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October 17, 2008

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E., Room 52-77  
Washington, DC 20426

RE: *Southern Company Services, Inc.*  
Docket No. ER09-\_\_\_\_-000  
Proposed Amendment to Southern Companies' Market-Based Rate Tariff

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("FPA"),<sup>1</sup> and Part 35 of the Federal Energy Regulatory Commission's (the "Commission") regulations,<sup>2</sup> Southern Company Services, Inc. ("SCS"), acting as agent for Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company and Southern Power Company (collectively, "Southern Companies" or "SC"), submits revised and new sheets to Southern Companies' market-based rate tariff included as Attachment A hereto ("Amended Tariff Sheets").<sup>3</sup>

Through these Amended Tariff Sheets, Southern Companies propose to institute, for at least a three-year period,<sup>4</sup> an auction process (the "Auction") for certain transactions in the

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<sup>1</sup> 16 U.S.C. § 824d (2000).

<sup>2</sup> 18 C.F.R. Part 35 (2008).

<sup>3</sup> The subsidiaries of Southern Company that have been authorized by the Commission to sell electricity to wholesale purchasers at market-based rates are: Alabama Power Company ("Alabama Power"), Georgia Power Company ("Georgia Power"), Gulf Power Company ("Gulf Power"), Mississippi Power Company ("Mississippi Power"), Southern Power Company ("Southern Power") (market-based rate tariff originally filed in Docket No. ER96-780); Southern Company – Florida, LLC (market-based rate tariff originally filed in Docket No. ER00-3240); Oleander Power Project, LP (market-based rate tariff originally filed in Docket No. ER01-1633); and DeSoto County Generating Company (market-based rate tariff originally filed in Docket No. ER03-1383).

<sup>4</sup> Southern Companies hereby reserve the right to file changes under FPA Section 205 to their market-based rate tariff generally and/or the Auction provisions thereunder specifically; however, Southern Companies commit to refrain from filing changes that would have the effect of terminating the Day Ahead Energy ("DAE") Auction and the Hour Ahead Energy ("HAE") Auction during an initial three (3) year period commencing on the date of the first Auction.

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Southern Balancing Authority Area (“Southern BAA”).<sup>5</sup> Under the terms of the Amended Tariff Sheets, which set forth the Rules of the Bid-Based Energy Auction (“Auction Rules”), Southern Companies will make available all uncommitted thermal resources<sup>6</sup> on a day-ahead and hour-ahead basis at cost-based offer prices established pursuant to the Auction Rules, as discussed below.

To provide transparency, the Auction clearing prices would be provided to either a reputable index developer or a data hub for the day-ahead products and the hour-ahead product, provided the Commission grants Southern Companies safe harbor protection consistent with the Commission’s *Policy Statement on Natural Gas and Electric Price Indices*.<sup>7</sup> Regardless, such prices would be made available at the close of the auction periods to all entities eligible to participate in the Auction, thus affording transparency to entities that are active in the southeastern markets. The Auction process would be overseen by an Independent Auction Monitor approved by the Commission. Southern Companies commit to submitting a filing to the Commission proposing such an Independent Auction Monitor within 30 days of an order approving the Auction.

Southern Companies’ Auction does not replicate a “Standardized Market Design” wholesale market but instead provides for standardized cost-based wholesale offers by Southern Companies to the existing marketplace, within which Southern Companies operate. This market structure reflects the implementation of the Commission’s open access policies and the implementation of state retail regulation and integrated resource planning. As is discussed in the filing, the Southeastern United States, including the four states served at retail by the Southern Operating Companies, are served principally by vertically integrated public utilities and other market participants that rely heavily upon self-owned generation and long-term wholesale

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<sup>5</sup> The boundaries of the Southern BAA are defined by the metered transmission tie lines with neighboring balancing authority areas. These interconnections establish a territory generally coextensive with the service territories of Alabama Power, Georgia Power, Gulf Power, and Mississippi Power as well as the service territories of Dalton Utilities, the owners of the Georgia Transmission Corporation, and the members of the Municipal Electric Authority of Georgia.

<sup>6</sup> Southern Companies would be including all Available Capacity (*i.e.*, any thermal capacity under Southern Companies ownership or contractual control that can be dispatched to provide energy sold through the Auctions) excluding capacity reasonably expected to serve load (including appropriate amounts for load forecast uncertainty), capacity needed for the Southern BAA Operating Reserves, capacity needed for existing third party sales and capacity otherwise unavailable for dispatch due to outage or other operational constraints. Southern Companies has used thermal capacity because the other lower operating cost resources are used to meet native load requirements.

<sup>7</sup> 104 FERC ¶ 61,121 at P 37 (2003) (the Commission does not intend to prosecute and/or penalize parties for inadvertent errors in reporting); *on reh’g*, 112 FERC ¶ 61,040 at P 10 (2005) (innovations that bring price transparency and better confidence in the accuracy and reliability of wholesale prices are welcome).

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contracts. Adding a standard, cost-based short-term Auction offered by Southern Companies to the market will enhance the options available to present and future market participants.

In sum, Southern Companies request that the Commission accept the instant tariff amendment for filing without suspension, modification, condition, or hearing, and thus find that Southern Companies may continue to sell electricity at market-based rates within the Southern BAA (for both short-term and long-term sales) as long as the Auction remains in place. As previously noted, Southern Companies strongly believe they lack market power either in the Southern BAA or elsewhere. Even so, the Auction proposal contained in this filing will mitigate prospectively any ability of Southern Companies to exercise market power (if it were found to exist) and will avoid further litigation over their market-based rate authority.

In Part 1 of this filing, Southern Companies provide background regarding their market-based rate authorizations, pending proceedings regarding such authorizations, and the relationship of the Auction to the status of Southern Companies' market-based rate authorization.

In Part 2 of this filing, Southern Companies summarize the Auction, including detailed descriptions of the "must-offer" feature, the day-ahead and hour-ahead offerings, the procedures under which the Auction will be conducted, the role of the Independent Auction Monitor, and other pertinent information.

In Part 3 of this filing, Southern Companies demonstrate why the Auction is just and reasonable, and not unduly discriminatory, unduly preferential or otherwise unlawful, and why the Auction mitigates any potential or alleged horizontal market power that Southern Companies may be either alleged or found to possess. Specifically, the Auction, as proposed, will mitigate any alleged market power because it eliminates Southern Companies' ability to engage in physical or economic withholding of uncommitted electricity. The Auction is therefore a reasonable mitigation of perceived horizontal market power.

In addition, as noted further in Part 3 of this filing:

- The Auction is consistent with Commission precedent regarding mitigation and will produce just and reasonable rates;
- The Auction is reasonable because it is consistent with state and federal policy objectives;
- The Auction is reasonable because it provides an enhancement to existing supply alternatives; and
- The Auction is reasonable because it enhances transparency and efficiency.

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## 1. Background

Two pending Commission proceedings concerning Southern Companies' market-based rate authority, discussed below, are related to this filing. By discussing these proceedings, Southern Companies are not attempting to reargue or supplement the record in those proceedings. Rather, Southern Companies simply intend to provide some historical context to the present filing. Importantly, Southern Companies *do not* believe that this filing needs to or even should be consolidated with these preexisting proceedings. This filing seeks to establish an Auction prospectively only and the requested effective date for the Amended Tariff Sheets is prospective as well. This said, Southern Companies believe that, if the Commission approves the Auction as proposed herein, any issues about generation market power arising from Southern Companies' September 2008 triennial update will be rendered moot prospectively from the effective date of the Auction.

### a. Southern Companies' Market-Based Rate Authorizations<sup>8</sup>

#### i. Docket No. EL04-124

On August 9, 2004, as amended on August 27, 2004 and November 19, 2004, SCS, on behalf of Southern Companies, submitted revised generation market power screens in accordance with the Commission's orders issued on April 14, 2004<sup>9</sup> and July 8, 2004.<sup>10</sup> The revised screens were submitted for the Southern BAA and all first-tier markets.

On December 17, 2004, the Commission issued an order on the filing, instituting a Section 206 proceeding in order to determine whether Southern Companies may continue to charge market-based rates in the Southern BAA.<sup>11</sup> In that order, the Commission concluded that Southern Companies passed both the pivotal supplier screen and the wholesale market share

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<sup>8</sup> On January 11, 1996, in Docket No. ER96-780-000, SCS, on behalf of Southern Companies, filed for Commission authorization to make wholesale power sales at market-based rates. Docket No. ER96-780-000, *Southern Co. Svcs., Inc.*, Initial Filing, Jan. 11, 1996. The Commission conditionally accepted the market-based rate tariff for filing, and instituted a hearing. *Southern Co. Svcs., Inc.*, 75 FERC ¶ 61,130 (1996); *see also Southern Co. Svcs., Inc.*, 75 FERC ¶ 61,353 (1996). On February 14, 1997, the parties to the proceeding filed a joint stipulation resolving the case without a hearing, and the Presiding Judge issued an Order terminating the proceeding on March 4, 1997. *Southern Co. Svcs., Inc.*, 78 FERC ¶ 63,009 (1997). Southern Companies have submitted triennial and other periodic updates in this docket.

<sup>9</sup> *AEP Power Mkt'g, Inc.*, 107 FERC ¶ 61,018 (2004) ("AEP I").

<sup>10</sup> *AEP Power Mkt'g, Inc.*, 108 FERC ¶ 61,026 (2004) ("AEP II").

<sup>11</sup> *Southern Co. Energy Mkt'g, Inc.*, 109 FERC ¶ 61,275 (2004) ("December 17 Order").

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screen for the first-tier control areas for each of the four seasons.<sup>12</sup> However, it found that the submitted screens indicated failures of the wholesale market share screen for the Southern BAA in each of the four seasons.<sup>13</sup> Accordingly, with regard to the Southern BAA, the Southern Companies were directed to: (i) file a Delivered Price Test (“DPT”) analysis; (ii) file a tailored mitigation proposal that “would eliminate the ability to exercise market power;” or (iii) “inform the Commission that it would adopt the April 14 Order’s default cost-based rates or propose other cost-based rates and submit cost support for such rates” within sixty days of the date of the December 17 Order.<sup>14</sup>

On July 8, 2005, the Commission issued an order establishing a trial-type evidentiary hearing in order to resolve issues of material fact and to address issues associated with Southern Companies’ DPT in the Southern BAA.<sup>15</sup> The Commission specifically directed the presiding judge “to make any factual findings necessary to fully develop the record and to provide the Commission with a properly-constructed DPT on whose results the Commission can, in turn, rely.”<sup>16</sup> On November 9, 2007, the Presiding Administrative Law Judge (“ALJ”) issued an initial decision.<sup>17</sup>

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<sup>12</sup> December 17 Order, 109 FERC ¶ 61,275 at P 30.

<sup>13</sup> *Id.* at P 31.

<sup>14</sup> *Id.* at P 35.

<sup>15</sup> *Southern Co. Energy Mkt’g, Inc.*, 112 FERC ¶ 61,054 at Ordering Para. (A) (2005) (“July 2005 Hearing Order”).

<sup>16</sup> *Id.* at P 60. Some of the issues to be addressed included: “(i) the use of simultaneous import capability, rather than Total Transfer Capability, as the measure of transmission constraints; (ii) the performance of the pivotal supplier analysis under the economic capacity measure; (iii) the use of historical data for prices, loads, and generation, rather than projected data, (iv) the development of sensitivity analyses and the data necessary to corroborate the DPT results in compliance with the Commission’s regulations; and (v) the impact of any transmission constraints on the appropriate scope of the relevant market.” *Id.* at P 61. However, in the July 2005 Hearing Order, the Commission *expressly did not set for hearing the issue of how the results of the properly-constructed DPT should be interpreted nor whether Southern Companies have generation market power in the Southern BAA.* *Id.* at P 60 (emphasis added). Instead, the Commission indicated it would address those matters after the initial decision and briefs on and opposing exceptions. *Id.* at P 61. The Commission likewise deferred action on the historical data proffered by Southern Companies (including the transaction data showing Southern Companies to be net purchasers of short-term energy during the test year) until the Commission had before it a properly-constructed DPT. *Id.* at P 95. On August 8, 2005, Southern Companies filed a request for rehearing on the Hearing Order, and the Commission issued its Order Granting in Part and Denying in Part Rehearing of the July 8, 2005 Order on June 21, 2007. *Southern Co. Energy Mktg.*, 119 FERC ¶ 61,301 (2007).

