

2024 Annual Audit Report on the Southeast Energy Exchange Market

Presented to:

SEEM Annual Meeting of Stakeholders and Participants

By Potomac Economics Independent Market Auditor

May 6, 2025



2024 Annual Report

- Potomac Economics serves as the Independent Market Auditor for the SEEM.
- This presentation summarizes the results and findings from our Annual Report for 2024. The topics include:
 - Overview of Auditor Responsibilities
 - Market Activity, including:
 - $\circ~$ Trading and Liquidity
 - Market Concentration
 - \circ Prices
 - Network Usage and Constraints
 - Conclusions and Recommendations



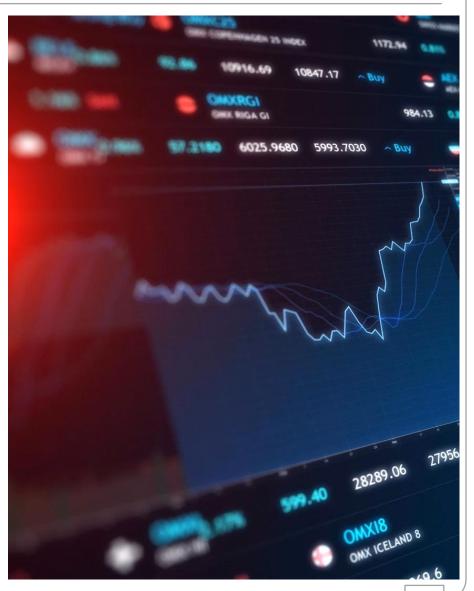
Key Findings

- SEEM Trading volumes have increased on a steady trend throughout 2024 and into 2025
 - The monthly average cleared trades for 2024 was 88,000 MWh, compared to was 58,000 MWh for 2023;
 - March 2025 was an all-time high of 125,000 MWh;
- Estimated production cost savings continue to increase, with estimated savings of \$18 million since inception.
- Bids and offers are converging to the clearing price, indicating a maturing market.
- Demand bids tend to respond more strongly to regional conditions than supply offers;
- We recommend assessing the potential for extending the platform to longer trading horizons to capture additional benefits.



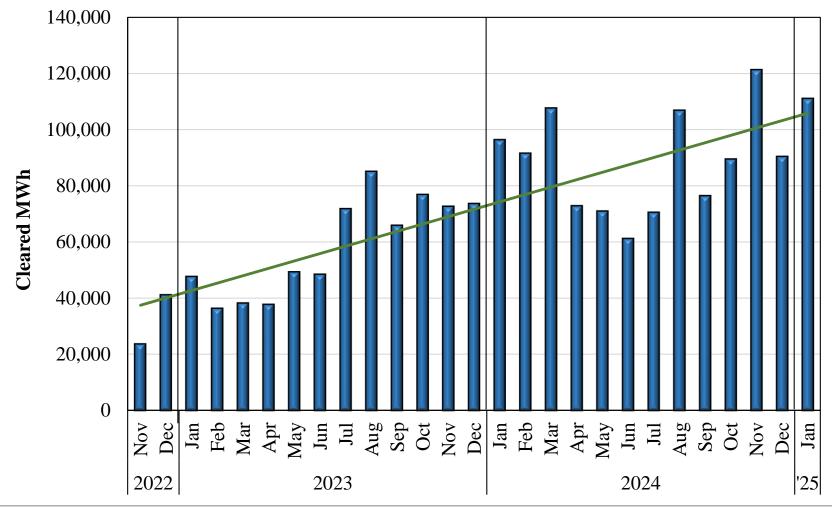
Market Auditing Function

- SEEM is audited by calculating screens, metrics, and other analyses on a daily basis.
- Screens are based on specific requirements in Auditing Process in the SEEM Market Rules.
- In 2024, the screens verified that the market software and outcomes functioned as intended.



