing 40% from West Virginia coal keep the lights on.
5. **Retask the Power Plant Research 100% Study to be zero carbon PJM (not 100% RPS)** – The rational sequence is to first figure out what works best for PJM, then figure out how Maryland best fits within that structure. A preliminary [Zero Carbon PJM Options](#) indicates that while a PV + OSW + storage only system is theoretically feasible, it would have a ratepayer impact exceeding \$300/month.
6. **Maryland's role should be full-scale demonstrations. Demonstrate any technology (renewables & new nuclear) that can be a major component of a zero carbon PJM.**
 - a. Qualification is by an approved zero carbon PJM dispatch model like the Zero Carbon PJM model.
 - b. Awards for 2 million MWh/yr for 20 years.
 - c. While ppa price is a primary criteria, competitive evaluations should ratepayer impact, in-State jobs impact, risk assessment (whales, public opposition to transmission, NRC approvals ...)
 - d. Develop the ability to objectively calculate ratepayer impact from system models that include transmission and intermittent backup costs..
 - e. Ask PJM asked to score impact on firm capacity and system reliability.

Dr. Alex Pavlak is a Professional Engineer who has led the successful development of major new military systems. In a former life he was the President of a solar collector development company. Today he is the Chairman of the [Future of Energy Initiative](#). His advocacy is to engineer effective zero carbon systems.

