

Update on PJM Offshore Wind Studies

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Recap - Offshore Wind (OSW) Transmission Study: Phase 1

Phase 1 Study Background

- Scenario study conducted in response to a <u>request from OPSI</u>; an independent effort between PJM and interested state agencies
- Five scenarios created in collaboration with PJM's coastal states (short and long-term)
- **Goal** was to analyze and identify regional transmission solutions to accommodate the coastal states' offshore wind goals, as well as *all* PJM states' RPS requirements
 - Assessed the impact to the PJM transmission system and identified costs and location of upgrades (not cost allocation)
 - Study intended to be advisory only

Phase 1 Study Conclusions

Link to Report (2021)

- Scenario results range from \$627.34m to \$3,213.14m
 - OSW injection totals range from 6,416 MW–17,016 MW
- Results demonstrated system impacts, identified network upgrades and upgrade costs for all scenarios, and opportunities for regional solutions
- Market efficiency analysis for the study's Scenario #1 demonstrated decreased gross load payments, especially for coastal states, among other benefits

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Recap - Proposed Phase 2 Offshore Wind Scenarios

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	Offshore Wind Scenarios (MW)						
	Scenario	Delaware	Maryland	North Carolina	New Jersey	Virginia	Total OSW Capacity
	1	-	2,022	-	3,906	2,640	8,568
Study Year 2028*	2	-	4,000	-	3,906	2,640	10,546
	3	800	2,022	-	3,906	2,640	9,368
	4	-	2,022	-	7,648	5,200	14,870
	5**	-	2,022	-	7,648	2,640	12,310
Study Year 2035*	6**	-	2,022	-	7,648	5,200	14,870
	7	-	8,500	-	7,648	5,200	21,348
	8***	-	-	-	-	-	0

^{*}Model all PJM state RPS targets as being met for scenario years 2028 and 2035.

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^{**} Include only 9,000 MW of solar in Virginia for Scenarios 5 and 6.

^{***} Neither PJM nor any PJM state were assuming that the offshore wind policy goals of the PJM states will not be achieved. Scenario #8 was to serve as an opportunity to separate the transmission impacts of offshore wind in comparison to other renewable resources that will be developed in pursuit of state policies.



New Jersey SAA 2.0

- Analysis to be performed in 2024 on an additional 3,500 MW of OSW capacity in New Jersey.
- PJM anticipates opening a competitive window in summer 2024 to address the needs from the SAA 2.0 analysis.

Maryland OSW Informational Analysis

PJM requested by Maryland PSC to conduct analysis on Maryland's 8,500 MW OSW target in response to the POWER Act (2023); may lead to competitive solicitation for transmission solutions.

Delaware OSW Scenario Request

 PJM requested by Delaware PSC and DNREC to assess the impacts of an additional 1,000 MW of OSW connecting into Delaware.



- As a result of the subsequent OSW scenario requests, PJM will not be conducting OSW Transmission Study: Phase 2 as a formal study.
- PJM will continue to work with New Jersey, Maryland and Delaware on their respective OSW efforts and analyze scenarios similar to what was requested as part of the Phase 2 study.
- Additional scenarios that consider OSW policies are expected to occur through PJM's proposed Long-Term Regional Transmission Planning (LTRTP) process.



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