Rules on Southern Companies' Energy Auction Participation

1.0 Participation; Definitions

- 1.1 Southern Companies shall participate in the Energy Auction in accordance with these Rules on Southern Companies' Energy Auction Participation including DA-1, DA-2, HA-1, and HA-2 hereto (collectively, the "Participation Rules").
- 1.2 Capitalized terms used in these Participation Rules shall have the meanings provided to them in Section 2 of the Auction Rules. In addition, the following terms shall be defined as follows.
 - 1.2.1 Available Capacity: *See* Section 1.3 of Appendix DA-1 and Section 1.3 of Appendix HA-1.
 - 1.2.2 Commitment Cost: The cost to start or change operating modes of a generating unit, as specified in Appendices DA-2 and HA-2.
 - 1.2.3 Controlled Capacity: Capacity controlled by Southern Companies through ownership or contractual arrangement. Capacity shall only be considered "controlled" if Southern Companies have included such capacity in their unit commitment process as a dispatchable resource.
 - 1.2.4 IIC: The "Southern Company System Intercompany Interchange Contract" as filed pursuant to 119 FERC ¶ 61,065 (2007) and designated as Southern Company Services, Inc., Second Revised Rate Schedule FERC Number 138, as amended from time to time.
 - 1.2.5 IIC Manual: That "Allocation Methodology and Periodic Rate Computation Procedure Manual" established pursuant to the IIC.
 - 1.2.6 Lock-Down Period: As regards the DAE Auction, the one (1) hour prior to the close of the DAE Bid Period. As regards the HAE Auction, the five (5) minutes prior to the close of the HAE Bid Period.

2.0 Establishment and Administration

- 2.1 Southern Companies' Marketing Function Employees and Transmission Function Employees, as those terms are defined in 18 C.F.R. § 358.3(d) and (i), may not serve as Auction Administrator.
- 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).

Issued by: Charles D. Long, IV Effective: [Phase II Start]

V.P., Fleet Operations & Trading

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.

3.0 General Provisions

3.1 Sales of Energy Outside the Energy Auction

- 3.1.1 During the DAE Bid Period of a DAE Auction for a Delivery Day that is not a weekend day or NERC holiday, Southern Companies shall not make, other than through such DAE Auction, any Energy sale of 16 hours in duration and 50 MW or more in quantity to be delivered at a point in the Southern BAA (other than a delivery point located at a metered boundary with a balancing authority area adjacent to the Southern BAA) from 6:00:00 am CPT until 10:00:00 pm CPT on the Delivery Day applicable to such DAE Bid Period.
- 3.1.2 During the HAE Bid Period of an HAE Auction, Southern Companies shall not make, other than through such HAE Auction, any Energy sale to be delivered at a point in the Southern BAA (other than a delivery point located at a metered boundary with a balancing authority adjacent to the Southern BAA) for delivery during the Delivery Hour applicable to such HAE Bid Period.

3.2 <u>Transparency</u>

3.2.1 Southern Companies will report the quantities and prices of sales they made via the Energy Auction to either a reputable index developer or a data hub.

3.3 Auditing; Auction Monitoring

- 3.3.1 In addition to such information identified in Auction Rules Section 4.3.4, the Independent Auction Monitor's reports shall include any instances where it was unable to verify Southern Companies' Available Capacity calculations and inputs, or where issues arose involving availability or the terms of transmission service needed to accommodate an Energy Auction purchase.
- 3.3.2 In addition to such authorizations identified in Auction Rules Section 4.3.4, the Independent Auction Monitor is authorized to: (i) verify Southern Companies' available capacity calculations, including inputs into those calculations; and (ii) confirm that any transmission service provided by Southern Companies necessary to accommodate a purchase under the Energy Auctions is not unreasonably withheld.

