MONTHLY AUDIT REPORT ON THE SOUTHEAST ENERGY EXCHANGE MARKET

FOR

February 2025

Prepared by:

POTOMAC ECONOMICS

Independent Market Auditor

April 1, 2025

I. Overview

This is the February 2025 Auditor report on the Southeast Energy Exchange Market (SEEM). SEEM is a system energy market that uses a centralized intra-hour energy exchange to create bilateral trades among its trading participants every 15 minutes. It uses available transmission capability (ATC) of the SEEM members under a transmission service designed for SEEM, called Non-Firm Energy Exchange Transmission Service (NFEETS). It has been operating since November 2022 and now has 24 members.[1]

As discussed herein, trading volumes in February were 99,000, down from 110,000 MWh in January and above the 12-month trailing monthly average of 88,000 MWh. With an average bid-offer spread of over $12/MWh, the estimated production cost savings from SEEM transactions in February were $1.1 million. Trading among SEEM members relies on individual transmission path segments connecting the members and trades may span multiple segments. Transmission availability on individual segments varied widely. For many segments capacity is available in every interval. For other segments, availability is zero in many intervals. Considering all intervals and segments, two percent of the time availability was zero and 96 percent of the time a segment was available while no cleared transaction utilized it. Overall, this indicates widely available transmission. Due to transmission loss costs, transmission constraints, and participant-specific constraints, about 22,000 MWh of potential economic exchanges were left uncleared in February, which is slightly lower than the level in January. As explained more below, these are uncleared offers and bids in the same interval where the offer price was less than the bid price by more than the average cost of losses.

SEEM is governed by the SEEM Membership Board. The automated architecture of SEEM was developed and is operated by Hartigen, who also serves as the SEEM Administrator. Our auditing role is directed by the Membership Board in accordance with elements specified in the Market Rules as developed by the Membership Board and approved by the Federal Energy Regulatory Commission (FERC). The results of our auditing are reported to the Membership Board through submission of this Monthly Report. We also have a duty under the Market Rules to respond to inquiries made by regulators and other oversight authorities, including FERC. We received no such inquiries during the period of this report.

[1] The initial 18 members are: Alabama Power Company; Georgia Power Company; Mississippi Power Company; Associated Electric Cooperative, Inc.; Dalton Utilities; Dominion Energy South Carolina, Inc.; Duke Energy Carolinas, LLC; Duke Energy Progress, LLC; Louisville Gas & Electric Company and Kentucky Utilities Company; North Carolina Municipal Power Agency Number 1; PowerSouth Energy Cooperative; North Carolina Electric Membership Corporation; Tennessee Valley Authority; Georgia System Operations Corporation; Georgia Transmission Corporation; Municipal Electric Authority of Georgia; Oglethorpe Power Corporation; and South Carolina Public Service Authority. The Florida members joining in June 2023 are: Seminole Electric Cooperative; Tampa Electric Company; Duke Energy Florida; Florida Power Corporation; TEA Gainesville System Utilities; and TEA JEA.

The SEEM auditing framework is based on the provisions of the SEEM Market Rules Section VI.D. (Auditing Process). These duties are in four main categories. The first duty is to analyze SEEM input, constraints, and matching results to determine if SEEM operates in accordance with the SEEM Rules (SEEM Rules Sections VI.D.1, VI.D.1.4). This is the main day-to-day auditing work and represents most of the activities reported herein.

A second auditing responsibility is ensuring participants have access to SEEM data in accordance with the SEEM Rules (Sections VI.D.2). Access to SEEM data involves allowing each SEEM participant to review its own bids and offers and to view matches made by the system. We are in receipt of the bid and offer data and have verified that this data is available daily.

A third area of responsibility is to report to the Membership Board regarding (1) the reliability and accuracy of the SEEM System, and (2) any complaints received from a Participant to the Membership Board and to investigate further any such complaint at the Board's direction (SEEM Rules Sections VI.D.3, VI.D.1.5). The purpose of Section II of this report is to fulfil our responsibility to report on the reliability and accuracy of the SEEM system to the Board. Regarding complaints from participants to the Board, we were not directed by the Board to investigate any such complaints during the period of this report.

Finally, we have the duty to respond to written questions from Participants, FERC, NERC, state commissions in the region, Tennessee Valley Authority's Inspector General, and any other applicable regulators that oversee the electric operations of any Member regarding the integrity of the matching process (SEEM Rules Sections VI.D.6). We received no such inquiry in February.

In the remainder of the report (Section II), we provide the results of our analysis of the first main area of responsibility: to analyze input, constraints, and matching results to determine whether SEEM operates in accordance with the SEEM Rules. This is in two main parts. First, we review various daily screens that ensure specific inputs, constraints, and energy exchanges have met certain validation metrics. Second, we review the economic activity in SEEM to provide insight into its functioning and performance.

II. AUDITING RESULTS

In this section, we discuss the results of our monthly auditing. In subsection A, we show the results of our daily screening. In subsection B, we present an overview of economic activity.

A. Market Operation Screens

We calculate screens, metrics, and other analyses on a daily basis using market data and other data to meet the auditing obligations in the Market Rules. The screens and metrics are developed in accordance with specific Market Rules requirements and are divided into three main categories:

- Verification of bid/offer parameters;
- Evaluation of SEEM matching; and
- Verification of SEEM System Constraints.

The following three subsections describe the screens used for our auditing. Unless otherwise indicated, these screens are calculated daily for all fifteen-minute intervals.

1. Bid/Offer Parameters

The following screens audit the information provided in participant bids and offers.

- Offers (bids) from a participant must have Participant-Specific Constraints identifying at least three other non-affiliated Participants that can be matched as counterparties;
- All offers and bids must include a source or sink;
- Each offer and bid must have a delivery interval;
- Bids and offers must be 4 MW increments;
- "All or Nothing Selection" must be indicated; and
- The Network Map must be accurate (monthly).

2. Matching

The following screens are used to audit the SEEM matches:

- Match price must not exceed the bid price and must be greater than the offer price;
- Buyer and seller must be distinct participants;
- Participant-specific constraints must be check for any changes (monthly);
- SEEM benefit calculation must be verified;
- Any maximum offer price declared must bind the transaction; and
- Each match must have a NERC Tag.

3. Constraints

The following screens audit the SEEM constraints.

- Transaction volume must not exceed offer or bid volume;
- The SEEM algorithm must only make energy exchanges that yield positive benefits to both buyer and seller; and
- Transaction volume over each segment must not exceed the segment ATC.

We have data transfer and storage architecture in place to receive SEEM data that supports the calculation of these screens. Apart from screening the network map and the participant-specific constraints (described below), the screens are calculated daily, and we have developed data processing procedures for each of the daily screens. We applied the screens to the February SEEM data and found that in all intervals the screens have indicated that requirements have been met.

For the monthly audit of the network map, we use the initial map developed by Hartigen and the SEEM working groups as a basis for comparing subsequent maps. This map is an electronic file of all sources, sinks, balancing areas, and SEEM transmission segments that comprise the SEEM system. A SEEM segment is an interface between two balancing areas and in many cases is synonymous with the path used by the system. In some cases, the segments are linked together to allow SEEM matches across multiple systems, forming a multi-segment path. The SEEM model allows any number of SEEM segments to be linked in order to find a beneficial trade.

By using this initial map as a basis of comparison, we will take advantage of the lengthy technical process used by SEEM and the SEEM members to develop the map and so we assume it is accurate. It would not be practicable to replicate this initial map. To monitor the map over time, we use the SEEM model's static path configuration database that is used by the model to assess possible paths associated with the sources and sinks offered and bid in each interval. We save a snapshot of this database and compare it to the path configuration database used at the start of each month. We identify and evaluate any changes. We found no changes in February and therefore we conclude the network map is accurate for the current sources and sinks participating in SEEM.

In a similar fashion, we evaluate changes to participant-specific constraints. These are counterparties and balancing areas acceptable to each participant for trades in SEEM, as well as any maximum price constraints. In each interval SEEM uses a set of participant-specific constraints for all participant bids and offers. We check each participant for any excluded sellers or buyers and any max price constraints and identify any constraints that changed during the month. There were a series of changes to participant-specific constraints that closed and re-opened trade among a small number of counterparties in February. These changes were more

numerous than usual due to the entry of new participants into the system. We do not find cause for concern.

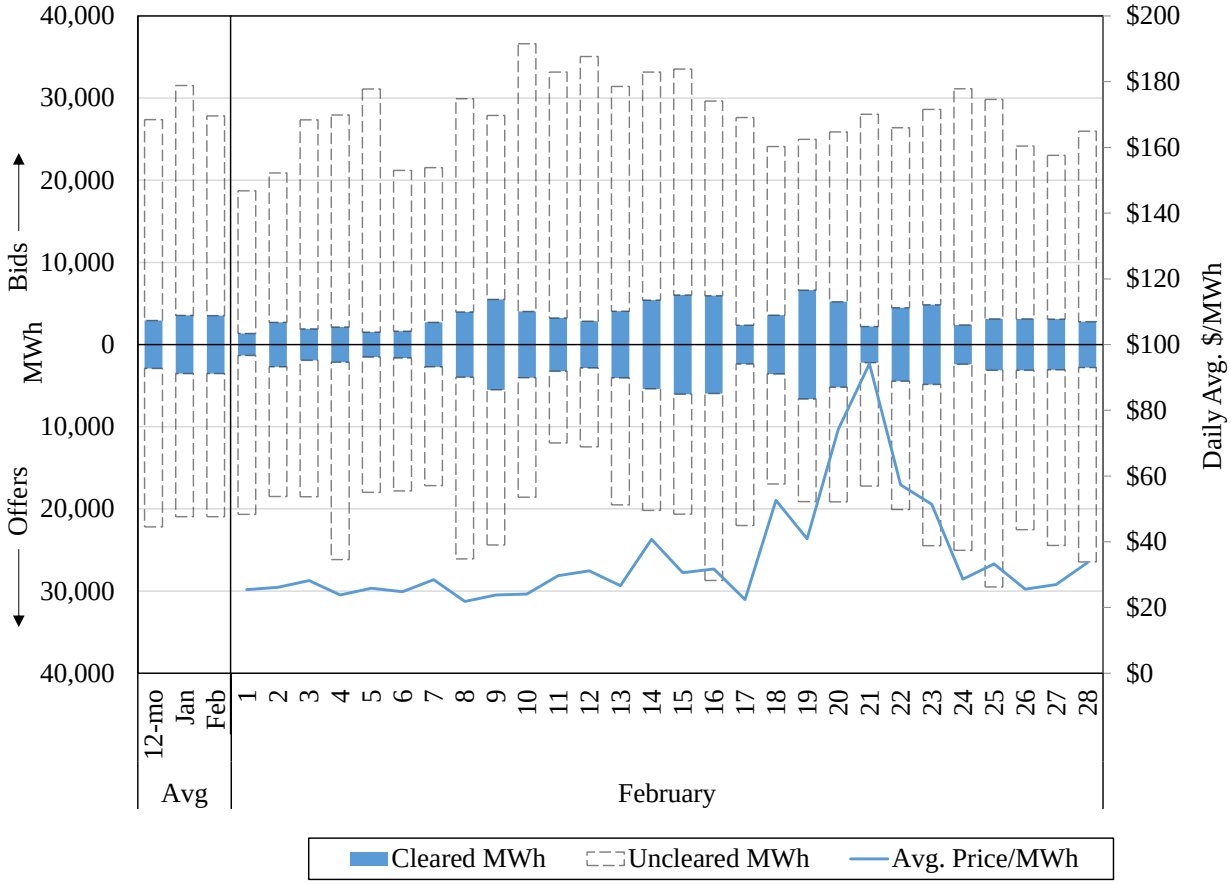
B. Market Activity

In this section, we summarize and discuss SEEM operations and outcomes to illuminate any potential operating or market issues. Our evaluation is in two principal areas. First, is an overall review of the market trading, including volumes, prices, and characteristics of participation. Second is an evaluation of network usage, focusing on the key transmission paths and constraints.

1. Market Outcomes

SEEM cleared nearly 99,000 MWh of energy in February, lower than January and higher than the trailing 12-month average of 87,000 MWh. The average clearing price was $11.5/kWh. Figure 1 shows the daily SEEM bids and offers for February along with the daily average clearing price. Each bar represents the daily total MWh volume of SEEM activity. The bids and offers are divided between cleared bids to buy (blue bar above the x axis) and cleared offers to sell (blue bars below the x axis). The transparent bars stacked above the bids and below the offers are the uncleared bids and offers.

