
**MONTHLY AUDIT REPORT ON THE
SOUTHEAST ENERGY EXCHANGE MARKET**

**FOR
June 2024**

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I. OVERVIEW

This is the June 2024 Auditor report on the Southeast Energy Exchange Market (SEEM). SEEM is a regional 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 operated since November 2022 and now has 24 members.¹

Trading volumes in June were slightly more than 60,000 MWh, lower than the 70,000 MWh in May and lower than the 12-month rolling average of 74,000 MWh. Trading among SEEM members relies on individual transmission 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, 2.5 percent of the time availability was zero and 98 percent of the time a segment was available, and no cleared transaction utilized it. Overall, this indicates widely available transmission. Due to transmission loss costs, transmission constraints, and participant-specific constraints, about 13,000 MWh of potential economic exchanges were left uncleared in June, somewhat lower than in recent months. As explained herein, 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 member joining in June 2023 are: Seminole Electric Cooperative; Tampa Electric Company; Duke Energy Florida; Florida Power Corporation; TEA Gainesville Regional 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 fulfill 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 an inquiry from a participant in relation to certain data from December 2022 during Winter Storm Elliot. The participant was responding to a request from the Kentucky Public Service Commission concerning transmission availability for SEEM transactions during that time period. As the data is derived from publicly available OASIS data, we provided the participant NFEETS data for December 23, 2022.

In the remainder of the report (Section II), we provide the results of our analysis of the first main area of responsibility: to analyze of 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 the 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 properly 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 June 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 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 June 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 changes to participant-specific constraints among a small number of participants in June to temporarily restrict trading partners. We find it consistent with our observations in prior months.

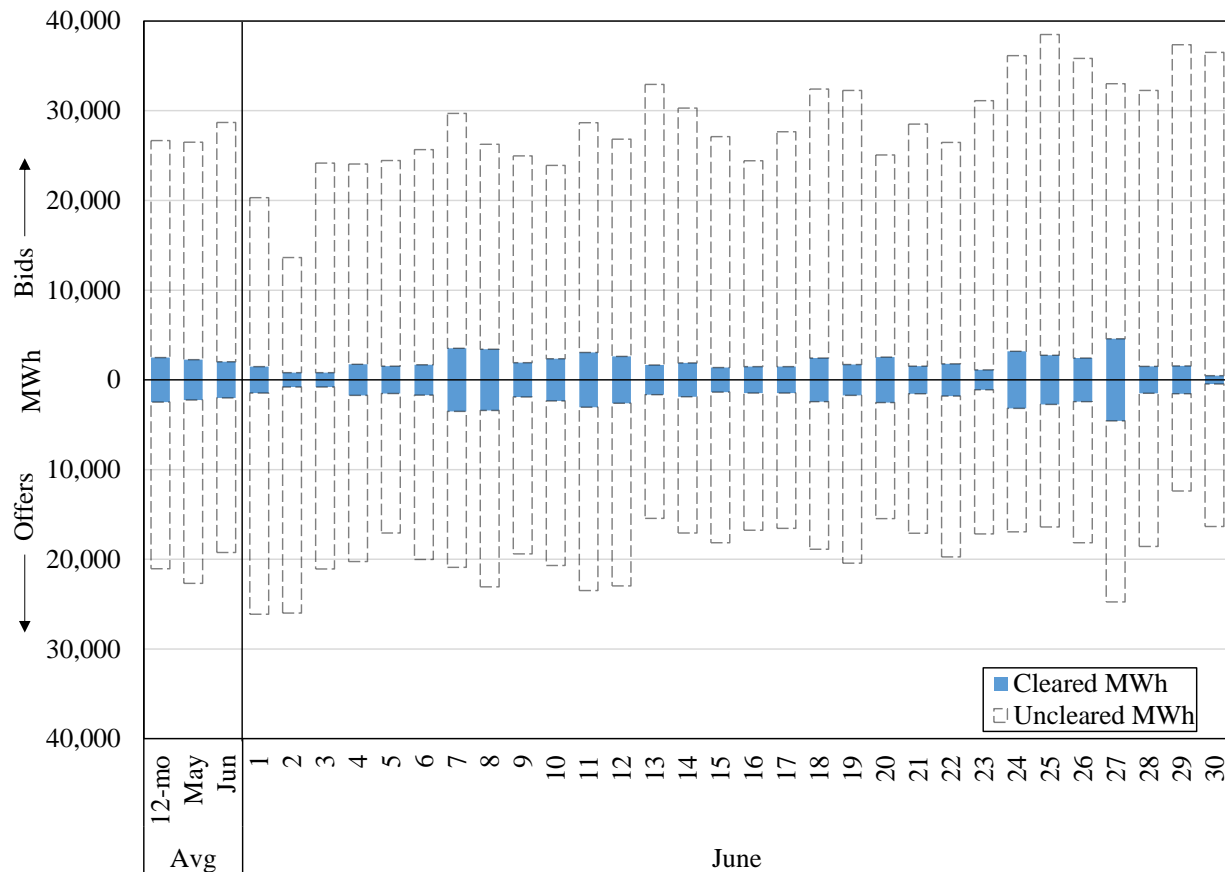
B. Market Activity

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 60,300 MWh of energy in June, which is lower than May (and down significantly from the all-time high in March of over 100,000 MWh). Figure 1 shows the daily SEEM bids and offers for June. 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 bar stacked above the bids and below the offers are the uncleared bids and offers. Although the individual days show some variation, there is no particular pattern to note.

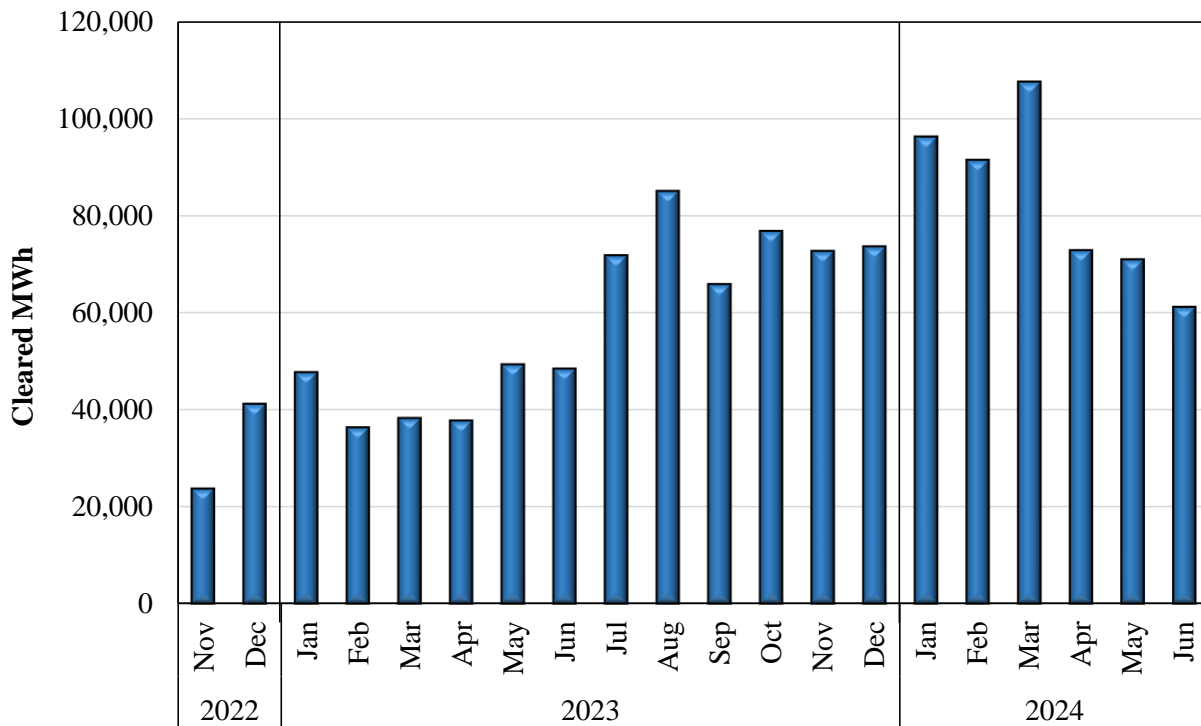
Figure 1: Daily Bids and Offers
June 2024



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 comparable to May’s level and the 12-month average.

Figure 2 shows the cleared trades on an historical monthly basis. It shows an increase in cleared volumes since the SEEM inception, especially in July during the Florida participants’ first full month of trading. Volumes continued to increase in the first three months of 2024, but have fallen off since April.

Figure 2: Volume of Cleared Trades
January 2023 -June 2024



Our next evaluation is a monthly comparison of bids, offers, and prices and is shown in Figure 3. It shows the monthly total activity in the SEEM market, including both cleared and uncleared bids and offers. The purpose is to summarize the trends in market liquidity. 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.