Issued by: Charles D. Long, IV Effective: [Phase II Start]

V.P., Fleet Operations & Trading

4.0 DAE Auction

4.1 Submission of DAE Offers

- 4.1.1 Prior to the Lock-Down Period for a given DAE Auction, Southern Companies shall submit to the Auction Administrator one or more DAE Offers, as developed in accordance with Appendices DA-1 and DA-2.
- 4.1.2 Notwithstanding the provisions of Auction Rules Section 5.2.1, Southern Companies may not during the Lock-Down Period for a given DAE Auction revise their DAE Offers as result of them entering into one or more sales of Energy outside of the Energy Auction; <u>provided</u>, however, that Southern Companies may revise their DAE Offers for other reasons.
- 4.1.3 Southern Companies shall identify as an acceptable counterparty in accordance with Auction Rules Section 4.4.1 each Bidder that: (a) has executed a service agreement with Southern Companies that references this Tariff; and (b) is in good standing under such service agreement, including having met all credit requirements thereunder.

4.2 Recallable Energy Curtailment

- 4.2.1 The Auction Administrator shall notify Southern Companies of the appropriate curtailment priority for all DAE Units awarded to it that are comprised of Recallable Energy.
- 4.2.2 In the event a DAE Seller experiences such a supply side disruption and determines that it must curtail a portion or all of the Recallable Energy it has been awarded in the DAE Auction, it shall do so in the priority order established by the Auction Administrator, determined as follows:
 - 4.2.2.1 Energy based on lower-priced DAE Bid Blocks shall be curtailed before Energy based on higher-priced DAE Bid Blocks.
 - 4.2.2.2 In the event that two or more DAE Buyers had the same DAE Bid Block, Energy based on a DAE Bid Block submitted later in time shall be curtailed prior to Energy based on a DAE Bid Block submitted earlier in time.

Issued by: Charles D. Long, IV Effective: [Phase II Start]

V.P., Fleet Operations & Trading

4.2.3 A curtailed DAE Buyer awarded one or more DAE Units comprised of Recallable Energy to be sold by Southern Companies may request, in the event of curtailment, continuity of service (*i.e.*, to not be curtailed by Southern Companies) at a "buy-through" price. The buy-through price for each hour for which continuity of service occurs shall be the greater of: (a) at a price equal to the HAE Auction Clearing Price (if such an HAE Auction Clearing Price exists) applicable to each hour for which such continuity of service occurs (if Southern Companies are awarded Energy through the HAE Auction at that price), or (b) Southern Companies' first (lowest) Offer Price for the HAE Auction for such hour. Southern Companies will honor such request if able to do so without adversely impacting system reliability.

5.0 HAE Auction

5.1 Submission of HAE Offers

- 5.1.1 Prior to the Lock-Down Period for a given HAE Auction, Southern Companies shall submit to the Auction Administrator one or more HAE Offers as developed in accordance with Appendices HA-1 and HA-2.
- 5.1.2 Notwithstanding the provisions of Auction Rules Section 6.2.1, Southern Companies may not during the Lock-Down Period for a given HAE Auction revise their HAE Offers as result of them entering into one or more sales of Energy outside of the Energy Auction; provided, however, that Southern Companies may revise their HAE Offers for other reasons.
- 5.1.3 Southern Companies shall identify as an acceptable counterparty in accordance with Auction Rules Section 4.4.1 each Bidder that: (a) has executed a service agreement with Southern Companies that references this Tariff; and (b) is in good standing under such service agreement, including having met all credit requirements thereunder.

5.2 Curtailment

- 5.2.1 The Auction Administrator shall notify Southern Companies of the appropriate curtailment priority for all HAE Units awarded to it.
- 5.2.2 Sales of Energy comprising HAE Units may be interrupted by Southern Companies for any reason or for no reason, without liability on the part of Southern Companies, provided that: (a) sales of such Energy based on lower-priced HAE Bid Blocks shall be curtailed before sales of Energy based on higher-priced HAE Bid Blocks; and (b) in the event that two or more HAE Buyers had the same HAE Bid Block, Energy based on an HAE Bid Block submitted later in time shall be curtailed prior to Energy based on an HAE Bid Block submitted earlier in time; provided, however, that Southern Companies may use a different curtailment priority in the event doing so would result in fewer HAE Units being curtailed than under the curtailment priority provided herein.

Issued by: Charles D. Long, IV Effective: [Phase II Start]

V.P., Fleet Operations & Trading

6.0 Force Majeure

6.1 Southern Companies shall be excused from non-compliance with the Auction Rules and the Participation Rules, and associated Appendices, to the extent such non-compliance is the result of an event of Force Majeure or otherwise necessary to maintain system reliability or to reliably serve load.

