

June 28, 2019

Via Electronic Filing

Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

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

Dear Ms. Bose:

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 tenth 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 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.<sup>1</sup>

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 to represent that Southern Companies join in this request for confidential and privileged treatment. A justification for the

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SYDNEY

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).

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:

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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 Murphy

Attachments

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



# **Exhibit A**

Independent Auction Monitor's Annual Informational Report

(Public Version—Redacted)

# Informational Report for The Southern Companies' Energy Auction

April 24, 2018 to April 23, 2019

#### PREPARED FOR



#### SUBMITTED BY

The Brattle Group
Independent Auction Monitor

JUNE 28, 2019



## Informational Report for The Southern Companies' Energy Auction April 24, 2018 to April 23, 2019

Docket Nos. ER09-88, ER17-514

June 28, 2019

## Prepared By:

The Brattle Group, Inc.
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# The Brattle Group, Inc.

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### Assisted By:

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### 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 tenth annual report reviewing the Southern Companies' 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 Tariff<sup>2</sup> as relating to 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.

Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company, and Southern Power Company are referred to collectively as "Southern Companies." Southern Companies recently sold Gulf Power Company to NextEra Energy, as discussed in Section V.A.

<sup>&</sup>lt;sup>2</sup> 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, 2018 through April 23, 2019.<sup>3</sup> 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"), who assisted in monitoring compliance with the data restrictions contained in the Tariff. Lastly, Section VIII provides our conclusions and a summary of our observations.

#### **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 Tariff requirements related to safeguarding confidential bid and offer information, and further found no evidence that SCS marketing function employees had any improper access to confidential bid or offer information during the review period. 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.

Throughout this report, we sometimes refer to the current review period as "Year 10," and to the previous review period, covering April 24, 2017 through April 23, 2018, as "Year 9."

# II. Clearing Price for Each Energy Auction

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
11/27/2018	Firm-LD						45.00			
9/11/2018	Recall						38.99			

Table 2 shows that 123 HAE auctions cleared during the current review period (compared with 90 in Year 9).

A total of 9,508 MWh cleared through the HAE auction, slightly more than the 9,030 MWh cleared in Year 9. The transaction size ranged from 7 to 250 MW and the weighted-average clearing price was

Table 2
HAE Cleared Auctions: Clearing Price and Quantity

Delivery Date	Hour Ending	Offer MW	Bid	Lowest Offer	Highest Bid	Cleared	Clearing Price	Winning	Total Number	Winning
Delivery Dute	(CPT)	Ojjer WW	MW		(\$/MWh)	MW	(\$/MWh)	Bidders	of Ridders	Offerors
C/20/2010				13/10/00/11	1 1/10/00/11				III BIIIIPIS	
6/20/2018	16						49.14			
6/20/2018 6/20/2018	17 19						45.82 51.64			
6/20/2018	20						47.03			
6/20/2018	21						47.08			
6/20/2018	22						37.84			
6/20/2018	23						41.84			
7/25/2018	19						50.00			
7/25/2018	20						42.62			
7/25/2018	22						34.99			
8/4/2018	19						51.90			
8/6/2018	12						30.57			
8/7/2018	13						40.79			
8/30/2018	10						35.08			
9/7/2018	24						30.18			
	3						29.94			
9/8/2018	4						29.86			
9/8/2018										
9/10/2018	8 13						33.22 43.23			
9/13/2018										
9/13/2018	16 17						49.02			
9/13/2018							57.70 35.95			
9/14/2018	19									
9/14/2018	20						39.50			
9/14/2018	22						38.97			
9/15/2018	16						55.11			
9/15/2018	19 20						44.76 37.91			
9/16/2018										
9/16/2018	22 23						40.00 32.16			
9/16/2018										
9/16/2018 9/17/2018	24 7						34.14 31.43			
	19									
10/1/2018							44.16			
10/3/2018 10/4/2018	23 19						30.83 50.00			
10/4/2018	1						33.74			
	8									
10/9/2018	9						32.00 35.00			
10/9/2018	10						38.00			
10/9/2018 10/9/2018	11						35.00			
	20									
10/9/2018 10/9/2018	21						35.00 33.00			
10/9/2018	22						32.00			
10/9/2018	23						30.00			
10/9/2018	24						25.00			
10/10/2018	1						25.00			
10/10/2018	3						24.00			
10/10/2018	4						24.00			
10/10/2018	5						25.00			
10/10/2018	6						27.00			
10/10/2018	7						28.00			
10/10/2018	9						30.00			
10/10/2018	10						30.00			
10/10/2018	11						31.00			
10/10/2018	12						32.00			
10/10/2018	14						34.00			
10/10/2018	15						35.00			
10/10/2018	16						35.00			
10/10/2018	17						35.00			
10/10/2018	18						35.00			
10/10/2018	10						33.00			