Figure 1: Daily Bids and Offers
February 2025

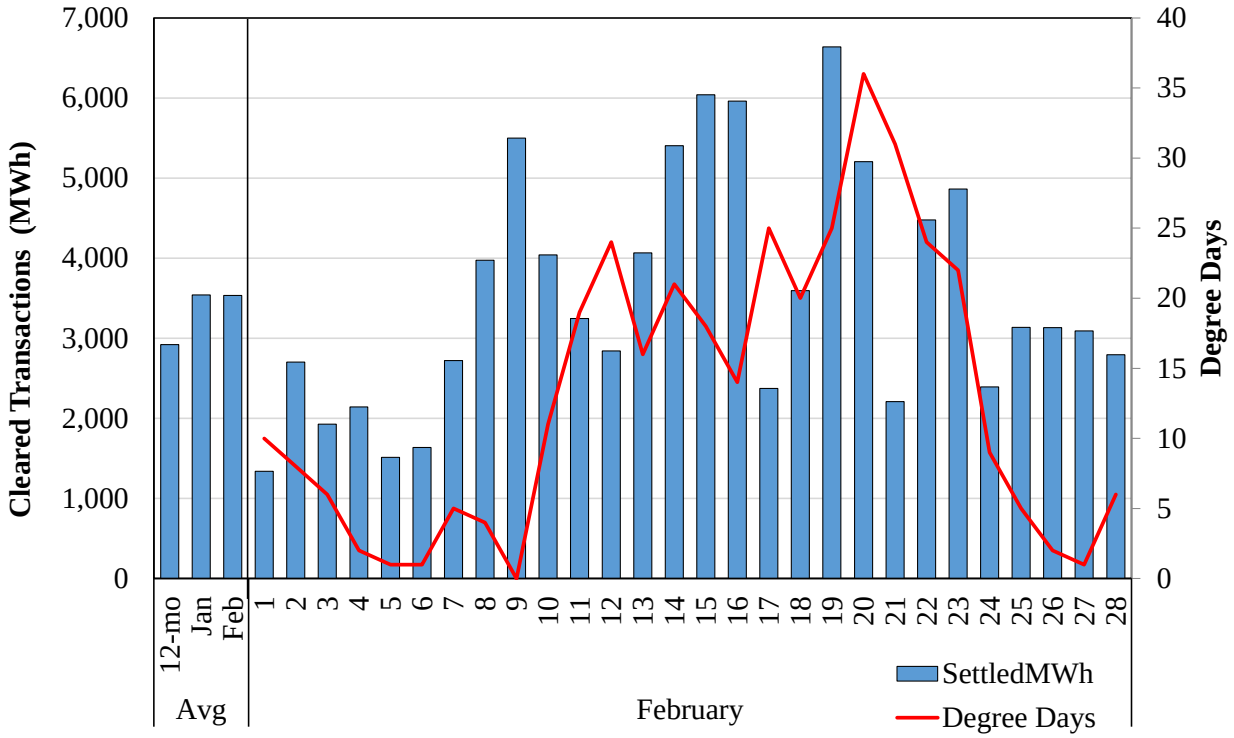


The left side columns show activity relative to the previous month and relative to the 12-month rolling average. As the left-side monthly and the 12-month average bars show, total liquidity (cleared and uncleared bids and offers) was slightly lower than both the 12-month average and lower than January's level.

The individual days in Figure 1 show some variation in offers, bids, and cleared transactions across the month. The cold weather February 20-22 resulted in a decrease in offered quantities, a slight increase in bids, and a sharp increase in clearing price. This market response has been a feature of SEEM in extreme events – supply tends to decline when reliability issues arise. To understand more, Figure 2 shows the daily cleared transactions alone, to better observe the daily variation. We also include a proxy for regional demand, Degree Days (DDs). DDs are common measures of daily temperature levels that measure the demand for cooling and heating.[2]

[2] According to the US National Weather Service, "Degree days are the difference between the daily temperature mean, (high temperature plus low temperature divided by two) and 65°F. If the temperature mean is above 65°F, we subtract 65 from the mean and the result is ***Cooling Degree Days***. If the temperature mean is below 65°F, we

Figure 2: Cleared Transactions and Demand



The chart shows some periods of time when the trading volumes and DD move in opposite direction. However, we found no statistical relationship as measured by the correlation coefficient[3] between Degree Days and trading volumes, indicating trading volumes decline when regional demand peaks.

Below is an extended evaluation going back to November 2023 and other market variables. These are shown in Table 1.

subtract the mean from 65 and the result is ***Heating Degree Days***." For the Figure, we use Degrees Days from Atlanta, GA.

[3] The correlation coefficient is a statistic that measures the relationship between two variables (in our case the cleared volumes and Degree Days). A positive correlation coefficient indicates the variables tend to move in the same direction while a negative correlation coefficient indicates the variables tend to move in opposite directions. A correlation coefficient at or close to zero means there is no linear relationship.

Table 1: Market Correlation Statistics
November 2023 - February 2025

		Correlation Coefficients	
		Degree Days	Price
1	Trade Volume	0.023	0.108
	p value	0.656	0.035
2	Offer Volume	-0.392	-0.160
	p value	0.000	0.002
3	Bid Volume	0.265	0.074
	p value	0.000	0.150
4	Price	0.262	
	p value	0.000	

Note: Highlighted values are statistically significant.

As shown in the table, even extending the time period back, the relationship between DD and cleared trades did not attain statistical significance. (see row 1 of the table).

The Table shows the correlation statistics between market activity (Trades, Offers, and Bids) and DD and Price. Row 1 shows Trade Volume has no statistical relationship with DD. Clearing prices are significant only at the 96 percent level (p value = 0.035). In prior reports, this statistical relationship was stronger and so is worth noting. Both Trade Volume and Clearing Price are cleared equilibrium values, determined by intersection of supply (offers) and demand (bids). When the clearing price and clearing quantity are positively correlated, this indicates a market where demand is fluctuating more than supply. In other words, changes in demand dominates changes in supply.

Row 2 in the table shows a statistically significant *negative* correlation between supply offers and DD, but not between supply offers and clearing price. We would not expect a negative correlation between supply offers and DD based on market fundamentals alone -- with higher regional demand, we would expect more supply to respond. However, resource management also requires recourse to reliability considerations. High DD days can create tight operating conditions and a withdrawal of supply to meet reliability objectives, thus reducing capacity available for economy trades in SEEM. Our discussion with participants supported this logic. Row 2 also shows an absence of correlation between supply offers and price. We would expect a stronger relationship given supply an increase in supply will tend to decrease price. However, if the supply increase is predominately high-priced offers, the price could be unaffected.

In Row 3 of the table, the statistically significant positive correlation between Bid Volume and DD price is expected from economic theory because higher regional demand (DD) will result in more participants seeking power supplies in SEEM. There is no statistical correlation between Bid Volume and clearing price. In theory, the correlation could be in either direction – a positive correlation if the clearing price influenced by higher demand; a negative correlation if the clearing price is dominated by more expensive supply.

Finally, in Row 4 of the correlation matrix in the table reports a positive correlation between price and DD, something that is also expected from economics: high overall demand tends to result in higher prices.

Overall, the absence of a statistical relationship between cleared trades and DD is likely the result of Offer Volume not responding to higher system demand, likely due to reliability constraints, which is not sufficiently offset by higher participant demand. Otherwise, the statistics suggest the market mainly is behaving as expected according to economics.

Figure 3 shows the cleared trades on an historical monthly basis. It shows a variable volume of cleared trades with a notable increase in July 2023 with the addition of Florida participants. The highest volume was February 2024. The figure also shows the trend line. The R-squared indicates 68 percent of the variation in monthly cleared volumes is the result of a time trend. Part of that is the result of new participants, of course, but the trend continues past the major change in membership in June of 2023. The slope of the trend line is 2572, meaning each month the cleared volume increases by about 2572 MWh.

Figure 3: Monthly Volume of Cleared Trades
February 2023 - February 2025

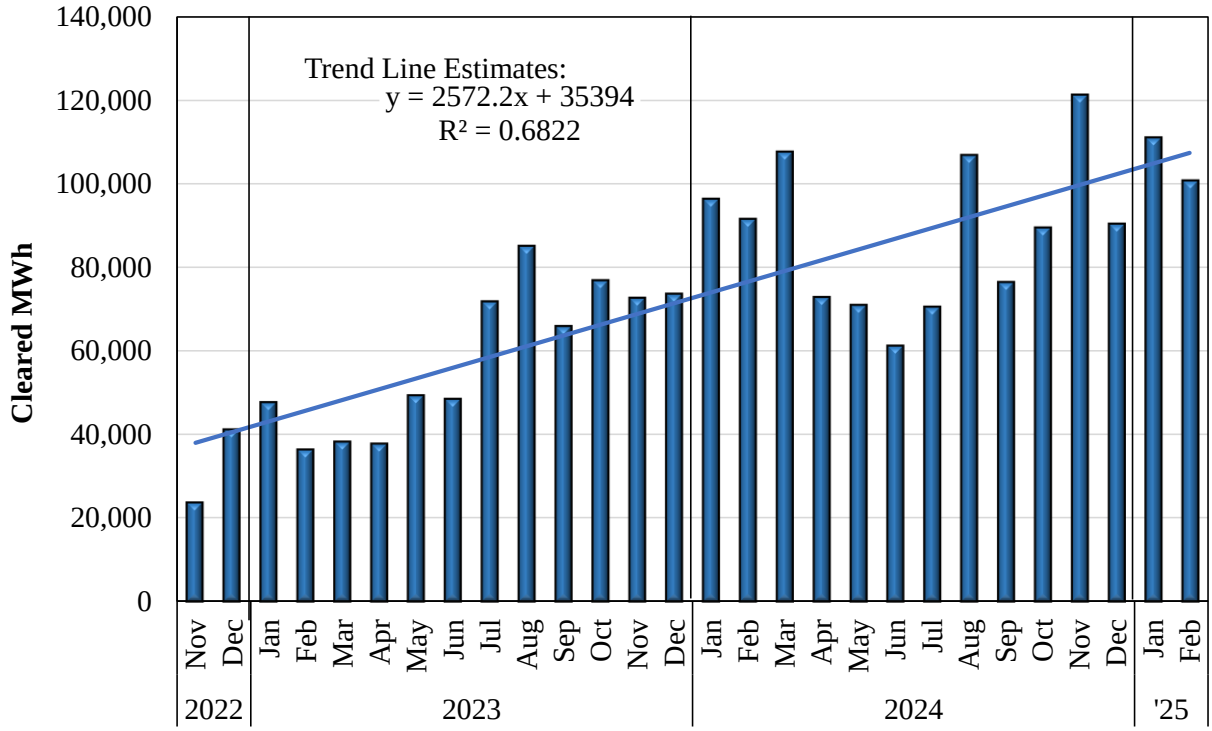
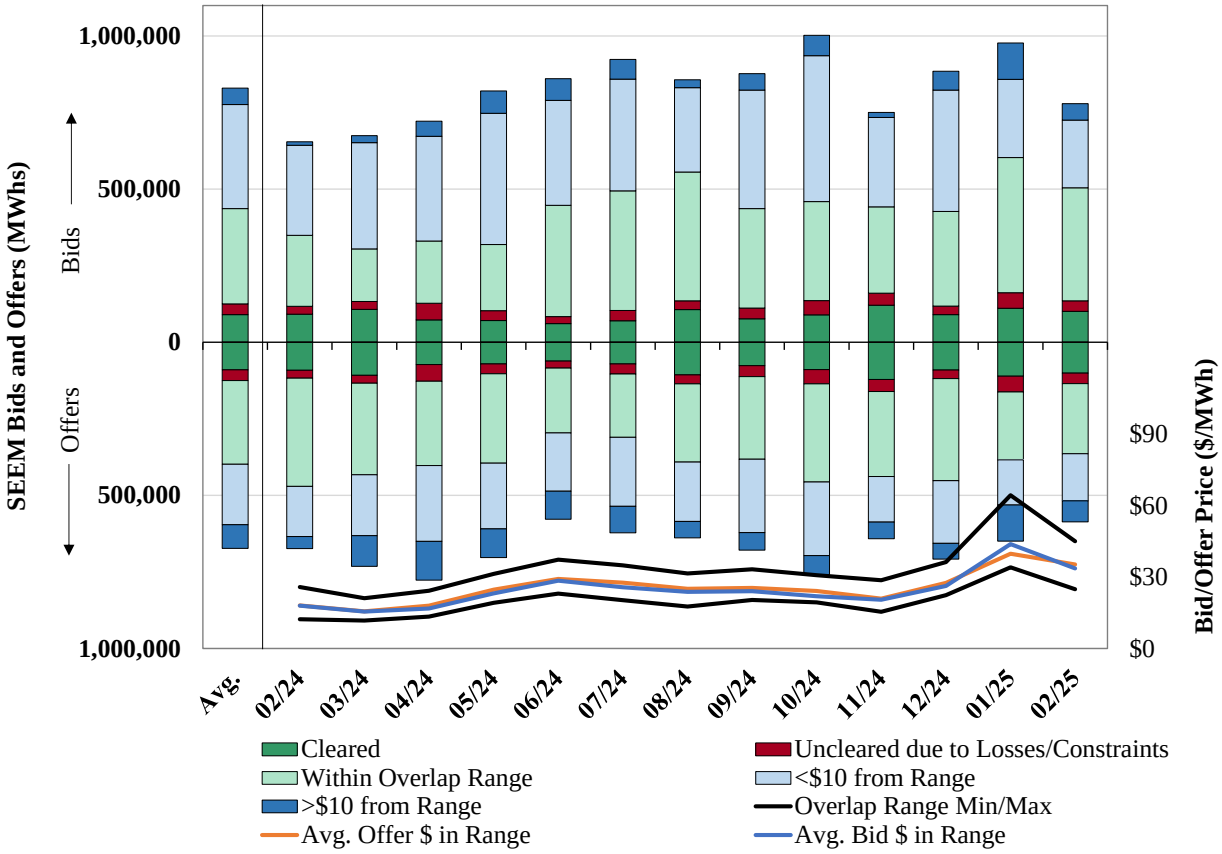


