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Debbie-Anne A. Reese
Acting Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

June 28, 2024

RE: *Fifteenth Annual Informational Report of the Independent Auction Monitor
Docket Nos. ER09-88, ER17-514*

Dear Ms. Reese:

The Brattle Group (“Brattle”), as the Independent Auction Monitor (“IAM”) for the Southern Companies’ Day-Ahead and Hour-Ahead Energy Auctions in the Southern Balancing Authority Area (“Auction”), hereby submits its fifteenth annual informational report (the “Annual Informational Report”).

Consistent with prior annual reports, the Annual Informational Report, attached as Exhibit A, addresses the following: (1) the clearing price for each Auction; (2) the amount of energy offered and sold by each seller (identified by name) in each Auction; (3) the amount of energy bid on and purchased by each buyer in each Auction; (4) any instances where the IAM was unable to verify Southern Companies’ available capacity calculations or inputs; and (5) any instances where issues arose involving availability of or the terms for transmission service needed to accommodate an Energy Auction purchase. It also reports on the Southern Companies’ compliance with applicable Energy Auction Tariff requirements. The Annual Informational Report is submitted with our best efforts, as economists, to serve the purpose of the IAM as articulated in the Federal Energy Regulatory Commission’s orders.¹

Brattle is submitting a non-public and a public version of the Annual Informational Report. Brattle requests confidential and privileged treatment for the non-public version of the Annual Informational Report in accordance with 18 C.F.R. §§ 388.107 and 388.112. Brattle is authorized

¹ *Southern Company Services, Inc.*, 125 FERC ¶ 61,316 (2008); *Southern Company Services, Inc.*, 134 FERC ¶ 61,226 (2011); *Alabama Power Company*, 158 FERC ¶ 61,131 (2017).

to represent that Southern Companies join in this request for confidential and privileged treatment. A justification for the redactions in the public version of the Annual Informational Report has been developed by Southern Companies, and is attached as Exhibit B.

Pursuant to 18 C.F.R. § 388.112(d) and (e), the following individuals should be notified of any request or decision to release the non-public version of the Annual Informational Report or any part thereof and should be given opportunity to comment on any request for release:

Dean M. Murphy
The Brattle Group
One Beacon Street
Suite 2600
Boston, MA 02108
617.864.7900
dean.murphy@brattle.com

Paul Hughes
Southern Company Services, Inc.
Bin S-400 EC
3535 Colonnade Parkway
Birmingham, AL 35243
205.992.0441
phughes@southernco.com

Barbara Levine, Esq.
The Brattle Group
One Beacon Street
Suite 2600
Boston, MA 02108
617.864.7900
barbara.levine@brattle.com

Thank you for your attention to this matter. Please direct any questions concerning this submission to the undersigned.

Respectfully submitted,

/s/Dean M. Murphy

Dean M. Murphy

PRINCIPAL | BOSTON

Attachments

cc: All Parties (with public version of Exhibit A)

PUBLIC VERSION—REDACTED

Exhibit A

Independent Auction Monitor's Annual Informational Report

(Public Version—Redacted)

PUBLIC VERSION—REDACTED

Informational Report for The Southern Companies' Energy Auction

APRIL 24, 2023 TO APRIL 23, 2024

PREPARED FOR



THE FEDERAL ENERGY
REGULATORY COMMISSION

SUBMITTED BY

The Brattle Group
Independent Auction Monitor

JUNE 28, 2024



Informational Report
for
The Southern Companies' Energy Auction
April 24, 2023 to April 23, 2024

Docket Nos. ER09-88, ER17-514

June 28, 2024

Prepared By:

The Brattle Group, Inc.
One Beacon Street
Suite 2600
Boston, MA 02108

Van Ness Feldman, LLP
2000 Pennsylvania Avenue, NW
Suite 6000
Washington, DC 20006

The Brattle Group, Inc.

Principal Monitors:

Dean M. Murphy
Lucas Bressan

Assisted By:

Xander Bartone
Evan Bennett
Julia Caravias
Megan Diehl
Audrey Yan

Van Ness Feldman, LLP

Douglas W. Smith
Patrick M. Reimherr

Prepared For:

The Federal Energy Regulatory Commission

888 First Street NE
Washington, DC 20426

The views expressed in this report are those of the authors and do not necessarily reflect the views of The Brattle Group, Inc. or Van Ness Feldman, LLP.

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I. Introduction and Overview

This is the fifteenth annual report reviewing the Southern Companies’¹ Day-Ahead Energy (“DAE”) and Hour-Ahead Energy (“HAE”) auctions (collectively the “Energy Auction” or “Auction”), as administered by their agent, Southern Company Services Inc. (“SCS”). This report has been prepared by The Brattle Group (“Brattle”), which serves as the Independent Auction Monitor (“IAM”) and is being provided to the Federal Energy Regulatory Commission (“FERC” or “Commission”) in order to provide the Commission with information regarding our ongoing monitoring of the Energy Auction. This report includes:

- a. The clearing price for each Auction that cleared;
- b. The amount of energy offered and sold by each seller in each Auction;
- c. The amount of energy bid on and purchased by each buyer in each Auction;
- d. Instances where the IAM was unable to verify SCS’s Available Capacity calculations, or inputs used in those calculations;
- e. Instances where issues arose involving the availability or terms of transmission service needed to accommodate an Energy Auction purchase;
- f. Changes in the IAM’s protocols;
- g. Any instances in which the IAM has reported complaints regarding the Energy Auction or other serious matters to FERC;
- h. Any instances of suspected Energy Auction manipulation or other questionable behavior related to the Energy Auction by any Auction Participant;
- i. Confirmation as to whether SCS complied with the Energy Auction Tariff² regarding the handling of Auction Participant confidential information; and
- j. Confirmation as to whether, in the judgment of the IAM, the Energy Auction is being properly administered in accordance with the Energy Auction Tariff, with due regard for its nature and complexity.

¹ Alabama Power Company, Georgia Power Company, Mississippi Power Company, and Southern Power Company are referred to collectively as “Southern Companies.”

² Southern Companies’ market-based rate tariff includes several relevant segments: General Tariff Provisions; Rules of the Energy Auction (“Auction Rules”); Rules on Southern Companies’ Energy Auction Participation (“Participation Rules”); and Appendices DA-1, DA-2, HA-1, and HA-2 to the Participation Rules. Alabama Power Company Market Based Rate Tariff and Southern’s Tariff Volume No. 4 (effective February 8, 2017). We refer to these documents collectively as “the Tariff.”

The review period for this informational report is April 24, 2023 through April 23, 2024.³ The rest of the report is organized as follows. Section II summarizes the clearing price of each cleared Firm-LD and Recallable DAE auction, and each cleared HAE auction. Sections III and IV provide information about the participation of Energy Auction offerors and bidders, respectively. Section V summarizes changes in the Auction and in our monitoring and verification protocols during the current review period. Section VI summarizes the results of our monitoring, including those instances in which SCS did not fully comply with the Tariff. Section VII contains the summary report of the IAM’s legal advisor, Van Ness Feldman, LLP (“Van Ness Feldman”), which assisted in monitoring compliance with the data restrictions contained in the Tariff. Lastly, Section VIII provides our conclusions and a summary of our observations.

A. Summary of Conclusions

To the best of our ability to ascertain, and with the specific exceptions identified in this report, we have found that SCS has complied with the requirements of the Tariff throughout the review period. We found no evidence of attempts to manipulate the Auction or other questionable behavior by any Auction Participant, nor did we receive any complaints regarding the availability or the terms of transmission service needed to accommodate an Energy Auction purchase. Van Ness Feldman’s review of compliance with the Tariff’s data restrictions found that SCS has been diligent in its efforts to comply with the applicable Tariff requirements related to safeguarding confidential bid and offer information during the review period, and further found no evidence that SCS marketing function employees had any improper access to confidential bid or offer information. Lastly, we did not receive any complaints relating to the Energy Auction or discover other serious matters that would have prompted an interim report to the Commission.

II. Clearing Price for Each Energy Auction

During the review period, seven DAE auctions cleared for Firm-LD energy (*i.e.*, seven auctions matched a buyer’s bid with a seller’s offer) and no DAE auctions cleared for Recallable energy (*i.e.*, no auctions matched a buyer’s bid with a seller’s offer), as shown in Table 1. A total of 12,000 MWh of Firm-LD energy cleared the DAE auction at a weighted average price of [REDACTED]. In the prior year (Year 14), eight DAE auctions cleared (two Firm-LD and six Recallable).