Because the uncleared bids and offers in the blue bars are unlikely to clear, a movement of these quantities closer to the expected clearing range signals an improvement in market liquidity.

Figure 3: Bid and Offer Evaluation

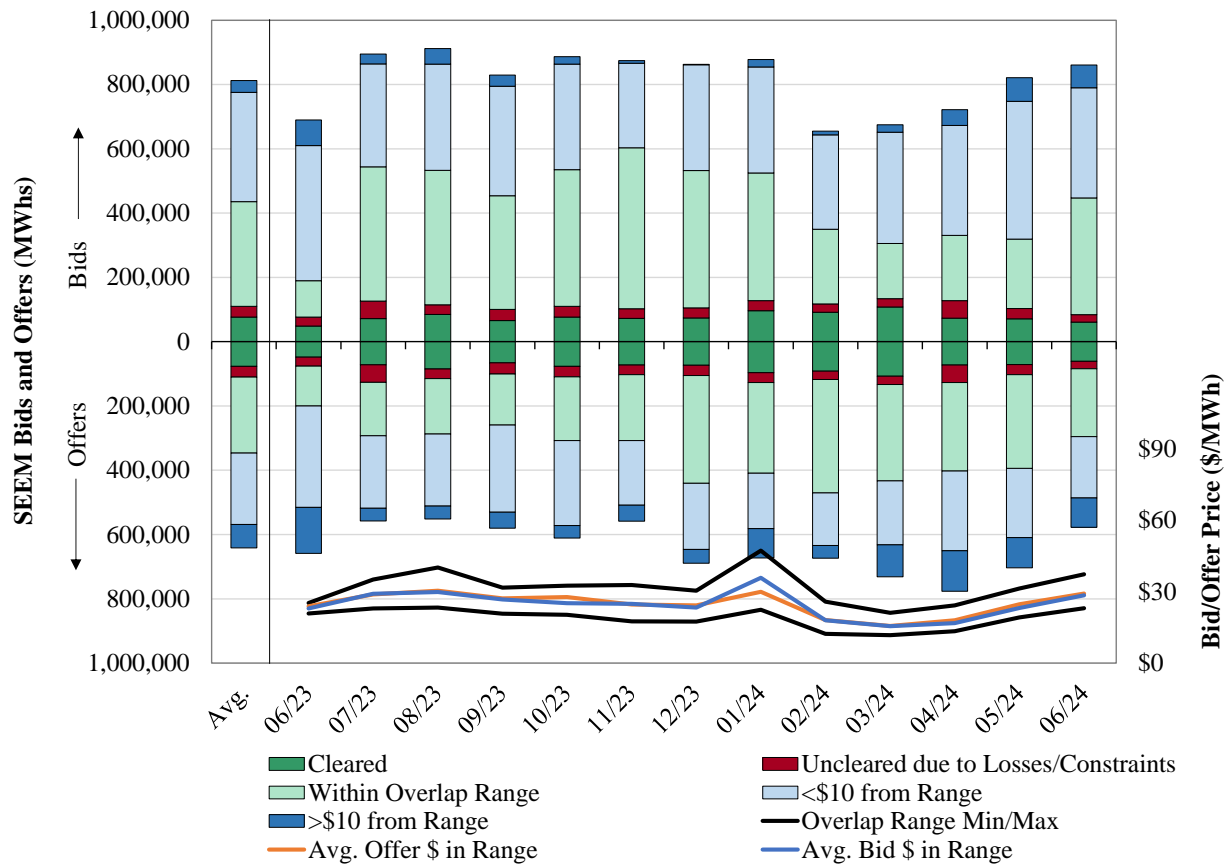
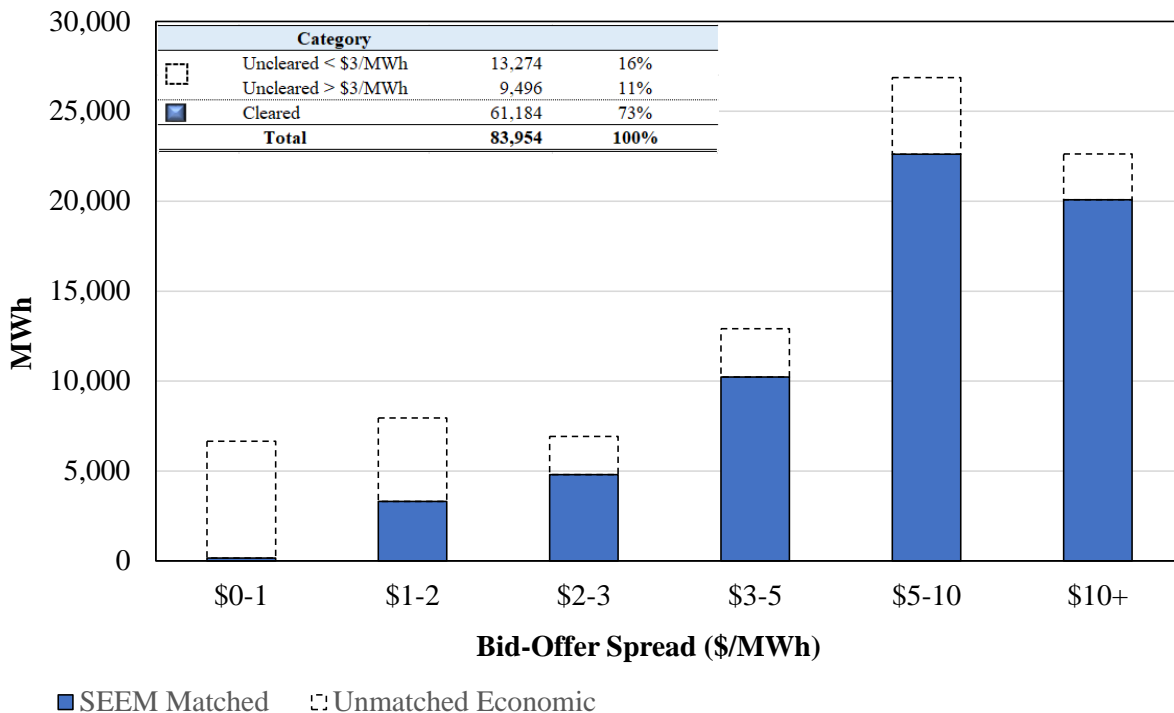


Figure 3 shows that, not surprisingly, bid and offer volume increased substantially when Florida participants joined fully in July 2023. Since the end of 2023, liquidity declined slightly, even though cleared matches increased somewhat. Liquidity in May and June skewed toward buyers (bids > offers).

Like in previous months, we evaluated the uncleared bids and offers and 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 4 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 4: Cleared and Uncleared Economic Matches
June 2024