Issued by: Charles D. Long, IV Effective: [Phase II Start]

V.P., Fleet Operations & Trading

Appendix DA-1 to Participation Rules Determination of Available Capacity for DAE Auction

Southern Companies are not required to offer into the DAE Auction any Energy: (a) in excess of their total Controlled Capacity or (b) that they reasonably deem necessary to serve their Total Obligations (as defined below). To this end, this Appendix DA-1 sets forth the process for the determination of the quantity of DAE Blocks that Southern Companies will offer into a given DAE Auction.

1.0 Determine Southern Companies' Available Capacity

- 1.1 Determine Southern Companies' Supply Curve
- 1.1.1 Start with Southern Companies' total Controlled Capacity sorted in ascending merit order (i.e., into a "Supply Curve").
 - 1.1.1.1 Such capacity shall include: (a) all steam, combined cycle, and combustion turbine resources dispatched pursuant to the IIC, (b) the portion of hydroelectric resources scheduled by Southern Companies for the Delivery Day, and (c) third-party purchases.
 - 1.1.1.2 The following resources will be placed at the bottom of the supply curve for purposes of determining Available Capacity: (a) nuclear resources, (b) the portion of hydroelectric resources scheduled by Southern Companies for the Delivery Day, (c) third-party purchases, and (d) generating units classified as "must run" for either transmission or generation purposes.
- 1.1.2 Subtract capacity that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints.
- 1.2 Determine Southern Companies' Total Obligations
- 1.2.1 Start with Southern Companies' native load and contractual obligations pursuant to the IIC for the Delivery Day based on (a) Southern Companies' load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Day, adjusted appropriately for load forecast uncertainty, and (b) Southern Companies' third-party contractual obligations.
- 1.2.2 Add reliability obligations for Regulating Reserve and Contingency Reserve-Spinning as required by the Southern Balancing Authority consistent with applicable NERC and SERC requirements.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations but does not include resources that cannot be committed to supply DAE Blocks for the Delivery Day or uncommitted resources not located in the Southern BAA.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

2.0 Divide Available Capacity into DAE Units, DAE Offer Blocks and DAE Offers

- 2.1 Available Capacity will be divided into DAE Offers each of which contain one or more DAE Offer Block offering one or more DAE Units, subject to the following conditions.
 - 2.1.1 In the case of the marginal committed generating unit(s) (i.e., the last unit(s) presumed to be serving firm obligations), that portion of the marginal generating unit(s) not presumed to be serving firm obligations shall be divided into DAE Offer Blocks containing an appropriate number of DAE Units.
 - 2.1.2 In the case of an uncommitted generating unit with a minimum operating limit of more than 50 MW, a DAE Block may contain more than one DAE Unit to represent the minimum output of that unit; in which case, additional Available Capacity above the minimum output may be offered as additional DAE Blocks as part of a Dependent Offer.
 - The Available Capacity of generating units with less than 50 MW of Available Capacity may be combined and "linked" with other, similar generating units to form DAE Units to the extent practicable.
 - 2.1.4 Insofar as Southern Companies' offer curve must be monotonically increasing in price, DAE Units from a given unit may be "linked" if and to the extent the DAE Units representing lower output levels have higher costs than DAE Units representing higher output levels.

3.0 **Determine Firm LD or Recallable Nature of DAE Blocks**

- 3.1 The quantity of DAE Units equivalent to the capacity of generating units with the following characteristics will be offered through the DAE Auction as Recallable Energy: (i) generating units online, but indicating potential for unexpected outage; (ii) generating units offline, scheduled to return, but indicating potential for delayed return; and (iii) other generating units that cannot reasonably be offered except as Recallable Energy without impairing reliability.
- All DAE Units not offered as Recallable DAE Units will be placed into the DAE Auction for sale as Firm LD Units.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

October 19, 2009 Issued on:

Appendix DA-2 to Participation Rules Determination of Southern Companies' Offer Prices for DAE Auction

Southern Companies' Offer Prices shall be determined on a unit by unit basis for each resource identified by the process in Appendix DA-1 as being made available for sale in the DAE Auction. Southern Companies' Offer Prices for use in the DAE Auction will be determined using the same methodology whether the DAE Blocks are offered on a Firm LD or Recallable basis. Southern Companies' Offer Price level for capacity made available for sale in the DAE Auction shall include components for Average Variable Costs, and/or Commitment Costs as follows.