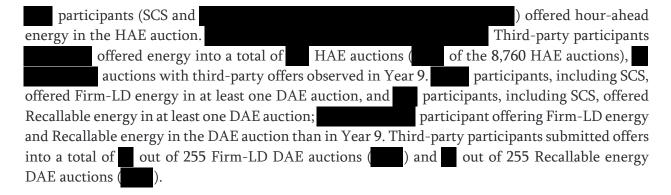
Delivery Date											
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10/10/2018 20 10/10/2018 22 10/10/2018 24 12/100 10/11/2018 3 10/11/2018 3 10/11/2018 4 10/11/2018 4 10/11/2018 5 10/11/2018 6 10/11/2018 14 10/11/2018 15 10/11/2018 16 10/11/2018 19 10/11/2018 19 10/11/2018 19 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 10/11/2018 10 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 10 11/11/2018 10 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 10 11/11/2018 10 11/11/2018 20 11/11/2018 20 11/11/2018 20 11/11/2018 3 11/11/2018 3 11/11/2018 4 11/11/2018 10 11/1	10/10/2018				(2)1010011)	(3) 1010011)				of bruders	
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2/2/2019       11       27.86         2/17/2019       24       21.34         2/18/2019       1       20.51         2/18/2019       2       20.31         2/18/2019       3       20.33         3/8/2019       4       22.49         3/8/2019       23       20.53         3/8/2019       24       19.65         3/9/2019       2       21.52         3/9/2019       3       21.89         3/9/2019       24       20.10         3/9/2019       24       20.50         3/10/2019       24       20.44         3/12/2019       24       21.21         3/16/2019       22       28.00         3/17/2019       22       28.44         3/18/2019       7       35.72											
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3/9/2019       24       20.50         3/10/2019       23       20.99         3/10/2019       24       20.44         3/12/2019       24       21.21         3/16/2019       22       28.00         3/17/2019       22       28.44         3/18/2019       6       36.80         3/18/2019       7       35.72											
3/10/2019     24       3/12/2019     24       3/16/2019     22       3/17/2019     22       3/18/2019     6       3/18/2019     7       35.72		24									
3/12/2019     24     21.21       3/16/2019     22     28.00       3/17/2019     22     28.44       3/18/2019     6     36.80       3/18/2019     7     35.72											
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3/18/2019 7 35.72											
Total/Average 34.03											
	Total/Average							34.03			

# **III. Energy Auction Offerors**

Table 3 lists the 26 registered Auction Participants for both the HAE and the DAE auctions. In Year 10, no new Auction Participants were added, and none were removed.