Figure 4 shows our evaluation of market liquidity trends. The dark green bars are the cleared bids and offers. The rest of the bar segments are various categories of uncleared bids and offers:

- The red segment shows uncleared economic bids and offers. These transactions appear to be profitable, but do not clear because of the cost of losses or a constraint (explained more below).
- The light green bars show bids and offers that were not cleared but were within the indicated cleared bid-offer spread – i.e., from the lowest cleared offer to the highest cleared bid. Bids and offers in this group do not clear because there are not sufficient counterparties to clear all of them – i.e., the counterparty bids/offers that could be economic have already been matched to another bid/offer with greater savings.
- The light blue bars show bids/offers within $10 of the overlap range ($10 or less outside the cleared bid-offer range).
- The dark blue bars show bids/offers greater than $10 of the overlap range – i.e., offers to sell that are >$10 higher than this highest bid or offers to buy energy <$10 less than the lowest supply offer. Participants likely do not expect these to clear.

Figure 4: Bid and Offer Evaluation

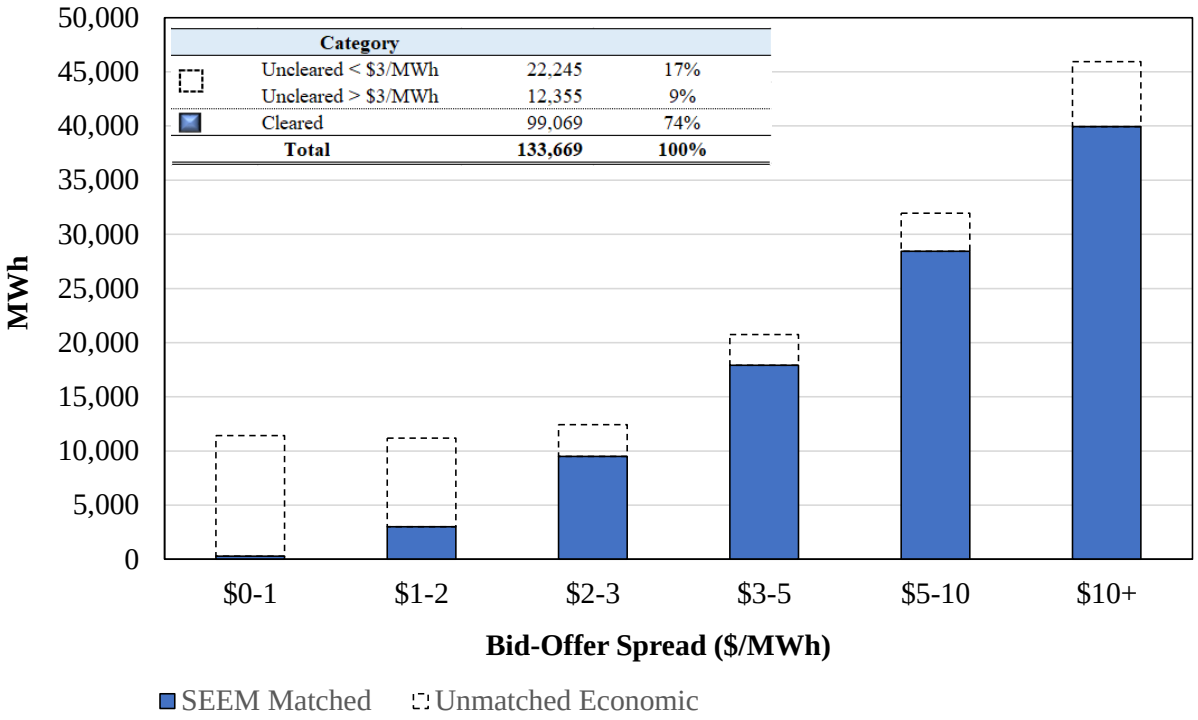


In Figure 4, the total size of the stacked bars (both bids and offers) are an indication of market liquidity. In general, there tends to be more bids (varying around 750,000 MWh) than offers (varying around 600,00 MWh). If one measures liquidity as the sum of all the bar segments (counting the offer segments below the bar in absolute values), the liquidity is not statistically correlated with cleared trades over the trailing 12-month period.

Like in previous months, our evaluation of uncleared bids and offers found a notable volume of uncleared bids and offers with economic overlap in the sense that in an interval there were uncleared bids whose bid price was greater than some uncleared offer prices in the same interval. Of course, most economic uncleared matches have a small bid-offer spread, and likely are not matched due to transmission losses that render the trade uneconomic. However, there are some economic uncleared matches with substantial spreads. Figure 5 shows a summary of the cleared and uncleared matches. Each stacked bar shows the SEEM matches (blue bar) and the economic unmatched (transparent bar) at the given bid-offer spread. For example, the first blue bar shows SEEM matches where bids exceed offers by up to $1 – there are very few because that spread

would not pay most transmission loss cost. The transparent box shows considerable uncleared economic bids and offers that did not clear at spreads up to $1.

Figure 5: Cleared and Uncleared Economic Matches
February 2025



To understand why economic bids and offers may not have cleared, it is useful to examine the bid-offer spread. Average loss charges are roughly $2 per MWh, although some potential economic matches would incur higher loss costs. Therefore, in the inset table, we divide totals between bid-offer spreads above and below $3 per MWh. Those below $3 are likely to have not cleared because of the costs of losses, well most of those that did not clear at spreads above $3 likely did not clear because of transmission constraints or participant constraints. The inset table also shows that over the entire period, 74 percent of the economic transactions cleared. The costs of transmission losses were likely the most significant factor that prevented transactions from clearing. This is because in each of the periods most of the uncleared economic transactions were those with spreads of less than $3 per MWh.

Trades clearing in SEEM offer participants the ability to reduce output from higher-cost resources and replace it with lower-cost ones. In February, the bid-offer spread averaged $11.5/MWh. With 99,000 MWh cleared, there is approximately $1.1 million in production cost savings at least.[4]

[4] There is likely more production cost saving than the data shown because the bids (offers) are likely to by slightly lower than the true cost of buyers (higher than the true cost to sellers) due to the split-the-savings nature of SEEM. In a split-the-savings auction like SEEM, participants will improve their payoff by slightly lowering bids and raising offers in an attempt to get a split closer to their counterparty's bid or offer.

This is the highest monthly production cost savings since the market opened. Figure 6 shows (the lower bound of) estimated production cost savings for each month since SEEM inception. The red line shows the cumulative savings. Cumulative savings are almost $16 million.

Figure 6: Estimated Production Cost Savings

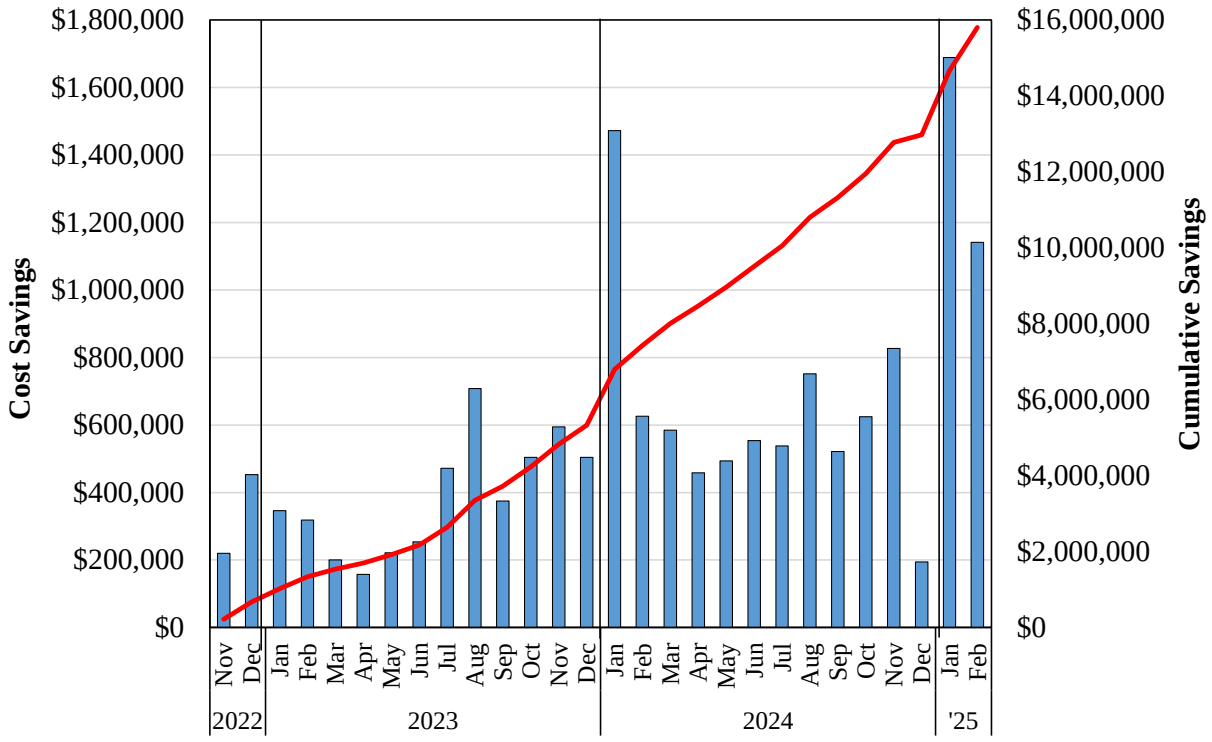
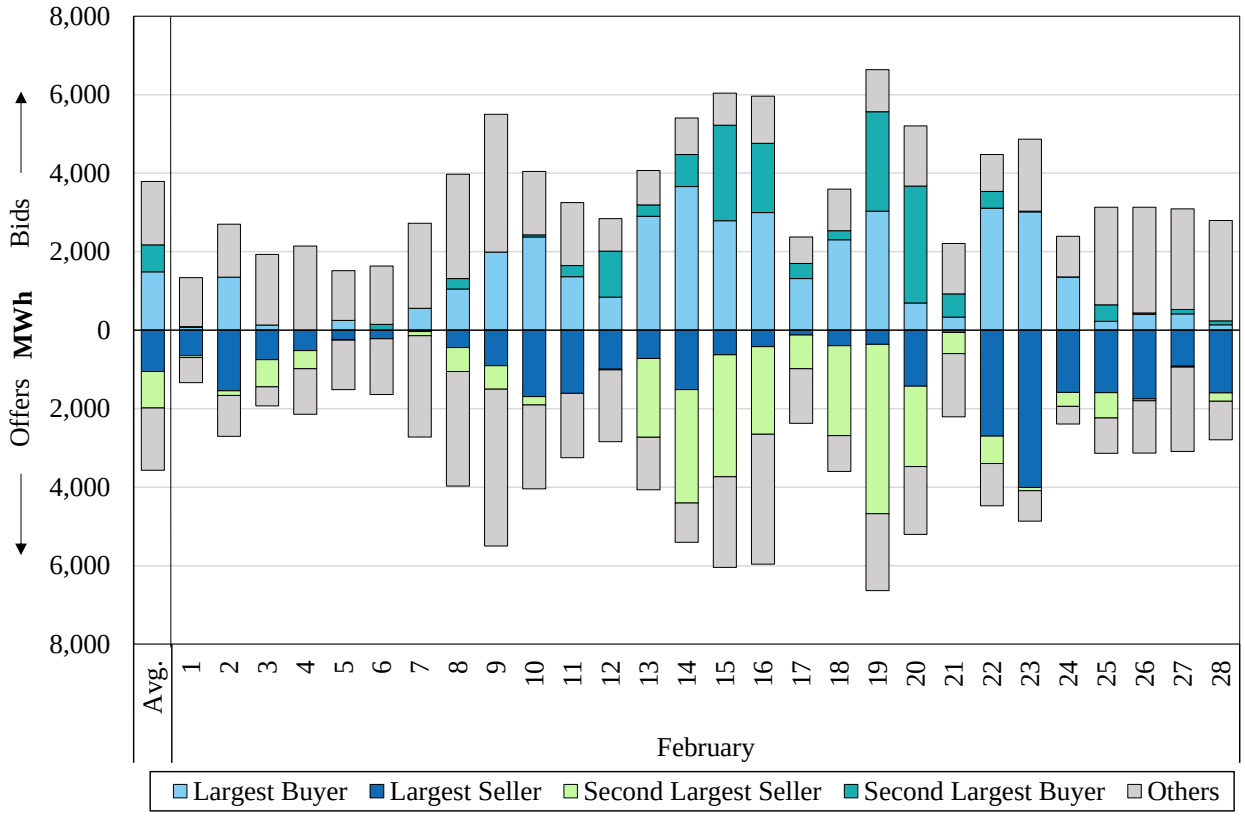