1.0 Cost Components

- 1.1 "Average Variable Costs" (expressed in \$/MWh) shall be determined in a manner consistent with the determination of variable dispatch cost pursuant to Article III of the IIC Manual and include cost components associated with marginal replacement fuel cost, variable operation and maintenance expenses, in-plant fuel handling costs, emission allowance replacement costs, and compensation for transmission losses that would otherwise not have been incurred; provided, however, that the marginal replacement fuel cost shall be applied to the average heat rate equation for the unit under consideration rather than the incremental heat rate equation.
- 1.2 "Commitment Costs" (expressed in \$/MWh) shall include startup costs. If the unit has a minimum run time such that it must operate beyond the 16-hour sale period, then Commitment Costs shall also reflect the expected increase in production cost associated with running the unit in subsequent hours. In the case of a combustion turbine or combined-cycle unit, the Commitment Cost may also include an adder associated with maintenance costs associated with incurred start-ups. The Commitment Cost adder (in \$/MWh) shall be spread across DAE Blocks by dividing the total startup costs (in dollars) by the minimum load (low limit operating point) of the unit being committed and by the presumed 16 hours of operation. In the case of DAE Units from units linked in accordance with Section 2.1.3 of Appendix DA-1, Commitment Costs will be spread across the total MW of all the linked DAE Units.

2.0 Determination of Southern Companies' Offer Prices for DAE Units

2.1 Southern Companies' Offer Price for DAE Offer Blocks created in accordance with Section 2.1.1 of Appendix DA-1 shall not exceed the sum of: (a) 110 percent of the associated unit's Average Variable Cost for operating at maximum load (in \$/MWh); and (b) a demand charge of \$21.43/MWh.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

Issued on: October 19, 2009

Filed to comply with order of the Federal Energy Regulatory Commission, Docket No. ER09-88, issued Dec. 18, 2008, 125 FERC ¶ 61,316.

2.2 Southern Companies' Offer Price for DAE Offer Blocks linked in accordance with Section 2.1.2 of Appendix DA-1 shall not exceed the sum of: (a) 110 percent of the associated unit's Average Variable Cost for operating at its low limit operating point (in \$/MWh); (b) 110 percent of the unit's Commitment Costs (in \$/MWh); and (c) a demand charge of \$21.43/MWh.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

- 2.3 Southern Companies' Offer Price for a DAE Offer Block formed in accordance with Section 2.1.3 of Appendix DA-1 shall not exceed the sum of: (a) 110 percent of the MW weighted average of the Average Variable Cost of each of the associated units operating at maximum load (in \$/MWh); (b) 110 percent of the combined Commitment Cost of the units (in \$/MWh); and (c) a demand charge of \$21.43/MWh.
- 2.4 Southern Companies' Offer Price for any DAE Offer Block not determined in accordance with Section 2.1 thru 1.1, above, shall not exceed the sum of: (a) 110 percent of the associated unit's Average Variable Cost for operating at maximum load (in \$/MWh); (b) 110 percent of the unit's Commitment Costs (in \$/MWh); and (c) a demand charge of \$21.43/MWh.

2.5 [Reserved]

2.6 The above formulas shall establish an upper limit for the determination of Southern Companies' Offer Prices. Southern Companies may establish Offer Prices lower than these limits on a unit-by-unit or DAE Offer Block by DAE Offer Block basis so long as such Offer Prices apply to all Bidders.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

Appendix HA-1 to Participation Rules Determination of Available Capacity for HAE Auction

Southern Companies are not required to offer into the HAE Auction any Energy: (a) in excess of their total Controlled Capacity or (b) that they reasonably deem necessary to serve their Total Obligations (as defined below). To this end, this Appendix HA-1 sets forth the process for the determination of the quantity of HAE Power that Southern Companies will offer into a given HAE Auction.