<sup>17</sup> *Southern Co. Energy Mktg.*, 121 FERC ¶ 63,011 (2007) (“Initial Decision”). While the ALJ was unable to provide the Commission with a “properly constructed DPT on whose results the Commission can, in turn, rely,” the

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Only one party – Shell Trading – has opposed Southern Companies’ request for market-based rate authority in Docket No. EL04-124.<sup>18</sup> Shell Trading is a competitive power marketer and not a load serving entity. Further, neither the state commissions in the Southeast nor any “captive” load serving entities have opposed Southern Companies’ market-based rate authorization request.

**ii. September 2008 Triennial Update Filing**

The Commission has not yet issued an opinion on the ALJ’s Initial Decision in Docket No. EL04-124. However, Southern Companies are still required to comply with certain obligations regarding market-based rate authority, including the submission of an additional, new, triennial market power analysis. Accordingly, on September 2, 2008, Southern Companies filed a triennial update in accordance with Order No. 697 and its progeny.<sup>19</sup> The filing included the updated horizontal market power screen analyses for the Southern BAA and interconnected BAAs. This updated horizontal market power screen analysis indicates that Southern Companies again passed the pivotal supplier screen for the Southern BAA, but continue to fail the market share screen in each of the four seasons for the Southern BAA. Because Docket No. EL04-124 has not concluded, it is not clear how the Commission will treat the September 2008 triennial update filing.

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Presiding Judge set forth a number of specific findings. Some of those findings are as follows: (1) as to the Economic Capacity (“EC”) prong of the DPT, “Southern’s own analysis confirms that Southern fails the DPT for all season/load conditions using the EC form of the DPT, regardless of which specific measure is used (*i.e.*, pivotal supplier, market share, and market concentration test) . . .;” (2) “Southern has demonstrated and Staff has confirmed that Southern passes the AEC [Available Economic Capacity] pivotal supplier analysis in all ten season/load periods. This result is consistent with considerations of Southern’s native load and contractually committed capacity under the AEC measure of generation capacity;” (3) As to the AEC prong of the DPT regarding the market share and market concentration measures, the Presiding Judge was “unable to adopt any single DPT study in its entirety to recommend to the Commission.”

Since the issuance of the initial decision, Briefs on Exceptions and Briefs opposing Exceptions were submitted by Southern Companies, Shell Trading, Dalton Utilities, and Commission Trial Staff, raising the following key issues: consideration of Operating Reserves; quantification of available capacity in external areas and allocation of import capacity; system lambda values; exclusion of outbound sales in market share analysis; and evidentiary rulings that affected key determinations.

<sup>18</sup> Other parties who have intervened, but not opposed this request include: Calpine, Dalton Utilities, Sawnee EMC, Coweta-Fayette EMC, Longleaf Energy Associates, Southeast Electricity Consumers Association, and Alabama Municipal Electric Authority.

<sup>19</sup> Interventions and comments are due November 3, 2008. *See* Docket No. ER96-780-020, Notice of Filing, Sept. 9, 2008.

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**b. Southern Companies' Market-Based Rate Status/ Relationship of Other Proceedings to the Auction**

As noted herein, the instant filing is directed to establishing a mechanism (the Auction) to assure the Commission that Southern Companies: (i) are not able to engage in physical or economic withholding in the Southern BAA, and therefore, (ii) may continue to sell at market-based rates in the Southern BAA, in both the short-term and long-term wholesale markets. In this regard, the Commission should note the following:

- Southern Companies do not believe they have horizontal market power in the Southern BAA or elsewhere. However, should Southern Companies be found to have horizontal market power in the Southern BAA or in any first tier market, the instant filing is intended as a means to mitigate that market power as of the effective date of the Amended Tariff Sheets (as discussed below). If the Commission finds that Southern Companies lack any such horizontal market power, the Commission can and should nonetheless approve the Auction in any event as a positive step forward in providing much greater transparency of wholesale electricity markets in the Southeast.
- In assessing the merits of the instant filing, with respect to whether or not any alleged horizontal market power is mitigated by virtue of the Auction, the Commission's salient considerations should include:
  - The fact that the Commission has recently concluded that "there is no fundamental problem or barrier with respect to long term wholesale power contracts, either inside organized markets or in other regions."<sup>20</sup> This is consistent with the arguments of Dalton Utilities, a wholesale customer of Georgia Power and Southern Power, who has requested that its long-term market-based rate contract with Southern Companies should be upheld as a competitive arms-length transaction.<sup>21</sup>

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<sup>20</sup> "Wholesale Competition in Regions With Organized Markets," statement of Chairman Kelliher issued in Docket No. RM07-19-000 and AD07-7-000 on October 16, 2008, *available at* <http://www.ferc.gov/news/statements-speeches/kelliher/2008/10-16-08-kelliher-E-1.asp>.

<sup>21</sup> Dalton Brief on Exceptions at 1. As Dalton Utilities has argued in Docket No. EL04-124:

The record in this proceeding contains no evidence on the basis of which the Presiding Judge could provide the Commission with a long-term firm DPT analysis that can be used to enable the Commission to determine that Southern's existing long-term firm, wholesale contracts are not just and reasonable (See DeRamus Exhibit Shell-1 at 62; Staff Witness Siskind T.1335-1337; Southern

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- The fact that Commission acceptance of the Auction will save significant administrative costs and resources that would otherwise be expended by the Commission, Southern Companies and other participants in future market-based rate proceedings. Acceptance of the Auction will prevent potentially protracted litigation over the updated data presented recently in the September 2008 triennial update.
- The fact that the Auction allows for the efficient (market-based) utilization of excess capacity through a cost-effective administrative process. The Auction, therefore, provides for additional significant administrative savings when compared to alternative auctions or market structures that may entail large sunk and variable costs to operate.
- The fact that, with the retention of an independent, Commission-approved Auction monitor, Southern Companies are providing important oversight of Southern Companies' compliance obligations with respect to the Auction process.

## **2. The Auction<sup>22</sup>**

### **a. The Must-Offer Requirement**

Southern Companies propose to condition their ability to sell at market-based rates on the establishment and operation, for at least three years, of day-ahead and hour-ahead, bid-based energy auctions of their Available Capacity (the "DAE Auction" and "HAE Auction," respectively).<sup>23</sup> The Auction would be subject to the oversight of an Independent Auction Monitor.

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Companies Witnesses Frame Exhibit SCS-32 at 110 and Dr. Hieronymus Exhibit SCS-64 at 32). Nor would it be appropriate for the Presiding Judge to provide such a DPT analysis, if it were available, as it is not one on which the Commission is likely to rely in view of its decision in Order No. 697 not to generically alter the DPT to allow different product analyses for short-term and long-term power. (Order No. 697 at P 122.) *Id.* at 7.

<sup>22</sup> This discussion of the Auction and the Auction Rules is descriptive only and does not in any way modify the terms or conditions of the Auction Rules as set forth in the Amended Tariff Sheets. In the event of any conflict between this discussion and the Auction Rules as submitted herewith, the Auction Rules shall control.

<sup>23</sup> Capitalized terms, not otherwise defined herein, have the meaning specified in Section 2.0 of the Rules of the Bid-Based Energy Auction of the Southern Companies' Market-Based Rate Power Sales Tariff as proposed in this filing.



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**i. Available Capacity**

Available Capacity would be defined for purposes of the Auction as any thermal Controlled Capacity that can be dispatched to provide energy sold through the DAE Auction or the HAE Auction, excluding capacity reasonably expected to serve load (including appropriate amounts for load forecast uncertainty),<sup>24</sup> capacity needed for the Southern BAA Operating Reserves, capacity needed for existing third party sales and capacity otherwise unavailable for dispatch due to outage or other operational constraints.<sup>25</sup> Controlled Capacity is capacity controlled by Southern Companies through ownership or contractual arrangement and is included by Southern Companies as a dispatchable resource.

The quantities of Available Capacity offered by Southern Companies into the DAE Auction or the HAE Auction would, as explained below, be determined in accordance with Appendices DA-1 and HA-1 of the Auction Rules. Owing to variations in load forecasts, unit outages, and other commitments, the quantities of Available Capacity offered will necessarily vary from day-to-day and hour-to-hour.

It is thus difficult for Southern Companies to predict with a great deal of accuracy how much Available Capacity will be offered in any given Auction. In round numbers, however, Southern Companies believe that a range from 1,500 MW to more than 8,000 MW, will be offered in the DAE Auction. That said, on any given day, depending upon system conditions and particularly during the summer months, the Available Capacity offered may be as low as zero, owing to the need for Southern Companies to use all or virtually all of their available

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<sup>24</sup> Available Capacity would not include uncommitted capacity with a greater-than-24 hour commitment notice or capacity not reasonably expected to be available due to outages, deratings, or other operational constraints.

<sup>25</sup> This is consistent with the Electric Power Supply Association's policy on withholding which states:

Companies will operate and schedule generating facilities, undertake maintenance, declare outages, and commit or otherwise bid supply in a manner that complies with the rules, regulations and guidelines of the applicable power market. Moreover, companies will not engage in such activities or misrepresent the operational capabilities of generation facilities in a manner expressly calculated to affect market prices by unlawfully withholding available supply from the market in order to create artificial supply shortages. However, companies may decide not to run their generating plants or bid and schedule such resources or other power supplies when such actions would risk jeopardizing public health and safety or damaging their facilities, or in order to comply with facility licensing, environmental or other legal requirements, or when such actions would be uneconomic under the given circumstances.

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capacity resources to serve their firm obligations after taking into consideration unexpected outages, deratings, or other operational constraints. Importantly, regardless of how much Available Capacity is offered, Southern Companies will be offering in the Auctions *all of their Available Capacity* and thus have no ability to engage in physical withholding.

**ii. Auction Process**

The Auction would be administered by an “Auction Administrator.” The only employees of Southern Companies eligible to serve as Auction Administrator would be “support employees” as specified in 18 C.F.R. § 358.4(a)(4) or employees performing similar “back office” administrative functions.<sup>26</sup> Those employees of Southern Companies directly engaged in wholesale electricity marketing and trading would not have access to bid information for any purpose, except to the extent that the information is made available to Auction participants pursuant to the processes specified in Section 4.2.4 of the Auction Rules and described below.<sup>27</sup>

Participation in the Auction would be open to all entities currently qualified to transact with Southern Companies pursuant to their market-based rate tariff.<sup>28</sup> This would include entities that have existing service agreements based on either the EEI Master Agreement or the WSPP Agreement. Entities that do not currently have service agreements would be eligible to participate upon entering into a service agreement referencing the market-based rate tariff. All prospective bidders must be in good standing with Southern Companies and meet all credit requirements consistent with the service agreement.

**(a) DAE Auction**

The DAE Auction would take place every business day, excluding weekends and NERC holidays, provided that Southern Companies have Available Capacity to sell on a day-ahead basis.<sup>29</sup> The bid period for the DAE Auction (the “DAE Bid Period”) would begin at 12:00 noon CPT two NERC business days prior to the day of physical delivery (the “Delivery Day”) and end at 6:30 a.m. CPT one day prior to the Delivery Day.<sup>30</sup> In addition, the Auction Administrator

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<sup>26</sup> Auction Rules § 3.4.

<sup>27</sup> Southern Companies shall impose internal data control restrictions consistent with those used for the Standards of Conduct and/or the Separation of Functions and Communications Protocol Applicable to Southern Power Company. *See id.* § 3.7.

<sup>28</sup> *Id.* § 2.3.

<sup>29</sup> *Id.* § 3.2.

<sup>30</sup> *Id.* § 2.12.

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may administer a DAE Auction for energy to be delivered on weekend days or NERC holidays at the discretion of Southern Companies.<sup>31</sup> In the event there is a weekend DAE Auction for a particular weekend, the applicable DAE Bid Period shall open two business days prior to the Delivery Day and close one business day prior to the Delivery Day at the times ordinarily used for DAE Auctions and the delivery term shall be for 16 hours on both Saturday and Sunday (*i.e.*, a 2x16 strip).<sup>32</sup>

All energy offered and sold in the DAE Auction would be one of two products: (a) 50 MW blocks of Firm LD Energy for a term of 16 hours beginning 6:00 a.m. CPT on the Delivery Day and ending 10:00 p.m. CPT on the Delivery Day, or (b) 50 MW blocks of Recallable Energy for the same 16 hour period.<sup>33</sup> Blocks of Firm LD Energy and Recallable Energy (all referred to as “DAE Blocks”) are to be offered simultaneously but via separate auctions.<sup>34</sup>

Southern Companies selected a 50 MW block for use in the DAE Auction because it is a standard, frequently traded, and well-understood commodity volume used for energy trades in the Southeast. Southern Companies chose to use a 16 hour “strip” from 6:00 a.m. to 10 p.m. for the DAE Auction product because these are the commonly-recognized “peak” period hours for electricity in the Southeast.