³ Throughout this report, we sometimes refer to the current review period as “Year 15,” and to the previous review period, covering April 24, 2022 through April 23, 2023, as “Year 14.”

**TABLE 1
DAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY**

Delivery Date	Product	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
1/15/2024	Firm-LD						50.55			
2/23/2024	Firm-LD						16.00			
4/16/2024	Firm-LD						24.96			
4/17/2024	Firm-LD						25.04			
4/18/2024	Firm-LD						29.19			
4/19/2024	Firm-LD						27.96			
4/22/2024	Firm-LD						23.98			
Total/Average						750				

During the current review period, 551 HAE auctions cleared. This is more than the prior year (Year 14), which had 395 cleared auctions, and is higher than in other recent years (with the exception of Year 13, which showed the largest number of HAE clearings in the history of the Auction, 793 HAE clearings). The greater number of HAE auction clearings in Year 15 is partially attributable to increased participation of third parties as bidders in the HAE auction during this review period, as discussed in Section IV below. A monthly summary of HAE auction clearings is provided in Table 2, with detail on individual clearings provided in Appendix D. [REDACTED]

[REDACTED]

[REDACTED]. A total of 46,609 MWh cleared through the HAE auction, slightly more than the amount cleared in Year 14 (41,014 MWh), and more than in other recent years (again with the exception of Year 13, which showed the highest in the history of the Auction, 87,418 MWh). The transaction size ranged from 1 to 410 MW, with a weighted-average clearing price of [REDACTED].

[REDACTED]

TABLE 2
MONTHLY SUMMARY OF HAE AUCTION CLEARINGS

Month	Number of Clearings	Average MW Offered in Cleared Auctions	Average MW Bid in Cleared Auctions	Average MW Cleared	Clearing Price (Weighted Average \$/MWh)
April 24 - 30, 2023	20				
May 2023	46				
June 2023	11				
July 2023	51				
August 2023	42				
September 2023	30				
October 2023	2				
November 2023	26				
December 2023	37				
January 2024	46				
February 2024	96				
March 2024	32				
April 1 - 23, 2024	112				
Total/Average	551				

III. Energy Auction Offerors

Table 3 lists the 27 registered Auction Participants for the Energy Auction. In Year 15, one new Auction Participant was added (Mercuria Energy America, LLC); none were removed.

██████████ (SCS, ██████████) offered hour-ahead energy in the HAE auction, the same number of participants as in Year 14. Third-party participants (██████████) offered energy into a total of ██████ HAE auctions (█████ of the 8,784 HAE auctions), down from the ██████ auctions with third-party offers observed in Year 14.

██████████ (SCS, ██████████) offered Firm-LD energy in at least one DAE auction, ██████████ offered Recallable energy in at least one DAE auction; relative to Year 14, ██████████ offering into each of the Firm-LD energy and Recallable energy auctions. Third-party participants submitted offers into a total of ██████ out of 256 Firm-LD DAE auctions ██████████ of the 256 Recallable energy DAE auctions ██████████.

TABLE 3
REGISTERED AUCTION PARTICIPANTS DURING THE REVIEW PERIOD

<i>Company Acronym</i>	<i>Company Name</i>
AEC	PowerSouth Energy Cooperative
AECI	Associated Electric Cooperative, Inc.
AEM	ArcLight Energy Marketing, LLC
BMLP	Brookfield Energy Marketing LP
CALPINE	Calpine Energy Services, L.P.
CCG	Constellation Energy Commodities Group
COEI	Cooperative Energy, Inc.
CONOCO	ConocoPhillips Company
CPLC	Progress Energy Carolinas, Inc.
DESC	Dominion Energy South Carolina, Inc.
DUK	Duke Energy Carolinas, LLC
EDF	EDF Trading North America, LLC
FEMT	BNP Paribas Energy Trading GP
FPC	Progress Energy Florida, Inc.
JPMVEC	JP Morgan Ventures Energy Corporation
MACQUARIE	Macquarie Energy LLC
MEAI	Mercuria Energy America, LLC
MLCI	Merrill Lynch Commodities Inc.
OPC	Oglethorpe Power Corporation
PPLE	PPL EnergyPlus, LLC
REMC	Rainbow Energy Marketing Corporation
SOCO	Southern Company Services, Inc.
TEA	The Energy Authority
TNSK	Tenaska Power Services Co.
TVA	Tennessee Valley Authority
UPP	Union Power Partners, LP
WRGS	Westar Energy, Inc.

SCS offered energy into all of the HAE and DAE auctions, as it is required to do, with the following exceptions:

- 4 Firm-LD DAE auctions (1.6% of the 256 Firm-LD DAE auctions), and
- 7 HAE auctions (0.1% of the 8,784 HAE auctions).

The lack of SCS offers into the 4 Firm-LD auctions is explained by the lack of available capacity, in which case SCS was not required to offer capacity into these auctions. The lack of offers in 7 HAE auctions did constitute instances of non-compliance, as discussed further in Section VI.A.

Table 4 shows the corresponding amounts of energy offered into the HAE and DAE auctions by each participant. Across all the auctions, 50.2 TWh of energy were offered, an increase relative to the 42.0 TWh of energy offered in Year 14.

IV. Energy Auction Bidders

Table 5 shows the MWh quantities of energy bid by each participant in the HAE and DAE auctions. SCS and [REDACTED] bid into the HAE auction. Third-party participants bid into [REDACTED] of all HAE auctions). While this is below the number in Year 13 (which had the largest number of HAE auctions with third-party bids in the history of the Auction, [REDACTED]), it is higher than the number observed in other recent years ([REDACTED] in Year 14 and [REDACTED] in Year 12). Participation by SCS as a bidder was [REDACTED] as in Year 14, with SCS placing bids in [REDACTED] of HAE auctions, versus [REDACTED] in Year 14.

In the DAE auction, [REDACTED] (SCS, [REDACTED]) bid into at least one Firm-LD auction, while [REDACTED] bid for Recallable energy. The total number of Firm-LD DAE auctions with third-party bids was [REDACTED] in Year 15, [REDACTED] in Year 14. Third parties placed bids [REDACTED] Recallable DAE auctions in Year 15, [REDACTED] [REDACTED] in Year 14. [REDACTED]

Across all the auctions, approximately 1.76 TWh of energy bids were submitted, with [REDACTED] of this volume submitted through the HAE auctions. SCS accounted for [REDACTED] of the total bid volume across the DAE and HAE auctions. The average amount of capacity bid into the Firm-LD DAE auctions was [REDACTED] in Year 14. The average amount of energy bid into the Recallable DAE auctions was [REDACTED] [REDACTED] in Year 14. [REDACTED]. For the HAE auction, the average amount of energy bid was [REDACTED] in Year 14.⁶

⁶ Averages reflect total bid quantities across all Firm-LD DAE auctions, Recallable DAE auctions, and HAE auctions, though not all of these had bids. The average total bid quantity in Firm-LD DAE auctions that had a bid was [REDACTED], the average total bid quantity in Recallable DAE actions that had a bid was [REDACTED], and the average total bid quantity in HAE auctions that had a bid was [REDACTED].

TABLE 5
 QUANTITY OF ENERGY BID IN DAE AND HAE AUCTIONS, BY PARTICIPANT (MWH)

<i>Participant</i>	<i>HAE</i>	<i>DAE</i>	
		<i>Firm LD</i>	<i>Recallable</i>
[REDACTED]			

V. Changes in Auction and Auction Verification Protocols

A. Changes in Monitoring Protocols

Our processes and accompanying automated “tools” that make the needed calculations to validate Available Capacity, Seller Offer Prices (“SOPs”), and the clearing price for each Auction are set forth in our protocols. These protocols were created and tested during the initialization phase of our monitoring assignment, prior to the start of the Auction, and have been updated as needed to reflect new information, changes, and improvements. The current versions of our 10 protocols are shown in Appendix A. They include:

Protocol I—Monitoring of SCS’s daily load forecasts

Protocol II—Monitoring of SCS’s daily load forecast uncertainty (“LFU”) calculations

Protocol III—Monitoring SCS’s bilateral transactions into the Southern Balancing Authority Area during the Energy Auction bid periods

Protocol IV—Monitoring of SCS’s unit outage data

Protocol V—Verifying DAE Available Capacity calculations and the associated SOPs, as well as the final SOP curve submitted to OATI

Protocol VI—Verifying the HAE Residual Supply Curve calculations and the associated SOPs, as well as verification of the final SOP curve submitted to OATI

Protocol VII—Verifying SCS’s compliance with the Tariff regarding the treatment of cleared Recallable energy, when applicable

Protocol VIII—Verifying Energy Auction clearing, when applicable

Protocol IX—Assessing availability of transmission services for energy sold through the Energy Auction

Protocol X—Monitoring of Third-Party Energy Auction Participants

Our protocols are living documents that are modified as needed. In Year 15, there was one change to our protocols, as summarized in Table 6. Only this single change to our protocols during the current review period is discussed here.