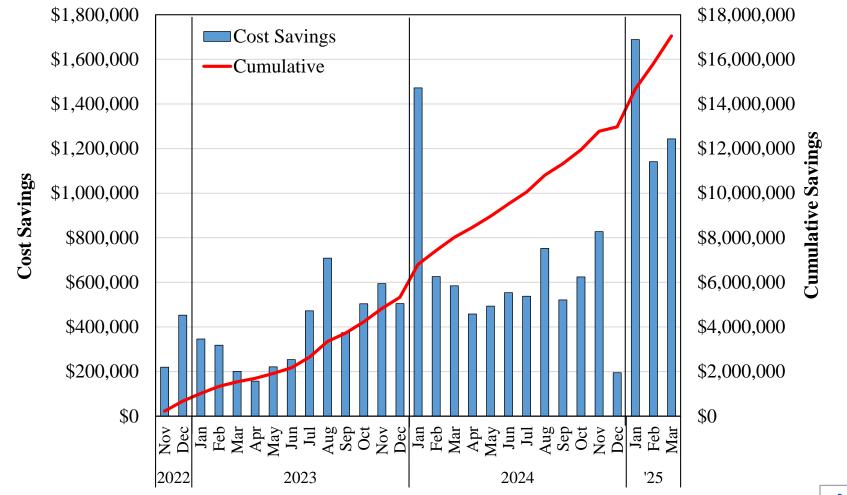
Monthly Cleared Trading Volume November 2022 to April 2025

• Market clearing volume has increased over time (even apart from new participants joining in July 2023).



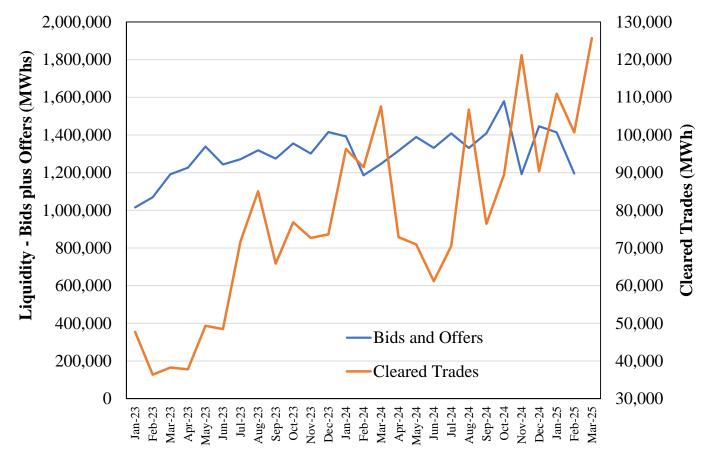
Production Cost Savings November 2022 to April 2025

• Cumulative production cost savings based on average cleared volumes and the associated bid-offer spreads through Mar. 2025 are almost \$18M



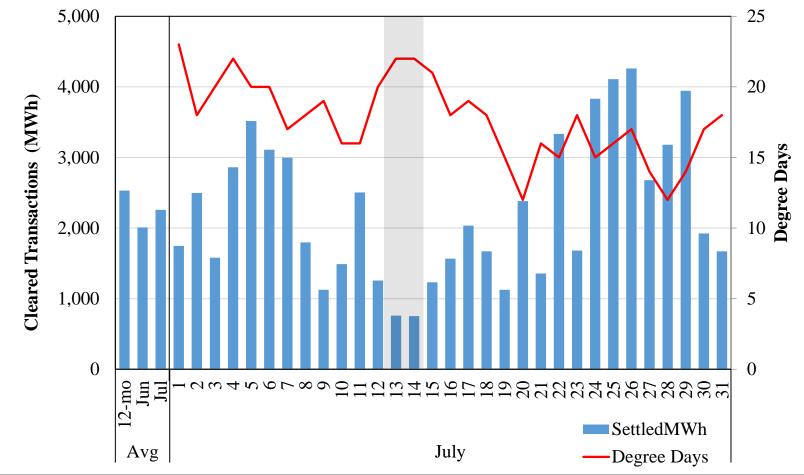
Monthly Cleared Trading Volume January 2023 to March 2025

- Offer and bid volume as remained relatively stable (blue line) while trades have increased (orange).
- This shows more efficient trading with offers and bids converging.



Activity and Regional Demand July 2024

- Degree days drive the demand for electricity;
- Demand bids rise in extreme events but less supply is available so trading tends to decrease. Trading is not correlated with degree days generally.