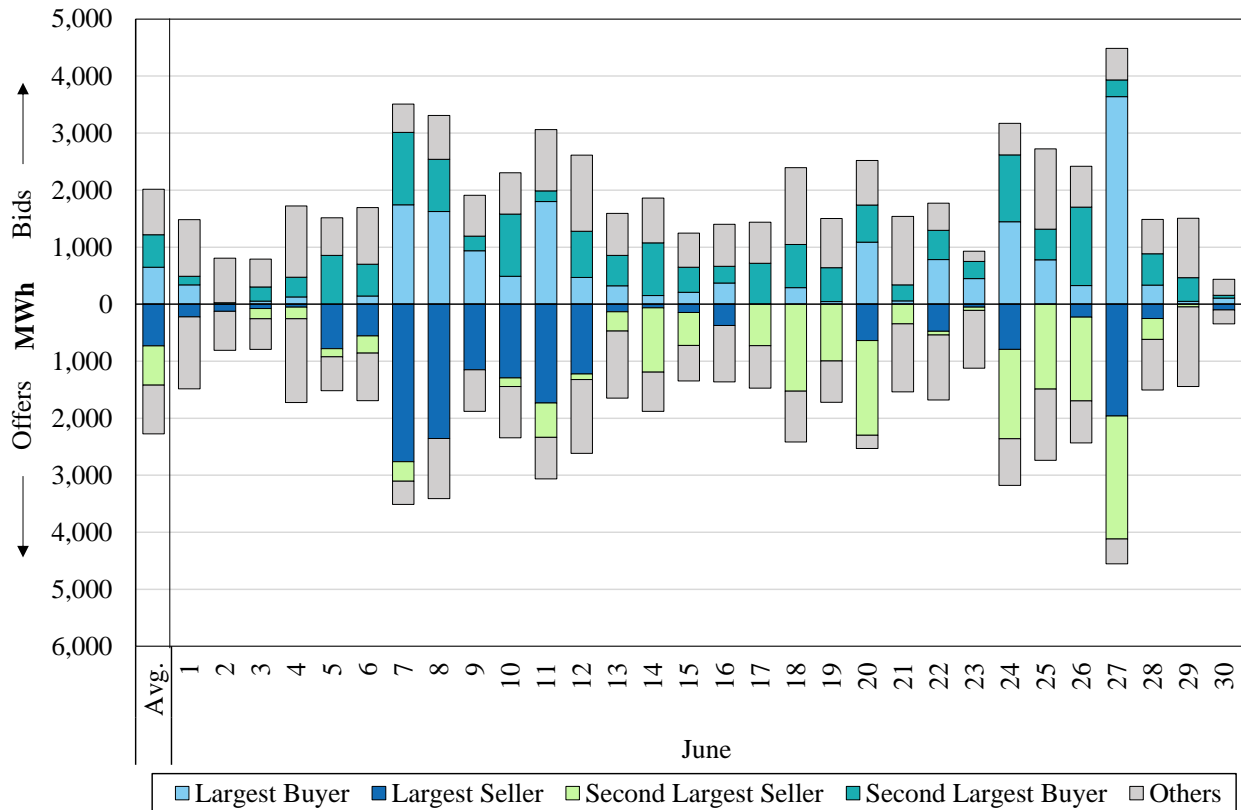


To understand why economic bids and offers may not have cleared, it is useful to examine the bid-offer spread. Average loss charges are roughly \$2 per MWh, although some potential economic matches would incur higher loss costs. Therefore, in the inset table, we divide totals between bid-offer spreads above and below \$3 per MWh. Those below \$3 are very 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, 73 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 less than \$3 per MWh.

Figure 5 shows more detail on the matched bids and offers by showing the matches by the largest market participants. Like the prior figure, 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 5: Volumes of Matched Bids and Offers
June 2024

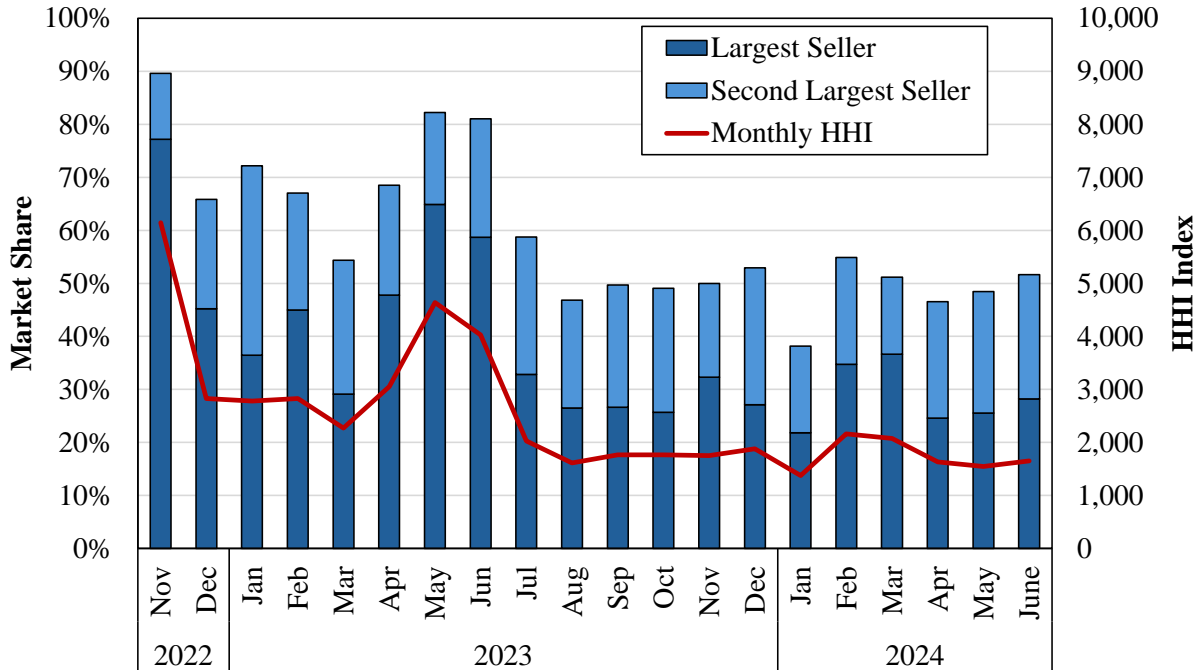


The figure shows certain buyers and sellers comprise significant shares of the transaction activity. For the month, 29 percent of the sales were made by a single seller and 31 percent of the purchases were made by a single buyer.

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 6 shows the monthly share of matched transaction 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 6: Seller Market Share Statistics
November 2022 – June 2024

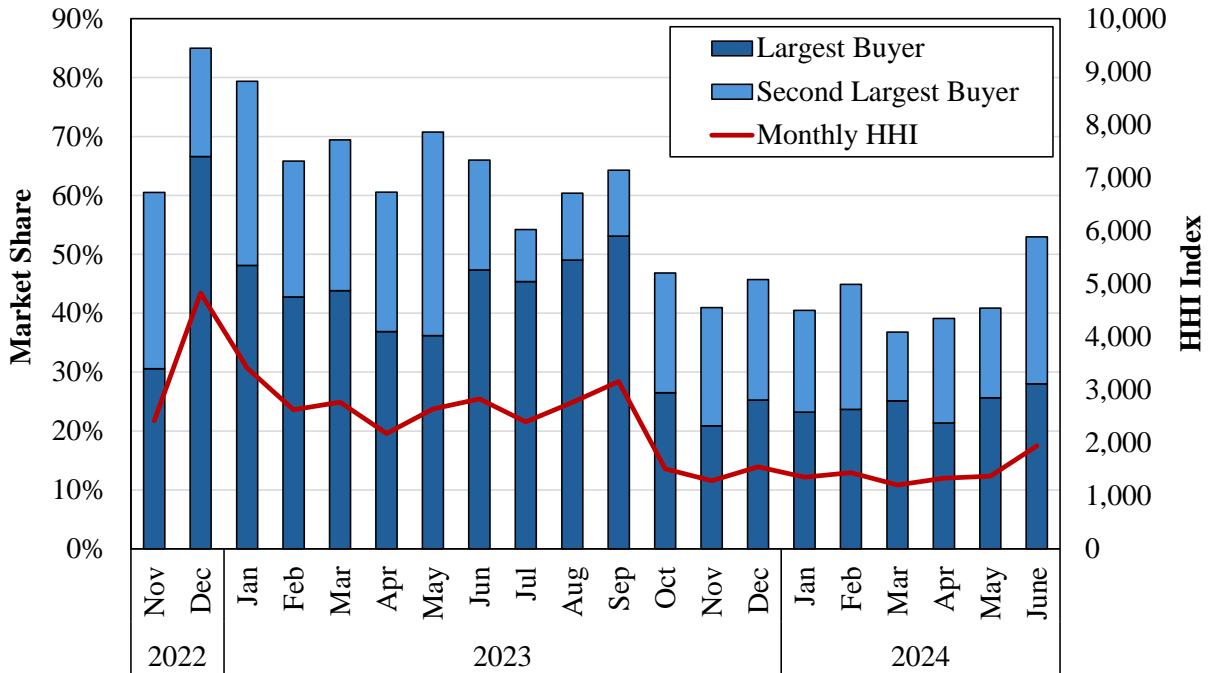


Not surprisingly, the share of the top seller, as well as the share of the top two, declined once the Florida participants full joined in July 2023. The chart also shows the HHI has declined. The HHI is a measure of market concentration and is used to determine market competitiveness, often on a relative 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 $HHI = 10,000 = 100 \times 100$. A perfectly competitive market where no firm has an appreciable market share, the HHI is close to 0. 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 since July and has remained close to 1800. Although this is close to the highly concentrated range, it has been falling. Figure 7 shows the buyer concentration.