TABLE 6
SUMMARY OF CHANGES TO IAM PROTOCOLS IN YEAR 15

<i>Protocol</i>	<i>Changes in Year 15</i>
I. Load Forecasting	No changes
II. Load Forecasting Uncertainty	Updated LFU percentages
III. Purchases and Sales	No changes
IV. Outages	No changes
V. DAE Available Capacity and SOP Verification	No changes
VI. HAE Available Capacity and SOP Verification	No changes
VII. Recallable energy Verification	No changes
VIII. Auction Clearing Price Verification	No changes
IX. Assessment of Transmission Services for Energy Auction Purchases	No changes
X. Monitoring of Third-Party Participation	No changes

Protocol II—Load Forecast Uncertainty Protocol

As in previous years, SCS performed an annual revision of LFU percentage values for use in the DAE auction, taking effect on August 1, 2023. We independently verified these values, which are summarized in Appendix C, and have incorporated them into our daily monitoring.

VI. Results of Monitoring

During the current review period, our daily and periodic monitoring activities revealed six instances of non-compliance. These are summarized in Table 7 below, grouped into four types:

1. Failure to submit offer curves in the HAE auction due to a deliberate decision by SCS to manually exclude capacity from the HAE auction (one instance),
2. Failure to submit offer curves in the HAE auction due to technical issues (two instances),
3. Capacity exclusion in the DAE and HAE auctions (two instances), and
4. Bilateral trade executed during the HAE Auction Bid Period (one instance).

As described in Section III, SCS offered energy into all of the HAE and DAE auctions, as it is required to do, with the following exceptions:

- 4 Firm-LD DAE auctions (1.6% of the 256 Firm-LD DAE auctions),
- 7 HAE auctions (0.1% of the 8,784 HAE auctions).

The lack of SCS offers into the 4 Firm-LD auctions is explained by the lack of available capacity for those auctions, in which case SCS was not required to offer capacity into these auctions. The lack of offers in 7 HAE auctions did constitute instances of non-compliance. These are described in more detail in Section VI.A below.

In this review period, we observed a decrease in the number of non-compliant events relative to Year 14. The overall frequency of instances of non-compliance continues to be reasonably low.

**TABLE 7
INSTANCES OF NON-COMPLIANCE IN YEAR 15**

<i>Type of Event</i>	<i>Period Affected by Event</i>
I. Failure to submit offer curves in the HAE auction—manual capacity exclusion	1. 5 HAE auctions (1/17/2024 HE10—14)
II. Failure to submit offer curves in the HAE auction—technical issues	2. 1 HAE auction (1/20/2024 HE21) 3. 1 HAE auction (3/18/2024 HE20)
III. Capacity exclusion in the DAE and HAE auctions	4. 5 DAE auctions (between 1/15/2024 and 1/29/2024) 5. 11 DAE auctions (between 1/15/2024 and 1/29/2024) and 56 HAE auctions (between 1/3/2024 HE1 and 2/8/2024 HE9)
IV. Bilateral trade executed during the HAE Auction Bid Period	6. 1 HAE auction ()

In the next section, we briefly describe these non-compliant events. For more detail on these issues, see the issue tracking forms included in Appendix B.

A. Non-Compliant Events

I. Failure to submit offer curves in the HAE auction—manual capacity exclusion

The first type of non-compliant event involved the failure to submit offer curves for five consecutive HAE auctions between 1/17/2024 HE10 and HE14. On 2/1/2024 SCS explained that on the referenced January date, manual edits had been made in their models to remove all capacity from the Auction to ensure that capacity would be available to meet system load. SCS further explained that the morning of the event was a particularly cold morning

[REDACTED]

[REDACTED] With the aim of maintaining system reliability, the decision was made to remove all units from the Auction by flagging them as being reserved for system reliability. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

SCS explained that the process of implementing edits is a manual task performed by a Fleet Coordinator. Due to the timing of the Auction, the manual edits were implemented around 7:00 AM but did not take effect until the auction for HE10. [REDACTED] [REDACTED], the Fleet Coordinator neglected to remove the edits, which resulted in no capacity being offered despite the expectation that some capacity might have been available. Once they noticed that no capacity was being submitted, personnel began investigating and found the manual edits still in place. The issue was corrected and a curve was submitted for HE15. As a result of the manual edits, no capacity was offered into the HAE auctions between 1/17/2024 HE10 and HE14.

Brattle analyzed detailed hourly resource level data to determine whether capacity should have been offered into the Auction. For the five auctions in question, the manual edits SCS implemented flagged all generation capacity as being unavailable for the Auction via a manual edit that overwrote other information about unit availability, and as a result it was not possible to evaluate the actual availability of each unit. Our analysis also revealed that there were no third-party bids for the five auctions in question, and as a result there was no impact to their outcome.

For all the auctions discussed above, we understand that the Tariff requires SCS to evaluate the availability of each unit and to reflect whatever capacity was actually available. In this instance, rather than evaluating each unit's ability to contribute to available capacity, all units were simply manually removed from consideration for the Auction. It is particularly important to evaluate the availability of each individual resource at times when the power system is under stress, as was the case during the affected period.

II. Failure to submit offer curves in the HAE auction—technical issues

The second type of non-compliant event involved two instances of failure to submit offer curves in the HAE auction (numbers 2–3 in Table 7 above). These events resulted from technical issues around the offer development and submission process, but with different circumstances or root causes in each case:

- The first instance resulted from an unplanned outage that affected several applications. This outage was caused by a partial failure of a network switch due to a faulty line card. To prevent additional connectivity issues, the network services team modified network configurations to temporarily direct network traffic through a new path while a replacement card was obtained from the vendor. As a result of this outage SCS was unable to submit an offer curve into OATI

for 1/20/2024 HE21. The failure to submit an offer did not have an impact on the outcome of the Auction as no third-party bids were submitted for this hour.

- The second instance of this type of event was due to an unexpected system outage during a scheduled network change. The outage affected multiple systems, and resulted in the failure to submit offers for the HAE auction for 3/18/2024 HE20. SCS investigated and found that the root cause was a set of incorrect configuration settings in network components that were introduced as part of their network segmentation project. Corrective steps were identified and implemented on April 9, 2024. This failure to submit an offer did not have an impact on the outcome of the Auction as no third-party bids were submitted for this hour.

III. Capacity exclusion in the DAE and HAE auctions

The third type of non-compliant event involved two instances of discrepancies in the computation of available capacity for the DAE and HAE auctions (numbers 4–5 in Table 7 above). These events resulted from technical issues or administrative oversights around the offer development process, but with different circumstances or root causes in each case:

- The first instance of this type resulted from a software bug. SCS explained that a portion of the capacity of two generating units was inadvertently excluded due to a bug in the model that is used to determine Available Capacity. As a result, SCS' offers exceeded the SOP for five DEA auctions between 1/15/2024 and 1/29/2024. The outcome of the DAE Auction on 1/15/2024 was affected: on this date [REDACTED] Firm LD capacity cleared at a price of \$50.55/MWh. Absent this exclusion, the auction clearing price would have been \$50.46/MWh (same quantity [REDACTED] could have cleared; note that this date was also affected by another, unrelated capacity exclusion, discussed below). This issue did not have an impact on the outcome of the remaining four DAE auctions due to the absence of third-party bids, and it did not affect the HAE auction. A solution was put in place starting on DA flowdate 1/30/2024.
- The second instance of this type of event involved three units that were offered at a price higher than the SOP cap allowed by the Tariff, due to the use of incorrect maximum ratings in the calculation of the units' costs. This affected both the DAE and the HAE auctions. SCS explained that, due to an administrative oversight, the ratings for three generating units had not been modified at the beginning of the calendar year to reflect annual ratings updates. Brattle analyzed detailed resource level data to determine the impact of this error on SCS offers into the auctions. In the DAE auction, the SOP cap was exceeded on a total of 11 DA flowdates between 1/8/2024 and 1/29/2024, by a maximum of 11.67%. The outcome of the auction on 1/15/2024 was affected (this date was also affected by the unrelated capacity exclusion discussed above). On 1/15/2024 [REDACTED] of Firm LD capacity cleared at a

price of \$50.55/MWh. Had Southern offered at the SOP cap, the Auction Clearing Price would have been \$50.38/MWh (with the same [REDACTED] quantity clearing). This clearing price impact captures the combined impact of the capacity exclusion above with the outdated ratings discussed here. In the HAE auction, the SOP cap was exceeded on a total of 56 HAE auctions between 1/3/2024 HE1 and 2/8/2024 HE9, by a maximum of 224%. This issue did not affect the outcome of any of these HAE auctions, due to either the absence of third-party bids or the fact that the affected units were not part of offer blocks that did (or could have) taken part in auction clearing.