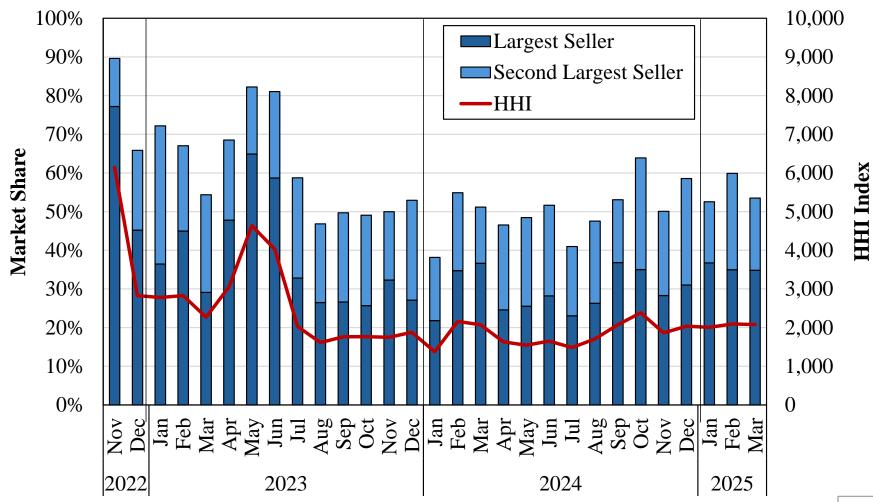
Market Concentration



- Next slide shows seller market shares and concentration
- Market shares are measured to view competitiveness
 - Not determinative of market power
- Top seller share declined with Florida participants
 - Favorable decrease in top market shares
- HHI measures market concentration
 - Used to determine market competitiveness
 - Calculated by squaring market share of each firm
 - Lower values indicate less concentrated market
- HHI in SEEM market highly concentrated
 - Significant decrease over time is favorable to market effectiveness
- Buyer market share shows similar trend to seller market share
 - See the 2024 Annual Report released today

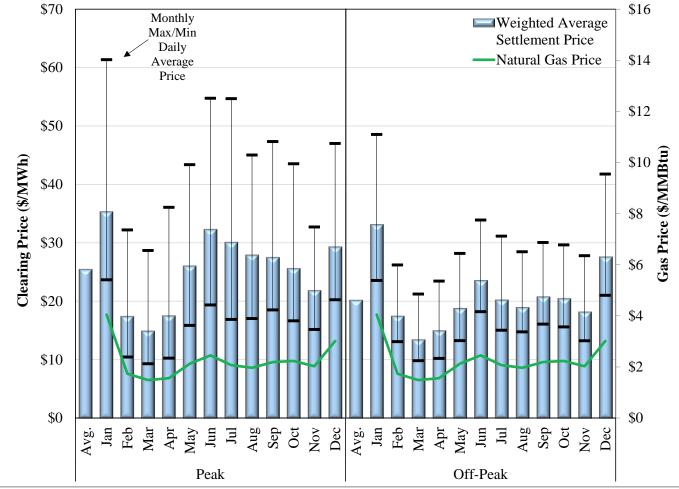
Seller Market Concentration

• The market has become less concentrated as new participants joined in July 2023 and has remained stable.



Summary of Market Pricing in 2024

- Prices have been correlated with fuel prices as expected in a competitive market.
- Locational differences caused by network constraints explain much of the range in prices – average price by segment ranged from \$10 to \$60/MWh.



Evaluation of Network Usage

- We evaluation the SEEM transactions by path segments
 - 270 unique segments with ATC values, 81 without ATC (unlimited)
 - Evaluated all segments and all intervals with ATC
- This evaluation shows that segments generally remained available for SEEM trades
 - Many top paths have over 93% of their intervals uncleared
 - About 5 percent of the segments were constrained;

Segment	Case 1		Case 2		Case 3		Case 4	
	Partially Used		Fully Used		Unavailable		Uncleared	
	Intervals	%	Intervals	%	Intervals	%	Intervals	%
All Segments	208,600	2.0%	7,842	0.1%	514,786	5.0%	9,613,716	92.9%

Conclusions and Recommendations

- POTOMAC ECONOMICS
- SEEM platform implementation and operation has been successful
 - Trade volumes, liquidity, and competitiveness increased over the year
 - Traders have provided positive feedback
- Recommendation to Improve Current Market
 - SEEM publishes the daily average price for transactions after the day
 - We recommend SEEM publish hourly average prices in real time to improve the price discovery for participants
 - This is a recommendation from last year that has been on hold pending FERC reconsideration.
- Benefits of improved price discovery
 - Would help inform more competitive and efficient bids and offers
 - Could inform other real-time decisions by participants (e.g., starting a fast start unit)

Long-Term Potential Improvements

- SEEM's current market has performed well under its limited scope
 - It facilitates very short, near-term exchanges of economic energy
- Additional benefits and efficiency could be achieved by transacting further ahead and for longer periods.
 - Including hour ahead, multi-hour, and day-ahead;
 - Likely will need legal assessment of OATT, given FERC Order affirming SEEM.
- We have begun reviewing hourly and daily bilateral trading patterns in the southeast to assess the potential for expanding SEEM.
 - We would need SEEM Board approval for a more in-depth analysis.