Figure 7: Buyer Market Share Statistics
November 2022 – June 2024

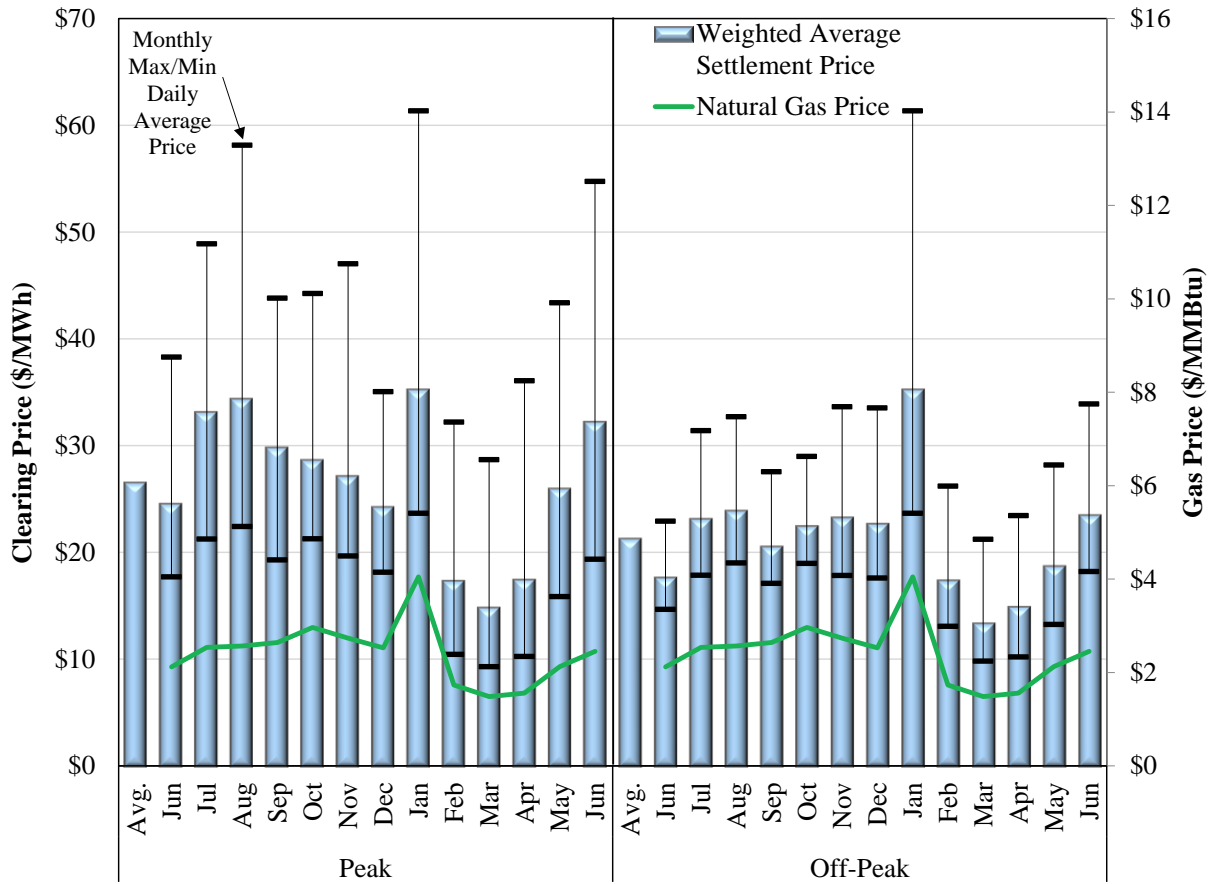


The statistics show a trend similar to the seller market shares. The entry of Florida participants coincided with a decline in buyer concentration, although with a lag in the decline in the share of the largest buyers. These declines, together with the uptrend in matched trades are indicative of a market evolving to greater liquidity and competitiveness.

2. Network Usage

In this subsection, we report on the usage of the SEEM network. Figure 8 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 8: Monthly Clearing Prices and Natural Gas Costs



The figure shows that both peak and off-peak prices rose in June relative to May and were slightly higher than the 12-month average. 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. There are 240 segments used in SEEM for which an ATC value is posted. There are another 111 segments for which no ATC is posted. These are segments that were available on an unlimited basis.² We calculate total segment (MWh) usage and for segments with ATC values, we 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

² 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.

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;³
- (3) Unavailable, no ATC;⁴ 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 1 shows an excerpt of our statistics. The table displays the 20 segments that had at least 2,000 MWh of transactions scheduled during 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.

Table 1: Statistics for Most Utilized SEEM Segments
June 2024

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
F/TEC/TEC-FPC//	924	2,874	3,510	16,635	0.85%	948	33%	0	0%	0	0%	1932	67%
F/FPC/TEC-SOCO//	0	139	283	13,317	12.61%	666	23%	117	4%	388	13%	1709	59%
F/JEA/SOCO-JEA//	0	657	959	11,313	2.49%	1,523	53%	2	0%	20	1%	1335	46%
SS/SOCO/FL-SOCO//	245	443	1,684	10,300	2.70%	779	27%	0	0%	0	0%	2101	73%
S/TVA/TVA-DUK//	0	333	357	9,505	4.25%	244	8%	24	1%	133	5%	2479	86%
S/DUK/TVA-DUK//	0	692	692	9,422	2.08%	300	10%	20	1%	37	1%	2523	88%
SS/SOCO/TVA-SOCO//	447	872	1,441	7,948	1.18%	308	11%	0	0%	0	0%	2572	89%
S/TVA/TVA-SOCO//	995	2,870	4,900	6,722	0.34%	211	7%	0	0%	0	0%	2669	93%
F/FPC/FPC-SOCO//	0	139	283	5,445	5.20%	500	17%	25	1%	412	14%	1943	67%
S/CPL/DUK-CPLE//	0	3,716	6,933	4,002	0.15%	291	10%	1	0%	46	2%	2542	88%
S/AECI/AECI-TVA//	0	98	479	3,898	4.11%	273	9%	70	2%	330	11%	2207	77%
S/DUK/SOCO-DUK//	0	2,000	2,220	3,616	0.27%	191	7%	0	0%	36	1%	2653	92%
P/LGEE/LGEE-TVA//	0	1,623	1,623	3,408	0.35%	351	12%	0	0%	144	5%	2385	83%
F/FPC/TEC-FPC//	973	2,926	3,559	3,318	0.17%	470	16%	0	0%	0	0%	2410	84%
S/TVA/AECI-SOCO//	0	98	349	2,705	3.42%	246	9%	36	1%	848	29%	1750	61%
SS/SOCO/SOCO-FL//	9	1,120	1,927	2,675	0.35%	415	14%	1	0%	0	0%	2464	86%
S/DUK/DUK-SOCO//	353	1,750	2,335	2,607	0.21%	473	16%	0	0%	0	0%	2407	84%
S/TVA/LGEE-SOCO//	0	2,648	2,828	2,461	0.14%	213	7%	0	0%	48	2%	2619	91%
SS/SOCO/SOCO-SOCO//	43,830	44,230	44,230	2,151	0.01%	113	4%	0	0%	0	0%	2767	96%
S/MEAG/SOCO-JEA//	None	None	None	2,129	None	337	12%	0	0%	0	0%	2543	0%

³ ATC less the MW schedule was less than 4 MW (i.e., no additional SEEM transaction could be cleared).

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

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 2 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 June, there were 1,010,880 segment intervals.⁵ The two circumstances (Cases (2) and (3)) when a segment is constrained occurred in more than 25,000 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 (2.5 percent of the time). The third most common case was “Partially Used” (Case 1), where the segment was partially used (about 1.4 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 (689).

Table 2: Summary of All Segments
June 2024

Segment	Case 1		Case 2		Case 3		Case 4	
	Partially Used		Fully Used		Unavailable		Uncleared	
	Intervals	%	Intervals	%	Intervals	%	Intervals	%
All Segments	14,367	1.4%	437	0.0%	24,825	2.5%	971,251	96.1%

Measuring transmission capacity congestion by adding Case 2 and 3, the percentage of constrained segment intervals declined to 2.5 percent in June from 5 percent in May). 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 on constrained segments can be gained from Table 3. It shows the segments most often unavailable to SEEM (i.e., unavailable in at least 1,000 intervals). All segments shown reported ATC of 0 in one or more intervals during the month (ATC Min=0). In many intervals

⁵ 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 June, SEEM operated in all intervals. There are 10 Seminole Electric Cooperative segments not yet available in the model. Once included, the total will be 361.

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 unconstrained for SEEM activity.