IV. Bilateral trade executed during the HAE Auction Bid Period

The fourth type of non-compliant event in Year 15 involved a bilateral sale into the Southern Balancing Authority Area (“BAA”) that was conducted during the Auction Bid Period, which is prohibited by the Tariff. On [REDACTED] SCS entered into a bilateral transaction to sell power for delivery into the Southern BAA [REDACTED]. The deal took place on [REDACTED], during the Auction Bid Period [REDACTED]. This event had no impact on the auction outcome, since auction clearing is not affected by the execution of a bilateral sale during the Auction Bid Period.

B. Additional Events

We identified four additional events that, while not necessarily violations of the Tariff, are noted here for completeness. These all involve bilateral sales into the Southern BAA during the prohibited Auction Bid Period. The Tariff prohibits Southern from entering into bilateral transactions within the Bid Period (from 25 minutes before the hour until 10 minutes before the hour) for products that can be transacted in the Auction. On a quarterly basis, we perform a sampling of bilateral sales transaction records and request all trading records (*e.g.*, phone conversations, instant messages between traders, *etc.*) for each of the trades in the sample. We then independently review this documentation to determine whether each sampled deal was compliant with the Tariff.

On four occasions, SCS traders engaged in the negotiation of a bilateral transaction during the Bid Period of an HAE auction. On [REDACTED], Southern traders discussed pricing for a transaction during the Auction Bid Period, though each of these deals was not finalized until after the Bid Period closed. While these deals were ultimately finalized outside of the prohibited Auction Bid Period and thus are not necessarily in violation of the Tariff, we believe that negotiating a deal during the Auction Bid Period is contrary to the spirit of the Tariff.

C. Monitoring of Auction Spread Posting

We have continued to monitor SCS's voluntary bid-offer spread posting policy in Year 15. The bid-offer spread was computed accurately and posted for all auctions that had at least one bid and one offer from different entities, the necessary condition for posting.

VII. Legal Advisor's Report on Compliance with Data Restrictions

The Auction Rules and Participation Rules in the Tariff contain restrictions concerning the treatment of confidential bid and offer information. Van Ness Feldman reviewed Southern Companies' compliance with the Tariff's data restrictions related to confidential bid and offer information, and reports on its review in this Section.

A. Fifteenth Annual Review

Van Ness Feldman conducted its annual review for the fifteenth review period in May and June of 2024. In conducting its review, Van Ness Feldman propounded written inquiries and requests for documents. In addition to reviewing documents and written responses to questions produced by SCS, Van Ness Feldman conducted telephone interviews with the two SCS employees who served in the role of Southern Auction Administrator during the review period, and one employee who has assumed the Southern Auction Administrator role at the start of the 2024/25 review period. Van Ness Feldman also conducted a phone interview with three representatives of TranServ International, Inc. ("TranServ"), the Independent Auction Administrator, who are responsible for the Independent Auction Administrator functions.

SCS has been fully cooperative during this annual review. It has answered all questions, provided the requested documents, and made its employees available for interviews. TranServ has also been cooperative in making representatives available for interview.

B. Findings

The review conducted by Van Ness Feldman found that SCS has been diligent in its efforts to comply with the Tariff's requirements related to confidential bid and offer information during the review period. Findings on specific Tariff requirements are detailed below.

1. Position of the Auction Administrator

The Tariff provides that only employees holding specific positions listed in Section 2.1 of the Participation Rules may serve as Southern Auction Administrators. During the review period, two SCS employees were designated as Southern Auction Administrators. Specifically, one SCS employee served as the primary Southern Auction Administrator and the second served as the back-up Southern Auction Administrator.

Section 2.1 of the Participation Rules provides that a Project Manager who is “[r]esponsible for leading, coordinating, and supporting the development and implementation of policies regarding strategic issues in order to promote consistency in regulatory matters at the federal level,” reports to “Regulatory Affairs and Energy Policy (a subdepartment within the Generation Compliance Organization),” and is “[w]ithin the Compliance Organization, which ultimately reports to the Southern Company Compliance Officer and General Counsel” may serve as a Southern Auction Administrator.⁷ The Project Manager who served as the primary Southern Auction Administrator had a position consistent with the terms of Section 2.1, except that the Project Manager position was housed in the Operations Compliance department, not Regulatory Affairs and Energy Policy. This discrepancy does not appear to create any incremental risk of noncompliance with the data confidentiality requirements in the Tariff.

Section 2.1 of the Participation Rules provides that a Pool Bill Operations Supervisor who is “[r]esponsible for providing oversight and direction to Contract Analysts” who are in turn “coordinating, managing and administering contract information related to the [Intercompany Interchange Contract (IIC)], producing the monthly energy billings pursuant to the IIC, and providing support in connection with the preparation and submission of data and other information to regulatory agencies” may serve as a Southern Company Administrator.⁸ In May 2023, the back-up Southern Auction Administrator who was in the position of Pool Bill Operations Supervisor was promoted to Pool Settlement Manager. The Pool Settlement Manager oversees the work of the Pool Bill Operations Supervisor. Pool Settlement Manager is not a position listed in Section 2.1 of the Participation Rules. This discrepancy does not appear to create any incremental risk of noncompliance with the data confidentiality requirements in the Tariff.

SCS has designated two new employees to serve in the Southern Auction Administrator role beginning with the 2024/25 review year. Both of these new Southern Auction Administrators are in Contract Analyst positions, consistent with Section 2.1 of the Participation Rules.

⁷ Participation Rules § 2.1.

⁸ *Id.*

2. Access to Confidential Bid and Offer Information

The Participation Rules require that a Southern Auction Administrator may only access confidential third-party bid or offer information⁹ if directed to do so by the IAM, or for the purpose of complying with posting requirements.¹⁰ The Tariff further provides that “[a]ll Bid Information and Offer Information submitted to the Auction Administrator shall be used by the Auction Administrator only for auction administration and audit purposes.”¹¹

SCS reported that the only handling of confidential third-party bid or offer information by a Southern Auction Administrator during the review period was in connection with the monthly receipt and posting of certain bid and offer information from four months prior.

Consistent with the revised Procedures for Southern Company Energy Auction Administration, dated July 18, 2014, neither of the Southern Auction Administrators had an Auction Administrator user ID for webMarket¹² during the review period. Instead, under those procedures, in the event the Southern Auction Administrator needed to access third-party confidential bid and offer information, the Southern Auction Administrator would have to request a temporary Auction Administrator user ID from the Independent Auction Administrator. The Southern Auction Administrators reported that they did not request a temporary Auction Administrator user ID or access any third-party confidential bid or offer information through webMarket during the review period. Transerv confirmed that it had not issued a temporary Auction Administrator user ID to either of the Southern Auction Administrators during the review period.

The primary Southern Auction Administrator has webMarket user status as Buyer Company Administrator/Buyer Security Administrator/Seller Company Administrator/Seller Security Administrator, which permits her to access Southern Companies’ confidential bid and offer data, but not the bid and offer data of third parties. During the review period, the primary Southern Auction Administrator periodically accessed webMarket to, for instance, reset SCS employee passwords or review data on SCS transactions, but did not use webMarket in ways that would

⁹ Bid information and offer information are defined as prices, terms, and conditions under which a bidder offers to purchase or an offeror offers to sell energy in the Auction. Auction Rules §§ 2.4, 2.41.

¹⁰ Participation Rules § 2.1B(b).

¹¹ Auction Rules § 3.5.

¹² “webMarket” is the software program through which the Auction is administered. An SCS user of webMarket would be able to access confidential bid and offer information of a third party only if the user had “Auction Administrator” rights.

give her access to confidential third-party bid or offer information.¹³ The back-up Southern Auction Administrator did not access webMarket during the review period.