1.0 Determine Southern Companies' Residual Supply Curve

- 1.1 Determine Southern Companies' Supply Curve
- 1.1.1 Start with Southern Companies' total Controlled Capacity sorted in ascending merit order (i.e., into a "Supply Curve").
 - 1.1.1.1 Such capacity shall include: (a) all steam, combined cycle, and combustion turbine resources dispatched pursuant to the IIC, (b) the portion of hydroelectric resources scheduled by Southern Companies for the Delivery Hour, and (c) third-party purchases.
 - 1.1.1.2 The following resources will be placed at the bottom of the supply curve for purposes of determining Available Capacity: (a) nuclear resources, (b) the portion of hydroelectric resources scheduled by Southern Companies for the Delivery Day, (c) third-party purchases, and (d) generating units classified as "must run" for either transmission or generation purposes.
- 1.1.2 Subtract capacity that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints.
- 1.2 Determine Southern Companies' Total Obligations
- 1.2.1 Start with Southern Companies' native load and contractual obligations pursuant to the IIC for the Delivery Hour based on (a) Southern Companies' load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Hour and (b) Southern Companies' third-party contractual obligations.
- 1.2.2 Add reliability obligations for Regulating Reserve and Contingency Reserve-Spinning as required by the Southern Balancing Authority consistent with applicable NERC and SERC requirements.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations but does not include resources that cannot be committed to supply HAE Units for the Delivery Hour or uncommitted resources not located in the Southern BAA.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

2.0 Offer Capacity Forming Residual Supply Curve into HAE Auction

2.1 The capacity forming Available Capacity will be offered into the HAE Auction in the form of HAE Offers each of which contain one or more HAE Offer Blocks offering one or more HAE Units; <u>provided</u>, however, that the capacity of units with fixed output levels (e.g., combustion turbines) contributing to such uncommitted capacity may be "linked" together in an HAE Block with multiple HAE Units.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading

Appendix HA-2 to Participation Rules Determination of Southern Companies' Offer Prices for HAE Auction

Southern Companies' Offer Prices shall be determined on a unit by unit basis for each resource identified by the process in Appendix HA-1 as being made available for sale in the HAE Auction. Southern Companies' Offer Prices for use in the HAE Auction shall be based on the Incremental Variable Costs (as defined below) of the incremental resource(s) that are reasonably anticipated to be serving the sales made as a result of the HAE Auction.

1.0 Cost Components

- 1.1 "Incremental Variable Costs" (expressed in \$/MWh) shall be determined in a manner consistent with the determination of variable dispatch cost pursuant to Article III of the IIC Manual and include cost components associated with marginal replacement fuel cost, variable operation and maintenance expenses, in-plant fuel handling costs, emission allowance replacement costs, and compensation for transmission losses that would otherwise not have been incurred.
- 1.2 "Commitment Costs" (expressed in \$/MWh) shall include fuel startup costs. In the case of a combustion turbine, the Commitment Cost may also include an adder associated with maintenance costs associated with incurred start-ups. If the unit has a minimum run time exceeding one (1) hour, then Commitment Costs shall also reflect the expected increase in production cost associated with running the unit in subsequent hours. The Commitment Cost adder (in \$/MWh) shall be determined by dividing the total Commitment Costs (in dollars) by the full load output of the unit being committed.

2.0 Determination of Southern Companies' Offer Prices

- 2.1 Southern Companies' Offer Price for the HAE Offers associated with online (i.e., spinning), uncommitted, and dispatchable electric capacity from steam generating units shall not exceed the sum of: (a) 110 percent of the Incremental Variable Costs for such Energy (in \$/MWh) and (b) a demand charge of \$21.43/MWh.
- 2.2 Southern Companies' Offer Price for the HAE Offers associated with a combustion turbine shall not exceed the sum of: (a) 110 percent of the associated unit's Incremental Variable Cost for operating at maximum load (in \$/MWh); (b) 110 percent of the unit's Commitment Costs (in \$/MWh); and (c) a demand charge of \$21.43/MWh.
- 2.3 The above formulas shall establish an upper limit for the determination of Southern Companies' Offer Prices. Southern Companies may establish Offer Prices lower than these limits on a unit-by-unit basis so long as such Offer Prices apply to all Bidders.

Issued by: Charles D. Long, IV

V.P., Fleet Operations & Trading