Prior to the opening of the DAE Bid Period, Southern Companies would identify to the Auction Administrator the number of DAE Blocks of each type they have available to sell.<sup>35</sup> At

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<sup>31</sup> *Id.* § 3.3.

<sup>32</sup> *Id.*

<sup>33</sup> The Auction Rules define Firm LD as “Energy sold whereby a party shall be relieved of its obligations to sell and deliver or to purchase and receive without liability only to the extent that, and for the period during which, such performance is prevented by Force Majeure.” *Id.* § 2.22. This definition of Firm LD is very similar to the definition of Firm LD in the EEI Master Power Purchase & Sale Agreement that is routinely used for energy trading throughout the industry. The Auction Rules define Recallable as “Energy sold whereby Seller, upon experiencing a supply side disruption, has the right, but not the obligation, to curtail the delivery of such Energy without liability on the part of Seller.” *Id.* § 2.42.

<sup>34</sup> *Id.* § 5.1.1.

<sup>35</sup> *Id.* § 5.2.1. To the extent that the sale of any of the DAE Blocks are linked to the sale of any other DAE Blocks (such that none of the linked blocks can be sold unless all linked blocks are sold), these shall be indicated at the time of submission. For example, if a combustion turbine had a capacity of 100 MW, and could only be dispatched at that level, it would only clear the Auction if both of the 50 MW blocks are sold. To the extent that the sale of any of the DAE Blocks are contingent upon the sale of other DAE Blocks (such that dependent blocks cannot be sold unless “parent” blocks are sold first), these shall be indicated at the time of submission. An example of a contingent unit would be a 600 MW resource with a minimum operating limit of 400 MW. The sale of the final 200 MW would be contingent (dependent) on the sale of at least 400 MW from that facility.

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any time after the provision of such information but before the “Lock-Down Period” described below, Southern Companies could notify the Auction Administrator of any change in the number of DAE Blocks available provided that such change is the direct result of one or more of the following occurring after the initial notification of DAE Blocks to the Auction Administrator: (a) a non-discretionary event affecting one of the primary inputs to the calculation of Available Capacity; or (b) Southern Companies entering into one or more sales of energy outside of the Auction.<sup>36</sup>

Certain DAE Blocks will be offered through the DAE Auction only as Recallable Energy. These DAE Blocks would represent Available Capacity from: (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.<sup>37</sup> This latter category would include resources necessary to meet an N-1 reliability criteria – the requirement that if Southern Companies suffered an outage of their largest single contingency and needed to deploy the Contingency Reserves component of their Operating Reserves, Southern Companies must act to replenish those reserves within 90 minutes.<sup>38</sup> Any remaining Available Capacity would be offered as Firm LD Energy.<sup>39</sup>

During the DAE Bid Period for a Delivery Day that is not a weekend day or NERC holiday, Southern Companies would refrain from making, other than through such DAE Auction, any sales of 50 MW blocks of energy 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) for delivery between 6 a.m. CPT and 10 p.m. CPT on the Delivery Day applicable to such bid period.<sup>40</sup> Southern Companies would retain the right to sell other products

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<sup>36</sup> Auction Rules § 5.2.1.2.

<sup>37</sup> Auction Rules, Appx. DA-1 § 3.1.

<sup>38</sup> In Order No. 693, the Commission approved Reliability Standard BAL-002-0 as *mandatory and enforceable*. Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, FERC Stats. & Regs. ¶ 31,242, at P 356 (2007), *order on reh’g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007). Under BAL-002-0 the default Contingency Reserve Restoration Period is 90 minutes. See section B. R 6.2. SERC has adopted the 90 minute restoration requirement. See SERC Reliability Corporation Contingency Reserve Policy dated May 22, 2008 at 5. The document can be found at: [http://www.serc1.org/Documents/SERC%20Supplements/Operating/SERC%20Contingency%20Reserve%20Policy\\_approved%2006-30-08.pdf](http://www.serc1.org/Documents/SERC%20Supplements/Operating/SERC%20Contingency%20Reserve%20Policy_approved%2006-30-08.pdf).

<sup>39</sup> Auction Rules, Appx. DA-1 § 3.2.

<sup>40</sup> *Id.* § 4.1.1.

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under their market-based rate authority, subject to the lockdown limitations on Available Capacity and Seller Offer Prices discussed herein.

Prior to “Lock-Down Period” for a given DAE Auction – a one hour period prior to the close of the DAE Bid Period (5:30 a.m. CPT to 6:30 a.m. CPT on the business day prior to the Delivery Day)<sup>41</sup> – Southern Companies would notify the Auction Administrator of the Seller Offer Prices for each of the offered DAE Blocks.<sup>42</sup> The price would be determined in accordance with the formulas and processes described in Appendix DA-2 of the Auction Rules. Generally speaking, the price of a given block would not exceed the sum of: (a) 110 percent of the arithmetic mean of the Average Variable Cost of each of the associated units operating at maximum load; (b) the combined Commitment Cost of those units; and (c) a FERC-approved demand charge.<sup>43</sup>

Southern Companies have included in the calculation of Seller Offer Prices as set forth in the Auction Rules a cost-based demand charge of \$21.43/MWh. This is consistent with the cost-based demand charge that is developed and supported in a separate Cost-Based Rate Tariff filed for Southern Companies being submitted contemporaneously in Docket No. ER09-\_\_\_\_-000. To the extent that the demand rates in that proceeding are modified, Southern Companies commit to make a compliance filing in this proceeding to reflect the final approved charges in the Auction rules.

During the DAE Bid Period, bidders would be allowed to submit bids to purchase one or more of the offered DAE Blocks (“DAE Bids”), but must submit bids for Firm LD blocks separately from bids for Recallable blocks.<sup>44</sup> Bids would be expressed as an implied heat rate in MMBtu/MWh.<sup>45</sup> Bidders could modify or withdraw a DAE Bid at any time during the DAE Bid Period. A bidder could also submit multiple DAE Bids, but each separate bid would be considered independently.

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<sup>41</sup> Auction Rules § 2.35.

<sup>42</sup> *Id.* § 5.2.2.1.

<sup>43</sup> Auction Rules, Appx. DA-2 § 2.0.

<sup>44</sup> Auction Rules § 5.3.

<sup>45</sup> *Id.* § 2.1.1.; *see also* § 2.43.

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Bids for Firm DAE Blocks and Recallable DAE Blocks are to be evaluated independently by the Auction Administrator.<sup>46</sup> Upon close of the DAE Bid Period, DAE Blocks would be awarded as follows (the exact process for awards is set forth in the Auction Rules):<sup>47</sup>

- All DAE Bids will be sorted in descending order (highest to lowest implied heat rate) to simulate an economic demand curve.
- All Seller Offer Prices will be sorted in ascending order (lowest to highest implied heat rate) to simulate an economic supply curve.
- The intersection of the simulated supply and demand curves shall be determined by locating the quantity on the supply and demand curves where the next highest DAE Bid is less than the next lowest Seller Offer Price.
- All DAE Bids not exceeding this quantity on the demand curve shall be granted their bid for DAE Blocks.
- If there are no DAE Bids that exceed the lowest Seller Offer Price, no DAE Blocks will be sold.

All bidders awarded DAE Blocks shall pay a price calculated as (a) the implied heat rate representing the greater of the highest non-winning DAE Bid or the Seller Offer Price of the last DAE Block sold, multiplied by (b) the Henry Hub Midpoint gas price (in \$/MMBtu) published by Platts Megawatt Daily<sup>©</sup> for the Gas Flow Day.<sup>48</sup>

As soon as possible after the close of the DAE Bid Period, the Auction Administrator will notify Southern Companies and all bidders that submitted DAE Bids during such bid period of their respective awarded DAE Blocks.<sup>49</sup> Upon notification of being awarded a DAE Block, a buyer shall be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (*i.e.*, “tagging”) requirements, pursuant to Southern Companies’ Order No. 890 Compliance Open Access Transmission Tariff.<sup>50</sup> All transactions of DAE Blocks

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<sup>46</sup> *Id.* § 5.4.1.

<sup>47</sup> *Id.* § 5.4.2.

<sup>48</sup> *Id.* § 5.4.3.

<sup>49</sup> *Id.* § 5.5.1.

<sup>50</sup> *Id.* § 5.5.3.

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will be considered to have been transacted under the terms and conditions of the service agreement between Southern Companies and the buyer under Southern Companies' market-based rate tariff.

Southern Companies would have the right to curtail delivery of energy sold as Recallable DAE Blocks in the event it experienced *a supply side disruption only* (e.g., an unplanned outage or derate) affecting the Available Capacity offered into the DAE Auction.<sup>51</sup> The Recallable product offered by Southern Companies is thus distinct from the standard non-firm energy product generally traded in the marketplace today, where sellers can curtail for any reason, including economic reasons.

In the event Southern Companies experienced such a supply disruption and determined that they must curtail a portion or all of the Recallable DAE Blocks, they shall do so in the priority order established by the Auction Administrator, determined as follows: (a) buyers with lower bid prices shall be curtailed before buyers with higher bid prices; and (b) in the event that two or more buyers had the same bid price, bids submitted later in time would be curtailed prior to bids submitted earlier in time as between such buyers.<sup>52</sup> A curtailed buyer may request continuity of service (*i.e.*, to not be curtailed) at a price equal to the HAE Auction market clearing price. Southern Companies will honor such request if able to do so without adversely impacting system reliability. Conversely, if such a request cannot be honored, the buyer will be required to curtail its purchase. In any event, Southern Companies will take any action necessary to preserve reliability in the event the buyer does not curtail its purchase as directed.

**(b) HAE Auction**

The HAE Auction would take place every hour of every day, including normal business days, weekends, and NERC Holidays, provided again that Southern Companies have Available Capacity to sell on an hour-ahead basis.<sup>53</sup> The HAE Auction sales would be non-firm energy sales of one clock hour in duration entered into the clock hour prior to the hour of physical delivery. The delivery would be at a point inside the Southern BAA (not a metered boundary). The bid period for the HAE Auction (the "HAE Bid Period") would begin 60 minutes prior to the top of the delivery hour and end 45 minutes prior to the top of the delivery hour.<sup>54</sup> Bids to purchase energy through the HAE Auction would be submitted in the form of a MW quantity, be

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<sup>51</sup> *Id.* § 5.6.1.

<sup>52</sup> *Id.* § 5.6.2.

<sup>53</sup> *Id.* § 3.2.

<sup>54</sup> *Id.* § 2.27.

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denominated in one MW increments (with a minimum of one MW), and state the maximum price the bidder is willing to pay (in \$/MWh).<sup>55</sup>

For the Lock-Down Period, a five minute period prior to the close of the HAE Auction,<sup>56</sup> Southern Companies would refrain from making sales outside the Auction process that would impact either the Available Capacity or the Seller Offer Prices of energy offered in the HAE Auction. In addition, during the HAE Bid Period, Southern Companies would refrain from making, other than through the HAE Auction, any energy sales to be delivered at a point inside the Southern BAA (as opposed to 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 that bid period.<sup>57</sup>

Appendix HA-1 of the Auction Rules sets forth the process for determining the quantity of energy (the “HAE Power”) that Southern Companies will offer into a given HAE Auction. Prior to the start of the HAE Bid Period, Southern Companies will submit to the Auction Administrator a supply curve representing the amount of HAE Power they have available to sell for the next delivery hour, including associated Seller Offer Prices.<sup>58</sup> The supply curve can be submitted in one MW increments or in blocks of Energy.<sup>59</sup> Southern Companies may submit a revised supply curve to the Auction Administrator at any time prior to the applicable Lock-Down Period.<sup>60</sup>

During the HAE Bid Period, bidders may submit HAE Bids to purchase HAE Power.<sup>61</sup> A Bidder may modify or withdraw an HAE Bid at any time during the HAE Bid Period.<sup>62</sup> A

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<sup>55</sup> *Id.* § 2.26.

<sup>56</sup> *Id.* § 2.35.

<sup>57</sup> *Id.* § 4.1.2.

<sup>58</sup> *Id.* § 6.2.1. Both the amount of HAE Power offered and the associated Minimum Acceptable Bids will be calculated in accordance with Appendices HA-1 and HA-2, respectively.

<sup>59</sup> *Id.* § 6.2.2.

<sup>60</sup> *Id.* § 6.2.3.

<sup>61</sup> *Id.* § 6.3.1.

<sup>62</sup> *Id.* § 6.3.2.