Table 3: Most Constrained SEEM Segments
June 2024

Segment	ATC			Loading		Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/TVA/AECI-LGEE//	0	3	346	0	0.00%	0	0%	0	0%	1,453	50%	1427	50%
S/TVA/AECI-DUK//	0	94	333	1,051	1.41%	106	4%	4	0%	974	34%	1796	62%
S/TVA/AECI-CPLW//	0	94	276	142	0.20%	31	1%	6	0%	916	32%	1927	67%
S/TVA/DUK-LGEE//	0	333	357	0	0.00%	0	0%	0	0%	877	30%	2003	70%
S/TVA/AECI-TVA//	0	98	349	0	0.00%	0	0%	0	0%	864	30%	2016	70%
S/TVA/AECI-SOCO//	0	98	349	2,705	3.42%	246	9%	36	1%	848	29%	1750	61%
S/TVA/CPLW-LGEE//	0	276	276	0	0.00%	0	0%	0	0%	772	27%	2108	73%
S/TVA/SOCO-LGEE//	0	356	2,340	0	0.00%	0	0%	0	0%	772	27%	2108	73%
S/TVA/TVA-LGEE//	0	322	2,446	125	0.03%	5	0%	0	0%	772	27%	2103	73%
F/FPC/SEC-FPC/SSN-FPC/	0	233	1,000	0	0.00%	0	0%	0	0%	676	23%	2204	77%
F/FPC/SEC-FPC/SSN-FPCS/	0	233	1,000	0	0.00%	0	0%	0	0%	676	23%	2204	77%
S/DUK/SCEG-CPLW//	0	291	454	0	0.00%	0	0%	0	0%	614	21%	2266	79%
S/DUK/SOCO-CPLW//	0	311	454	0	0.00%	0	0%	0	0%	604	21%	2276	79%
S/DUK/SC-CPLW//	0	297	454	0	0.00%	0	0%	0	0%	603	21%	2277	79%
S/DUK/TVA-CPLW//	0	313	454	0	0.00%	0	0%	0	0%	584	20%	2296	80%
S/DUK/CPLW-CPLW//	0	341	454	0	0.00%	0	0%	0	0%	511	18%	2369	82%
S/DUK/DUK-CPLW//	0	339	454	0	0.00%	0	0%	0	0%	505	18%	2375	82%
F/FPC/SEC-SOCO/SSO-SOCO/	0	136	283	0	0.00%	0	0%	0	0%	420	15%	2460	85%
F/FPC/FPC-SOCO//	0	139	283	5,445	5.20%	500	17%	25	1%	412	14%	1943	67%
F/FPC/TEC-SOCO//	0	139	283	13,317	12.61%	666	23%	117	4%	388	13%	1709	59%

III. CONCLUSION

We reviewed the operation of SEEM for June 2024. 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 -- June 2024

Segment	ATC			Loading		Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
F/TEC/TEC-FPC//	924	2,874	3,510	16,635	0.85%	948	33%	0	0%	0	0%	1932	67%
F/FPC/TEC-SOCO//	0	139	283	13,317	12.61%	666	23%	117	4%	388	13%	1709	59%
F/JEA/SOCO-JEA//	0	657	959	11,313	2.49%	1,523	53%	2	0%	20	1%	1335	46%
SS/SOCO/FL-SOCO//	245	443	1,684	10,300	2.70%	779	27%	0	0%	0	0%	2101	73%
S/TVA/TVA-DUK//	0	333	357	9,505	4.25%	244	8%	24	1%	133	5%	2479	86%
S/DUK/TVA-DUK//	0	692	692	9,422	2.08%	300	10%	20	1%	37	1%	2523	88%
SS/SOCO/TVA-SOCO//	447	872	1,441	7,948	1.18%	308	11%	0	0%	0	0%	2572	89%
S/TVA/TVA-SOCO//	995	2,870	4,900	6,722	0.34%	211	7%	0	0%	0	0%	2669	93%
F/FPC/FPC-SOCO//	0	139	283	5,445	5.20%	500	17%	25	1%	412	14%	1943	67%
S/CPL/DUK-CPLE//	0	3,716	6,933	4,002	0.15%	291	10%	1	0%	46	2%	2542	88%
S/AECI/AECI-TVA//	0	98	479	3,898	4.11%	273	9%	70	2%	330	11%	2207	77%
S/DUK/SOCO-DUK//	0	2,000	2,220	3,616	0.27%	191	7%	0	0%	36	1%	2653	92%
P/LGEE/LGEE-TVA//	0	1,623	1,623	3,408	0.35%	351	12%	0	0%	144	5%	2385	83%
F/FPC/TEC-FPC//	973	2,926	3,559	3,318	0.17%	470	16%	0	0%	0	0%	2410	84%
S/TVA/AECI-SOCO//	0	98	349	2,705	3.42%	246	9%	36	1%	848	29%	1750	61%
SS/SOCO/SOCO-FL//	9	1,120	1,927	2,675	0.35%	415	14%	1	0%	0	0%	2464	86%
S/DUK/DUK-SOCO//	353	1,750	2,335	2,607	0.21%	473	16%	0	0%	0	0%	2407	84%
S/TVA/LGEE-SOCO//	0	2,648	2,828	2,461	0.14%	213	7%	0	0%	48	2%	2619	91%
SS/SOCO/SOCO-SOCO//	43,830	44,230	44,230	2,151	0.01%	113	4%	0	0%	0	0%	2767	96%
S/MEAG/SOCO-JEA//	None	None	None	2,129	None	337	12%	0	0%	0	0%	2543	0%
S/CPL/TVA-DUK//	0	276	276	1,925	0.99%	166	6%	8	0%	8	0%	2698	94%
SS/SOCO/TVA-FL/MULTIPATHALIAS/	9	795	1,366	1,776	0.31%	215	7%	2	0%	0	0%	2663	92%
S/DUK/TVA-CPLE//	0	692	692	1,757	0.39%	145	5%	1	0%	56	2%	2678	93%
S/SCEG/SCEG-SOCO//	549	3,028	8,516	1,698	0.08%	177	6%	0	0%	0	0%	2703	94%
S/MEAG/FPC-DUK//	None	None	None	1,526	None	180	6%	0	0%	0	0%	2700	0%
S/TVA/TVA-CPLW//	0	276	276	1,448	0.74%	68	2%	0	0%	4	0%	2808	98%
SS/SOCO/DUK-FL/MULTIPATHALIAS/	0	586	1,013	1,443	0.35%	248	9%	0	0%	17	1%	2615	91%
S/DUK/SOCO-CPLE//	0	1,998	2,220	1,398	0.11%	68	2%	0	0%	55	2%	2757	96%
S/SCEG/SOCO-SCEG//	0	621	1,608	1,340	0.30%	121	4%	0	0%	142	5%	2617	91%
S/DUK/CPLW-DUK//	0	1,088	1,243	1,235	0.17%	53	2%	0	0%	33	1%	2794	97%
S/TVA/SOCO-TVA//	0	2,524	3,997	1,164	0.07%	44	2%	0	0%	40	1%	2796	97%
S/MEAG/FPC-SOCO//	None	None	None	1,067	None	191	7%	0	0%	0	0%	2689	0%
S/TVA/AECI-DUK//	0	94	333	1,051	1.41%	106	4%	4	0%	974	34%	1796	62%
S/MEAG/SOCO-MEAG//	2,774	3,085	3,258	1,039	0.05%	50	2%	0	0%	0	0%	2830	98%
SS/SOCO/SOCO-DUK//	0	502	737	1,031	0.31%	28	1%	4	0%	8	0%	2840	99%
SS/GTC/FPC-DUK//	None	None	None	1,009	None	53	2%	0	0%	0	0%	2827	0%
F/FPC/SOCO-FPC//	0	234	478	951	0.60%	126	4%	22	1%	384	13%	2348	82%
S/CPL/SCEG-CPLE//	0	637	637	930	0.22%	157	5%	0	0%	95	3%	2628	91%
SS/GTC/SCEG-GTC//	1	85	111	905	1.47%	49	2%	16	1%	36	1%	2779	96%
S/MEAG/DUK-JEA//	None	None	None	883	None	185	6%	0	0%	0	0%	2695	0%
SS/SOCO/FL-TVA/MULTIPATHALIAS/	245	443	1,684	816	0.21%	46	2%	0	0%	0	0%	2834	98%
SS/SOCO/FL-DUK/MULTIPATHALIAS/	0	387	648	788	0.30%	58	2%	7	0%	8	0%	2807	97%
SS/SOCO/FL-SCEG/MULTIPATHALIAS/	1	65	107	781	1.56%	75	3%	29	1%	19	1%	2757	96%
S/MEAG/TVA-JEA//	None	None	None	714	None	128	4%	0	0%	0	0%	2752	0%
S/DUK/CPLW-CPLE//	0	1,085	1,243	690	0.10%	123	4%	0	0%	55	2%	2702	94%
S/TVA/LGEE-DUK//	0	333	357	612	0.27%	108	4%	0	0%	149	5%	2623	91%
S/DUK/CPLW-SOCO//	585	1,920	2,335	601	0.04%	60	2%	0	0%	0	0%	2820	98%
S/CPL/CPLW-DUK//	0	5,677	6,828	601	0.02%	60	2%	0	0%	3	0%	2817	98%
S/SC/SOCO-SC//	0	887	2,385	579	0.09%	91	3%	0	0%	156	5%	2633	91%
SS/GTC/GTC-SOCO//	20,000	20,000	20,000	538	0.00%	16	1%	0	0%	0	0%	2864	99%
S/SCEG/SOCO-CPLE//	0	632	826	512	0.11%	71	2%	0	0%	6	0%	2803	97%
S/MEAG/GTC-JEA//	None	None	None	474	None	71	2%	0	0%	0	0%	2809	0%
SS/GTC/FPC-MEAG//	None	None	None	474	None	71	2%	0	0%	0	0%	2809	0%
SS/SOCO/DUK-SOCO//	0	624	1,066	427	0.09%	65	2%	1	0%	17	1%	2797	97%
S/CPL/CPLW-SCEG//	0	404	404	423	0.15%	48	2%	0	0%	24	1%	2808	98%
S/SCEG/SCEG-CPLE//	387	632	826	415	0.09%	92	3%	0	0%	0	0%	2788	97%
SS/SOCO/SCEG-SOCO//	1	154	202	397	0.37%	36	1%	1	0%	7	0%	2836	98%
SS/GTC/FPC-SCEG//	None	None	None	393	None	51	2%	0	0%	0	0%	2829	0%
SS/GTC/FPC-GTC//	32	275	730	385	0.16%	28	1%	0	0%	0	0%	2852	99%
S/MEAG/FPC-TVA//	None	None	None	382	None	21	1%	0	0%	0	0%	2859	0%