Figure 7 shows more detail on the matched bids and offers by showing the matches by the largest market participants. Like the prior figures, the bars above the *x* axis are cleared bids and the bars below are cleared offers. The bars in this figure are divided by the top two participants and then all the rest.

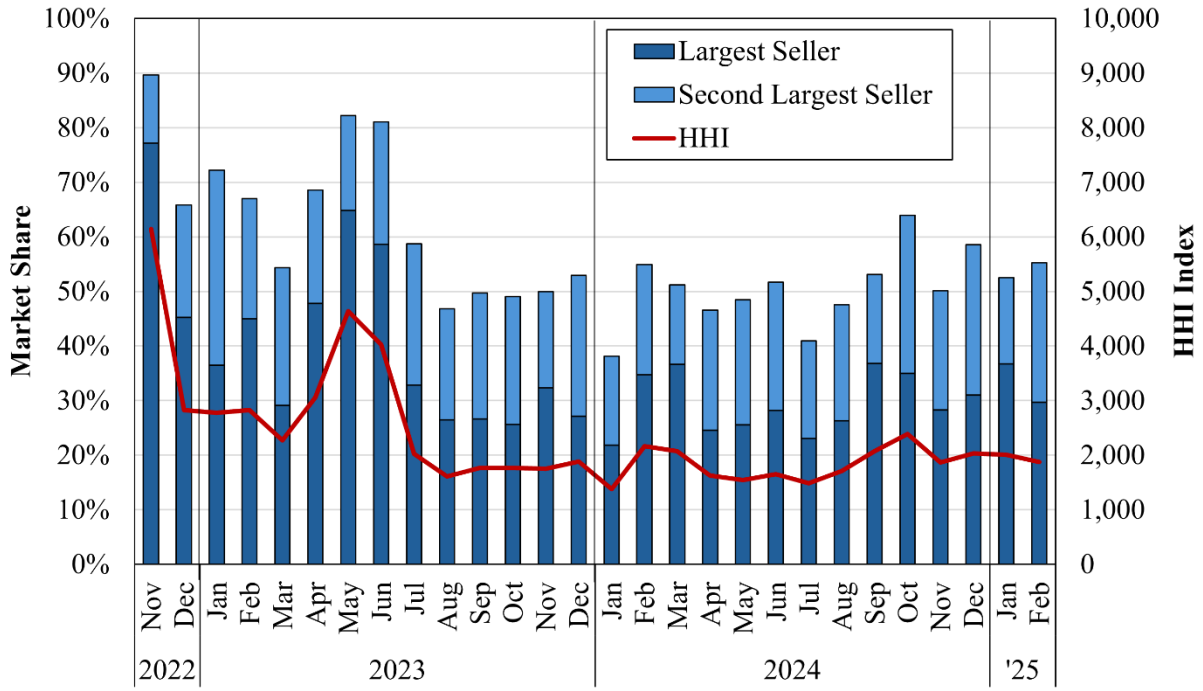
Figure 7: Volumes of Matched Bids and Offers
February 2025



The figure shows certain buyers and sellers comprise significant shares of the transaction activity. For the month, 29 percent of the sales were made by a single seller and 39 percent of the purchases were made by a single buyer.

In the next figures, we present a time series of market shares and concentration. Economists measure market shares to get a general view of the competitiveness of a market. It is not determinative of the existence of market power, but it is useful for an overall view. Figure 8 shows the monthly share of matched transactions of the largest two sellers along with the Herfindahl Hirschmann Index (HHI), defined below. The bars in this figure stack the two top sellers during the month.

Figure 8: Seller Market Share and Concentration Statistics
November 2022 – February 2025

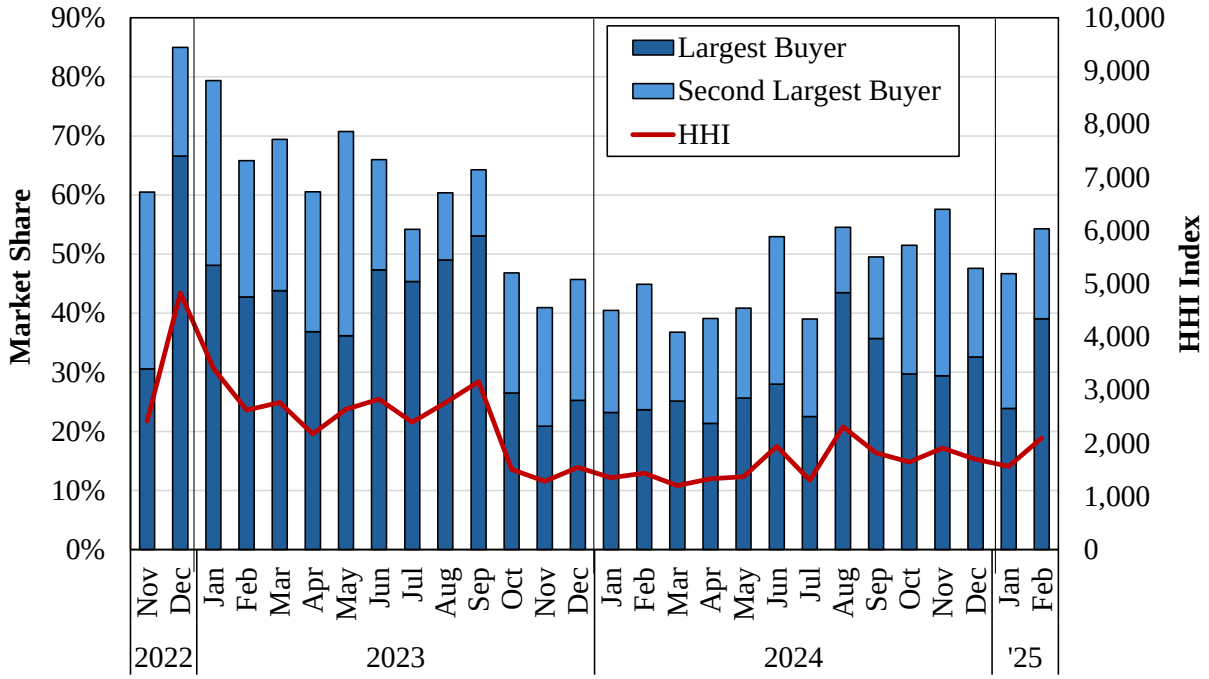


Not surprisingly, the share of the top seller, as well as the share of the top two, declined once the Florida participants fully joined in July 2023. The chart also shows that the HHI has declined. The HHI is a measure of market concentration and is used to determine market competitiveness, often on a relative basis over time or as a result of structural changes like a merger or divestiture. It is calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers. It can range from close to 0 to 10,000, with lower values indicating a less concentrated market. A single-seller monopoly market would have an HHI of 10,000 = 100 x 100. A perfectly competitive market where no firm has an appreciable market share, the HHI is close to zero. The US antitrust agencies (FTC and DOJ) consider markets with:

- HHI greater than 1800 to be highly concentrated;
- one with an HHI between 1000 and 1800 to be moderately concentrated; and
- one with an HHI less than 1000 to be unconcentrated.

The HHI indicates that the SEEM market has been highly concentrated in most months. However, the HHI has come down over time and has remained close to 1800. Although this is close to the highly concentrated range, it has been falling. Figure 9 shows the buyer concentration.

Figure 9: Buyer Market Share and Concentration Statistics
November 2022 – February 2025

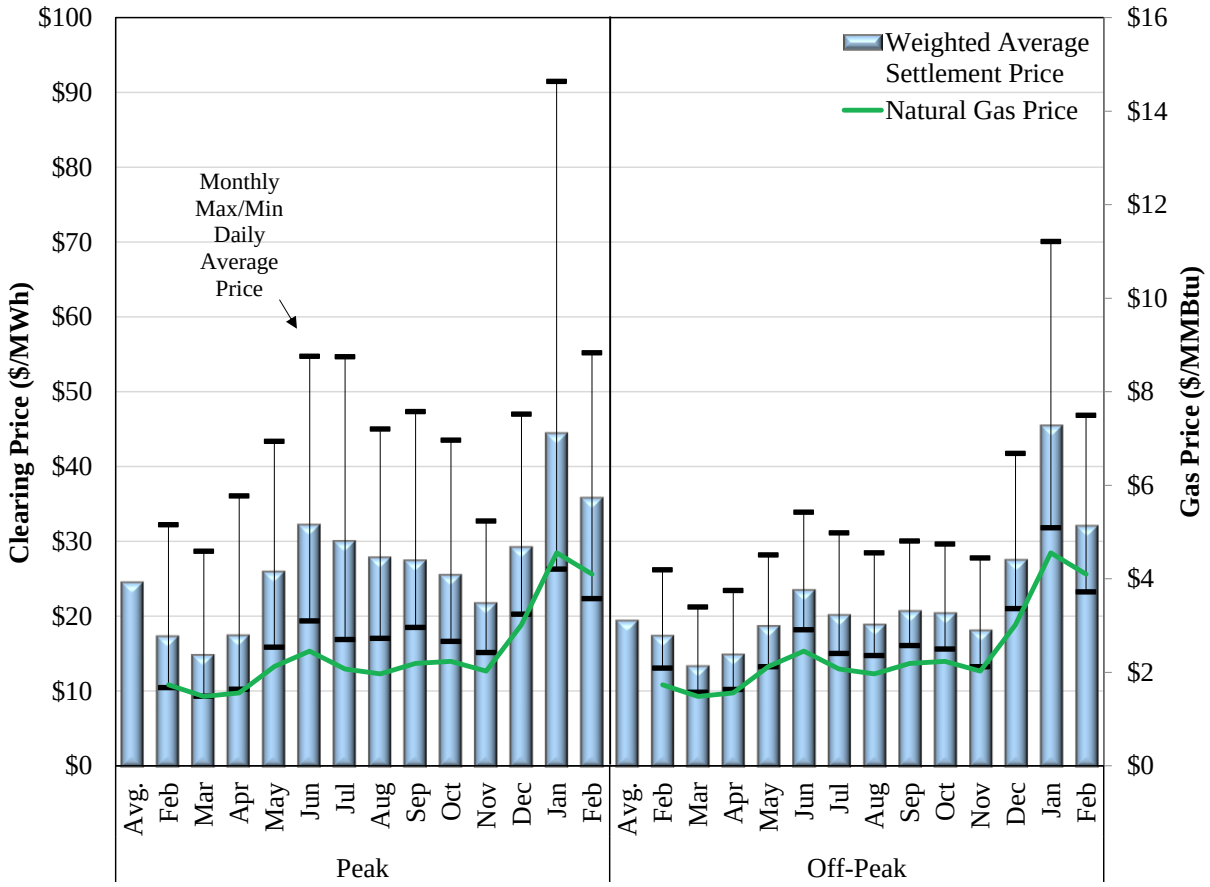


The entry of Florida participants coincided with a decline in buyer concentration. These declines, together with the uptrend in matched trades, are indicative of a market evolving to greater liquidity and competitiveness.