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Bidder may also submit multiple HAE Bids, but each separate bid will be considered independently.<sup>63</sup>

Upon close of the HAE Bid Period, HAE Power would be awarded as follows (the exact process for awards is set forth in the Auction Rules):<sup>64</sup>

- All HAE Bids will be sorted from highest to lowest to simulate an economic demand curve.
- The intersection of the simulated demand curve and Southern Companies' supply curve (described above) shall be determined by locating the quantity on the supply and demand curves where the next highest HAE Bid is less than the next lowest Seller Offer Price.
- All HAE Bids not exceeding this quantity on the demand curve shall be granted their bid for HAE Power, unless any such HAE Power is linked with HAE Power with higher Seller Offer Prices that exceed this intersection point.
- If the marginal HAE Bid indicates a willingness to accept an award of HAE Power for a quantity less than the full amount in the HAE Bid, the Auction Administrator will accept that HAE Bid to the extent such lesser quantity is available and offered at a price less than or equal to such marginal HAE Bid; otherwise such marginal bid will be rejected.
- If there are no HAE Bids that exceed the lowest Seller Offer Price, no HAE Power shall be sold for such delivery hour.

All buyers would pay a price for HAE Power awarded based upon the market clearing price (in \$/MWh), calculated as the greater of the highest non-winning HAE Bid and Seller Offer Price of the last MW sold in the HAE Auction for such delivery hour.<sup>65</sup>

As soon as possible after the close of the HAE Bid Period, the Auction Administrator will notify Southern Companies and all bidders that submitted HAE Bids during the HAE Bid Period of their respective awarded HAE Power.<sup>66</sup> Upon notification of being awarded HAE Power, the

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<sup>63</sup> *Id.* § 6.3.3.

<sup>64</sup> *Id.* § 6.4.1.

<sup>65</sup> *Id.* § 6.4.2.

<sup>66</sup> *Id.* § 6.5.1.

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buyer would be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (*i.e.*, “tagging”) requirements.<sup>67</sup> All transactions of HAE Power will be considered to have been transacted under the terms and conditions of the service agreement between Southern Companies and the buyer under Southern Companies’ market-based rate tariff.

In the event Southern Companies needed to curtail delivery of HAE Power (which, as noted above, is non-firm in nature), they would do so in the priority order established by the Auction Administrator, determined as follows: (a) sales of HAE Power based on lower HAE Bids shall be curtailed before sales of HAE Power based on higher HAE Bids; and (b) in the event that two or more buyers had the same bid price, HAE Power based on a bid submitted later in time shall be curtailed prior to HAE Power based on a bid submitted earlier in time.<sup>68</sup>

**(c) Administrative Charge**

In this filing, Southern Companies have not proposed to recover in this filing the costs of administering the Auction (including, but not limited to, the costs associated with retention of the Independent Auction Monitor) because it is impossible to predict at this time the volume of Auction transactions necessary to establish a service charge. Upon having sufficient experience with the Auction, Southern Companies would anticipate filing with the Commission to recover their ongoing administrative costs.

**(d) Future Scope of the Auction**

As explained above, Southern Companies have designed the Auction to mitigate fully its ability to exercise generation market power and thus put to rest any concerns about the appropriateness of Southern Companies’ ongoing market-based rate authority. The Auction has also been deliberately designed to be implemented on a very tight timeline – *i.e.*, within 60 days of a Commission order approving it. To the best of Southern Companies’ knowledge, no ISO or RTO has ever established an energy auction in such short order.

In order to accomplish such a quick implementation, Southern Companies have proposed that offerings in the Auction be limited to those of Southern Companies. As a threshold matter, the Auction is intended to mitigate potential concerns regarding Southern Companies’ market power, not that of other entities. Moreover, establishing the infrastructure (including computer systems and other administrative functions) necessary to operate an auction with multiple sellers would be far more complicated than one with just a single seller. Southern Companies, frankly,

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<sup>67</sup> *Id.* § 6.5.3.

<sup>68</sup> *Id.* § 6.6.

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do not believe that they would be able to implement the Auction on the timeline envisioned if additional parties were allowed to sell through it.

As described below, Southern Companies are amenable in due time to: (a) expanding the Auction to include sellers other than Southern Companies; (b) work with market participants to move the Auction to an independent administrator so other sellers could be added more easily; and/or (c) expanding the Auction to include products other than those proposed herein. Southern Companies believe strongly that the Auction brings tangible benefits to buyers and the marketplace in general, and they are committed to furthering these goals to the extent practicable.

### **iii. Duties of the Independent Auction Monitor**

As noted above, the Auction process would be subject to review and audit by an Independent Auction Monitor. Within 30 days upon acceptance of this Auction Proposal, Southern Companies, in a compliance filing, would submit for Commission acceptance the name of the Independent Auction Monitor. The Independent Auction Monitor would have the following duties:

- Verify that all Available Capacity is offered into the DAE Auction and the HAE Auction in a manner consistent with the Auction Rules;
- Verify that any changes made by Southern Companies to their determination of Available Capacity after the opening of the Bid Period but before the close of the Bid Period were made for appropriate reasons;
- Verify that the Auction process was conducted properly, including the determination of the Seller Offer Prices and the determination of the winning bidders;
- Verify that information on Auction results was properly provided to either a reputable index developer or a data hub; and
- Answer questions from third parties with regard to the integrity of the Auction process and results.

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**iv. Publication and Reporting of Auction Prices**

The clearing prices resulting from each Auction will be made available to all entities eligible to participate in the Auction on an Internet-based platform after the close of the DAE Bid Period or HAE Bid Period (as applicable) on the following schedule:<sup>69</sup>

- Implied heat rate forming basis for the DAE Auction market clearing price – Within one hour of the close of the applicable DAE Bid Period.
- DAE Auction market clearing price – No later than the end of the applicable Delivery Day.
- HAE Auction market clearing price – Within forty-five minutes of the close of the applicable HAE Bid Period.

Information about sales in the auction will also be publicly disseminated as follows.

First, subject to a determination by the Commission that doing so would qualify for safe harbor protection, consistent with the Commission’s *Policy Statement on Natural Gas and Electric Price Indices*, Southern Companies will make the information described above publicly available by posting market clearing prices on its website on the same timeline as such information is made available to eligible auction participants.<sup>70</sup>

Second, and again subject to a determination by the Commission that doing so would qualify for its safe harbor protection, Southern Companies will report the quantities and prices of sales made via the Auction to either a reputable index developer or a data hub.<sup>71</sup>

Third, consistent with current Commission regulations, all transactions resulting from the Auction will be included in Southern Companies’ FERC Electric Quarterly Reports (“EQRs”).

Fourth, no earlier than six months after a particular auction, the Auction Administrator will make available on a per-request basis all bid information for such auction, subject to the protection of bidder identities.<sup>72</sup> The information will be produced in a way to track the actions of a particular bidder, but without revealing its specific identity.

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<sup>69</sup> *Id.* § 4.2.2.

<sup>70</sup> *Id.* § 4.2.3. A request for such safe harbor protection is provided in Section 4 below.

<sup>71</sup> *Id.* § 4.2.1. A request for such safe harbor protection is provided in Section 4 below.

<sup>72</sup> *Id.* § 4.2.4.

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**v. Non-Auction Sales**

The DAE and HAE auctions will represent potential vehicles for consummating energy transactions in the Southern BAA but they are not intended to be the exclusive means whereby energy transactions may take place. Stated differently, buyers would not be restricted from bilateral purchases from Southern Companies except as expressly restricted by the Auction Rules.<sup>73</sup> The prices charged by Southern Companies for their non-auction transactions would not be subject to the Auction Rules.

As explained in the attached Affidavit of Rodney Frame, the Auction (combined with the must-offer requirement) is a mitigation proposal.<sup>74</sup> Southern Companies would continue to engage in market-based bilateral transactions as they have been doing for many years. The primary difference between the current situation and what Southern Companies propose now is that the potential buyers know that Southern Companies, subject to third party verification, will be making all available uncommitted thermal resources available through the Auction at cost-based offer prices.

**3. The Auction is Just and Reasonable and Should be Accepted for Filing**

The Federal Power Act requires that all rates and charges for wholesale sales must be just and reasonable and not unduly discriminatory or preferential or otherwise unlawful.<sup>75</sup> Applications for market-based rates are accepted for filing if the Commission finds that “the seller and its affiliates lack, or have adequately mitigated, market power.”<sup>76</sup>

The Auction should be accepted for filing because it provides for a reasonable means of mitigating a generation market power that Southern Companies are alleged or perceived to have, and additionally, is a reasonable means of mitigating any findings of market power that could result via the September 2008 triennial update.

In short, the Auction, as proposed, will mitigate any alleged market power from the date the Auction becomes operational because it takes away Southern Companies’ ability to engage in physical or economic withholding of uncommitted capacity or energy. The Auction is therefore a reasonable mitigation of perceived horizontal market power.

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<sup>73</sup> See *id.* § 4.1.

<sup>74</sup> Frame Aff. at P. 7.

<sup>75</sup> 16 U.S.C. § 824d.

<sup>76</sup> Order No. 697 at P 7.

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In addition, as noted further below in sections 3:

- The Auction is consistent with Commission precedent regarding mitigation;
- The Auction is reasonable because it is consistent with state and federal policy objectives;
- The Auction is reasonable because it provides an enhancement to existing supply alternatives; and
- The Auction is reasonable because it enhances transparency and efficiency.

**a. The Auction Mitigates Allegations About Southern Companies' Horizontal Market Power**

The Commission's indicative screens focus on horizontal market power which can arise when a single supplier or small number of suppliers hold "too great" of a portion of the capacity that can supply a market (and where other conditions, such as ease of entry and the availability of close substitutes, are not present). An electric generator that has horizontal market power can exercise it by withholding otherwise economic (*i.e.*, "in-the-money") generating capacity from the market or by offering it to the market only at a price that is "too high." The former is sometimes referred to as "physical" withholding while the latter is sometimes referred to as "economic" withholding.

In either case, however, the effects are the same, in that the market must call on higher cost generating resources to meet total demand than it would otherwise. The need to call on these higher cost generating resources causes the market-clearing prices to rise. An electricity generator that possesses and exercises market power loses money on the supply that it withholds but, if its strategy is successful, more than offsets the losses incurred by the withheld units through higher profits from its generators that continue to operate. Those generators that continue to operate reap higher profits than they would have without the withholding strategy because the withholding strategy, if successful, has increased the market price above the pre-withholding level.<sup>77</sup>

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<sup>77</sup> Of course, any attempt by a generation owner to exercise market power via a withholding strategy is likely to be much more complicated than this simple explanation suggests. Several factors must be considered in assessing whether market power actually can be exercised by a particular supplier including, among others things, the need for that supplier to meet its load, Operating Reserves, and pre-existing contractual obligations, alternatives available to the buyers (including purchases from outside of the BAA market area being studied), uncertainty about the responses of other suppliers to the withholding, how any withholding will affect market price, the extent to which

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As discussed by Mr. Frame, the Auction is just and reasonable and should be accepted for filing because any residual concerns about physical withholding of generation are directly addressed by the Auction. The Auction is a “must-offer” obligation on Southern Companies that encompasses all of its otherwise available and uncommitted thermal generation capacity.<sup>78</sup>

Although the precise mechanics of the process differ somewhat between the DAE Auction and the HAE Auction, and between the Firm LD and Recallable products offered in the DAE Auction, the overall principles are the same for each. Under the Auction, Southern Companies will first determine their total generating capacity including owned generating units<sup>79</sup> and pre-existing purchases. From this amount, Southern Companies will make two appropriate subtractions: (i) the portion of their total generating capacity that is unavailable due to planned or existing outages, derates or operational constraints; and (ii) the amount of capacity already committed (for meeting native load fulfilling sales obligations to third-parties, and providing Operating Reserves). The remaining amounts constitute Southern Companies’ “Available Capacity,” *all of which will be made available through the Auction*. The offering to the market of all available capacity counters any concern that Southern Companies might be able to engage in physical withholding.

As explained further by Mr. Frame,<sup>80</sup> the Auction is also just and reasonable because it directly addresses any residual concerns about economic withholding because Southern Companies’ supply offers will be “capped” on the basis of cost-based pricing principles that previously have been accepted by the Commission as appropriate when concerns about the exercise of horizontal market power are (or might be) present.<sup>81</sup> The Seller Offer Prices will reflect an energy charge based on the incremental variable costs of the units in the supply curve

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the operating characteristics of the generation owners are consistent with a withholding strategy and the potential that an attempt to exercise market power might trigger regulatory sanctions.

<sup>78</sup> Frame Aff. at P 16-17.