Appendix A (continued)

Segment	ATC			Loading		Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max	MWhs	Factor	Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/SC/DUK-SC//	0	2,382	3,307	363	0.02%	64	2%	0	0%	48	2%	2768	96%
S/SCEG/CPLC-SOCO//	183	377	622	357	0.13%	40	1%	0	0%	0	0%	2840	99%
SS/GTC/SOCO-JEA//	None	None	None	348	None	70	2%	0	0%	0	0%	2810	0%
S/TVA/LGEE-CPLW//	0	276	276	335	0.17%	76	3%	0	0%	48	2%	2756	96%
SS/GTC/FPC-SOCO//	None	None	None	300	None	61	2%	0	0%	0	0%	2819	0%
SS/GTC/DUK-GTC//	0	335	629	299	0.12%	26	1%	1	0%	81	3%	2772	96%
F/TEC/FPC-TEC//	0	1,914	3,034	289	0.02%	50	2%	0	0%	44	2%	2786	97%
SS/GTC/TVA-GTC//	0	188	359	286	0.20%	27	1%	1	0%	20	1%	2832	98%
S/MEAG/MEAG-SOCO//	2,478	2,651	2,952	285	0.01%	13	0%	0	0%	0	0%	2867	100%
SS/GTC/SOCO-GTC//	12,552	13,374	14,826	285	0.00%	29	1%	0	0%	0	0%	2851	99%
SS/SOCO/TVA-DUK/MULTIPATHALIAS/	0	502	737	278	0.08%	10	0%	0	0%	8	0%	2862	99%
S/DUK/DUK-SC//	0	1,461	2,686	273	0.03%	58	2%	0	0%	68	2%	2754	96%
SS/SOCO/SOCO-SCEG//	1	65	107	264	0.53%	29	1%	12	0%	19	1%	2820	98%
SS/SOCO/SCEG-FL/MULTIPATHALIAS/	1	154	202	264	0.25%	60	2%	2	0%	7	0%	2811	98%
F/JEA/JEA-SOCO//	0	430	811	250	0.08%	56	2%	0	0%	32	1%	2792	97%
S/MEAG/TVA-FPC//	None	None	None	246	None	42	1%	0	0%	0	0%	2838	0%
S/SCEG/DUK-SCEG//	0	111	276	231	0.29%	46	2%	2	0%	99	3%	2733	95%
S/MEAG/MEAG-JEA//	0	182	268	216	0.18%	33	1%	0	0%	70	2%	2777	96%
SS/SOCO/SOCO-SC//	0	22	284	208	0.44%	25	1%	1	0%	301	10%	2553	89%
S/MEAG/FPC-GTC//	None	None	None	195	None	27	1%	0	0%	0	0%	2853	0%
SS/GTC/MEAG-JEA//	None	None	None	195	None	27	1%	0	0%	0	0%	2853	0%
SS/GTC/SCEG-JEA//	None	None	None	194	None	24	1%	0	0%	0	0%	2856	0%
SS/GTC/GTC-JEA//	0	771	1,261	194	0.04%	28	1%	0	0%	8	0%	2844	99%
F/FPC/SOCO-TEC//	0	234	478	193	0.12%	24	1%	0	0%	384	13%	2472	86%
SS/GTC/GTC-DUK//	0	323	464	185	0.09%	13	0%	3	0%	44	2%	2820	98%
S/MEAG/SCEG-JEA//	None	None	None	179	None	47	2%	0	0%	0	0%	2833	0%
S/DUK/DUK-SCEG//	0	115	425	178	0.21%	39	1%	0	0%	29	1%	2812	98%
S/CPL/CPLC-SC//	0	2,170	4,854	178	0.01%	24	1%	0	0%	24	1%	2832	98%
S/MEAG/FPC-SCEG//	None	None	None	177	None	88	3%	0	0%	0	0%	2792	0%
SS/GTC/TVA-JEA//	None	None	None	171	None	24	1%	0	0%	0	0%	2856	0%
S/DUK/DUK-CPLC//	0	2,517	4,639	166	0.01%	26	1%	0	0%	55	2%	2799	97%
SS/SOCO/TVA-SCEG/MULTIPATHALIAS/	1	65	107	161	0.32%	19	1%	3	0%	19	1%	2839	99%
S/DUK/SCEG-DUK//	0	649	650	160	0.04%	19	1%	0	0%	33	1%	2828	98%
S/AECI/TVA-AECI//	0	757	817	159	0.03%	12	0%	0	0%	36	1%	2832	98%
S/SCEG/SCEG-DUK//	432	742	852	146	0.03%	17	1%	0	0%	0	0%	2863	99%
S/TVA/AECI-CPLW//	0	94	276	142	0.20%	31	1%	6	0%	916	32%	1927	67%
SS/GTC/SC-GTC//	20	116	185	141	0.19%	14	0%	1	0%	0	0%	2865	99%
S/MEAG/TVA-DUK//	None	None	None	131	None	12	0%	0	0%	0	0%	2868	0%
S/TVA/SOCO-AECI//	0	600	622	130	0.03%	12	0%	0	0%	40	1%	2828	98%
S/TVA/TVA-LGEE//	0	322	2,446	125	0.03%	5	0%	0	0%	772	27%	2103	73%
P/LGEE/TVA-LGEE//	0	1,396	1,424	125	0.01%	5	0%	0	0%	9	0%	2866	100%
SS/SOCO/FL-SC/MULTIPATHALIAS/	0	22	284	124	0.27%	17	1%	5	0%	301	10%	2557	89%
S/MEAG/DUK-FPC//	None	None	None	121	None	28	1%	0	0%	0	0%	2852	0%
S/MEAG/FPC-SC//	None	None	None	111	None	26	1%	0	0%	0	0%	2854	0%
SS/GTC/GTC-TVA//	243	609	682	105	0.02%	6	0%	0	0%	0	0%	2874	100%
S/SC/CPLC-SC//	0	1,927	2,841	99	0.01%	14	0%	0	0%	30	1%	2836	98%
F/FPC/FPC-TEC//	0	2,082	3,074	96	0.01%	30	1%	0	0%	40	1%	2810	98%
S/TVA/SOCO-FPC//	0	333	357	83	0.04%	8	0%	0	0%	109	4%	2763	96%
S/SC/CPLC-SOCO//	730	3,381	3,799	79	0.00%	10	0%	0	0%	0	0%	2870	100%
S/MEAG/FPC-MEAG//	0	60	224	77	0.15%	15	1%	0	0%	30	1%	2835	98%
SS/GTC/GTC-SC//	0	213	303	76	0.06%	9	0%	0	0%	48	2%	2823	98%
S/SCEG/CPLC-SCEG//	0	377	622	75	0.03%	9	0%	0	0%	88	3%	2783	97%
S/SC/SC-SOCO//	603	3,127	3,799	71	0.00%	7	0%	0	0%	0	0%	2873	100%
S/DUK/TVA-SC//	0	692	692	67	0.01%	9	0%	0	0%	22	1%	2849	99%
SS/GTC/TVA-FPC//	None	None	None	62	None	7	0%	0	0%	0	0%	2873	0%
SS/GTC/GTC-FPC//	0	771	1,261	60	0.01%	9	0%	0	0%	8	0%	2863	99%
SS/GTC/SCEG-FPC//	None	None	None	59	None	14	0%	0	0%	0	0%	2866	0%
SS/GTC/TVA-DUK//	None	None	None	58	None	3	0%	0	0%	0	0%	2877	0%
S/DUK/DUK-TVA//	0	692	692	53	0.01%	11	0%	0	0%	4	0%	2865	99%
S/DUK/SOCO-SCEG//	0	115	425	51	0.06%	13	0%	0	0%	46	2%	2821	98%

Appendix A (continued)