2. Network Usage

In this subsection, we report on the usage of the SEEM network. Figure 10 shows monthly SEEM clearing prices, natural gas costs, and average daily minimum and maximum prices in peak and off-peak hours during the month. The figure shows that prices are correlated with natural gas costs, which is the marginal fuel in many hours and strongly influences the value of power. The superimposed lines over the bars show the price spread over each month.

Figure 10: Monthly Clearing Prices and Natural Gas Costs



The figure shows that both peak and off-peak prices increased in February relative to January and were higher than the 12-month average, consistent with higher natural gas prices. The whisker bars for each month show that the value of transactions can vary significantly, mainly because transmission constraints can contribute to higher prices between different locations. If a constraint prevents higher total flows between two (beneficial trading) areas, the average transaction price will be higher than if sufficient transmission capability was available to allow all beneficial trades to clear between the areas.

Accordingly, we evaluate SEEM transactions by path segments. SEEM trades among participants using ATC. We gathered ATC and trading statistics for all SEEM segments available to the model. In February, there were 293 segments used -- 237 segments for which an ATC value was posted and 56 segments for which no ATC is posted (these are segments that were available on an unlimited basis.[5]) There were 58 segments in SEEM not used. We calculate total segment (MWh) usage for the 293 segments that were used during the month. For segments with ATC values, we

[5] It is not unusual for transmission paths to have no ATC value posted, and not just for the SEEM transmission service (NFEETS), but also longer-term service.

report the median, maximum, and minimum ATC values over all intervals for each segment. For these "ATC segments," we are also able to calculate a "loading factor" based on the scheduled transactions and ATC on the segment during each 15-minute interval. It is the portion of the path used in that interval relative to the maximum amount that could have been used based on the ATC.

In addition to schedule volumes and the ATC statistics, we also calculate how each segment was utilized by interval during the month, *to wit*, the interval was either:

(1) Partially used (MWs cleared were less than ATC or total MWs cleared on a segment without ATC);

(2) Fully Used, ATC was used up for the interval;[6]

(3) Unavailable, no ATC;[7] and

(4) Uncleared (no schedules on the segment).

In reporting the usage of each segment, we refer to a "segment-interval" which is an observation in a single interval on one segment. Table 2 shows an excerpt of our statistics. The table displays the top 30 segments by volume for the month. The full data for all segments is provided in Appendix A. When ATC is listed as "None" this means there was no ATC posted.

[6] ATC less the MW schedule was less than 4 MW (i.e., no additional SEEM transaction could be cleared).

[7] ATC was less than 4 MW at the start of the interval.

Table 2: Statistics for Most Utilized SEEM Segments
February 2025

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/TVA/SOCO-TVA//	0	3,850	4,740	31,467	1.28%	946	35%	6	0%	96	4%	1640	61%
F/FPC/FPC-SOCO//	0	287	367	27,794	16.74%	757	28%	179	7%	269	10%	1483	55%
F/TEC/TEC-FPC//	800	2,671	3,771	14,955	0.85%	1,201	45%	0	0%	0	0%	1487	55%
F/FPC/TEC-SOCO//	0	292	367	11,545	6.90%	893	33%	35	1%	265	10%	1495	56%
S/SC/SOCO-SC//	748	1,378	2,417	9,974	1.04%	519	19%	0	0%	0	0%	2169	81%
SS/SOCO/SOCO-TVA//	-196	1,699	2,755	9,552	0.85%	297	11%	16	1%	48	2%	2327	87%
S/MEAG/FPC-TVA//	None	None	None	7,305	0.00%	327	12%	0	0%	0	0%	2361	88%
S/CPL/SC-CPLE//	0	2,038	3,156	7,298	0.54%	379	14%	0	0%	15	1%	2294	85%
S/SC/SOCO-CPLE//	1,487	2,531	2,855	6,562	0.39%	299	11%	0	0%	0	0%	2389	89%
SS/SOCO/FL-TVA/MULTIPATHALIAS/	-196	992	1,484	6,508	1.05%	393	15%	0	0%	48	2%	2247	84%
SS/SOCO/FL-SOCO//	56	1,016	1,484	6,241	0.94%	381	14%	0	0%	0	0%	2307	86%
SS/SOCO/SOCO-SC//	42	399	576	6,016	2.49%	244	9%	25	1%	0	0%	2419	90%
SS/SOCO/FL-SC/MULTIPATHALIAS/	42	392	576	5,854	2.53%	392	15%	7	0%	0	0%	2289	85%
S/SCEG/SOCO-SCEG//	98	1,303	2,434	5,209	0.60%	488	18%	0	0%	0	0%	2200	82%
S/DUK/SOCO-DUK//	334	1,845	2,220	5,148	0.43%	199	7%	0	0%	0	0%	2489	93%
P/LGEE/LGEE-TVA//	0	1,623	1,623	4,879	0.49%	221	8%	2	0%	35	1%	2430	90%
S/TVA/DUK-TVA//	0	426	426	4,674	1.76%	259	10%	0	0%	168	6%	2261	84%
S/CPL/CPLE-DUK//	638	3,793	7,752	3,465	0.13%	145	5%	0	0%	0	0%	2543	95%
SS/SOCO/SOCO-SOCO//	43,186	46,312	46,312	3,440	0.01%	183	7%	0	0%	0	0%	2505	93%
F/FPC/TEC-FPC//	849	2,728	3,820	3,410	0.19%	392	15%	0	0%	0	0%	2296	85%
SS/SOCO/SOCO-DUK//	-17	442	701	3,378	1.22%	135	5%	14	1%	17	1%	2522	94%
F/JEA/SOCO-JEA//	0	417	780	3,263	1.15%	429	16%	0	0%	32	1%	2227	83%
SS/GTC/FPC-TVA//	None	None	None	3,015	0.00%	197	7%	0	0%	0	0%	2491	93%
S/CPL/DUK-CPLE//	0	2,853	7,650	2,814	0.14%	223	8%	1	0%	15	1%	2449	91%
SS/SOCO/SOCO-FL//	988	1,475	1,710	2,762	0.29%	220	8%	0	0%	0	0%	2468	92%
SS/SOCO/FL-SCEG/MULTIPATHALIAS/	0	119	143	2,650	3.84%	266	10%	60	2%	51	2%	2311	86%
S/MEAG/FPC-SC//	None	None	None	2,567	0.00%	251	9%	0	0%	0	0%	2437	91%
F/JEA/JEA-SOCO//	97	660	903	2,443	0.58%	347	13%	0	0%	0	0%	2341	87%
F/FPC/SOCO-FPC//	0	263	443	2,423	1.57%	145	5%	97	4%	328	12%	2118	79%
F/TEC/FPC-TEC//	265	1,639	4,649	2,282	0.21%	212	8%	0	0%	0	0%	2476	92%

The "Uncleared" category indicates that among these most utilized segments, many of them have over 90 percent of their intervals uncleared. There are, however, numerous instances when segments are constrained. A constrained segment is one where either (1) the segment is completely used by SEEM ("Fully Used" column in the table) or (2) ATC is insufficient (less than 4 MW) prior to SEEM matching (the "Unavailable" column in the table).

Table 3 show the summary usage for all segments. During the month, total segment intervals is the product of all 351 segments and the number of intervals during the month. In February, there were 943,488 segment intervals.[8] The two circumstances (Cases (2) and (3)) when a segment is constrained occurred in more than 18,000 segment-intervals and almost always because the ATC was insufficient to schedule (i.e., ATC < 4 MW) rather than because it is fully used by a SEEM match. The most common case in the data was "Uncleared" (Case 4), where ATC was available or there was no ATC posted, but the segment was not used because no beneficial transactions were cleared by the SEEM model over that segment. These cases represent over 96 percent of all segment-intervals. The second most common case was case "Unavailable" (Case 3), where ATC was not sufficient to clear any SEEM transactions (1.9 percent of the time). The third most

[8] The maximum number of segment intervals in a month is (351 segments x 4 intervals x 24 hours x #days in the month). This is the maximum because occasionally the system requires shutting down for short periods to perform upgrades and other patches. In February, SEEM operated in all intervals.

common case was "Partially Used" (Case 1), where the segment was partially used (1.8 percent of the time). Finally, in a small number of intervals, the Segment ATC was "Fully Used" (Case 2), where the segment was completely scheduled in the interval (1,210 intervals).

Table 3: Summary of All Segments
February 2025

Segment	Case 1 Partially Used		Case 2 Fully Used		Case 3 Unavailable		Case 4 Uncleared	
	Intervals	%	Intervals	%	Intervals	%	Intervals	%
All Segments	17,023	1.8%	548	0.1%	18,063	1.9%	907,854	96.2%

Measuring transmission capacity congestion by adding Case 2 and 3, the percentage of constrained segment intervals was 2.0 percent in February (versus 3.0 percent in January). Overall, these results indicate that transmission was generally available to facilitate economic transactions in the SEEM region. As we discussed above, transmission loss costs were likely the main factor in preventing economic trades from being consummated than transmission constraints.

Further insight into constrained segments can be gained from Table 4. It shows the 20 segments least often available to SEEM. All segments shown reported ATC of 0 in one or more intervals during the month (ATC Min=0). In some intervals there were at least some cleared trades. Like in previous months, these frequently unavailable paths are in many intervals unused when they are available (as indicated by the "Uncleared" column). Overall, the evaluation of individual segments indicates the system is largely unconstrainted for SEEM activity.

Table 4: Most Constrained SEEM Segments
February 2025

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/AECI/AECI-TVA//	0	5	591	100	0.15%	13	*0%*	0	*0%*	1,304	*49%*	1371	*51%*
S/TVA/AECI-TVA//	0	24	512	0	0.00%	0	*0%*	0	*0%*	1,300	*48%*	1388	*52%*
S/TVA/AECI-DUK//	0	24	440	90	0.12%	5	*0%*	6	*0%*	957	*36%*	1720	*64%*
S/TVA/AECI-SOCO//	0	24	512	9	0.01%	2	*0%*	0	*0%*	944	*35%*	1742	*65%*
S/TVA/AECI-CPLW//	0	24	308	1	0.00%	0	*0%*	1	*0%*	944	*35%*	1743	*65%*
S/TVA/AECI-LGEE//	0	24	512	0	0.00%	0	*0%*	0	*0%*	920	*34%*	1768	*66%*
S/TVA/LGEE-AECI//	0	725	725	55	0.02%	4	*0%*	0	*0%*	593	*22%*	2091	*78%*
S/TVA/DUK-AECI//	0	426	426	60	0.03%	4	*0%*	0	*0%*	439	*16%*	2245	*84%*
F/FPC/SOCO-TEC//	0	251	443	137	0.09%	15	*1%*	0	*0%*	436	*16%*	2237	*83%*
F/FPC/SOCO-FPC/SOCO-FPCS/	0	252	443	0	0.00%	0	*0%*	0	*0%*	424	*16%*	2264	*84%*
S/TVA/CPLW-AECI//	0	308	308	15	0.01%	1	*0%*	0	*0%*	421	*16%*	2266	*84%*
F/FPC/SOCO-GVL//	0	154	285	0	0.00%	0	*0%*	0	*0%*	348	*13%*	2340	*87%*
F/FPC/SOCO-FPC//	0	263	443	2,423	1.57%	145	*5%*	97	*4%*	328	*12%*	2118	*79%*
F/FPC/SOCO-SEC/SOCO-SSN/	0	263	443	0	0.00%	0	*0%*	0	*0%*	328	*12%*	2360	*88%*
F/FPC/SEC-SOCO/SSO-SOCO/	0	262	367	0	0.00%	0	*0%*	0	*0%*	325	*12%*	2363	*88%*
S/TVA/TVA-AECI//	0	725	725	0	0.00%	0	*0%*	0	*0%*	321	*12%*	2367	*88%*
S/TVA/SOCO-AECI//	0	725	725	304	0.08%	27	*1%*	0	*0%*	313	*12%*	2348	*87%*
F/FPC/FPC-SOCO//	0	287	367	27,794	16.74%	757	*28%*	179	*7%*	269	*10%*	1483	*55%*
F/FPC/SEC-SOCO/SSN-SOCO/	0	292	367	0	0.00%	0	*0%*	0	*0%*	267	*10%*	2421	*90%*
F/FPC/TEC-SOCO//	0	292	367	11,545	6.90%	893	*33%*	35	*1%*	265	*10%*	1495	*56%*

III. CONCLUSION

We reviewed the operation of SEEM for February 2025. We have developed operational procedures to validate the market rules and constraints of SEEM. All our screens have been validated, and we conclude the SEEM operated within the rules and constraints. We also have evaluated the SEEM outcomes and have not identified significant operating issues.