<sup>79</sup> In this process, Southern Companies will include only the portion of their hydroelectric generating capacity that is scheduled for delivery during the Auction delivery period.

<sup>80</sup> Frame Aff. at P 18-19.

<sup>81</sup> Order No. 697 specifically provides that this same incremental cost plus 10 percent level will be used as the “default” mitigation for sales of one week or less (such as sales in the DA and HA Auctions) for suppliers that are presumed to have market power. Order No. 697 at P 620. Moreover, the Commission has approved similar proposals for other utilities. *See, e.g., Duke Power*, 115 FERC ¶ 61,042 (2006) (approving a settlement where Duke Power’s voluntary sales of electric power at wholesale were priced in some instances at Duke Power’s system incremental cost plus 10 percent); *AEP Power Mktg., Inc.*, 113 FERC ¶ 63,027 (2005) (approving a settlement which contained under its Schedule A for price mitigation an energy charge consisting of the anticipated incremental cost of energy expected to be purchased or produced by Seller plus ten percent).

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plus the standard ten percent adder for difficult-to-quantify incremental variable costs.<sup>82</sup> Incremental cost plus 10 percent is also one of the offer cap options available in the clearing price auctions operated by the PJM for suppliers that, as a result of failing the PJM Market Monitoring Unit's structural tests, are believed to have the potential for exercising market power in transmission constraint-created local market areas in PJM.<sup>83</sup> The Commission has approved a similar mitigation measure for the CAISO's Market Redesign and Technology Upgrade ("MRTU") market design.<sup>84</sup>

The Seller Offer Prices will also include a demand charge as determined in the Cost-Based Rate Tariff being filed contemporaneously with this proposal. Including a demand charge in the Seller Offer Price is appropriate for a number of reasons. First, the Commission has permitted demand charges for sales of a day or even an hour and for non-firm sales.<sup>85</sup> Second, the Commission has found that a must-offer obligation can be unjust and unreasonable without appropriate compensation to generators for the capacity and reliability services they provide.<sup>86</sup>

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<sup>82</sup> These include, but are not limited to, the increased risk of equipment problems or failures associated with the increased usage; fuel inventory management problems; emissions cap management impacts. "In addition to basic energy rate, we also allow fixed or percentage adders to recover any unquantifiable, or difficult-to-quantify incremental variable costs and to protect the seller from any error in estimating incremental variable costs." *Public Svc. Co. of New Mexico*, 25 FERC ¶ 61,469 at 62,048 (1983). "[T]he industry's consistent practice is to justify ten percent adders to incremental costs as allowing recovery of incremental energy costs, not as providing a contribution to fixed costs." *Terra Comfort Corp.*, 52 FERC ¶ 61,241 at 61,840 (1990).

<sup>83</sup> See Section 6.4.2 of the PJM Amended and Restated Operating Agreement. Incremental cost plus 10 percent is one of the offer cap options available to mitigated suppliers in PJM. Other offer cap options include (i) the use of historical locational prices deemed to portray competitive market conditions and (ii) amounts negotiated between PJM and individual sellers.

<sup>84</sup> *California Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) at P 1045, *order on reh'g*, 119 FERC ¶ 61,076 (2007) at P 501.

<sup>85</sup> See e.g., *Detroit Edison Co.*, 78 FERC ¶ 61,149 (1997) (tariff included a demand charge for periods of an hour up to one year, plus 10 percent of system incremental energy costs); *Delmarva Power & Light Co.*, 24 FERC ¶ 61,380 at 61,795 (1983) (with respect to power sales rates to interruptible customers, a demand charge is included in the rate for the energy as a contribution toward the already recovered capital costs, and this demand charge is then credited against the [full requirements customers] cost of service to compensate the full requirements customers for the use of the capacity); and *Terra Comfort Corp.*, 52 FERC ¶ 61,241 at 61,839 & n.26 (1990) (it is "common practice for jurisdictional utilities to assess demand charges for even non-firm sources" in order "to provide a contribution to the fixed cost of those facilities which support the sale for the benefit of the ratepayers who are assigned all fixed costs in the first instance").

<sup>86</sup> See *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,281 at P 34 ("We have previously found the [must offer obligation] to be unjust and unreasonable without appropriate compensation to generators for the capacity and reliability services they provide") (December 20, 2007). See also *Cal. Ind. Sys. Operator Corp.*, 123 FERC



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Third, organized short-term markets (*e.g.*, PJM markets, CAISO markets, and the other regional transmission organizations (“RTOs”) and independent system operators (“ISOs”) in the east) have explicit mechanisms that provide compensation for the value of generating capacity and capacity-related services, and these mechanisms are in addition to any return earned in the day-ahead and hour-ahead energy markets.<sup>87</sup> None of these capacity procurement and compensation mechanisms are (or will be) available in the Southeast to supplement Southern Companies’ Auction proposal if it is approved by the Commission.<sup>88</sup>

Fourth, the majority of Southern Companies-owned generation that will participate in the Auction proposal (under a must-offer obligation and bid mitigation rules) are included in retail rates of the four Operating Companies. If there were no contribution to the fixed cost recovery of such generation units (*i.e.*, if the Seller Offer bids under Southern Companies’ proposal had no demand charge component), then the retail ratepayers would inappropriately subsidize the cost-based wholesale Auction mechanism and wholesale customers. This obviously is an important consideration for the state commissions in which Southern Companies operate, who would want retail ratepayers to receive some benefit if the units that they have paid for are going to be used for the benefit of others.

In short, if there were no demand charge component to the cost-based Seller Offer bids, then there would be no contribution to fixed costs for the capacity subject to the must-offer obligation.<sup>89</sup> Retail ratepayers are entitled to a contribution to the fixed costs associated with the capacity that supports the proposed Auction mechanism and the resulting cost-based prices. For

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¶ 61,281 at P 60 (“In the [Reliability Capacity Services Tariff] Extension Order, we reiterated our earlier finding that the must-offer obligation is unjust and unreasonable without appropriate compensation to resources for the capacity and reliability services they provide”).

<sup>87</sup> For example, PJM has a Reliability Pricing Model (“RPM”) Capacity Market that contains a must-offer component and PJM runs a Regulation Market and a Synchronized Reserve Markets in addition to day-ahead and real-time energy markets. Under the MRTU market design, the CAISO will operate day-ahead and real-time ancillary services capacity markets (co-optimized with the procurement of energy), a residual unit commitment process with availability payments, a resource adequacy program and a backstop capacity procurement mechanism.

<sup>88</sup> While it is true that procurement of, and compensation for, generating capacity will still be obtainable via bilateral transactions, all of the PJM and CAISO capacity procurement and compensation mechanisms mentioned above are in addition to the bilateral procurement of capacity in bilateral markets. In other words, the presence of a bilateral market for capacity does not diminish the need to allow for some level of compensation for generating capacity in short term markets with a must-offer obligation.

<sup>89</sup> As noted above, Commission precedent recognizes that the additional ten percent added to incremental costs in determining the mitigated bids is for hard-to-quantify incremental costs and therefore is not a contribution to fixed cost recovery. Similarly, the Commission also has held that a default energy bid (which includes an option to recover variable costs plus ten percent) is “not designed to provide fixed cost recovery.” *See Cal. Indep. Sys. Operator Corp.*, 125 FERC ¶ 61,055 at P 104 (2008).

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all of the above reasons, Southern believes having a demand charge component in the calculation of the Seller Offer bids is a necessary and just and reasonable element of the Auction design.

In addition, as also discussed by Mr. Frame, the Auction contains other important features that guard against the potential exercise of market power by Southern Companies and further support its reasonableness:<sup>90</sup>

- The determination of the market-clearing price will be formulaic, not discretionary.
- Southern Companies will engage an Independent Auction Monitor to ensure that the Auction is being properly administered and to monitor their participation in the market.
- The Auction will be administered by personnel separate from Southern Companies' own wholesale electricity marketing personnel.<sup>91</sup>
- The simultaneous "lock down" feature means that Southern Companies' supply offers and the bids of potential buyers will be finalized at the same time.

The Auction is also reasonable because the ability of customers to buy wholesale electricity in the DAE Auction and HAE Auction protects them against any exercise of market power by Southern Companies – not only in the Auction markets themselves, but also in other markets as well. Thus, if hypothetically, Southern Companies sought to raise prices in those other markets (and in so doing exercised perceived market power), customers could simply avoid those other markets (and the presumed attempt to exercise market power), and place their demands in the Auction markets. The hypothetical attempt to artificially raise prices therefore would be defeated.

This rationale is also consistent with Commission precedent regarding the relationship between short-term and long-term markets. The Commission found in Order No. 697-A that centralized bid-based RTO/ISO markets "will discipline a seller's attempt to exercise market power in long-term contracts because the would-be buyer can always purchase from the short-

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<sup>90</sup> Frame Aff. at P 20-22.

<sup>91</sup> The separation of Southern Companies' wholesale electricity marketing personnel from their Auction administration personnel means that the wholesale electricity marketing personnel will not have access to the bid data that the Auction administration personnel receive. Accordingly, even if not constrained by other factors, the wholesale electricity marketing personnel will not have access to the actual buyer bid data that might allow them to raise the Seller Offer Prices to take advantage of less elastic demands.

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term market if a seller tries to charge an excessive price [in the long-term market].”<sup>92</sup> The Commission’s view – that the potential for arbitrage between the RTO/ISO administered short-term markets and long-term markets disciplines market power in long-term markets – applies here as well. Long-term buyers can always rely on the Auction if Southern Companies attempt to exercise any perceived or alleged market power in such long-term markets.

Southern Companies’ non-Auction electricity is essentially committed to load and existing obligations, and therefore cannot be withheld. At this time, Southern Companies cannot estimate the amount of blocks of Firm LD Energy, Recallable Energy, and hourly non-firm energy that will be available for the Auction. While Southern Companies have historic sales data, they cannot predict how their wholesale customers will react to the Auction – whether they will continue to prefer the traditional bilateral transactions, whether they will migrate to the Auction, or whether the result will be some combination thereof. Because of the reliability requirement to replace Contingency Reserves (one component of Operating Reserves) within 90 minutes following a contingency event, Southern Companies must be in a position to offer Recallable Energy at least equal to the amount of Contingency Reserves the Southern Balancing Authority specifies, which is typically based on the largest generating unit in the BAA or approximately 1,200 MW. However, the important fact from a market-power mitigation perspective is that Southern Companies will, subject to independent third-party verification, be offering *all* Available Capacity beyond that necessary to meet the reliability requirements of Southern Companies’ customers.

It is important for purposes of analyzing the mitigation effects of the Auction to understand that Southern Companies’ load serving obligations and operations under the IIC ensure that all of Southern Companies’ non-Auction electricity is “spoken for.” Pursuant to its state-based regulation and the Commission-approved IIC coordination agreement, Southern Companies must always utilize the system’s lowest cost resources to meet the Southern Companies’ aggregate load demands. Only if there are excess resources available may the more expensive power be sold in the short-term market.

Overall, Southern Companies own and operate more than 42,000 MW of generating capacity and serve more than 4.3 million retail customers. Total peak load for all load serving entities in Southern BAA for 2007 was 47,828 MW; 38,777 MW of which represented retail load served directly by Southern Companies. During that period, there was 59,852 MW of generation capacity located in the Southern BAA, of which Southern Companies owned or controlled 44,980 MW.

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<sup>92</sup> Order No. 697-A at P 285.

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The Intercompany Interchange Contract (“IIC”) among Southern Companies provides for the coordinated and integrated operation of Southern Companies’ resources to serve their aggregate load in a reliable and economical manner and to engage in short-term transactions. The IIC establishes a power pool and provides for an equitable allocation of the benefits and burdens of participating in that pooling arrangement. The generating resources of the respective electric systems are operated for the mutual benefit of all Southern Companies and their customers.<sup>93</sup> Some of the benefits achieved via the IIC include: pooling of reserves; taking advantage of diversity among the various loads on the respective electric systems; coordinating scheduled maintenance; and making use of joint economic dispatch.

Because economic dispatch, subject to reliability requirements, determines the output of individual generating units, some of the Southern Companies, at any point in time, will generate more energy than required to satisfy their individual obligations and, conversely, other Southern Companies generate less than required to serve their obligations. The IIC recognizes that each Operating Company retains its lowest cost energy resources for its own customers. Accordingly, energy generated in excess of that amount needed to serve one’s own requirements is then provided to the pool out of one’s higher cost resources and made available to other participants to meet their requirements. Consideration is given to seeking wholesale opportunity sales only when there is energy from generation that is available after serving the aggregate system obligations (native load plus Operating Reserves plus third party obligations). In addition, the Operating Companies participate in these shorter-term, transient opportunity transactions only through the pool (the pool having exclusive rights under the IIC to market excess energy within the defined operating window), and they share revenues and cost responsibility on the basis of their respective contribution to the system load during the summer peak period (“peak-period load ratio”), even if just one Operating Company’s generating resources are used to make an opportunity sale.