Table 3
Registered Auction Participants during the Review Period

Company Acronym	Company Name
AEC	PowerSouth Energy Cooperative
AECI	Associated Electric Cooperative, Inc.
AEM	ArcLight Energy Marketing, LLC
BMLP	Brookfield Energy Marketing LP
CALPINE	Calpine Energy Services, LP
CARGILL	Cargill Power Markets, LLC
CONOCO	ConocoPhillips Company
CCG	Constellation Energy Commodities Group
COEI	Cooperative Energy, Inc.
CPLC	Progress Energy Carolinas, 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
MLCI	Merrill Lynch Commodities Inc.
OPC	Oglethorpe Power Corporation
PPLE	PPL EnergyPlus, LLC
REMC	Rainbow Energy Marketing Corporation
SCEG	South Carolina Electric & Gas Company
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:

- 22 HAE auctions (0.3% of the 8,760 HAE auctions),
- 3 Firm-LD DAE auctions (1.2% of the 255 DAE auctions), and
- 2 Recallable DAE auctions (0.8% of the 255 DAE auctions).

These instances are explained by either (a) the lack of available capacity, in which case SCS was not required to offer energy into the auctions, or (b) technical issues that resulted in SCS's failure to submit offer curves for certain auctions. This is 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, 49.3 TWh of energy were offered, comparable to the 49.9 TWh of energy offered in Year 9.

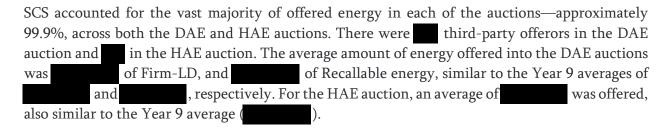


Table 4
Quantity of Energy Offered in DAE and HAE Auctions, by Participant (MWh)

# IV. Energy Auction Bidders

Table 5 shows the MWh quantities of energy bids by each participant in the HAE and DAE auctions. SCS and one other party bid into the HAE auction. The third-party participant bid into HAE auctions; this is \_\_\_\_\_\_ of all HAE auctions and about 50% more than the number of auctions with third-party bids in Year 9. Participation by SCS as a bidder decreased somewhat with SCS placing bids in \_\_\_\_\_\_ of HAE auctions, down from \_\_\_\_\_\_ in Year 9. In the DAE auctions, \_\_\_\_\_\_ participants (including SCS) bid into at least one Firm-LD auction, and \_\_\_\_\_\_ participants (including SCS) bid for Recallable energy in at least one auction. The total number of DAE auctions with third-party bids increased to \_\_\_\_\_ in Year 10 (\_\_\_\_\_ Firm-LD auctions and \_\_\_\_\_ Recallable energy auction), up from \_\_\_\_\_ in the previous year.

Across all the auctions, approximately 2.4 TWh of energy bids were submitted, with volume submitted through the HAE auctions. SCS accounted for about of the total bid volume in both the DAE and HAE auctions. For the HAE auction, the average amount of energy bid was

<sup>\*</sup> Figures in parentheses show percent of total energy offered

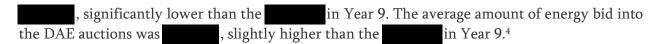


Table 5

Quantity of Energy Bid in DAE and HAE Auctions, by Participant (MWh)

Participant	HAE		DAE
		Firm LD	Recallable

<sup>\*</sup> Figures in parentheses show percent of total energy bid

# V. Changes in Auction and Auction Verification Protocols

#### A. GULF POWER SALE

Southern Companies recently sold Gulf Power Company to NextEra Energy, effective January 1, 2019. To ensure an orderly transition, Gulf Power remains a member of the Southern Pool for a transition period that is expected to continue through the end of 2024. During this transition period, Southern Companies will continue to manage those Gulf Power assets that are part of the

<sup>&</sup>lt;sup>4</sup> Averages above reflect total bid quantities across all Firm-LD DAE and HAE auctions; however, not all of these auctions had bids. The average bid in HAE auctions that had a bid was bid in DAE auctions that had a bid was a second of these auctions.

Southern Pool, and Gulf Power's generation assets and load obligations will continue to be included in the determination of Southern Companies' offers into the Auction. Gulf Power does have the right to leave the Pool with 180 days' notice, though it is expected that the actual departure date will be known well in advance.