Appendix A

SEEM Path Usage -- February 2025

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/TVA/SOCO-TVA//	0	3,850	4,740	31,467	1.28%	946	35%	6	0%	96	4%	1640	61%
F/FPC/FPC-SOCO//	0	287	367	27,794	16.74%	757	28%	179	7%	269	10%	1483	55%
F/TEC/TEC-FPC//	800	2,671	3,771	14,955	0.85%	1,201	45%	0	0%	0	0%	1487	55%
F/FPC/TEC-SOCO//	0	292	367	11,545	6.90%	893	33%	35	1%	265	10%	1495	56%
S/SC/SOCO-SC//	748	1,378	2,417	9,974	1.04%	519	19%	0	0%	0	0%	2169	81%
SS/SOCO/SOCO-TVA//	-196	1,699	2,755	9,552	0.85%	297	11%	16	1%	48	2%	2327	87%
S/MEAG/FPC-TVA//	None	None	None	7,305	0.00%	327	12%	0	0%	0	0%	2361	88%
S/CPL/SC-CPLE//	0	2,038	3,156	7,298	0.54%	379	14%	0	0%	15	1%	2294	85%
S/SC/SOCO-CPLE//	1,487	2,531	2,855	6,562	0.39%	299	11%	0	0%	0	0%	2389	89%
SS/SOCO/FL-TVA/MULTIPATHALIAS/	-196	992	1,484	6,508	1.05%	393	15%	0	0%	48	2%	2247	84%
SS/SOCO/FL-SOCO//	56	1,016	1,484	6,241	0.94%	381	14%	0	0%	0	0%	2307	86%
SS/SOCO/SOCO-SC//	42	399	576	6,016	2.49%	244	9%	25	1%	0	0%	2419	90%
SS/SOCO/FL-SC/MULTIPATHALIAS/	42	392	576	5,854	2.53%	392	15%	7	0%	0	0%	2289	85%
S/SCEG/SOCO-SCEG//	98	1,303	2,434	5,209	0.60%	488	18%	0	0%	0	0%	2200	82%
S/DUK/SOCO-DUK//	334	1,845	2,220	5,148	0.43%	199	7%	0	0%	0	0%	2489	93%
P/LGEE/LGEE-TVA//	0	1,623	1,623	4,879	0.49%	221	8%	2	0%	35	1%	2430	90%
S/TVA/DUK-TVA//	0	426	426	4,674	1.76%	259	10%	0	0%	168	6%	2261	84%
S/CPL/CPLE-DUK//	638	3,793	7,752	3,465	0.13%	145	5%	0	0%	0	0%	2543	95%
SS/SOCO/SOCO-SOCO//	43,186	46,312	46,312	3,440	0.01%	183	7%	0	0%	0	0%	2505	93%
F/FPC/TEC-FPC//	849	2,728	3,820	3,410	0.19%	392	15%	0	0%	0	0%	2296	85%
SS/SOCO/SOCO-DUK//	-17	442	701	3,378	1.22%	135	5%	14	1%	17	1%	2522	94%
F/JEA/SOCO-JEA//	0	417	780	3,263	1.15%	429	16%	0	0%	32	1%	2227	83%
SS/GTC/FPC-TVA//	None	None	None	3,015	0.00%	197	7%	0	0%	0	0%	2491	93%
S/CPL/DUK-CPLE//	0	2,853	7,650	2,814	0.14%	223	8%	1	0%	15	1%	2449	91%
SS/SOCO/SOCO-FL//	988	1,475	1,710	2,762	0.29%	220	8%	0	0%	0	0%	2468	92%
SS/SOCO/FL-SCEG/MULTIPATHALIAS/	0	119	143	2,650	3.84%	266	10%	60	2%	51	2%	2311	86%
S/MEAG/FPC-SC//	None	None	None	2,567	0.00%	251	9%	0	0%	0	0%	2437	91%
F/JEA/JEA-SOCO//	97	660	903	2,443	0.58%	347	13%	0	0%	0	0%	2341	87%
F/FPC/SOCO-FPC//	0	263	443	2,423	1.57%	145	5%	97	4%	328	12%	2118	79%
F/TEC/FPC-TEC//	265	1,639	4,649	2,282	0.21%	212	8%	0	0%	0	0%	2476	92%
SS/GTC/GTC-TVA//	0	471	669	2,242	0.76%	88	3%	0	0%	20	1%	2580	96%
F/FPC/FPC-TEC//	355	1,882	5,077	2,145	0.17%	197	7%	0	0%	0	0%	2491	93%
S/TVA/TVA-SOCO//	4,410	4,910	4,980	1,953	0.06%	60	2%	0	0%	0	0%	2628	98%
S/TVA/LGEE-TVA//	0	3,000	3,000	1,913	0.11%	86	3%	3	0%	236	9%	2363	88%
SS/SOCO/DUK-SOCO//	431	963	1,019	1,900	0.31%	78	3%	0	0%	0	0%	2610	97%
S/SC/SC-SOCO//	353	3,040	3,545	1,833	0.09%	164	6%	0	0%	0	0%	2524	94%
SS/SOCO/TVA-SOCO//	686	1,276	1,460	1,811	0.22%	55	2%	0	0%	0	0%	2633	98%
S/DUK/DUK-TVA//	0	692	692	1,767	0.44%	161	6%	2	0%	183	7%	2342	87%
SS/SOCO/SOCO-SCEG//	0	119	143	1,491	2.15%	84	3%	35	1%	51	2%	2518	94%
S/DUK/DUK-SOCO//	467	2,219	2,335	1,483	0.10%	163	6%	0	0%	0	0%	2525	94%
SS/GTC/GTC-SC//	63	263	286	1,472	0.87%	62	2%	0	0%	0	0%	2626	98%
S/DUK/SOCO-TVA//	92	692	692	1,418	0.31%	40	1%	4	0%	0	0%	2644	98%
S/DUK/CPLE-TVA//	0	692	692	1,399	0.34%	59	2%	0	0%	168	6%	2461	92%
S/TVA/LGEE-DUK//	0	440	440	1,320	0.46%	72	3%	0	0%	58	2%	2558	95%
S/DUK/TVA-CPLE//	52	692	6,151	1,306	0.26%	73	3%	0	0%	0	0%	2615	97%
SS/GTC/FPC-DUK//	None	None	None	1,280	0.00%	77	3%	0	0%	0	0%	2611	97%
S/DUK/CPLE-SOCO//	1,708	2,230	2,335	1,177	0.08%	86	3%	0	0%	0	0%	2602	97%
SS/GTC/SOCO-TVA//	None	None	None	1,166	0.00%	44	2%	0	0%	0	0%	2644	98%
S/CPL/CPLE-SC//	0	3,155	4,401	1,093	0.05%	75	3%	0	0%	7	0%	2606	97%
S/SC/CPLE-SC//	619	1,720	2,542	1,085	0.09%	73	3%	0	0%	0	0%	2615	97%
S/CPL/DUK-TVA//	0	308	308	1,058	0.52%	56	2%	0	0%	15	1%	2617	97%
S/TVA/CPLW-TVA//	0	308	308	1,043	0.52%	55	2%	0	0%	58	2%	2575	96%
S/CPL/SCEG-CPLE//	0	817	817	1,010	0.19%	99	4%	0	0%	18	1%	2571	96%
S/DUK/TVA-DUK//	52	692	4,042	976	0.20%	34	1%	0	0%	0	0%	2654	99%
S/MEAG/SOCO-MEAG//	2,735	3,095	3,295	959	0.05%	71	3%	0	0%	0	0%	2617	97%
S/TVA/TVA-DUK//	0	440	440	938	0.33%	27	1%	1	0%	103	4%	2557	95%
S/TVA/LGEE-SOCO//	0	3,000	3,000	926	0.05%	73	3%	0	0%	236	9%	2379	89%
S/CPL/TVA-DUK//	0	308	308	925	0.45%	40	1%	4	0%	4	0%	2640	98%
S/SCEG/SOCO-CPLE//	1,028	4,379	6,705	925	0.03%	95	4%	0	0%	0	0%	2593	96%
S/DUK/CPLE-CPLW//	0	454	454	889	0.30%	45	2%	0	0%	5	0%	2638	98%

Appendix A (continued)