Section 2.1B(d) of the Participation Rules provides that instances in which a Southern Auction Administrator has accessed confidential bid or offer information must be reported “(a) to the Independent Auction Administrator promptly upon its occurrence and (b) to the Independent Auction Monitor within one (1) business day of its occurrence.”¹⁴ There were no such reports made under Section 2.1B(d) during the review period.

In the course of finalizing the confidential version of the annual report submitted to FERC by the IAM in June 2023, the IAM requested review of the draft report for accuracy and completeness. The primary Southern Auction Administrator reviewed only Appendix B of the draft report, related to auction procedure violations, which did not include confidential third-party bid or offer information. No SCS employee reviewed any other portion of the draft report. SCS’s outside counsel reviewed the entire draft of the confidential version of the report.

The Auction Rules require that SCS post, by the end of each month, bid and offer data (without identification of the bidder or offeror) for the fourth month prior.¹⁵ The Independent Auction Administrator assembles this data, and conveys it to the Southern Auction Administrator before the end of each month. The information provided is promptly conveyed by the Southern Auction Administrator to the SCS employee who posts the data on the Southern Company website. This data is typically posted on the same day it is received by the Southern Auction Administrator.¹⁶ The Southern Auction Administrator does not do a substantive review of the information prior to conveying it to the appropriate SCS employee for posting. The Southern Auction Administrators’ access to this data for this purpose is expressly allowed under the Tariff.¹⁷

¹³ Numerous SCS marketing and trading employees use webMarket in connection with Southern Companies’ participation in the Auction. An SCS user of webMarket, including a Southern Auction Administrator, would be able to access confidential bid and offer information of a third party only if the user had “Auction Administrator” rights. No SCS employee has Auction Administrator rights.

¹⁴ Participation Rules § 2.1B(d).

¹⁵ Auction Rules § 4.2.4.

¹⁶ Historical bid and offer information is posted on the Southern Company website. Southern Company, Historical Bids and Offers, <https://www.southerncompany.com/about/energy-auction/historical-bids-and-offers.html> (last visited June 10, 2024).

¹⁷ Participation Rules § 2.1B(b).

3. Secure Storage of Confidential Bid and Offer Information

Confidential bid and offer information accessed by the Southern Auction Administrator must be “stored in a secure physical or electronic location.”¹⁸ SCS reports that it does not possess any physical records of confidential third-party bid or offer information. SCS further reports that it has no electronic records of confidential third-party bid or offer data.

During the review period, both Southern Auction Administrators worked on a hybrid work schedule, working in their offices on some days and working from their respective homes on other days. Both Southern Auction Administrators confirmed that they do not possess any physical or electronic records of confidential third-party bid or offer information at their homes.

4. Prohibition on Marketing and Trading Employee Access to Confidential Bid and Offer Information

The Tariff provides that “[t]hose employees of Southern Companies directly engaged in wholesale electricity marketing and trading shall not have access to Bid Information or Offer Information for any purpose (except to the extent such information is [posted] pursuant to Auction Rules Section 4.2.4).”¹⁹ Van Ness Feldman interviewed the two Southern Auction Administrators, reviewed emails from the Southern Auction Administrators to SCS marketing employees during two one-month sample periods, and reviewed a listing of the webMarket access rights for all Southern Companies employees. Van Ness Feldman found no evidence that SCS marketing or trading employees received third-party bid or offer information in violation of the Tariff or had improper access to such information during the review period.

5. Other Internal Data Control Restrictions Consistent with Standards of Conduct

The Tariff provides that “[i]n order to ensure that Bid Information and Offer Information is maintained in a manner consistent with the [Tariff], Southern Companies shall impose internal data control restrictions consistent with those used for Standards of Conduct compliance.”²⁰

Access to third-party bid and offer data on the webMarket system is available only to those individuals who are designated on webMarket as Auction Administrators (or IAMs). Neither of the Southern Auction Administrators nor any other SCS employee was designated as an Auction

¹⁸ *Id.* § 2.1B(d).

¹⁹ Participation Rules § 2.2.

²⁰ *Id.* § 2.3.

Administrator on the webMarket system during the review period. The only users of webMarket that were designated as Auction Administrators during the review period were employees of TranServ, the Independent Auction Administrator.

As described above, SCS has retained no third-party bid and offer information in physical or electronic form. Southern Auction Administrators have not accessed confidential third-party bid and offer information (except for the historical information provided by TranServ to be posted on the Southern Company website) during the review period. Access to the areas where the Southern Auction Administrators' offices are located is key card controlled, and marketing and trading personnel do not have access to those restricted areas.

The assignment of many auction administration functions to an Independent Auction Administrator operating from Minnesota substantially reduces any risk of inadvertent disclosure to SCS marketing or trading employees. The only handling of confidential third-party bid and offer information by the Southern Auction Administrators during the review period was related to the receipt of historical bid and offer information from the Independent Auction Administrator and forwarding of that information for posting. During the review period, most of the Independent Auction Administrator employees worked from their respective homes. The Independent Auction Administrator provided assurances that confidentiality of bid and offer information has been maintained for employees working from home.

The Southern Company Auction Administrator Protocol provides that “[t]he Auction Administrator and all personnel undertaking wholesale electricity marketing and trading activities for Southern Companies shall be familiar with this Auction Administrator Protocol and the data control restrictions set forth in this section.”²¹ Our interviews with the Southern Auction Administrators indicated that they are well versed in the data control restrictions.

The rules for the auction, including data control restrictions and rules on treatment of confidential bid and offer information, are covered in materials made available to SCS employees.

Van Ness Feldman found that the actions outlined above are reasonable steps to ensure that marketing function employees do not have access to third-party bid and offer information, consistent with the internal data control restrictions required by Section 2.3 of the Participation Rules.

²¹ Southern Company, Energy Auction: Auction Administrator Protocol § 1.3 (undated).

6. Summary of Findings

Based on its review, Van Ness Feldman found that SCS has been diligent in its efforts to comply with the applicable Tariff requirements related to safeguarding confidential bid and offer information during the review period. The Southern Auction Administrators have very limited access, consistent with the terms of the Tariff, to confidential third-party bid and offer information. Van Ness Feldman further found no evidence that SCS marketing function employees had any improper access to confidential bid or offer information during the review period.

VIII. Conclusion

We have monitored SCS's participation in the Energy Auction and its compliance with the Tariff during the fifteenth annual review period, April 24, 2023 through April 23, 2024. This report documents each instance during the review period where we have found that SCS's administration of the Energy Auction and its offers into the Energy Auction did not occur in full compliance with the Tariff. To the best of our ability to ascertain, and with the specific exceptions identified in this report, we have found that SCS has complied with the requirements of the Tariff throughout the review period. One notable exception is the failure to submit offer curves into 5 consecutive HAE auctions in January 2024, which resulted from SCS's manual exclusion of all capacity from the HAE auction.

The overall frequency of non-compliant events in Year 15 was lower than that in the prior review period and similar to other recent years. It continues to be reasonably low in absolute terms. We found no evidence of attempts to manipulate the Auction or other questionable behavior by any Auction Participant, nor did we receive any complaints regarding the availability or the terms of transmission service needed to accommodate an Energy Auction purchase. Van Ness Feldman's review of compliance with the Tariff's data restrictions found that SCS has been diligent in its efforts to comply with the applicable Tariff requirements related to safeguarding confidential bid and offer information during the review period, and further found no evidence that SCS marketing function employees had any improper access to confidential bid or offer information. Lastly, we did not receive any complaints relating to the Energy Auction or discover other serious matters that would have prompted an interim report to the Commission.

SCS has provided the data and information necessary for us to adequately monitor its participation in the Energy Auction, and has given us access to its personnel as we have requested. Except for the manual capacity exclusion noted above, the several instances identified in this report where SCS did fail to comply fully with specific Tariff provisions appear similar to

non-compliant events in previous review periods, in the sense that they appear to result from unintentional technical and administrative errors or system failures. It is probably unrealistic to expect that a complex administrative process such as the Energy Auction, which is overlaid on the even more complex process of managing SCS's power system, could be implemented perfectly, without any errors.

We have continued to monitor Southern Companies' posting of the bid-offer spread, and confirm that the bid-offer spread has been computed accurately and posted when the necessary conditions were met.

In Year 15, Auction participation by third-party offerors decreased in the HAE auction but increased in the DAE auction. Conversely, Auction participation by third-party bidders increased in the HAE auction in Year 15, but decreased in the DAE auction. Overall, the number of HAE auction clearings in Year 15 increased relative to Year 14, while the number of DAE auction clearings was similar to the number of clearings in Year 14. With the exception of Year 13, which had the highest number of HAE clearings in the history of the Auction, the number of clearings in the HAE auction remains higher than in other recent years. Similarly, the number of DAE auction clearings in Year 15 remains higher than in other recent years, reflecting trends in DAE auction participation by third parties.