#### B. 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 Southern 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 ("RSC") 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 10, 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 10

Protocol	Changes in Year 10
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 Participants	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 8/1/2018. 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 ten instances of non-compliance. These are summarized in Table 7 below, grouped into five types:

- 1. Failures to submit offer curves for the HAE auctions (two instances),
- 2. Failed offer curve submissions for the DAE and HAE auctions (four instances),
- 3. Discrepancy in unit cost calculation in the DAE auction (one instance),
- 4. Discrepancies in start-up cost calculations in the DAE auction (two instances), and
- Late posting of monthly historical HAE auction bid and offer data (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:

- 3 Firm-LD DAE auctions,
- 2 Recallable DAE auctions, and
- 22 HAE auctions.

Brattle was able to verify that no capacity was available for all 3 of the Firm-LD DAE auctions with no offer. As a result, SCS was not required to offer energy into those auctions, and these do not constitute instances of non-compliance. The lack of offers into the Recallable DAE auctions on 9/24/2018 and 11/9/2018, and into the 22 HAE auctions over multiple periods in May, August, and September 2018 did constitute instances of non-compliance. These are described in more detail in Section VI.A below.

In this review period, we observed a modest increase in the overall number of non-compliant events relative to the seven non-compliant events in Year 9. The overall frequency of instances of non-compliance continues to be low.

Table 7
Instances of Non-Compliance in Year 10

Type of Event	Period Affected by Event
I. Failure to submit offer curves for HAE auctions in May and August 2018	<ol> <li>12 HAE auctions (5/13/2018 HE8-HE19)</li> <li>3 HAE auctions (8/19/2018 HE23-HE24, 8/20/2018 HE1)</li> </ol>
II. Failed offer curve submissions in August, September, and November 2018	<ol> <li>6 HAE auctions (8/1/2018 HE4, 8/14/2018 HE23-HE24, 8/15/2018 HE3 and HE8-HE9)</li> <li>1 HAE auction (9/3/2018 HE10)</li> <li>1 DAE Recallable energy auction (9/24/2018)</li> <li>1 DAE Recallable energy auction (11/9/2018)</li> </ol>
III. Discrepancy in unit cost calculations in DAE auction in June 2018	7. 1 DAE auction (6/22/2018)
IV. Discrepancies in start-up cost calculations in DAE auction in October 2018	8. 1 DAE auctions (10/2/2018) 9. 1 DAE auction (10/26/2018)
V. Late posting of historical HAE auction bid and offer data for November 2018	10. March 2019 posting of November 2018 data

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

#### A. NON-COMPLIANT EVENTS

The first type of non-compliant event involved two instances of failure to submit offer curves for the HAE auctions in May and August 2018. These events resulted from technical issues around the offer submission process, but with different circumstances or root causes depending on the case:

- The first instance of this type of event occurred when SCS experienced a power outage
  that prevented them from submitting offers. The outage affected Alabama Power
  Corporate Headquarters and impacted other functions outside of the Auction. This
  event prevented submissions into 12 HAE auctions on 5/13/2018 from HE8-HE19. The
  outcomes of these auctions were not affected as no third-party bids were submitted.
- The second instance was due to network firewall issues being experienced by Southern.
  This resulted in a failure to submit offers for 3 HAE auctions on 8/19/2018 HE23-HE24
  and 8/20/2018 HE1. The outcomes of these auctions were not affected as no third-party
  bids were submitted.