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<sup>93</sup> Under the IIC, all generating resources and all load obligations of the Southern Companies are aggregated. Market opportunities, both purchases and sales, are assessed to determine if beneficial transactions are available. Once all opportunity purchase and sales decisions are made on a day-ahead basis, the unit commitment process takes place, ensuring adequate generation capacity will be available for the next business day. Similar purchase and sales decisions are made on an hour-ahead basis as well. The actual operation of the pool in real-time is based upon the traditional concept of economic dispatch, which through real-time computer control assures that available generation is dispatched so as to choose the most economical generation available to serve Southern Companies’ aggregate load at any given time. More specifically, an increase in the total system load will be satisfied by the lowest incremental cost resource (or resources) available for dispatch, whereas a decrease will result in a reduction in output from the highest incremental cost resource (or resources) then in dispatch. This real-time economic dispatch is performed in the aggregate without any consideration of the generating resources or load obligations of the respective Operating Companies. The IIC then provides for an accounting of the actual dispatch of the system, which can only be determined after-the-fact.

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On May 5, 2005, the Commission instituted an investigation in Docket No. EL05-102-000 to determine whether the role of Southern Companies' generation "pool" continued to be appropriate and consistent with the Commission's regulations and precedent regarding affiliate abuse.<sup>94</sup> On October 5, 2006, the Commission issued an order conditionally approving a settlement permitting continued operation under the IIC.<sup>95</sup>

Southern Companies are generally net purchasers of power in the short-term markets, and thus have a strong incentive to keep market prices low. Indeed, in four of the last five calendar years (2003-2007), Southern Companies purchased more power at wholesale, measured in MWh, than they sold at wholesale in these markets.

**b. The Auction is Consistent with Commission Precedent Regarding Mitigation**

The Auction is consistent with Commission precedent regarding mitigation of potential market power and the ability of sellers to exercise undue discretion in the bulk power market. In Order No. 697, the Commission stated:

While we do not impose a generic "must offer" requirement in this Final Rule, we do not rule out the possibility that we might find the imposition of a "must offer" requirement, or some other condition on the seller's market-based rate authority, to be an appropriate remedy in a particular case depending on the facts and circumstances, as we have done in the past.<sup>96</sup>

In essence then, the Auction entails a voluntary market power mitigation mechanism which the Commission has cited favorably in the past. The Commission has also accepted the use of independent third party verification as a means of preventing the exercise of undue discretion. Examples include use of independent market monitors and the use of third parties to develop mitigated bids.<sup>97</sup> Thus, the Auction is a proactive step grounded upon Commission

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<sup>94</sup> *Southern Co. Services, Inc.*, Order Establishing Hearing Procedures, 111 FERC ¶ 61,146, *clarified*, 112 FERC ¶ 61,015 (2005).

<sup>95</sup> *Southern Co. Services, Inc.*, Order on Settlement, 117 FERC ¶ 61,021 (2006).

<sup>96</sup> Order No. 697 at P 764.

<sup>97</sup> *See, e.g.*, California ISO Tariff § 27.1.1.6.1 ("With regard to decremental bids, if Final Hour-Ahead Schedules cause Congestion on the Intra-Zonal interface, the ISO shall, after Dispatching available and effective Reliability Must-Run Units to manage the Congestion, apply the decremental reference prices determined by the independent entity that determines the reference prices for the Automatic Mitigation Procedure (AMP) as described in Appendix P, Attachment A.").

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precedent. The Commission's acceptance of the Auction may encourage others to offer innovative ways of assuring the competitiveness of markets. This may serve to expedite review of market-based rate applications in other contexts, particularly where difficult and complicated situations may occur or where the adopted screens result in "false positives."

**c. The Auction Is Consistent With State and Federal Policy Objectives**

State commissions and this Commission share a common goal – assurance and oversight of the provision of reliable electric service at just and reasonable rates. This Commission has found – since at least the date it terminated the SMD rulemaking – that one-size does not fit all for competitive wholesale markets and that regional differences can and should be respected.<sup>98</sup> The Auction is a positive step forward for Southern Companies in meeting the dual objectives of this Commission and state regulators.

Southeastern state commissions preside over the traditional "regulatory compact" in which the utility is responsible for meeting all of the supply needs of its franchised customers, subject to state retail rate review. Southern Companies must balance this model – which includes the obligation to serve under state law – with the framework for a robust wholesale market envisioned by this Commission. In this latter regard, Southern Companies have complied with this Commission's open access transmission and interconnection requirements, which have provided independent generators an opportunity to compete in the southeastern wholesale market. Indeed, empirical data shows that Southern Companies' compliance with this Commission's policy objectives has facilitated new entrants to the Southeast's bulk power market. NERC reports that "[t]here has been significant merchant development in SERC since 1998, especially in the Southeastern and Delta subregions."<sup>99</sup>

In the Southeast federal and state policy objectives have been advanced through: (i) competitive solicitations for longer term supply under state oversight; and (ii) bilateral economy energy and capacity sales (which ensure efficient utilization of existing resources). This balance between state and federal policy objectives has provided strong benefits to southeastern regional customers, has facilitated long-term strategic planning, and has helped ensure that infrastructure financing is available for southeastern suppliers on reasonable terms.<sup>100</sup>

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<sup>98</sup> *Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design*, Order Terminating Proceedings, 112 FERC ¶ 61,073 (2005).

<sup>99</sup> NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION, "2007 Long-Term Reliability Assessment, 2007-2016" at 180, available at [www.nerc.com/files/LTRA2007.pdf](http://www.nerc.com/files/LTRA2007.pdf) ("NERC 2007 Long-Term Reliability Assessment").

<sup>100</sup> As noted by NERC, "SERC entities recognize that planning for variability in resource availability is necessary. Many SERC members manage this variability through reserve margins, demand side management

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This structure has also delivered customer benefits in the form of retail electric rates well below other regions of the country, integrated resource planning and sufficient reserve margins, increased transmission capacity, high levels of service reliability, and innovative demand response programs.<sup>101</sup> The Auction works in concert with the regional wholesale market structure.

Southern Companies' state regulators have considered whether to implement, foster or facilitate more broad-sweeping centralized markets and/or retail competition, and have not adopted these models.<sup>102</sup> The Auction is reasonable because it is consistent with state regulators' objectives. It solves the potential problem of possible horizontal market power (by removing the specter of opportunity to withhold electricity from the market), while at the same time assuring state commissions of resource adequacy via integrated resource planning commitments placed on Southern Companies. The Auction keeps in place important state-administered integrated resource planning and adequacy and demand-side management programs.

Although Southern Companies' opponents may argue that the Auction is inadequate because it does not provide for a system in which resource adequacy is provided by "the market," these arguments should be rejected. This Commission must balance the interests of the

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programs, fuel inventories, diversified fuel mix and sources, and transfer capabilities." NERC 2007 Long-Term Reliability Assessment at 179.

<sup>101</sup> As to retail rates, the following average retail prices for electricity to ultimate consumers through May 2008 are listed on the EIA website as follows: Georgia: 9.17 ¢/kWh, Florida: 11.19 ¢/kWh, Mississippi: 9.56 ¢/kWh, and Alabama: 9.36 ¢/kWh. Such prices are in stark contrast to other regions of the country, including New England: 16.89 ¢/kWh, Middle Atlantic (consisting of New Jersey, New York, and Pennsylvania): 14.00 ¢/kWh; and the Pacific Contiguous states (California, Oregon, Washington): 11.26 ¢/kWh. Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, *available at* [www.eia.doe.gov/cneaf/electricity/epm/table5\\_6\\_b.html](http://www.eia.doe.gov/cneaf/electricity/epm/table5_6_b.html). See Attachment E for discussion on innovative demand response programs and integrated resource planning. In its 2007 Long-Term Reliability Assessment, NERC noted with respect to the SERC region: (1) "[s]ignificant generation development has occurred in the SERC region during the past few years, resulting in thousands of MW of uncommitted generating capacity (at 33); (2) the region has "significant demand response programs" amounting to 5,672 MW in 2007 (at 177); (3) capacity resources are expected to be adequate throughout the long-term (2007-2016) assessment period (at 178); (4) collectively, SERC members are expected to be net exporters of firm power across regional boundaries throughout the ten-year period (at 179); (5) [t]he SERC region has extensive transmission interconnections between its subregions and its neighboring regions...these interconnections allow the exchange of firm and non-firm power." (at 183); (6) SERC members invested 1.2 billion in transmission investments in 2006 (the sixth consecutive year that SERC has represented approximately 20 percent of U.S. transmission expansion) and SERC members are expected to spend \$8.9 billion in the next five years (at 183-84); and (7) transmission capacity is expected to be adequate to supply firm customer demand and firm transmission reservations (at 183).

<sup>102</sup> An overview of southeastern state commission determinations in this area is provided in Attachment D hereto.

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southeastern state commissions in mandating and overseeing state integrated resource planning programs with its approval of any plan for mitigating Southern Companies' perceived horizontal market power. Although certain opponents may seek broader changes to the wholesale markets in the Southeast, the Auction will bring important transparency and price certainty to the region and assurances that Southern Companies will be unable to engage in physical and economic withholding.

The present regulatory structure has enabled the Southeast to prudently plan and manage resource procurement and maintain adequate reserve margin. NERC has stated that “[a] major driver of the uncertain or inadequate capacity margins is the industry’s relatively recent shorter-term approach to resource planning and acquisition, relying heavily on unspecified, undeveloped, and/or uncommitted resources to meet projected demand.”<sup>103</sup> The Commission has recognized the importance of long-term planning and contracting as a means of managing risk in short-term market.<sup>104</sup>

The Southeast, with well-defined accountability to serve load and develop an adequate and diverse supply, has maintained the supply resource adequacy necessary to ensure a competitive bilateral market. In its 2007 long-term reliability assessment, NERC found that capacity resources in the SERC region are expected to be adequate to reliably supply the forecast firm demand.<sup>105</sup> The southeastern state commission resource planning models are discussed in Attachment E hereto.

In sum, the Southern BAA is comprised of load-serving entities that have legal obligations to plan for and maintain adequate resources to serve their native load obligations in a cost-effective and reliable manner. These planning requirements are sufficiently long-term in scope to encompass a variety of supply and demand-side options including self-build, joint construction projects, open requests for proposals, and supply contracts of various lengths.<sup>106</sup>

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<sup>103</sup> NERC 2007 Long-Term Reliability Assessment at 11.

<sup>104</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006), *order on reh’g*, 119 FERC ¶ 61,076 (2007).

<sup>105</sup> NERC 2007 Long-Term Reliability Assessment at 178.

<sup>106</sup> This obligation to serve is imposed not only on Southern Companies, but also on municipal authorities and other entities that serve retail customers in the region. This means that these retail service providers do not solely rely on Southern Companies’ resources, but have substantial amounts of self-generation and/or long-term contracts to ensure sufficient supply to meet their customer needs.



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**d. The Auction is Reasonable Because it Provides an Enhancement to Existing Supply Alternatives**

As previously noted, in terms of long-term supply adequacy, the addition of new capacity, and the effective utilization of retail demand-response, the Southeast relies largely on processes overseen by the state commissions for new capacity, such as integrated resource planning and the competitive solicitation process for new capacity. These existing processes have been successful in meeting the demands of robust load growth in the Southeast, and will continue to successfully meet the need for new capacity. The competitive solicitation process alone has allowed several independent power producers to help meet growing regional demand, while doing so in a stable and cost-effective manner (typically through long-term PPAs).

These existing successful processes, aimed at longer term measures to ensure abundant and reliable supply, will be enhanced through Southern Companies' Auction. The "must-offer" obligation would provide market-based mechanisms to allow those with load-serving obligations to procure additional capacity on a shorter-term basis at rates free from any conceivable exercise of market power. These mechanisms do not represent additional "iron in the ground," but the mechanisms provide an additional means of efficiently allocating existing resources to those needing to serve load. Thus, the current proposal will further the efficient allocation of existing resources.

The Auction also provides potential benefits to third-party suppliers in the Southern BAA. First, the Auction provides a means for other suppliers to obtain replacement supply in the event of an outage. Second, it provides the basis for the development of an index price to which they can structure transactions.