Since the fourteenth annual report, our basic monitoring philosophy and practices have not changed, though we continue to update our monitoring process to improve the quality of monitoring and streamline the workflow, and to accommodate any changes in the Tariff, SCS's processes, and the Commission's guidance. We appreciate the Commission's continued confidence in our role as the IAM, and we look forward to receiving the Commission's feedback and guidance in the coming year.

APPENDIX A

IAM PROTOCOLS

This appendix contains our complete set of protocols. IAM protocols are living documents that are updated periodically as we gain experience in our monitoring role. This appendix includes the current version of each protocol, but we keep older versions on file, and will be able to provide them to the Commission, if requested.

Protocol I – Load Forecasting.....A-1

Protocol II – Load Forecast UncertaintyA-8

Protocol III – Purchases and SalesA-15

Protocol IV – Outages.....A-24

Protocol V – Day-Ahead Available Capacity and Seller Offer Prices Verification.....A-28

Protocol VI – Hour-Ahead Available Capacity and Seller Offer Prices VerificationA-37

Protocol VII – Recallable Energy Verification.....A-42

Protocol VIII – Auction Clearing Price Verification.....A-49

Protocol IX – Assessment of Transmission Services for Energy Auction Purchases.....A-57

Protocol X – Monitoring of Third-Party Participation in the Southern Company
Energy Auction.....A-58

THE REMAINDER OF THIS APPENDIX IS REDACTED

APPENDIX B

IAM ISSUE TRACKING FORMS

I. NON-COMPLIANT EVENTS

Failure to Submit HA Offer Curves for January 17, 2024 HE10-14 B-1

Bilateral Trade Executed During HAE Auction Bid Period..... B-3

Capacity Exclusion in DAE Auctions in January 2024..... B-4

Failure to Submit HA Offer Curve for January 20, 2024 HE21..... B-6

Discrepancies affecting the DAE and HAE Auctions in January and February 2024 B-7

Failure to Submit HA Offer Curve for March 18, 2024 HE20..... B-9

THE REMAINDER OF THIS APPENDIX IS REDACTED

APPENDIX C

LOAD FORECASTING UNCERTAINTY PERCENTAGES

This appendix contains the load forecast uncertainty average and maximum percentages calculated by SCS. These numbers were updated and the new load forecast uncertainty (“LFU”) numbers were implemented in [REDACTED] for flow date [REDACTED] onwards.

**Prior Average LFU Percentages
(Used through DAE delivery day [REDACTED])**

	DA0	DA1	DA2	DA3	DA4	DA5	DA6	DA7
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								

**Updated Average LFU Percentages
(Used from DAE delivery day [REDACTED])**

	DA0	DA1	DA2	DA3	DA4	DA5	DA6	DA7
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								

Prior Maximum LFU Percentages
(Used through DAE delivery day [REDACTED])

	DA0	DA1	DA2	DA3	DA4	DA5	DA6	DA7
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								

Updated Maximum LFU Percentages
(Used from DAE delivery day [REDACTED])

	DA0	DA1	DA2	DA3	DA4	DA5	DA6	DA7
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								