The second type of non-compliant event involved four instances when SCS's attempted offer curve submissions were not properly processed due to technical issues, but with different circumstances or root causes depending on the case:

- The first instance affected 6 HAE auctions: 8/1/2018 HE4, 8/14/2018 from HE23-HE24, and 8/15/2018 HE3 and HE8-HE9. While SCS did attempt to submit offers for these auctions, those submissions were not accepted or processed by the Auction platform as a result of the market opening late. The outcomes of these auctions were not affected as no third-party bids were submitted in any of them.
- The second instance affected the HAE auction on 9/3/2018 HE10. After investigation, SCS explained that the failure occurred when OATI experienced a malfunction of a redundant critical hardware component. Although SCS did attempt to submit an offer for this auction, it was not accepted or processed by the Auction platform. The outcome of the auction was not affected since no third-party bids were submitted.
- The remaining two instances of failed offer submission processing involved the DAE auctions for Recallable energy on 9/24/2018 and 11/9/2018. Although SCS submitted offers for the auctions in question, they were not appropriately processed by the Auction platform and not included in the clearing process due to a technical issue (the same issue in both instances). OATI carried out the clearing process after the fact and indicated that the outcome of the auction was not affected in either instance.

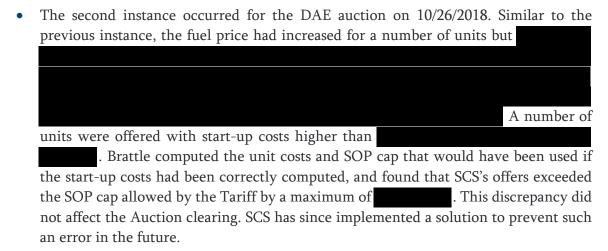
The third type of non-compliant event involved discrepancies in the cost calculations of the units in the DAE auction. For the DAE auction on 6/22/2018, Southern computed its offers based on fuel prices from an older vintage that were higher than the contemporaneous fuel prices. SCS identified a problem in their model for that date that caused it to use fuel price data from the previous day. Using the contemporaneous fuel prices to develop offer curves, Brattle determined that the curve developed by Southern exceeded the SOP cap by as much as \_\_\_\_\_\_. The outcome of the Auction was not affected because no third-party bids were submitted.

The fourth	type of non-compliant	event involved	discrepancies in	n the start-up	cost calculations
	. SCS operates a	number of units			
		Two instances			
v	were identified:				

• The first instance occurred for the DAE auction on 10/2/2018. While the fuel price had increased,

SCS's tool did not trigger the appropriate flag to indicate the discrepancy in this instance; SCS reports that it has since implemented a solution to prevent such a failure in the future. Brattle computed the unit costs and SOP cap that would have been used if the start-up costs had been correctly computed, and found that a total of 600 MW were offered at prices exceeding the SOP allowed by

the Tariff by a maximum of . This discrepancy did not affect the Auction clearing.



The final type of non-compliant event involved a late posting of the HAE auction bid and offer data for November 2018. SCS is required to post these data after four months, in this instance by the end of March 2019. After being notified of this by Brattle, SCS reported on 4/9/2019 that it had posted an incorrect link to the HAE Non-Firm product bid and offer data for November 2018 to its Auction website; this link did not provide access to the intended data file. SCS posted the correct link on 4/10/2019 and reported that it was implementing a process to prevent this issue from recurring. Posting of historical bid and offer data does not have a direct impact on Auction outcomes.

#### B. Monitoring of Auction Spread Posting

We have continued to monitor SCS's voluntary bid-offer spread posting policy in Year 10. We can confirm that a bid-offer spread was posted for all auctions that had at least one bid and one offer (from different entities, which is the necessary condition for posting). When a bid-offer spread was reported, the reported spread was accurately computed.