**e. The Auction is Reasonable Because it Enhances Transparency and Efficiency**

There is no index or price information presently available for hourly spot sales in the Southeast. While the current day-ahead price information, such as that provided by Megawatt Daily and ICE is certainly helpful to market participants, the relatively small volume of transactions currently being reported to these index developers does raise questions about transparency in the region. The market-clearing price information that will be provided as a result of the Auction and, in particular, the reporting of prices for the development of an hourly spot market index, will significantly enhance the transparency of these markets.<sup>107</sup>

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<sup>107</sup> Of course, price information for bilateral transactions also is available from the Commission's EQR system but that information is subject to substantial interpretational difficulties and, in any case, is available only with a substantial time lag.

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To facilitate this improved transparency in the Southeast markets, the Auction Administrator will post on an Internet-based platform the clearing price of the successfully auctioned DAE Blocks or HAE Power within one hour after the close of the DAE Bid Period or HAE Bid Period, as applicable. Subject to Southern Companies receiving the Commission's electricity price reporting "safe harbor" protection, the Auction Administrator also would report all sales made via the DAE Auction and HAE Auction to either a reputable index developer or a data hub.

Of course, all transactions resulting from the Energy Auction would be included in Southern Companies' FERC EQRs. Additionally, six months after the Delivery Day for a particular Energy Auction, the Auction Administrator will make available on a per-request basis all bid information for such particular Energy Auction, subject to the protection of Bidder identities. Thus, consistent with the need to protect commercially-sensitive material, the proposal will maximize market transparency.

Adoption of the proposal should promote improved utilization of resources (*i.e.*, greater efficiencies). Markets properly determine the value of power. They send signals through higher prices in times of scarcity.<sup>108</sup> These signals can encourage appropriate utilization of demand-side resources and provide incentives for additional construction of generation and transmission where appropriate. The release of the Auction results will also facilitate more efficient long-term bilateral contracting because contracting parties will have better regional price information.

Thus, the Auction mechanism can complement existing competitive procurement mechanisms already employed by Southern Companies and other entities in the region. Overall, this enhanced pricing transparency should facilitate needed infrastructure development through the transparency of short-term price signals. Persistent elevated (yet transparent) short-term price signals are likely to encourage either new entry or long-term contracting (to lock in a price and avoid short-term price volatility), and in the development of new demand response initiatives.<sup>109</sup> Auction prices that rise rapidly (as transparently overseen by the Independent Auction Monitor) may signal scarcity conditions, providing further incentives for new entry or the facilitation of imports to alleviate the scarcity conditions. Finally, the Auction mechanism establishes a situation that matches up load serving procurement with load serving responsibility.

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<sup>108</sup> As Chairman Kelliher recently stated, "[p]rices that do not reflect the value of electricity in a shortage can harm reliability, impede demand response, discourage new entry of demand response and generation resources, and block innovation. "Wholesale Competition in Regions With Organized Markets," statement of Chairman Kelliher issued in Docket No. RM07-19-000 and AD07-7-000 on October 16, 2008, *available at* <http://www.ferc.gov/news/statements-speeches/kelliher/2008/10-16-08-kelliher-E-1.asp>.

<sup>109</sup> After some actual experience with the Auction mechanism, State regulators may encourage Southern Companies to consider if demand response programs could be supplemented by an ability to offer into the Auction.

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This proposal is designed to mitigate any potential concerns with regard to Southern Companies ability to exercise generation market power in the Southern BAA. Southern respectfully requests that the Commission to act expeditiously on this request to provide the needed certainty as to Southern Companies market-based rate authority and to end the need for additional litigation related to issues of generation market power. Southern Companies are, of course, hopeful that the Auction program proves a successful and valuable addition to the Southeastern wholesale market. If so, Southern Companies believe that implementation of the proposal would not be inconsistent with further consideration of expanded market structures in coordination with Southeastern state authorities, if deemed productive by the Commission, such as a subsequent proceeding under the Commission's guidance to develop the Auction into a broader platform where third-party suppliers could participate.<sup>110</sup> While support for a broader auction process is understandable, accepting this filing will enhance market options now without prejudicing further developments and may demonstrate the potential viability of a broader platform.<sup>111</sup>

#### **4. Request for Safe Harbor Determination**

As explained above, the Auction Rules provide for Southern Companies to provide Auction clearing prices to a reputable index developer or a data hub and to publicly post clearing prices subject to a determination by the Commission that doing so would qualify for safe harbor protection. To this effect, Southern Companies respectfully request that in its order on this filing, the Commission expressly confirm that Southern Companies will receive such protection consistent with its *Policy Statement on Natural Gas and Electric Price Indices*.<sup>112</sup>

#### **5. Effective Date and Request for Waiver**

Southern Companies respectfully request that the Commission act on this filing at or before its December 17, 2008 Open Meeting and propose an effective date for the Amended

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<sup>110</sup> Such a proceeding would have to be coordinated with the Southeastern State authorities and address issues associated with the broader scope of selling including, but not limited to, who would be responsible for administering the auction, how the costs to support the auction would be recovered, liability for the auction administrator, and credit requirements. These issues go beyond the scope of Southern Companies voluntary, company-specific must-offer mitigation proposal.

<sup>111</sup> The Auction proposal does not have to be perfect or even the best auction mechanism – it must be just and reasonable. *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984), *cert denied*, 469 U.S. 917 (1984)(utility need establish that its proposed rate design is reasonable, not that it is superior to all alternatives).

<sup>112</sup> 104 FERC ¶ 61,121 (2003) at P 37 (The Commission does not intend to prosecute and/or penalize parties for inadvertent errors in reporting); *on rehearing*, 112 FERC ¶ 61,040 (2005) at P 10 (innovations that bring price transparency and better confidence in the accuracy and reliability of wholesale prices are welcome).

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Tariff Sheets of the date the Auction commences operation, which Southern Companies anticipate to be no later than 60 days after the date of the Commission's order accepting the filing. Prompt action on this filing is needed at or before the December 17, 2008 Open Meeting so that Southern Companies can put in place the computer and other systems needed to operate the Auction.

To the extent necessary, Southern Companies also respectfully request waiver of Section 35.3 of the Commission's regulations to permit an effective date of more than 120 days after this filing. Making the filing at this time will permit consideration of the issues in time for Southern Companies to undertake the necessary implementation program prior to the effective date and afford greater certainty to potential purchasers. Southern Companies note that granting a waiver in this instance would be consistent with the similar waivers of Section 35.3 that the Commission has granted for the other filings implementing new market programs.<sup>113</sup>

## 6. Communications

Correspondence and other communications regarding this filing should be directed to the following persons, who should also be designated for service on the Commission's official service list:

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\* Designated for service

## 7. Contents of Filing

The following documents, in addition to this letter, support this filing:

Attachment A            Amended Tariff Sheets

Attachment B            Black-lined version of Amended Tariff Sheets

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<sup>113</sup> See, e.g., *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,284 (2008); *Midwest Indep. Transmission Sys. Operator, Inc.*, 118 FERC ¶ 61,209 (2007).

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Attachment C	Affidavit of Rodney Frame
Attachment D	Summary of Southeast State Commission Consideration of Deregulation and Centralized Markets
Attachment E	Southeastern State Commission Resource Planning Models

**8. Service**

Southern Companies are serving copies of this filing on the following: Alabama Public Service Commission, the Florida Public Service Commission, the Georgia Public Service Commission, and the Mississippi Public Service Commission; all persons on the Official Service List in Docket Nos. ER96-780 and EL04-124, and all entities that have made purchases from Southern Companies under their market-based rate tariff in the short-term energy markets since January 1, 2007. To the extent the foregoing does not constitute full compliance with the Commissions' regulations relating to posting and service (Section 35.2 and 35.3), Southern Companies respectfully requests a waiver.

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**9. Conclusion**

WHEREFORE, for the reasons stated above, Southern Companies respectfully request that the Commission: (a) accept the market-based rate amendment (Tariff Sheets) for filing at or before its December 17, 2008 Open Meeting without suspension, condition or hearing,<sup>114</sup> and make the Amended Tariff Sheets effective on the date the Auction commences operation (which Southern Companies anticipate to be no later than 60 days after Commission acceptance of this proposal without material modification) and (b) confirm the safe harbor protections requested in Section 4.

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

Sincerely,



Kevin C. Fitzgerald  
Clifford S. Sikora  
Jeffrey M. Jakubiak  
David B. Rubin

*Counsel for Southern Companies*

**Attachments**

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<sup>114</sup> As emphasized throughout this transmittal, the proposed Auction has been carefully formulated to address potential market power concerns without jeopardizing Southern Companies' ability to maintain reliability in the Southern BAA and to fulfill their obligations under state regulatory structures. Any required changes to the submittal could upset that careful balance. Accordingly, Southern Companies must respectfully reserve the right unilaterally to withdraw this filing in the event the proposed Auction is not accepted as filed without material change or modification, and also in the event of suspension, hearing, or other procedures that, in their judgment, make clear that acceptance of the filing would likely be conditioned on such changes or modifications.

**ATTACHMENT A**

**MARKET BASED RATE POWER SALES TARIFF  
OF  
ALABAMA POWER COMPANY, GEORGIA POWER COMPANY,  
GULF POWER COMPANY, MISSISSIPPI POWER COMPANY,  
AND SOUTHERN POWER COMPANY**

**General Tariff Provisions**

**1.0 Availability**

1.1 This Tariff provides for sales of capacity and/or energy at market-based rates on a short-term or long-term basis by Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company and Southern Power Company (collectively referred to hereinafter as “Southern Companies” or “Seller”), subject to the establishment and operation of the Energy Auction as set forth in the attached Rules of the Bid-Based Energy Auction and other conditions set forth herein.

1.2 Service under this Tariff is available to any electric utility, rural electric cooperative, municipality, power authority, agency, or other entity authorized to purchase capacity and/or energy hereunder (hereinafter “Customer”).

1.3 No entity affiliated with Southern Companies is eligible for service under this Tariff.

**2.0 Character of Service**

2.1 Southern Companies may provide capacity and/or energy under this Tariff in varying amounts, at varying levels of firmness or priorities of service, for varying periods of service, and in accordance with varying delivery schedules, all as agreed to between the Customer and Southern Companies.

**3.0 Interconnection and Interchange**

3.1 Except as required by the rules of the bid-based energy auction as provided herein, or otherwise agreed, it shall be the responsibility of the Customer to make any necessary arrangements for delivery of capacity and energy beyond the points of interconnection of Southern Companies’ transmission system facilities with those of other electric systems.

**4.0 Rates**

4.1 Except as required by the rules of the bid-based energy auction as provided herein, the rates for sales under this Tariff shall be as negotiated by the parties.



## **5.0 Terms and Conditions of Service**

5.1 Prior to commencement of service, Southern Companies and the Customer shall execute a Service Agreement under this Tariff.

- a) For transactions of more than one year in duration or for a lesser period if desired by the parties, the Service Agreement shall set forth the rates and any additional terms and conditions of service for the transaction.
- b) For all other transactions, the Service Agreement shall allow the parties to engage in multiple transactions with the rates and any additional terms and conditions established at the time the transaction is arranged.

5.2 Except as required by the rules of the bid-based energy auction as provided herein, Southern Companies are under no obligation to provide service hereunder unless the parties mutually agree to the rates, terms and conditions of the transactions.

5.3 Acceptance of service by a Customer pursuant to a Service Agreement commits the Customer both to the provisions of this Tariff and to the terms and conditions of the individual Service Agreement.

## **6.0 Billing**

6.1 Southern Companies will submit to the Customer, as promptly as practicable after the first of each month, an invoice for transactions and the respective amounts due under the terms of this Tariff and the Service Agreement for the preceding calendar month (“delivery month”). Bills for each delivery month shall be due and payable on the 20th day of the succeeding month or the 10th day after the receipt of the invoice, whichever is later. Payment shall be made, on or before the due date, to Southern Companies in accordance with the invoice in immediately available funds through wire transfer, mail or other mutually agreeable method. Bills not paid when due shall accrue interest at one hundred five percent (105%) of the prime lending rate published in The Wall Street Journal or comparable successor publication on the date due (or if not published on the date due on the most recent preceding day on which published), from the due date to the date of payment.

6.2 In the event any portion of any invoice submitted pursuant to this Article is in bona fide dispute for reasons relating to the computation of the invoice, the undisputed amount shall be payable when due; and the remainder, with interest accrued at one hundred percent (100%) of the prime lending rate published in The Wall Street Journal or comparable successor publication on the date due (or if not published on the

## **Rules of the Bid-Based Energy Auction**

### **1.0 Establishment**

1.1 Seller shall cause the establishment and operation of an Energy Auction, as fully described herein, for a period of three (3) years from the effective date of such auction.