APPENDIX D

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
4/24/2023	18						26.23			
4/24/2023	19						29.76			
4/24/2023	24						23.02			
4/25/2023	1						23.01			
4/25/2023	5						27.01			
4/25/2023	6						30.65			
4/25/2023	8						30.65			
4/25/2023	9						30.65			
4/25/2023	10						26.25			
4/26/2023	10						26.83			
4/26/2023	11						26.84			
4/26/2023	12						27.38			
4/26/2023	13						29.00			
4/27/2023	8						31.78			
4/27/2023	13						30.25			
4/27/2023	14						26.65			
4/27/2023	15						31.16			
4/27/2023	16						31.16			
4/27/2023	17						31.16			
4/27/2023	18						31.16			
5/4/2023	8						26.78			
5/8/2023	18						40.00			
5/8/2023	19						35.87			
5/8/2023	20						36.39			
5/8/2023	22						25.00			
5/9/2023	1						20.42			
5/9/2023	7						26.24			
5/9/2023	18						33.00			
5/9/2023	19						26.75			
5/9/2023	20						32.96			
5/9/2023	21						26.75			
5/9/2023	23						26.75			
5/9/2023	24						20.37			
5/10/2023	19						42.77			
5/10/2023	20						47.77			
5/10/2023	21						31.26			
5/10/2023	22						26.96			
5/11/2023	21						40.00			
5/11/2023	23						22.88			
5/12/2023	1						19.77			
5/12/2023	2						23.00			
5/12/2023	7						28.02			
5/12/2023	8						26.97			
5/12/2023	12						27.45			
5/12/2023	13						29.70			
5/12/2023	19						25.62			
5/12/2023	23						20.82			
5/12/2023	24						19.85			
5/16/2023	9						27.12			
5/16/2023	17						54.01			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer (\$/MWh)</i>	<i>Highest Bid (\$/MWh)</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number of Bidders</i>	<i>Winning Offerors</i>
5/16/2023	18						54.34			
5/16/2023	23						28.00			
5/17/2023	10						30.68			
5/17/2023	11						30.68			
5/17/2023	12						28.60			
5/17/2023	22						28.60			
5/22/2023	1						16.29			
5/22/2023	9						32.00			
5/23/2023	13						33.59			
5/23/2023	14						33.54			
5/30/2023	10						25.00			
5/30/2023	11						25.98			
5/30/2023	15						23.57			
5/30/2023	17						25.45			
5/31/2023	13						25.68			
5/31/2023	14						25.31			
6/3/2023	11						20.54			
6/8/2023	12						24.19			
6/8/2023	13						24.68			
6/9/2023	11						27.50			
6/9/2023	12						27.47			
6/9/2023	17						26.09			
6/15/2023	19						23.00			
6/21/2023	19						28.66			
6/26/2023	23						20.88			
6/27/2023	1						22.55			
6/30/2023	21						32.00			
7/1/2023	2						19.20			
7/2/2023	21						35.00			
7/5/2023	10						34.00			
7/5/2023	11						31.98			
7/5/2023	15						34.00			
7/5/2023	16						34.09			
7/5/2023	17						33.75			
7/5/2023	18						34.00			
7/6/2023	10						31.10			
7/6/2023	15						42.97			
7/6/2023	18						36.17			
7/6/2023	19						33.87			
7/6/2023	20						33.21			
7/6/2023	21						45.00			
7/7/2023	23						25.40			
7/8/2023	12						28.57			
7/8/2023	18						39.19			
7/13/2023	9						34.30			
7/13/2023	10						30.53			
7/13/2023	11						29.69			
7/13/2023	12						29.69			
7/13/2023	13						42.00			
7/13/2023	15						33.99			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer (\$/MWh)</i>	<i>Highest Bid (\$/MWh)</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number</i>	<i>Winning Offerors</i>
7/13/2023	16						35.00			
7/13/2023	17						36.32			
7/13/2023	20						38.28			
7/13/2023	21						32.96			
7/13/2023	23						29.31			
7/14/2023	1						30.08			
7/14/2023	9						31.68			
7/14/2023	17						36.00			
7/14/2023	18						34.32			
7/14/2023	22						33.53			
7/15/2023	1						32.00			
7/15/2023	10						32.08			
7/15/2023	15						49.00			
7/16/2023	18						40.00			
7/17/2023	19						37.46			
7/17/2023	20						32.14			
7/17/2023	21						31.95			
7/17/2023	22						32.07			
7/18/2023	1						25.01			
7/18/2023	23						37.74			
7/18/2023	24						26.52			
7/24/2023	23						31.96			
7/24/2023	24						30.48			
7/26/2023	23						35.00			
7/27/2023	19						47.26			
7/27/2023	20						42.88			
7/27/2023	21						35.04			
7/27/2023	23						29.67			
8/1/2023	23						31.03			
8/2/2023	23						31.00			
8/2/2023	24						25.43			
8/3/2023	23						28.39			
8/3/2023	24						23.05			
8/4/2023	9						30.86			
8/4/2023	11						28.10			
8/7/2023	2						17.00			
8/7/2023	3						17.00			
8/7/2023	4						17.00			
8/7/2023	5						17.00			
8/7/2023	11						29.90			
8/7/2023	17						48.76			
8/10/2023	12						32.98			
8/10/2023	17						36.26			
8/11/2023	17						39.27			
8/11/2023	19						34.02			
8/11/2023	20						38.00			
8/11/2023	22						30.27			
8/12/2023	19						41.17			
8/12/2023	20						41.99			
8/12/2023	21						37.16			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer (\$/MWh)</i>	<i>Highest Bid (\$/MWh)</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number of Bidders</i>	<i>Winning Offerors</i>
8/13/2023	18						51.67			
8/13/2023	19						41.21			
8/17/2023	12						30.46			
8/18/2023	11						30.99			
8/19/2023	13						29.00			
8/20/2023	12						29.70			
8/20/2023	13						38.00			
8/20/2023	17						53.74			
8/20/2023	18						53.44			
8/21/2023	20						46.11			
8/22/2023	2						28.53			
8/22/2023	8						33.79			
8/22/2023	9						33.79			
8/23/2023	19						57.45			
8/23/2023	20						57.28			
8/23/2023	21						57.15			
8/23/2023	22						46.89			
8/31/2023	3						16.00			
8/31/2023	4						16.00			
8/31/2023	5						16.00			
9/3/2023	7						16.00			
9/3/2023	13						31.06			
9/3/2023	22						25.65			
9/6/2023	21						47.00			
9/6/2023	22						33.35			
9/6/2023	23						27.36			
9/6/2023	24						24.84			
9/7/2023	14						56.42			
9/7/2023	15						49.36			
9/7/2023	16						48.31			
9/7/2023	17						53.44			
9/7/2023	20						35.00			
9/10/2023	18						58.25			
9/10/2023	19						46.90			
9/10/2023	20						43.18			
9/11/2023	17						55.63			
9/11/2023	18						55.51			
9/12/2023	10						31.73			
9/12/2023	11						34.00			
9/12/2023	14						34.41			
9/12/2023	17						34.01			
9/12/2023	18						38.79			
9/14/2023	17						35.98			
9/14/2023	18						37.12			
9/14/2023	19						37.12			
9/14/2023	20						37.56			
9/16/2023	14						31.45			
9/16/2023	15						35.00			
9/21/2023	13						31.83			
9/26/2023	24						30.00			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer (\$/MWh)</i>	<i>Highest Bid (\$/MWh)</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number of Bidders</i>	<i>Winning Offerors</i>
10/11/2023	8						26.68			
10/21/2023	9						28.04			
11/2/2023	7						45.67			
11/10/2023	23						21.30			
11/11/2023	1						26.92			
11/11/2023	2						25.62			
11/11/2023	3						24.71			
11/11/2023	6						28.30			
11/11/2023	21						27.20			
11/11/2023	23						25.68			
11/11/2023	24						25.71			
11/12/2023	1						25.77			
11/12/2023	2						26.15			
11/12/2023	3						25.09			
11/12/2023	4						26.16			
11/12/2023	5						26.51			
11/12/2023	6						28.42			
11/12/2023	13						26.44			
11/12/2023	19						34.50			
11/12/2023	20						32.59			
11/12/2023	21						27.88			
11/12/2023	22						26.47			
11/13/2023	11						21.00			
11/14/2023	8						34.64			
11/20/2023	11						16.00			
11/26/2023	18						35.00			
11/26/2023	19						30.00			
11/30/2023	8						37.98			
12/7/2023	23						22.72			
12/11/2023	12						27.18			
12/12/2023	1						27.66			
12/12/2023	6						41.54			
12/13/2023	6						34.67			
12/13/2023	8						37.09			
12/14/2023	23						25.46			
12/14/2023	24						26.00			
12/16/2023	1						19.48			
12/16/2023	2						26.00			
12/16/2023	5						29.04			
12/16/2023	6						30.34			
12/16/2023	7						33.00			
12/16/2023	19						29.52			
12/16/2023	20						29.77			
12/16/2023	21						29.02			
12/18/2023	18						31.65			
12/19/2023	7						36.15			
12/19/2023	12						28.00			
12/19/2023	13						25.91			
12/19/2023	14						25.41			
12/19/2023	15						24.97			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
12/19/2023	17						36.04			
12/19/2023	18						36.67			
12/19/2023	19						40.00			
12/20/2023	6						41.39			
12/20/2023	8						38.75			
12/20/2023	10						21.77			
12/22/2023	1						28.01			
12/22/2023	2						26.25			
12/22/2023	3						27.01			
12/22/2023	6						35.18			
12/23/2023	20						26.07			
12/23/2023	21						25.57			
12/23/2023	22						25.10			
12/23/2023	23						16.40			
12/28/2023	11						23.42			
1/2/2024	7						33.52			
1/4/2024	12						35.62			
1/4/2024	14						25.89			
1/4/2024	15						25.19			
1/5/2024	11						30.00			
1/5/2024	12						25.03			
1/5/2024	13						22.92			
1/8/2024	11						23.35			
1/9/2024	22						26.27			
1/11/2024	7						45.88			
1/17/2024	19						59.59			
1/17/2024	20						127.00			
1/18/2024	18						41.27			
1/18/2024	19						42.88			
1/18/2024	21						38.76			
1/19/2024	10						31.67			
1/19/2024	17						39.18			
1/19/2024	18						38.74			
1/19/2024	19						40.19			
1/19/2024	20						42.78			
1/19/2024	21						42.46			
1/19/2024	22						43.15			
1/20/2024	19						41.78			
1/21/2024	19						41.16			
1/21/2024	20						35.62			
1/22/2024	2						41.08			
1/22/2024	4						45.00			
1/22/2024	11						40.87			
1/22/2024	12						33.70			
1/22/2024	13						24.29			
1/22/2024	14						35.00			
1/23/2024	3						25.57			
1/23/2024	4						26.65			
1/26/2024	8						32.95			
1/28/2024	18						34.06			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer (\$/MWh)</i>	<i>Highest Bid (\$/MWh)</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number of Bidders</i>	<i>Winning Offerors</i>
1/28/2024	19						34.06			
1/29/2024	7						34.06			
1/29/2024	10						24.26			
1/29/2024	11						16.76			
1/29/2024	13						20.54			
1/29/2024	14						18.88			
1/29/2024	15						18.89			
1/29/2024	16						22.77			
1/29/2024	17						30.79			
1/31/2024	9						26.98			
1/31/2024	10						21.98			
2/2/2024	13						17.09			
2/2/2024	14						16.52			
2/6/2024	7						29.57			
2/8/2024	10						15.00			
2/9/2024	13						14.85			
2/9/2024	14						14.23			
2/9/2024	15						17.00			
2/9/2024	16						17.00			
2/10/2024	10						13.58			
2/10/2024	11						13.60			
2/10/2024	12						17.00			
2/11/2024	11						17.00			
2/13/2024	6						23.07			
2/13/2024	12						15.34			
2/13/2024	13						15.06			
2/16/2024	21						15.51			
2/16/2024	22						12.40			
2/16/2024	23						11.30			
2/18/2024	12						15.10			
2/18/2024	15						14.46			
2/18/2024	16						18.00			
2/18/2024	16						18.00			
2/19/2024	6						20.52			
2/19/2024	7						30.00			
2/19/2024	12						15.56			
2/19/2024	19						21.55			
2/19/2024	20						23.40			
2/19/2024	21						18.01			
2/19/2024	22						16.96			
2/19/2024	24						19.36			
2/20/2024	3						23.40			
2/20/2024	4						23.40			
2/20/2024	5						18.40			
2/20/2024	6						26.40			
2/20/2024	7						34.55			
2/20/2024	8						19.41			
2/20/2024	9						18.16			
2/20/2024	10						13.07			
2/20/2024	11						11.53			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
2/20/2024	12						17.56			
2/20/2024	13						17.14			
2/20/2024	18						21.81			
2/20/2024	19						23.40			
2/20/2024	20						17.76			
2/20/2024	21						23.40			
2/20/2024	22						16.93			
2/20/2024	24						20.00			
2/21/2024	3						18.84			
2/21/2024	4						20.33			
2/21/2024	9						12.46			
2/21/2024	10						11.25			
2/21/2024	11						13.75			
2/21/2024	14						10.00			
2/21/2024	16						20.84			
2/22/2024	7						32.64			
2/22/2024	7						32.64			
2/22/2024	9						20.58			
2/22/2024	10						11.96			
2/22/2024	13						25.21			
2/22/2024	18						20.73			
2/22/2024	19						20.73			
2/22/2024	20						16.12			
2/25/2024	1						11.83			
2/25/2024	2						12.27			
2/25/2024	5						21.47			
2/25/2024	6						19.84			
2/25/2024	7						24.55			
2/25/2024	8						15.51			
2/25/2024	9						15.48			
2/26/2024	5						19.84			
2/26/2024	6						19.84			
2/26/2024	7						19.84			
2/26/2024	8						15.41			
2/26/2024	9						15.73			
2/26/2024	10						10.52			
2/26/2024	11						23.00			
2/26/2024	12						11.71			
2/26/2024	17						19.84			
2/26/2024	18						21.47			
2/26/2024	19						21.47			
2/26/2024	20						16.24			
2/26/2024	21						15.23			
2/27/2024	17						18.57			
2/27/2024	18						18.57			
2/27/2024	19						18.46			
2/28/2024	13						19.95			
2/28/2024	15						19.95			
2/28/2024	15						19.95			
2/28/2024	16						16.25			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
2/28/2024	17						20.00			
2/28/2024	18						21.60			
2/28/2024	19						21.60			
2/29/2024	5						18.79			
2/29/2024	6						19.95			
2/29/2024	7						19.95			
2/29/2024	8						21.60			
2/29/2024	9						18.66			
2/29/2024	10						18.72			
2/29/2024	23						20.00			
3/1/2024	5						17.56			
3/1/2024	6						19.94			
3/2/2024	10						20.00			
3/4/2024	14						26.16			
3/7/2024	19						18.71			
3/8/2024	22						16.94			
3/9/2024	16						12.87			
3/9/2024	18						30.00			
3/10/2024	21						16.77			
3/10/2024	22						13.17			
3/10/2024	24						13.12			
3/11/2024	1						12.46			
3/11/2024	2						13.64			
3/11/2024	6						28.00			
3/11/2024	11						12.94			
3/12/2024	6						28.73			
3/12/2024	7						30.67			
3/14/2024	23						12.78			
3/14/2024	24						14.72			
3/15/2024	1						12.87			
3/19/2024	1						16.45			
3/19/2024	2						16.47			
3/19/2024	3						20.00			
3/20/2024	9						17.86			
3/21/2024	8						15.71			
3/21/2024	9						17.17			
3/23/2024	14						12.03			
3/23/2024	15						12.59			
3/24/2024	8						21.48			
3/24/2024	9						14.49			
3/24/2024	10						11.60			
3/26/2024	24						16.87			
4/2/2024	1						17.75			
4/2/2024	2						16.99			
4/2/2024	19						34.77			
4/2/2024	20						30.54			
4/3/2024	2						18.18			
4/3/2024	3						17.26			
4/3/2024	4						17.21			
4/3/2024	9						30.00			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
4/3/2024	11						16.36			
4/3/2024	12						19.75			
4/3/2024	13						16.68			
4/3/2024	14						16.75			
4/3/2024	15						16.85			
4/3/2024	17						18.57			
4/3/2024	20						29.73			
4/3/2024	21						30.72			
4/4/2024	7						29.39			
4/5/2024	1						18.77			
4/5/2024	17						20.95			
4/6/2024	20						30.00			
4/6/2024	21						28.00			
4/6/2024	22						25.00			
4/7/2024	2						16.90			
4/8/2024	6						29.84			
4/8/2024	7						35.00			
4/8/2024	8						30.19			
4/8/2024	16						18.95			
4/9/2024	16						20.00			
4/9/2024	20						31.06			
4/10/2024	19						30.00			
4/11/2024	7						33.19			
4/11/2024	8						32.57			
4/11/2024	9						33.29			
4/11/2024	11						21.01			
4/11/2024	12						21.09			
4/11/2024	13						33.98			
4/11/2024	14						34.93			
4/11/2024	16						30.00			
4/11/2024	17						29.93			
4/11/2024	18						28.11			
4/11/2024	22						20.08			
4/13/2024	9						12.04			
4/13/2024	24						15.00			
4/14/2024	17						24.00			
4/14/2024	18						29.60			
4/14/2024	19						30.00			
4/14/2024	20						30.00			
4/14/2024	21						27.53			
4/14/2024	22						25.10			
4/14/2024	23						20.00			
4/14/2024	24						14.99			
4/15/2024	1						12.16			
4/15/2024	2						13.75			
4/15/2024	13						26.58			
4/15/2024	14						26.58			
4/15/2024	15						27.70			
4/15/2024	16						28.56			
4/15/2024	17						28.44			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