# 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. The law firm of Van Ness Feldman, LLP 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. TARIFF REQUIREMENTS ON HANDLING OF BID AND OFFER INFORMATION

The Tariff contains express requirements for the handling of third-party bid and offer information. Bid Information is defined as "[t]he prices, terms, and conditions under which a Bidder offers to

purchase Energy through the DAE Auction or HAE Auction."<sup>5</sup> Offer Information is defined as "[t]he prices, terms, and conditions under which an Offeror offers to sell Energy through the DAE Auction or HAE Auction."<sup>6</sup>

The Tariff provides that the Southern Auction Administrator may only access confidential third-party bid or offer information under prescribed circumstances. Further, only employees in one of the positions specified in the Tariff may serve as a Southern Auction Administrator.<sup>7</sup>

Under Section 2.1B(b) of the Participation Rules, the Southern Auction Administrator is only permitted to access confidential third-party bid or offer information as follows:

Southern Companies, through the Auction Administrator, shall access Bid Information, Offer Information, and other transaction-related information of Energy Auction participants other than Southern Companies only when directed by the Independent Auction Monitor; provided, Southern Companies may receive Bid Information and Offer Information from the Independent Auction Administrator for the sole purpose of complying with the posting requirements of Section 4.2.4 of the Auction Rules.

The Tariff further provides that the Auction Administrators may only use such information for auction administration or audit purposes.<sup>8</sup>

Section 2.1B(d) of the Participation Rules also requires that:

Any information accessed by Southern Companies' Auction Administrator personnel pursuant to Section 2.1B(b) will be stored in a secure physical or electronic location. Southern Companies will report any such access: (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. The Independent Auction Administrator will document any such access and maintain related documentation.

The Participation Rules contain the following additional requirements with respect to access to confidential bid and offer information:

2.2 Those 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 made available pursuant to Auction Rules Section 4.2.4).

Participation Rules § 2.1.

<sup>&</sup>lt;sup>5</sup> Auction Rules § 2.4.

<sup>6</sup> *Id.* § 2.41.

<sup>&</sup>lt;sup>8</sup> *Id.* § 3.5 ("All Bid Information and Offer Information submitted to the Auction Administrator shall be used by the Auction Administrator only for auction administration and audit purposes").

. . .

2.3 In order to ensure that Bid Information and Offer Information is maintained in a manner consistent with the foregoing paragraphs, Southern Companies shall impose internal data control restrictions consistent with those used for Standards of Conduct compliance.<sup>9</sup>

#### B. TENTH ANNUAL REVIEW

Van Ness Feldman conducted its annual review for the tenth review period in May and June of 2019. In conducting this 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. Van Ness Feldman also conducted a phone interview with two representatives of TranServ International, Inc. ("TranServ"), the Independent Auction Administrator, who have responsibility for the Independent Auction Administrator functions.

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

## C. 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. Findings on specific Tariff requirements are detailed below.

#### 1. Position of 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 Administrator. 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. Each of the Southern Auction Administrators holds a position listed in Section 2.1: one is a Contract Analyst, and the other is a Pool Bill Operations Supervisor.

#### 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 information if directed to do so by the IAM, or for the purpose

<sup>9</sup> Participation Rules §§ 2.2-2.3.

of complying with posting requirements.<sup>10</sup> 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."<sup>11</sup>

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 webMarket 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 access any third-party confidential bid or offer information through webMarket, and TranServ confirmed that it had not issued a temporary Auction Administrator user ID to either of the Southern Auction Administrators, during the review period. Both of the Southern Auction Administrators have webMarket user status as Buyer Company Administrator/Buyer Security Administrator/ Seller Company Administrator/Seller Security Administrator, which permits them to access Southern Companies' confidential bid and offer data, but not the bid and offer data of third parties.

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."<sup>13</sup> 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 2018, the IAM requested review of the draft report for accuracy and completeness. The primary Southern Auction Administrator reviewed only Appendices B and C of the draft report, which did not include confidential bid or offer information. SCS's outside counsel reviewed the entire draft of the confidential version of the report. Confidential elements of the report were not conveyed to the Southern Auction Administrators or any other SCS employee.

Participation Rules § 2.1B(b).

<sup>&</sup>lt;sup>11</sup> Auction Rules § 3.5.

<sup>&</sup>quot;webMarket" is the software program through which the Auction is administered. Numerous SCS marketing and trading employees use webMarket in connection with Southern Companies' participation in the Auction. An SCS user of webMarket would be able to access confidential bid or offer information of a third party only if the user had "Auction Administrator" rights.