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/SCEG/CPLE-SCEG//	497	1,987	3,410	867	0.07%	71	3%	0	0%	0	0%	2617	97%
S/CPL/CPLE-SCEG//	0	567	567	862	0.23%	71	3%	0	0%	8	0%	2609	97%
S/MEAG/FPC-DUK//	None	None	None	862	0.00%	79	3%	0	0%	0	0%	2609	97%
SS/SOCO/FL-DUK/MULTIPATHALIAS/	-17	434	701	860	0.32%	109	4%	0	0%	17	1%	2562	95%
S/MEAG/FPC-MEAG//	0	160	208	844	0.85%	92	3%	0	0%	44	2%	2552	95%
SS/GTC/FPC-SCEG//	None	None	None	843	0.00%	103	4%	0	0%	0	0%	2585	96%
SS/SOCO/SC-TVA/MULTIPATHALIAS/	-196	409	476	825	0.33%	69	3%	3	0%	48	2%	2568	96%
S/DUK/DUK-SC//	0	1,909	2,582	786	0.06%	123	5%	0	0%	3	0%	2562	95%
S/SC/DUK-SC//	857	1,589	2,494	786	0.07%	123	5%	0	0%	0	0%	2565	95%
S/DUK/CPLW-CPLE//	273	1,093	1,243	774	0.11%	39	1%	0	0%	0	0%	2649	99%
S/SC/SC-CPLE//	347	2,450	3,099	736	0.05%	99	4%	0	0%	0	0%	2589	96%
S/TVA/LGEE-CPLW//	0	308	308	665	0.35%	31	1%	1	0%	180	7%	2476	92%
S/SCEG/DUK-SCEG//	132	2,052	3,597	655	0.05%	120	4%	0	0%	0	0%	2568	96%
S/DUK/SOCO-CPLE//	728	1,845	2,220	600	0.05%	106	4%	0	0%	0	0%	2582	96%
S/MEAG/MEAG-SOCO//	2,401	2,601	2,961	564	0.03%	32	1%	0	0%	0	0%	2656	99%
S/MEAG/SOCO-JEA//	None	None	None	554	0.00%	76	3%	0	0%	0	0%	2612	97%
S/MEAG/FPC-SCEG//	None	None	None	532	0.00%	198	7%	0	0%	0	0%	2490	93%
S/DUK/DUK-SCEG//	0	131	159	524	0.64%	102	4%	0	0%	13	0%	2573	96%
S/DUK/SC-DUK//	528	2,310	2,901	462	0.03%	25	1%	0	0%	0	0%	2663	99%
S/MEAG/GTC-JEA//	None	None	None	437	0.00%	79	3%	0	0%	0	0%	2609	97%
SS/GTC/FPC-MEAG//	None	None	None	437	0.00%	79	3%	0	0%	0	0%	2609	97%
S/AECI/TVA-AECI//	0	655	746	434	0.11%	30	1%	5	0%	13	0%	2640	98%
SS/GTC/FPC-SC//	None	None	None	425	0.00%	57	2%	0	0%	0	0%	2631	98%
S/SCEG/SC-SCEG//	634	3,379	8,783	401	0.02%	72	3%	0	0%	0	0%	2616	97%
SS/GTC/GTC-DUK//	0	261	444	350	0.21%	11	0%	8	0%	57	2%	2612	97%
S/SCEG/SCEG-SOCO//	673	1,861	5,088	337	0.03%	32	1%	0	0%	0	0%	2656	99%
SS/GTC/SC-TVA//	None	None	None	331	0.00%	21	1%	0	0%	0	0%	2667	99%
S/SC/SC-DUK//	342	2,700	3,468	323	0.02%	35	1%	0	0%	0	0%	2653	99%
SS/SOCO/DUK-FL/MULTIPATHALIAS/	431	963	1,019	320	0.05%	59	2%	0	0%	0	0%	2629	98%
S/MEAG/JEA-TVA//	None	None	None	310	0.00%	54	2%	0	0%	0	0%	2634	98%
S/TVA/SOCO-AECI//	0	725	725	304	0.08%	27	1%	0	0%	313	12%	2348	87%
S/MEAG/FPC-SOCO//	None	None	None	296	0.00%	41	2%	0	0%	0	0%	2647	98%
SS/GTC/GTC-SOCO//	20,000	20,000	20,000	263	0.00%	18	1%	0	0%	0	0%	2670	99%
S/TVA/TVA-CPLW//	0	308	308	259	0.13%	11	0%	0	0%	37	1%	2640	98%
S/SC/SOCO-DUK//	1,487	2,531	2,855	253	0.02%	10	0%	0	0%	0	0%	2678	100%
SS/SOCO/TVA-FL/MULTIPATHALIAS/	686	1,273	1,460	253	0.03%	28	1%	0	0%	0	0%	2660	99%
S/SC/SOCO-SCEG//	335	1,364	2,531	233	0.03%	45	2%	0	0%	0	0%	2643	98%
SS/GTC/JEA-TVA//	None	None	None	217	0.00%	26	1%	0	0%	0	0%	2662	99%
SS/GTC/GTC-FPC//	633	947	1,074	212	0.03%	31	1%	0	0%	0	0%	2657	99%
SS/GTC/TVA-SCEG//	None	None	None	212	0.00%	26	1%	0	0%	0	0%	2662	99%
SS/GTC/SOCO-GTC//	12,207	13,542	14,952	187	0.00%	4	0%	0	0%	0	0%	2684	100%
SS/GTC/SOCO-DUK//	None	None	None	181	0.00%	7	0%	0	0%	0	0%	2681	100%
S/MEAG/DUK-FPC//	None	None	None	180	0.00%	65	2%	0	0%	0	0%	2623	98%
SS/SOCO/SC-FL/MULTIPATHALIAS/	90	409	476	177	0.07%	25	1%	1	0%	0	0%	2662	99%
S/SC/SC-SCEG//	375	3,150	5,307	168	0.01%	27	1%	0	0%	0	0%	2661	99%
SS/GTC/SOCO-SC//	None	None	None	161	0.00%	10	0%	0	0%	0	0%	2678	100%
S/MEAG/DUK-JEA//	None	None	None	157	0.00%	31	1%	0	0%	0	0%	2657	99%
SS/GTC/JEA-DUK//	None	None	None	154	0.00%	25	1%	0	0%	0	0%	2663	99%
S/DUK/CPLW-DUK//	233	1,074	1,243	151	0.02%	5	0%	0	0%	0	0%	2683	100%
S/MEAG/GTC-MEAG//	1,680	2,048	2,205	141	0.01%	13	0%	0	0%	0	0%	2675	100%
S/DUK/DUK-CPLE//	2,447	4,248	6,250	140	0.00%	28	1%	0	0%	0	0%	2660	99%
S/MEAG/MEAG-JEA//	93	204	317	139	0.10%	25	1%	0	0%	0	0%	2663	99%
SS/SOCO/TVA-SCEG/MULTIPATHALIAS/	0	119	143	139	0.20%	12	0%	12	0%	51	2%	2613	97%
S/MEAG/SC-JEA//	None	None	None	138	0.00%	25	1%	0	0%	0	0%	2663	99%
F/FPC/SOCO-TEC//	0	251	443	137	0.09%	15	1%	0	0%	436	16%	2237	83%
S/MEAG/MEAG-SC//	0	56	70	133	0.37%	9	0%	6	0%	84	3%	2589	96%
SS/SOCO/TVA-SC/MULTIPATHALIAS/	42	399	576	130	0.05%	4	0%	1	0%	0	0%	2683	100%
S/MEAG/SC-TVA//	None	None	None	125	0.00%	28	1%	0	0%	0	0%	2660	99%
SS/GTC/GTC-MEAG//	9,609	9,975	9,999	125	0.00%	9	0%	0	0%	0	0%	2679	100%
S/DUK/SC-TVA//	0	692	692	113	0.03%	14	1%	0	0%	196	7%	2478	92%

Appendix A (continued)

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
SS/SOCO/SCEG-TVA/MULTIPATHALIAS/	-196	149	208	112	0.12%	12	0%	1	0%	48	2%	2627	98%
SS/GTC/GTC-JEA//	633	947	1,074	110	0.02%	20	1%	0	0%	0	0%	2668	99%
SS/GTC/TVA-DUK//	None	None	None	109	0.00%	5	0%	0	0%	0	0%	2683	100%
S/AECI/AECI-TVA//	0	5	591	100	0.15%	13	0%	0	0%	1,304	49%	1371	51%
SS/GTC/SCEG-JEA//	None	None	None	95	0.00%	9	0%	0	0%	0	0%	2679	100%
SS/GTC/JEA-SC//	None	None	None	92	0.00%	23	1%	0	0%	0	0%	2665	99%
S/DUK/DUK-CPLW//	0	454	454	91	0.03%	7	0%	0	0%	4	0%	2677	100%
S/DUK/SOCO-SCEG//	0	131	159	90	0.11%	13	0%	0	0%	14	1%	2661	99%
S/TVA/AECI-DUK//	0	24	440	90	0.12%	5	0%	6	0%	957	36%	1720	64%
S/MEAG/DUK-MEAG//	23	145	205	89	0.10%	25	1%	0	0%	0	0%	2663	99%
S/MEAG/JEA-SC//	None	None	None	89	0.00%	22	1%	0	0%	0	0%	2666	99%
S/SCEG/SCEG-CPLE//	563	1,486	3,394	85	0.01%	9	0%	0	0%	0	0%	2679	100%
S/MEAG/JEA-MEAG//	0	160	208	80	0.08%	16	1%	0	0%	44	2%	2628	98%
S/DUK/SOCO-CPLW//	0	454	454	78	0.03%	4	0%	0	0%	4	0%	2680	100%
S/MEAG/JEA-DUK//	None	None	None	73	0.00%	21	1%	0	0%	0	0%	2667	99%
S/MEAG/SC-MEAG//	7	33	39	67	0.32%	8	0%	5	0%	0	0%	2675	100%
SS/GTC/GTC-SCEG//	0	65	78	67	0.18%	6	0%	4	0%	212	8%	2466	92%
S/MEAG/JEA-SCEG//	None	None	None	65	0.00%	24	1%	0	0%	0	0%	2664	99%
S/TVA/DUK-AECI//	0	426	426	60	0.03%	4	0%	0	0%	439	16%	2245	84%
S/SCEG/SCEG-DUK//	623	1,676	6,519	56	0.00%	8	0%	0	0%	0	0%	2680	100%
S/TVA/LGEE-AECI//	0	725	725	55	0.02%	4	0%	0	0%	593	22%	2091	78%
S/MEAG/TVA-SCEG//	None	None	None	51	0.00%	19	1%	0	0%	0	0%	2669	99%
SS/GTC/SC-GTC//	0	153	181	47	0.05%	3	0%	0	0%	80	3%	2605	97%
SS/GTC/SC-JEA//	None	None	None	47	0.00%	10	0%	0	0%	0	0%	2678	100%
SS/GTC/SCEG-TVA//	None	None	None	47	0.00%	7	0%	0	0%	0	0%	2681	100%
S/MEAG/TVA-SC//	None	None	None	43	0.00%	4	0%	0	0%	0	0%	2684	100%
SS/GTC/JEA-SCEG//	None	None	None	43	0.00%	18	1%	0	0%	0	0%	2670	99%
SS/GTC/SCEG-FPC//	None	None	None	43	0.00%	7	0%	0	0%	0	0%	2681	100%
S/DUK/TVA-SCEG//	0	131	159	41	0.05%	5	0%	1	0%	14	1%	2668	99%
S/MEAG/TVA-JEA//	None	None	None	40	0.00%	6	0%	0	0%	0	0%	2682	100%
S/MEAG/MEAG-FPC//	93	204	317	39	0.03%	6	0%	0	0%	0	0%	2682	100%
S/MEAG/FPC-GTC//	None	None	None	38	0.00%	6	0%	0	0%	0	0%	2682	100%
SS/GTC/JEA-GTC//	0	636	933	38	0.01%	3	0%	0	0%	12	0%	2673	99%
SS/GTC/MEAG-JEA//	None	None	None	38	0.00%	6	0%	0	0%	0	0%	2682	100%
SS/SOCO/SC-SOCO//	90	409	476	38	0.01%	6	0%	0	0%	0	0%	2682	100%
S/DUK/SCEG-TVA//	0	650	651	37	0.01%	4	0%	0	0%	197	7%	2487	93%
S/MEAG/TVA-DUK//	None	None	None	36	0.00%	2	0%	0	0%	0	0%	2686	100%
S/SC/SCEG-SC//	504	1,205	2,564	34	0.00%	3	0%	0	0%	0	0%	2685	100%
S/SCEG/SCEG-SC//	719	1,654	5,191	34	0.00%	3	0%	0	0%	0	0%	2685	100%
SS/GTC/SCEG-GTC//	65	81	114	33	0.06%	1	0%	1	0%	0	0%	2686	100%
SS/SOCO/TVA-DUK/MULTIPATHALIAS/	-17	442	701	33	0.01%	2	0%	0	0%	17	1%	2669	99%
SS/GTC/TVA-SC//	None	None	None	31	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/FPC-GTC//	0	636	933	30	0.01%	2	0%	0	0%	12	0%	2674	99%
S/MEAG/JEA-SOCO//	None	None	None	29	0.00%	8	0%	0	0%	0	0%	2680	100%
S/DUK/TVA-SOCO//	52	692	2,335	25	0.01%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/DUK-FPC//	None	None	None	25	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/SOCO-SCEG//	None	None	None	23	0.00%	3	0%	0	0%	0	0%	2685	100%
S/MEAG/SC-FPC//	None	None	None	21	0.00%	6	0%	0	0%	0	0%	2682	100%
S/DUK/SCEG-DUK//	499	650	651	19	0.00%	4	0%	0	0%	0	0%	2684	100%
S/MEAG/SOCO-FPC//	None	None	None	18	0.00%	6	0%	0	0%	0	0%	2682	100%
S/MEAG/SOCO-SCEG//	None	None	None	16	0.00%	6	0%	0	0%	0	0%	2682	100%
S/MEAG/MEAG-DUK//	0	54	125	15	0.04%	5	0%	0	0%	258	10%	2425	90%
S/TVA/CPLW-AECI//	0	308	308	15	0.01%	1	0%	0	0%	421	16%	2266	84%
SS/GTC/DUK-GTC//	13	606	640	15	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/SC-FPC//	None	None	None	13	0.00%	3	0%	0	0%	0	0%	2685	100%
SS/GTC/SC-MEAG//	None	None	None	12	0.00%	2	0%	0	0%	0	0%	2686	100%
S/MEAG/SOCO-SC//	None	None	None	9	0.00%	2	0%	0	0%	0	0%	2686	100%
S/MEAG/SOCO-TVA//	None	None	None	9	0.00%	2	0%	0	0%	0	0%	2686	100%
S/TVA/AECI-SOCO//	0	24	512	9	0.01%	2	0%	0	0%	944	35%	1742	65%
S/SC/CPLE-SOCO//	950	3,205	4,249	8	0.00%	2	0%	0	0%	0	0%	2686	100%

Appendix A (continued)