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/TVA/DUK-TVA//	0	333	357	50	0.02%	9	0%	0	0%	149	5%	2722	95%
SS/SOCO/SOCO-TVA//	320	2,237	2,882	47	0.00%	2	0%	0	0%	0	0%	2878	100%
S/SCEG/SOCO-DUK//	578	742	852	43	0.01%	5	0%	0	0%	0	0%	2875	100%
S/MEAG/JEA-MEAG//	0	60	237	41	0.08%	9	0%	1	0%	30	1%	2840	99%
SS/GTC/GTC-SCEG//	33	36	59	39	0.14%	10	0%	0	0%	0	0%	2870	100%
S/MEAG/TVA-SCEG//	None	None	None	37	None	20	1%	0	0%	0	0%	2860	0%
S/MEAG/GTC-DUK//	None	None	None	36	None	2	0%	0	0%	0	0%	2878	0%
SS/GTC/GTC-MEAG//	9,564	9,899	9,999	36	0.00%	2	0%	0	0%	0	0%	2878	100%
S/MEAG/SCEG-FPC//	None	None	None	30	None	11	0%	0	0%	0	0%	2869	0%
S/TVA/DUK-AECI//	0	333	357	29	0.01%	3	0%	0	0%	141	5%	2736	95%
S/DUK/SCEG-TVA//	254	649	650	29	0.01%	3	0%	0	0%	0	0%	2877	100%
SS/GTC/JEA-SCEG//	None	None	None	24	None	4	0%	0	0%	0	0%	2876	0%
SS/GTC/FPC-SC//	None	None	None	23	None	3	0%	0	0%	0	0%	2877	0%
S/MEAG/MEAG-DUK//	0	76	189	23	0.04%	4	0%	0	0%	76	3%	2800	97%
S/DUK/SOCO-SC//	0	1,813	2,220	23	0.00%	4	0%	0	0%	21	1%	2855	99%
S/MEAG/DUK-SC//	None	None	None	19	None	7	0%	0	0%	0	0%	2873	0%
SS/SOCO/SCEG-TVA/MULTIPATHALIAS/	1	154	202	18	0.02%	1	0%	2	0%	7	0%	2870	100%
S/MEAG/MEAG-SC//	0	42	63	17	0.08%	1	0%	2	0%	352	12%	2525	88%
S/MEAG/SOCO-DUK//	None	None	None	17	0.00%	1	0%	0	0%	0	0%	2879	0%
SS/GTC/DUK-JEA//	None	None	None	16	None	3	0%	0	0%	0	0%	2877	0%
S/SC/SCEG-SC//	1,312	1,889	2,628	16	0.00%	5	0%	0	0%	0	0%	2875	100%
S/MEAG/SOCO-SCEG//	None	None	None	14	None	7	0%	0	0%	0	0%	2873	0%
S/SCEG/SCEG-SC//	725	3,426	6,090	13	0.00%	3	0%	0	0%	0	0%	2877	100%
S/MEAG/TVA-SC//	None	None	None	12	None	12	0%	0	0%	0	0%	2868	0%
S/SC/SOCO-SCEG//	0	1,546	2,256	11	0.00%	1	0%	0	0%	30	1%	2849	99%
S/SCEG/SC-SCEG//	0	2,426	4,294	11	0.00%	1	0%	0	0%	2	0%	2877	100%
SS/GTC/JEA-GTC//	32	275	730	10	0.00%	5	0%	0	0%	0	0%	2875	100%
S/CPL/DUK-SCEG//	0	404	404	9	0.00%	1	0%	0	0%	46	2%	2833	98%
S/SC/SOCO-CPLE//	0	1,723	2,534	9	0.00%	5	0%	0	0%	96	3%	2779	96%
S/CPL/SC-CPLE//	0	1,915	3,150	9	0.00%	5	0%	0	0%	56	2%	2819	98%
SS/GTC/SCEG-TVA//	None	None	None	9	0.00%	1	0%	0	0%	0	0%	2879	0%
SS/SOCO/SC-SOCO//	51	305	490	7	0.00%	1	0%	0	0%	0	0%	2879	100%
S/MEAG/JEA-DUK//	None	None	None	6	None	3	0%	0	0%	0	0%	2877	0%
SS/SOCO/TVA-SC/MULTIPATHALIAS/	0	22	284	6	0.01%	2	0%	2	0%	301	10%	2575	89%
S/MEAG/MEAG-FPC//	0	182	268	6	0.00%	2	0%	0	0%	70	2%	2808	98%
S/DUK/TVA-SCEG//	0	115	425	5	0.01%	2	0%	0	0%	47	2%	2831	98%
SS/GTC/TVA-SCEG//	None	None	None	5	0.00%	1	0%	0	0%	0	0%	2879	0%
S/MEAG/MEAG-SCEG//	7	8	12	3	0.05%	0	0%	2	0%	0	0%	2878	100%
S/SCEG/DUK-CPLE//	2	112	276	3	0.00%	1	0%	0	0%	1	0%	2878	100%
S/TVA/DUK-SOCO//	0	333	357	3	0.00%	2	0%	0	0%	109	4%	2769	96%
S/SCEG/SOCO-SC//	0	1,142	3,453	3	0.00%	2	0%	0	0%	90	3%	2788	97%
S/MEAG/JEA-SC//	None	None	None	3	0.00%	1	0%	0	0%	0	0%	2879	0%
S/MEAG/SC-JEA//	None	None	None	2	None	2	0%	0	0%	0	0%	2878	0%
F/FPC/FPC-FPC/FPC-FPCS/	1,469	2,763	3,777	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/FPC-GVL//	0	248	364	0	0.00%	0	0%	0	0%	44	2%	2836	98%
F/FPC/FPC-SEC/FPC-SSN/	0	1,026	1,458	0	0.00%	0	0%	0	0%	40	1%	2840	99%
F/FPC/GVL-FPC//	20	348	435	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/GVL-FPC/GVL-FPCS/	20	348	435	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/GVL-SEC/GVL-SSN/	59	348	429	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/GVL-SOCO//	0	139	283	0	0.00%	0	0%	0	0%	384	13%	2496	87%
F/FPC/GVL-TEC//	59	348	435	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/SEC-FPC/SSN-FPC/	0	233	1,000	0	0.00%	0	0%	0	0%	676	23%	2204	77%
F/FPC/SEC-FPC/SSN-FPCS/	0	233	1,000	0	0.00%	0	0%	0	0%	676	23%	2204	77%
F/FPC/SEC-FPC/SSO-FPC/	193	461	860	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/SEC-FPC/SSO-FPCS/	193	461	860	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/SEC-GVL/SSN-GVL/	126	251	440	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/SEC-GVL/SSO-GVL/	0	218	357	0	0.00%	0	0%	0	0%	36	1%	2844	99%
F/FPC/SEC-SEC/SSO-SSN/	0	507	777	0	0.00%	0	0%	0	0%	36	1%	2844	99%
F/FPC/SEC-SOCO/SSN-SOCO/	0	139	283	0	0.00%	0	0%	0	0%	384	13%	2496	87%
F/FPC/SEC-SOCO/SSO-SOCO/	0	136	283	0	0.00%	0	0%	0	0%	420	15%	2460	85%

Appendix A (continued)