<sup>&</sup>lt;sup>13</sup> Participation Rules § 2.1B(d).

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. The Independent Auction Administrator assembles this data, and conveys it to the Southern Auction Administrator on or about the 23rd 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. 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 the data for this purpose is expressly allowed under the Tariff. The Southern Auction Administrators' access to the data for this purpose is expressly allowed under the Tariff.

### 3. Secure Storage of Confidential Bid and Offer Information

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

# 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 made available to Auction Participants pursuant to Section 4.2.4)." 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 available to 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 that they had improper access to such information during the review period.

## 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." <sup>18</sup>

<sup>&</sup>lt;sup>14</sup> Auction Rules § 4.2.4.

Historical bid and offer information is posted on the Southern Company website. Southern Company, Historical Bids and Offers, <a href="http://www.southerncompany.com/about-us/energy-auction/historical-bids-and-offers.html">http://www.southerncompany.com/about-us/energy-auction/historical-bids-and-offers.html</a> (last visited June 11, 2019).

<sup>&</sup>lt;sup>16</sup> Participation Rules § 2.1B(b).

<sup>&</sup>lt;sup>17</sup> *Id.* § 2.1B(d).

<sup>&</sup>lt;sup>18</sup> *Id.* § 2.3.

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 was designated as an Auction Administrator on the webMarket system during the review period.

As described above, SCS has retained no third-party bid and offer information in physical or electronic form.

The assignment of many auction administration functions to an Independent Auction Administrator operating from access-restricted offices in Minneapolis, Minnesota, has substantially reduced 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 receipt of historical bid and offer information from the Independent Auction Administrator and forwarding of that information for posting.

The Southern Auction Administrators' work spaces are located in a badge-access restricted space to which marketing function personnel do not have access.

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." Our interviews with the Southern Auction Administrators indicated that they are well versed in the data control restrictions.

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.

## 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. Of note, as a consequence of amendments to the Tariff that narrowed the role of the Southern Auction Administrators, the Southern Auction Administrators have very limited access 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.

<sup>&</sup>lt;sup>19</sup> Southern Company, Energy Auction: Auction Administrator Protocol § 1.3 (undated).

### VIII. Conclusion

We have monitored SCS's participation in the Energy Auction and its compliance with the Tariff during the tenth annual review period, April 24, 2018 through April 23, 2019. 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.

The overall frequency of non-compliant events in Year 10 increased relative to the prior review period, but continues to be low in absolute terms. We note that there were several instances of failed offer curve submissions caused by issues with the OATI platform (four of the six instances of failed offer curve submissions, within the total of ten non-compliant events in Year 10). A series of these events was clustered around August and September 2018, though the occurrence of such events did not persist throughout the remainder of 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 Tariff requirements related to safeguarding confidential bid and offer information, and further found no evidence that SCS marketing function employees had any improper access to confidential bid or offer information during the review period. 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. The instances identified in this report where SCS did fail to comply fully with specific Tariff provisions appear to be the result of 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 posted when the necessary conditions were met, and that it was accurately computed.

Regarding Auction participation by third parties, in the Year 10 HAE auctions we observed one less participant offering and one less participant bidding than in Year 9. The number of HAE auctions offered into by third parties increased considerably relative to the low participation in Year 9 ( ) and the number of HAE auctions with third party bidders also increased ( ), although participation did not return fully to the level of Year 8. The DAE auctions saw increases both in terms of participants (one more participant offering than in Year 9) and number of auctions offered or bid into by third parties. Third parties

offered into DAE auctions for Firm-LD energy ( ) and into DAE auctions for Recallable energy; they bid into auctions ( ), up from in Year 9.