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/MEAG/SCEG-TVA//	None	None	None	7	0.00%	3	0%	0	0%	0	0%	2685	100%
S/CPL/DUK-SCEG//	0	567	567	6	0.00%	1	0%	0	0%	1	0%	2686	100%
SS/GTC/JEA-MEAG//	None	None	None	4	0.00%	2	0%	0	0%	0	0%	2686	100%
S/MEAG/SOCO-DUK//	None	None	None	3	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/SOCO-FPC//	None	None	None	3	0.00%	1	0%	0	0%	0	0%	2687	100%
S/MEAG/MEAG-SCEG//	0	14	17	2	0.02%	0	0%	1	0%	32	1%	2655	99%
S/DUK/SC-SOCO//	271	2,166	2,335	1	0.00%	1	0%	0	0%	0	0%	2687	100%
S/SCEG/CPLE-SOCO//	1,672	99,999	99,999	1	0.00%	1	0%	0	0%	0	0%	2687	100%
S/TVA/AECI-CPLW//	0	24	308	1	0.00%	0	0%	1	0%	944	35%	1743	65%
SS/GTC/FPC-SOCO//	None	None	None	1	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/GTC/SOCO-JEA//	None	None	None	1	0.00%	1	0%	0	0%	0	0%	2687	100%
SS/SOCO/SCEG-FL/MULTIPATHALIAS/	52	149	208	1	0.00%	1	0%	0	0%	0	0%	2687	100%
F/FPC/FPC-FPC/FPC-FPCS/	2,437	3,425	3,860	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/FPC-GVL//	119	179	285	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/FPC-SEC/FPC-SSN/	610	1,139	1,552	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/GVL-FPC//	0	382	507	0	0.00%	0	0%	0	0%	72	3%	2616	97%
F/FPC/GVL-FPC/GVL-FPCS/	0	382	507	0	0.00%	0	0%	0	0%	72	3%	2616	97%
F/FPC/GVL-SEC/GVL-SSN/	133	391	498	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/GVL-SOCO//	0	292	367	0	0.00%	0	0%	0	0%	265	10%	2423	90%
F/FPC/GVL-TEC//	0	387	502	0	0.00%	0	0%	0	0%	92	3%	2596	97%
F/FPC/SEC-FPC/SSN-FPC/	0	833	1,275	0	0.00%	0	0%	0	0%	160	6%	2528	94%
F/FPC/SEC-FPC/SSN-FPCS/	0	833	1,275	0	0.00%	0	0%	0	0%	160	6%	2528	94%
F/FPC/SEC-FPC/SSO-FPC/	0	563	804	0	0.00%	0	0%	0	0%	4	0%	2684	100%
F/FPC/SEC-FPC/SSO-FPCS/	0	563	804	0	0.00%	0	0%	0	0%	4	0%	2684	100%
F/FPC/SEC-GVL/SSN-GVL/	0	173	275	0	0.00%	0	0%	0	0%	60	2%	2628	98%
F/FPC/SEC-GVL/SSO-GVL/	0	172	285	0	0.00%	0	0%	0	0%	88	3%	2600	97%
F/FPC/SEC-SEC/SSO-SSN/	0	796	1,042	0	0.00%	0	0%	0	0%	88	3%	2600	97%
F/FPC/SEC-SOCO/SSN-SOCO/	0	292	367	0	0.00%	0	0%	0	0%	267	10%	2421	90%
F/FPC/SEC-SOCO/SSO-SOCO/	0	262	367	0	0.00%	0	0%	0	0%	325	12%	2363	88%
F/FPC/SEC-TEC/SSN-TEC/	0	879	1,187	0	0.00%	0	0%	0	0%	116	4%	2572	96%
F/FPC/SEC-TEC/SSO-TEC/	0	796	1,042	0	0.00%	0	0%	0	0%	80	3%	2608	97%
F/FPC/SOCO-FPC/SOCO-FPCS/	0	252	443	0	0.00%	0	0%	0	0%	424	16%	2264	84%
F/FPC/SOCO-GVL//	0	154	285	0	0.00%	0	0%	0	0%	348	13%	2340	87%
F/FPC/SOCO-SEC/SOCO-SSN/	0	263	443	0	0.00%	0	0%	0	0%	328	12%	2360	88%
F/FPC/TEC-FPC/TEC-FPCS/	849	2,725	3,576	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/TEC-GVL//	120	179	285	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/FPC/TEC-SEC/TEC-SSN/	722	1,151	1,552	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/JEA/JEA-SEC/JEA-SSN/	215	518	518	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/JEA/SEC-JEA/SSN-JEA/	0	487	487	0	0.00%	0	0%	0	0%	40	1%	2648	99%
F/JEA/SEC-SOCO/SSN-SOCO/	0	628	637	0	0.00%	0	0%	0	0%	40	1%	2648	99%
F/JEA/SOCO-SEC/SOCO-SSN/	163	502	522	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/SEC/FPC-JEA//	0	612	637	0	0.00%	0	0%	0	0%	44	2%	2644	98%
F/SEC/FPC-SEC/FPC-SSN/	610	1,139	1,552	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/SEC/JEA-FPC//	0	637	637	0	0.00%	0	0%	0	0%	96	4%	2592	96%
F/SEC/JEA-SEC/JEA-SSN/	333	637	637	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/SEC/SEC-FPC/SSN-FPC/	0	827	1,268	0	0.00%	0	0%	0	0%	160	6%	2528	94%
F/SEC/SEC-FPC/SSO-FPC/	0	563	804	0	0.00%	0	0%	0	0%	4	0%	2684	100%
F/SEC/SEC-JEA/SSN-JEA/	0	612	637	0	0.00%	0	0%	0	0%	40	1%	2648	99%
F/SEC/SEC-TEC/SSO-TEC/	0	729	729	0	0.00%	0	0%	0	0%	80	3%	2608	97%
F/SEC/TEC-FPC//	399	729	729	0	0.00%	0	0%	0	0%	0	0%	2688	100%
F/SEC/TEC-SEC/TEC-SSO/	0	321	679	0	0.00%	0	0%	0	0%	20	1%	2668	99%
F/TEC/SEC-FPC/SSO-FPC/	0	729	729	0	0.00%	0	0%	0	0%	80	3%	2608	97%
F/TEC/SEC-TEC/SSO-TEC/	0	729	729	0	0.00%	0	0%	0	0%	80	3%	2608	97%
F/TEC/TEC-SEC/TEC-SSO/	0	321	679	0	0.00%	0	0%	0	0%	20	1%	2668	99%
P/LGEE/TVA-LGEE//	0	1,421	1,424	0	0.00%	0	0%	0	0%	8	0%	2680	100%
S/CPL/CPLW-DUK//	235	954	1,586	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/CPL/CPLW-TVA//	0	308	308	0	0.00%	0	0%	0	0%	195	7%	2493	93%
S/CPL/DUK-CPLW//	368	900	900	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/CPL/DUK-SC//	1,157	3,163	4,401	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/CPL/SC-DUK//	1,126	2,467	4,560	0	0.00%	0	0%	0	0%	0	0%	2688	100%

Appendix A (continued)

Segment	ATC				Loading	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/CPL/SC-SCEG//	383	567	567	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/CPL/SCEG-DUK//	0	817	817	0	0.00%	0	0%	0	0%	4	0%	2684	100%
S/CPL/SCEG-SC//	601	817	817	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/CPL/TVA-CPLW//	0	308	308	0	0.00%	0	0%	0	0%	4	0%	2684	100%
S/DUK/CPLE-DUK//	262	4,387	6,418	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/CPLE-SC//	0	2,256	2,656	0	0.00%	0	0%	0	0%	1	0%	2687	100%
S/DUK/CPLE-SCEG//	0	131	159	0	0.00%	0	0%	0	0%	14	1%	2674	99%
S/DUK/CPLW-SC//	275	1,093	1,243	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/CPLW-SCEG//	0	131	159	0	0.00%	0	0%	0	0%	13	0%	2675	100%
S/DUK/CPLW-SOCO//	292	1,093	1,243	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/CPLW-TVA//	0	692	692	0	0.00%	0	0%	0	0%	162	6%	2526	94%
S/DUK/SC-CPLE//	1,357	2,899	2,901	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/SC-CPLW//	0	454	454	0	0.00%	0	0%	0	0%	4	0%	2684	100%
S/DUK/SC-SCEG//	0	131	159	0	0.00%	0	0%	0	0%	13	0%	2675	100%
S/DUK/SCEG-CPLE//	499	650	651	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/SCEG-CPLW//	0	454	454	0	0.00%	0	0%	0	0%	4	0%	2684	100%
S/DUK/SCEG-SC//	499	650	651	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/SCEG-SOCO//	499	650	651	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/SOCO-SC//	728	1,697	2,170	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/DUK/TVA-CPLW//	0	454	454	0	0.00%	0	0%	0	0%	5	0%	2683	100%
S/DUK/TVA-SC//	52	692	1,829	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/MEAG/MEAG-GTC//	2,466	2,623	2,921	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/MEAG/MEAG-TVA//	1	124	160	0	0.00%	0	0%	0	0%	64	2%	2624	98%
S/MEAG/SCEG-MEAG//	12	17	28	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/MEAG/TVA-MEAG//	38	64	205	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/CPLE-DUK//	3,462	3,888	4,188	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/CPLE-SCEG//	523	1,921	4,602	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/DUK-CPLE//	3,182	3,482	3,908	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/DUK-SCEG//	501	1,881	3,632	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/DUK-SOCO//	2,881	3,205	3,657	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/SCEG-CPLE//	970	1,824	2,909	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/SCEG-DUK//	1,069	3,067	3,154	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SC/SCEG-SOCO//	1,204	2,511	3,138	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/CPLE-DUK//	99,807	99,999	99,999	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/CPLE-SC//	1,154	5,256	12,344	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/DUK-CPLE//	3,252	99,863	99,999	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/DUK-SC//	4,348	7,828	99,918	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/DUK-SOCO//	99,786	99,917	99,999	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/SC-CPLE//	2,381	5,143	9,722	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/SC-DUK//	99,892	99,992	99,999	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/SC-SOCO//	3,443	7,792	99,996	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/SOCO-DUK//	4,550	8,074	13,515	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/SCEG/SOCO-SC//	946	4,012	6,278	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/TVA/AECI-LGEE//	0	24	512	0	0.00%	0	0%	0	0%	920	34%	1768	66%
S/TVA/AECI-TVA//	0	24	512	0	0.00%	0	0%	0	0%	1,300	48%	1388	52%
S/TVA/CPLW-DUK//	0	308	308	0	0.00%	0	0%	0	0%	42	2%	2646	98%
S/TVA/CPLW-LGEE//	0	308	308	0	0.00%	0	0%	0	0%	89	3%	2599	97%
S/TVA/CPLW-SOCO//	108	308	308	0	0.00%	0	0%	0	0%	0	0%	2688	100%
S/TVA/DUK-CPLW//	0	308	308	0	0.00%	0	0%	0	0%	42	2%	2646	98%
S/TVA/DUK-LGEE//	0	426	426	0	0.00%	0	0%	0	0%	131	5%	2557	95%
S/TVA/DUK-SOCO//	0	426	426	0	0.00%	0	0%	0	0%	42	2%	2646	98%
S/TVA/SOCO-CPLW//	3	308	308	0	0.00%	0	0%	0	0%	4	0%	2684	100%
S/TVA/SOCO-DUK//	0	440	440	0	0.00%	0	0%	0	0%	46	2%	2642	98%
S/TVA/SOCO-LGEE//	0	2,995	3,000	0	0.00%	0	0%	0	0%	97	4%	2591	96%
S/TVA/TVA-AECI//	0	725	725	0	0.00%	0	0%	0	0%	321	12%	2367	88%
S/TVA/TVA-LGEE//	0	2,936	3,000	0	0.00%	0	0%	0	0%	97	4%	2591	96%
SS/GTC/GTC-GTC//	25,585	25,735	25,735	0	0.00%	0	0%	0	0%	0	0%	2688	100%
SS/GTC/MEAG-GTC//	8,621	8,724	9,089	0	0.00%	0	0%	0	0%	0	0%	2688	100%
SS/GTC/TVA-GTC//	138	302	345	0	0.00%	0	0%	0	0%	0	0%	2688	100%
SS/SOCO/DUK-SC/MULTIPATHALIAS/	42	399	576	0	0.00%	0	0%	0	0%	0	0%	2688	100%

Appendix A (continued)

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
SS/SOCO/DUK-SCEG/MULTIPATHALIAS/	0	119	143	0	0.00%	0	*0%*	0	*0%*	51	*2%*	2637	*98%*
SS/SOCO/DUK-TVA/MULTIPATHALIAS/	-196	947	1,019	0	0.00%	0	*0%*	0	*0%*	48	*2%*	2640	*98%*
SS/SOCO/SC-DUK/MULTIPATHALIAS/	-17	388	476	0	0.00%	0	*0%*	0	*0%*	17	*1%*	2671	*99%*
SS/SOCO/SC-SCEG/MULTIPATHALIAS/	0	119	143	0	0.00%	0	*0%*	0	*0%*	51	*2%*	2637	*98%*
SS/SOCO/SCEG-DUK/MULTIPATHALIAS/	-17	149	208	0	0.00%	0	*0%*	0	*0%*	17	*1%*	2671	*99%*
SS/SOCO/SCEG-SC/MULTIPATHALIAS/	42	149	208	0	0.00%	0	*0%*	0	*0%*	0	*0%*	2688	*100%*
SS/SOCO/SCEG-SOCO//	52	149	208	0	0.00%	0	*0%*	0	*0%*	0	*0%*	2688	*100%*