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
F/FPC/SEC-TEC/SSN-TEC/	177	786	1,347	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/SEC-TEC/SSO-TEC/	0	507	777	0	0.00%	0	0%	0	0%	36	1%	2844	99%
F/FPC/SOCO-FPC/SOCO-FPCS/	0	234	478	0	0.00%	0	0%	0	0%	384	13%	2496	87%
F/FPC/SOCO-GVL//	0	165	340	0	0.00%	0	0%	0	0%	384	13%	2496	87%
F/FPC/SOCO-SEC/SOCO-SSN/	0	234	478	0	0.00%	0	0%	0	0%	384	13%	2496	87%
F/FPC/TEC-FPC/TEC-FPCS/	973	2,696	3,508	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/FPC/TEC-GVL//	0	251	451	0	0.00%	0	0%	0	0%	4	0%	2876	100%
F/FPC/TEC-SEC/TEC-SSN/	0	1,034	1,464	0	0.00%	0	0%	0	0%	4	0%	2876	100%
F/JEA/JEA-SEC/JEA-SSN/	0	518	518	0	0.00%	0	0%	0	0%	44	2%	2836	98%
F/JEA/SEC-JEA/SSN-JEA/	321	589	589	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/JEA/SEC-SOCO/SSN-SOCO/	279	433	637	0	0.00%	0	0%	0	0%	0	0%	2880	100%
F/JEA/SOCO-SEC/SOCO-SSN/	3	522	522	0	0.00%	0	0%	0	0%	4	0%	2876	100%
F/TEC/SEC-FPC/SSO-FPC/	0	507	729	0	0.00%	0	0%	0	0%	36	1%	2844	99%
F/TEC/SEC-TEC/SSO-TEC/	0	507	729	0	0.00%	0	0%	0	0%	36	1%	2844	99%
F/TEC/TEC-SEC/TEC-SSO/	0	529	729	0	0.00%	0	0%	0	0%	4	0%	2876	100%
S/CPL/CPLW-DUK//	0	449	1,270	0	0.00%	0	0%	0	0%	116	4%	2764	96%
S/CPL/CPLW-TVA//	0	276	276	0	0.00%	0	0%	0	0%	116	4%	2764	96%
S/CPL/DUK-CPLW//	11	432	530	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/CPL/DUK-SC//	0	1,728	3,996	0	0.00%	0	0%	0	0%	46	2%	2834	98%
S/CPL/DUK-TVA//	0	276	276	0	0.00%	0	0%	0	0%	9	0%	2871	100%
S/CPL/SC-DUK//	532	2,520	5,084	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/CPL/SC-SCEG//	210	404	404	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/CPL/SCEG-DUK//	378	637	637	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/CPL/SCEG-SC//	378	637	637	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/CPL/TVA-CPLW//	0	276	276	0	0.00%	0	0%	0	0%	16	1%	2864	99%
S/DUK/CPLW-CPLW//	0	341	454	0	0.00%	0	0%	0	0%	511	18%	2369	82%
S/DUK/CPLW-DUK//	0	4,141	6,435	0	0.00%	0	0%	0	0%	36	1%	2844	99%
S/DUK/CPLW-SC//	0	1,873	2,731	0	0.00%	0	0%	0	0%	21	1%	2859	99%
S/DUK/CPLW-SCEG//	0	115	425	0	0.00%	0	0%	0	0%	46	2%	2834	98%
S/DUK/CPLW-TVA//	257	692	692	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/CPLW-SC//	0	1,089	1,243	0	0.00%	0	0%	0	0%	7	0%	2873	100%
S/DUK/CPLW-SCEG//	0	115	425	0	0.00%	0	0%	0	0%	35	1%	2845	99%
S/DUK/CPLW-SOCO//	346	1,093	1,243	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/CPLW-TVA//	257	692	692	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/DUK-CPLW//	0	339	454	0	0.00%	0	0%	0	0%	505	18%	2375	82%
S/DUK/SC-CPLW//	0	2,700	2,901	0	0.00%	0	0%	0	0%	55	2%	2825	98%
S/DUK/SC-CPLW//	0	297	454	0	0.00%	0	0%	0	0%	603	21%	2277	79%
S/DUK/SC-DUK//	0	2,111	2,901	0	0.00%	0	0%	0	0%	33	1%	2847	99%
S/DUK/SC-SCEG//	0	115	425	0	0.00%	0	0%	0	0%	31	1%	2849	99%
S/DUK/SC-SOCO//	585	1,968	2,335	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/SC-TVA//	257	692	692	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/SCEG-CPLW//	0	649	650	0	0.00%	0	0%	0	0%	55	2%	2825	98%
S/DUK/SCEG-CPLW//	0	291	454	0	0.00%	0	0%	0	0%	614	21%	2266	79%
S/DUK/SCEG-SC//	254	649	650	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/SCEG-SOCO//	254	649	650	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/SOCO-CPLW//	0	311	454	0	0.00%	0	0%	0	0%	604	21%	2276	79%
S/DUK/SOCO-TVA//	257	692	692	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/DUK/TVA-CPLW//	0	313	454	0	0.00%	0	0%	0	0%	584	20%	2296	80%
S/DUK/TVA-SOCO//	0	692	692	0	0.00%	0	0%	0	0%	1	0%	2879	100%
S/MEAG/DUK-MEAG//	0	95	175	0	0.00%	0	0%	0	0%	362	13%	2518	87%
S/MEAG/GTC-MEAG//	1,635	1,970	2,225	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/MEAG/MEAG-GTC//	2,446	2,701	2,996	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/MEAG/MEAG-TVA//	20	130	150	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/MEAG/SC-MEAG//	4	35	76	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/MEAG/SCEG-MEAG//	12	19	23	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/MEAG/TVA-MEAG//	0	54	172	0	0.00%	0	0%	0	0%	100	3%	2780	97%
S/SC/CPLW-DUK//	3,474	3,775	4,497	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/CPLW-SCEG//	0	1,638	3,701	0	0.00%	0	0%	0	0%	30	1%	2850	99%
S/SC/DUK-CPLW//	2,873	3,595	3,896	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/DUK-SCEG//	308	2,068	3,769	0	0.00%	0	0%	0	0%	0	0%	2880	100%

Appendix A (continued)

Segment	ATC			MWhs	Loading Factor	Partially Used		Fully Used		Unavailable		Uncleared	
	Min	Median	Max			Intervals	%	Intervals	%	Intervals	%	Intervals	%
S/SC/DUK-SOCO//	812	3,415	3,671	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SC-CPLE//	340	2,867	4,942	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SC-DUK//	334	2,556	4,236	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SC-SCEG//	1,371	3,391	9,313	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SCEG-CPLE//	323	2,681	3,104	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SCEG-DUK//	2,402	3,065	3,108	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SCEG-SOCO//	611	3,061	3,106	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SC/SOCO-DUK//	0	2,246	2,610	0	0.00%	0	0%	0	0%	20	1%	2860	99%
S/SCEG/SC-CPLE//	183	377	622	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SCEG/CPLE-SC//	183	377	622	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SCEG/DUK-SC//	2	112	276	0	0.00%	0	0%	0	0%	1	0%	2879	100%
S/SCEG/DUK-SOCO//	2	112	276	0	0.00%	0	0%	0	0%	1	0%	2879	100%
S/SCEG/SC-CPLE//	387	632	826	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SCEG/SC-DUK//	578	742	852	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/SCEG/SC-SOCO//	960	4,055	6,273	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/TVA/AECI-LGEE//	0	3	346	0	0.00%	0	0%	0	0%	1,453	50%	1427	50%
S/TVA/AECI-TVA//	0	98	349	0	0.00%	0	0%	0	0%	864	30%	2016	70%
S/TVA/CPLW-AECI//	0	276	276	0	0.00%	0	0%	0	0%	32	1%	2848	99%
S/TVA/CPLW-DUK//	0	276	276	0	0.00%	0	0%	0	0%	109	4%	2771	96%
S/TVA/CPLW-LGEE//	0	276	276	0	0.00%	0	0%	0	0%	772	27%	2108	73%
S/TVA/CPLW-SOCO//	276	276	276	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/TVA/CPLW-TVA//	0	276	276	0	0.00%	0	0%	0	0%	20	1%	2860	99%
S/TVA/DUK-CPLW//	0	276	276	0	0.00%	0	0%	0	0%	109	4%	2771	96%
S/TVA/DUK-LGEE//	0	333	357	0	0.00%	0	0%	0	0%	877	30%	2003	70%
S/TVA/LGEE-AECI//	0	600	622	0	0.00%	0	0%	0	0%	40	1%	2840	99%
S/TVA/LGEE-TVA//	0	2,648	2,828	0	0.00%	0	0%	0	0%	52	2%	2828	98%
S/TVA/SOCO-CPLW//	140	276	276	0	0.00%	0	0%	0	0%	0	0%	2880	100%
S/TVA/SOCO-LGEE//	0	356	2,340	0	0.00%	0	0%	0	0%	772	27%	2108	73%
S/TVA/TVA-AECI//	0	600	600	0	0.00%	0	0%	0	0%	128	4%	2752	96%
SS/GTC/GTC-GTC//	25,273	25,704	25,935	0	0.00%	0	0%	0	0%	0	0%	2880	100%
SS/GTC/MEAG-GTC//	8,564	8,699	9,034	0	0.00%	0	0%	0	0%	0	0%	2880	100%
SS/SOCO/DUK-SC/MULTIPATHALIAS/	0	22	284	0	0.00%	0	0%	0	0%	318	11%	2562	89%
SS/SOCO/DUK-SCEG/MULTIPATHALIAS/	0	65	107	0	0.00%	0	0%	0	0%	36	1%	2844	99%
SS/SOCO/DUK-TVA/MULTIPATHALIAS/	0	618	1,066	0	0.00%	0	0%	0	0%	17	1%	2863	99%
SS/SOCO/SC-DUK/MULTIPATHALIAS/	0	305	455	0	0.00%	0	0%	0	0%	8	0%	2872	100%
SS/SOCO/SC-FL/MULTIPATHALIAS/	9	283	490	0	0.00%	0	0%	0	0%	0	0%	2880	100%
SS/SOCO/SC-SCEG/MULTIPATHALIAS/	1	65	107	0	0.00%	0	0%	0	0%	19	1%	2861	99%
SS/SOCO/SC-TVA/MULTIPATHALIAS/	51	305	490	0	0.00%	0	0%	0	0%	0	0%	2880	100%
SS/SOCO/SCEG-DUK/MULTIPATHALIAS/	0	154	202	0	0.00%	0	0%	0	0%	15	1%	2865	99%
SS/SOCO/SCEG-SC/MULTIPATHALIAS/	0	22	202	0	0.00%	0	0%	0	0%	308	11%	2572	89%