The number of auction clearings and the amount of energy cleared has increased in both the HAE and DAE auctions. Overall, 9,508 MWh cleared through the HAE auction, slightly higher than the 9,030 MWh cleared in Year 9. A total of 123 HAE auctions cleared in Year 10, about 1.4% of all HAE auctions, up somewhat from 90 in Year 9. Two DAE auctions cleared in Year 10, compared to one DAE auction clearing in Year 9.

Since the ninth 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 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.

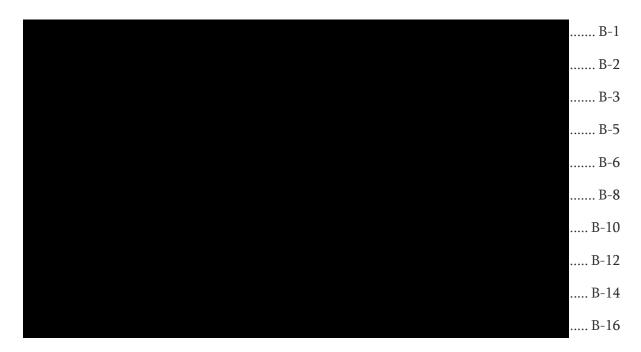
Protocol I – Load Forecasting
Protocol II – Load Forecast Uncertainty
Protocol III – Purchases and SalesA-1
Protocol IV – Outages
Protocol V – Day-Ahead Available Capacity and Seller Offer Prices VerificationA-2
Protocol VI – Hour-Ahead Available Capacity and Seller Offer Prices VerificationA-3
Protocol VII – Recallable Energy Verification
Protocol VIII – Auction Clearing Price Verification
Protocol IX – Assessment of Transmission Services for Energy Auction PurchasesA-5
Protocol X – Monitoring of Third Party Participation in the Southern Company Energy  Auction

THE REMAINDER OF THIS APPENDIX IS REDACTED

### **APPENDIX B**

### IAM ISSUE TRACKING FORMS

## I. NON-COMPLIANT EVENTS



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 numbers were implemented in for flow date onwards.

# Prior Average LFU Percentages (Used through DAE delivery day

	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

	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

					-			
	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

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

## **Exhibit B**

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



### **Exhibit B**

#### **EXPLANATION FOR REDACTIONS IN PUBLIC VERSION OF THE**

#### INDEPENDENT AUCTION MONITOR'S ANNUAL INFORMATIONAL REPORT

The table below provides justifications for the redactions of confidential and privileged information that have been made to the public version of the Report. In the first column of the table, Southern Companies have grouped the justifications for confidential and privileged treatment into five categories. In the second column, Southern Companies have listed the Report page numbers that contain such information. Because confidential and privileged information permeates virtually all aspects of the Appendices, Brattle and Southern Companies agreed that those portions of the Report should be redacted in their entirety.

In developing this table, Southern Companies have endeavored to provide the requisite specificity expected by the Commission for assertions of privileged and confidential treatment. Should the Commission have any question regarding the information contained in this table or its application to the public version of the Report, or if the Commission desires further clarification or elaboration as to any of the justifications described, Southern Companies welcome the opportunity to assist.

Justification for privileged treatment under 18 C.F.R. §§ 388.107 and 388.112	Page of Report
Release of data/information could constitute a violation of the Commission's market-based rate affiliate restrictions and the Separation of Functions and Communications Protocol applicable to Southern Power Company and its subsidiaries, as set forth in Southern Companies' market-based rate tariff.	none
Data reflects system forecast, planning, generator or other equipment-specific information, 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.	11, 12, 13, 14, Appendix A, Appendix B, Appendix C
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.	3, 4, 5, 6, 7, 8, 9, 20, 21
Data/information reflects generator reference prices and generator-specific cost and/or cost inputs, which are commercially valuable, necessary to	Appendix B

Justification for privileged treatment	Page of Report
under 18 C.F.R. §§ 388.107 and 388.112	
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.	
Data/information reflects Southern Companies' internal, trade secret and	Appendix A, Appendix C
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.	