Delivery Date	Hour Ending (CPT)	Offer MW	Bid MW	Lowest Offer (\$/MWh)	Highest Bid (\$/MWh)	Cleared MW	Clearing Price (\$/MWh)	Winning Bidders	Total Number of Bidders	Winning Offerors
4/15/2024	18						28.82			
4/15/2024	19						37.62			
4/15/2024	20						29.82			
4/15/2024	21						25.97			
4/15/2024	22						25.84			
4/15/2024	23						16.84			
4/16/2024	6						21.49			
4/16/2024	14						27.34			
4/17/2024	1						15.81			
4/17/2024	15						28.95			
4/17/2024	16						28.95			
4/17/2024	17						28.95			
4/17/2024	18						28.95			
4/17/2024	22						25.00			
4/17/2024	23						15.09			
4/17/2024	24						15.80			
4/18/2024	6						25.00			
4/18/2024	7						30.00			
4/18/2024	8						28.95			
4/18/2024	9						28.95			
4/18/2024	10						29.00			
4/18/2024	11						30.00			
4/18/2024	12						30.44			
4/18/2024	13						30.74			
4/18/2024	14						34.50			
4/18/2024	15						35.88			
4/18/2024	15						35.88			
4/18/2024	16						30.74			
4/18/2024	17						34.00			
4/18/2024	18						33.42			
4/18/2024	22						30.52			
4/18/2024	24						15.42			
4/19/2024	6						32.93			
4/19/2024	11						31.07			
4/19/2024	12						31.07			
4/19/2024	13						27.75			
4/19/2024	14						34.85			
4/19/2024	15						35.18			
4/19/2024	16						34.66			
4/19/2024	17						29.77			
4/19/2024	18						31.41			
4/19/2024	19						34.96			
4/19/2024	20						31.85			
4/19/2024	23						16.33			
4/19/2024	24						18.10			
4/20/2024	1						12.83			
4/20/2024	13						29.75			
4/20/2024	20						34.26			
4/21/2024	11						22.21			
4/21/2024	12						22.60			

HAE CLEARED AUCTIONS: CLEARING PRICE AND QUANTITY (CONT)

<i>Delivery Date</i>	<i>Hour Ending (CPT)</i>	<i>Offer MW</i>	<i>Bid MW</i>	<i>Lowest Offer</i>	<i>Highest Bid</i>	<i>Cleared MW</i>	<i>Clearing Price (\$/MWh)</i>	<i>Winning Bidders</i>	<i>Total Number of Bidders</i>	<i>Winning Offerors</i>
4/21/2024	13						22.75			
4/21/2024	23						11.15			
4/22/2024	6						33.19			
4/22/2024	7						31.56			
4/22/2024	8						16.84			
Total/Average	—					46,609		—	—	—

PUBLIC VERSION—REDACTED

Exhibit B

Explanation for Redactions in Public Version of the Independent Auction Monitor's Annual Informational Report

PUBLIC VERSION—REDACTED

Justification for privileged treatment under 18 C.F.R. §§ 388.107 and 388.112	Page of Report
<p>Data reflects Energy Auction bid and/or offer information and related non-public Energy Auction information related to one or more Energy Auction participants (including Southern Companies), which are commercially valuable and not yet public, which could be used to the competitive disadvantage of Energy Auction participants, and which Southern Companies are obligated to keep confidential in accordance with their market-based rate tariff and applicable orders of the Commission regarding the Energy Auction.</p>	<p>2, 3, 4, 6, 7, 8, 13, 14</p>
<p>Data/information reflects generator reference prices and generator-specific cost and/or cost inputs, which are commercially valuable, necessary to Southern Companies' participation in the marketplace, not yet public, and the release of which could give others in the marketplace a competitive advantage against Southern Companies, to the detriment and harm of their retail customers.</p>	
<p>Data/information reflects Southern Companies' internal, trade secret and proprietary systems and processes and other intellectual property, which are commercially valuable, necessary to Southern Companies' participation in the marketplace, not yet public, and the release of which could give others in the marketplace a competitive advantage against Southern Companies, to the detriment and harm of their retail customers.</p>	<p>Appendix A, Appendix B, Appendix C</p>