1.2 Nothing contained herein shall be construed as affecting in any way the right of Seller to unilaterally make application to the Commission for a change in rates under section 205 of the Federal Power Act and pursuant to the Commission's Rules and Regulations promulgated thereunder to amend these Rules of the Bid-Based Energy Auction; provided, however, that no such filing may have the effect of terminating both the DAE Auction and the HAE Auction during the initial three (3) year period of their operation.

### **2.0 Definitions**

These definitions shall apply to these Rules of the Bid-Based Energy Auction as well as Appendices DA-1, DA-2, HA-1, and HA-2, thereto.

2.1 Auction Administrator: Those persons administering the Energy Auction consistent with the provisions set forth herein.

2.2 Available Capacity: *See* Section 1.3 of Appendix DA-1 and Section 1.3 of Appendix HA-1.

2.3 Bidder: A Customer (as defined in Section 1.2 of the General Tariff Provisions, above) participating in the Energy Auction for the purpose of buying Energy that: (a) has executed a service agreement with Seller that references this Tariff; (b) is in good standing under such service agreement, including having met all credit requirements thereunder; and (c) has registered with the Auction Administrator (such registration to include the provision of contact and related information to the Auction Administrator ).

2.4 Bid Information: The prices, terms, and conditions under which a Bidder offers to purchase Energy through the DAE Auction or HAE Auction.

2.5 Business Day: Each weekday, Monday through Friday, excluding NERC holidays.

2.6 CPT: Central Prevailing Time.

2.7 Commission: The Federal Energy Regulatory Commission.

2.8 Commitment Cost: The cost to start or change operating modes of a generating unit, as specified in Appendices DA-2 and HA-2.

2.9 Controlled Capacity: Capacity controlled by Seller through ownership or contractual arrangement. Capacity shall only be considered "controlled" if Seller has included such capacity in its unit commitment process as a dispatchable resource.

2.10 DAE Auction: That auction, administered in accordance herewith, for the sale of DAE Blocks.

2.11 DAE Bid: A bid by a Bidder to purchase a DAE Block, expressed as an implied heat rate in MMBtu/MWh.

2.12 DAE Bid Period: The period beginning 12:00 Noon CPT two Business Days prior to the Delivery Day and ending at 6:30 am CPT one Business Day prior to the Delivery Day.

2.13 DAE Block: A 50 MW block of Energy offered or sold in the DAE Auction for delivery beginning at 6 am CPT and ending at 10 pm CPT on the Delivery Day.

2.14 DAE Buyer: A Bidder who has been awarded the purchase of a DAE Block.

2.15 DAE Market Clearing Price: *See* Section 5.4.3.

2.16 DAE Market Clearing Heat Rate: *See* Section 5.4.3.

2.17 Delivery Day: The calendar day in which the DAE Block sold through the DAE Auction will be delivered.

2.18 Delivery Day Gas Price: As regards a particular Delivery Day, the Gas Index Price for the 24-hour gas flow period most closely correlated to the Delivery Day.

2.19 Delivery Hour: The clock hour in which Energy sold through the HAE Auction will be delivered.

2.20 Energy: Electric energy delivered as three-phase alternating current.

2.21 Energy Auction: As the context may indicate, the DAE Auction and HAE Auction collectively, or the DAE Auction or the HAE Auction individually.

2.22 Firm LD: Energy sold whereby a party shall be relieved of its obligations to sell and deliver or to purchase and receive without liability only to the extent that, and for the period during which, such performance is prevented by Force Majeure.

2.23 Force Majeure: Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment (including computer systems), order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a party's control.

2.24 Gas Index Price: Henry Hub Midpoint gas price (in \$/MMBtu) published by Platts Megawatt Daily. The Gas Index Price is based on a gas delivery day from 9:00 am CPT on the Delivery Day to 9:00 am CPT on the following day.

2.25 HAE Auction: That auction, administered in accordance herewith, for the sale of HAE Power.

2.26 HAE Bid: A bid by a Bidder to purchase Energy through the HAE Auction, submitted in the form of a MW quantity, denominated in one (1) MW increments with a minimum of one (1) MW, and a maximum price Bidder is willing to pay (in \$/MWh).

2.27 HAE Bid Period: The period beginning 60 minutes prior to the beginning of the Delivery Hour and ending 45 minutes prior to the beginning of the Delivery Hour.

2.28 HAE Buyer: A Bidder who has been awarded the purchase of HAE Power.

2.29 HAE Market Clearing Price: *See* Section 6.4.1.6.

2.30 HAE Power: Non-Firm Energy offered or sold by Seller through the HAE Auction.

2.31 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

2.32 IIC Manual: That “Allocation Methodology and Periodic Rate Computation Manual” established pursuant to the IIC.

2.33 Independent Auction Monitor: An independent entity engaged by Seller, subject to Commission approval, to monitor and periodically review the DAE Auction and HAE Auction and be responsible for responding to questions from Bidders and/or regulators regarding the integrity of the auction process.

2.34 Into Southern: For purposes of sales through the DAE Auction and the HAE Auction, the term “Into Southern” means that the energy shall be scheduled and delivered to an interconnection or interface either (i) on Seller’s transmission system border or (ii) within the Southern BAA if the Energy is from a source of generation in the Southern BAA, which interface, in either case, the Southern Transmission Provider identifies as available for delivery of the Energy in or into the Southern BAA.

2.35 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.

2.36 MMBtu: Million British Thermal Units.

2.37 MW: Megawatt or megawatts.

2.38 MWh: Megawatt-hour or megawatt-hours.

2.39 NERC: The North American Electric Reliability Corporation or its successor.

2.40 Non-Firm: Energy sold whereby delivery by Seller may be interrupted for any reason or for no reason, without liability on the part of Seller.

2.41 OASIS: The Open Access Same Time Information System implemented by Southern Companies in accordance with FERC Orders 888, 889, and 890.

2.42 Recallable: Energy sold whereby Seller, upon experiencing a supply side disruption, has the right, but not the obligation, to curtail the delivery of such Energy without liability on the part of Seller.

2.43 Seller Offer Price: In the case of the DAE Auction, the minimum price at which Seller will sell a DAE Block, expressed as an implied heat rate in MMBtu/MWh. In the case of the HAE Auction, the minimum price at which Seller will sell HAE Power, expressed in dollars per MWh (\$/MWh).

2.44 SERC: The SERC Reliability Corporation or its successor.

2.45 Southern BAA: The Southern Balancing Authority Area, as that term is defined and used by NERC.

### **3.0 Establishment and Administration**

3.1 The Auction Administrator will establish an auction via the Internet to facilitate: (a) the bilateral sale of DAE Blocks by Seller on a Business Day-ahead basis through the DAE Auction; and (b) the bilateral sale of Energy by Seller on an hour-ahead basis through the HAE Auction.

3.2 The DAE Auction shall take place every Business Day so long as Seller has Available Capacity to sell on a Business Day-ahead basis. The HAE Auction shall take place every hour of every day, including Business Days, weekends, and NERC holidays, provided that Seller has Available Capacity to sell on an hour-ahead basis.

3.3 The Auction Administrator will administer a DAE Auction for DAE Blocks to be delivered on weekend days and NERC holidays at the direction of Seller.

3.3.1 In the event Seller directs the Auction Administrator to operate a weekend DAE Auction for a particular weekend, the delivery term shall be for 16 hours on both Saturday and Sunday (*i.e.*, a 2x16 strip) beginning at 6 am CPT and ending at 10 pm CPT each day.

3.3.2 In the event Seller directs the Auction Administrator to operate a weekend DAE Auction for a NERC holiday, the delivery term shall be for 16 hours on such NERC holiday beginning at 6 am CPT and ending at 10 pm CPT such day.

3.3.3 In the event Seller chooses to run a weekend or NERC holiday auction, the applicable Bid Period shall open two (2) Business Days prior to the Delivery Day and close one (1) Business Day prior to the Delivery Day concurrently with the open and closing times for the DAE Auction for the next Business Day.

3.4 The only employees of Seller permitted to serve as Auction Administrator shall be Seller's "support employees," as that term is used in 18 C.F.R. § 358.4(a)(4), or employees performing similar "back office" or administrative functions.

3.5 All Bid Information submitted to the Auction Administrator shall be used by the Auction Administrator only for auction administration and audit purposes.

3.6 Those employees of Seller directly engaged in wholesale electricity marketing and trading shall not have access to Bid Information for any purpose (except to the extent such information is made available to auction participants pursuant to Section 4.2.4).

3.7 In order to ensure that Bid Information is maintained in a manner consistent with the foregoing paragraphs, Seller shall impose internal data control restrictions consistent with those used for Standards of Conduct compliance.

#### **4.0 General Provisions**

##### **4.1 Sales of Energy Outside the Energy Auction**

4.1.1 During the Bid Period of a DAE Auction for a Delivery Day that is not a weekend day or NERC holiday, Seller 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 am CPT until 10 pm CPT on the Delivery Day applicable to such Bid Period.

4.1.2 During the Bid Period of a HAE Auction, Seller 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 Bid Period.

##### **4.2 Transparency; Confidentiality**

4.2.1 Subject to a determination by the Commission that doing so would qualify for safe harbor protection, Seller will report the quantities and prices of sales made via the Energy Auction to either a reputable index developer or a data hub.

4.2.2 Market-clearing prices of the DAE Auction and HAE Auction shall be made available to Bidders by the Auction Administrator on the following schedule:

4.2.2.1 DAE Market Clearing Heat Rate – Within one (1) hour of the close of the applicable DAE Bid Period.

4.2.2.2 DAE Market Clearing Price – No later than the end of the applicable Delivery Day.

4.2.2.3 HAE Market Clearing Price – Within forty-five (45) minutes of the close of the applicable HAE Bid Period.

4.2.3 Subject to a determination by the Commission that doing so would qualify for safe harbor protection, Seller shall make the information described in Section 4.2.2 publicly available (via posting on its website) on the same timeline as such information is made available to Bidders.

4.2.4 No earlier than six (6) months after a particular Energy Auction, the Auction Administrator will make available on a per-request basis all bid information for such particular Energy Auction, subject to the protection of Bidder identities in accordance with the confidentiality provisions set forth herein.

4.2.5 The identity of all Bidders shall be kept confidential from all third party entities, other than the Commission and the Independent Auction Monitor, except to the extent it is required as a result of price reporting, EQR reporting, or auction monitoring/auditing.

#### 4.3 Auditing; Market Monitoring

4.3.1 Seller will engage the Independent Auction Monitor to confirm that the Energy Auction is being properly administered in accordance with these Rules of the Bid-Based Energy Auction.

4.3.2 The Auction Administrator will ensure that all pertinent documentation associated with auction decisions shall be made available as required to the Independent Auction Monitor and the Commission.

### 5.0 DAE Auction

#### 5.1 Products Sold

5.1.1 All DAE Blocks auctioned in the DAE Auction shall be one of two products: (a) Firm LD Energy for a term of 16 hours beginning 6:00 am CPT on the Delivery Day and ending 10:00 pm CPT on the Delivery Day, or (b) Recallable Energy for a term of 16 hours beginning 6:00 am CPT on the Delivery Day and ending 10:00 pm CPT on the Delivery Day.

5.1.2 Blocks of Firm LD Energy and Recallable Energy (all referred to as “DAE Blocks”) shall be offered simultaneously, but via separate auctions.

5.1.3 All DAE Blocks shall be considered delivered “Into Southern.”

#### 5.2 Submission by Seller of DAE Blocks and Seller Offer Prices

##### 5.2.1 DAE Blocks

5.2.1.1 Prior to the opening of a DAE Bid Period, Seller shall submit to the Auction Administrator the number of DAE Blocks of each type it has available to sell, such figures calculated in accordance with Appendix DA-1.

5.2.1.2 At any time after the provision of such information to the Auction Administrator pursuant to Section 5.2.1.1 but before the Lock-Down Period applicable to such DAE Auction, Seller may notify the Auction Administrator of a change in the number of DAE Blocks available, provided that such change is the direct result of one or more of the following occurring after Seller's initial notification of DAE Blocks to the Auction Administrator: (a) a non-discretionary event affecting one of the primary inputs to Seller's calculation of Available Capacity or (b) Seller entering into one or more sales of Energy outside of the Energy Auction.

5.2.1.3 To the extent that: (a) the sale of any particular DAE Block(s) is linked to the sale of any other DAE Block(s) (such that none of the linked blocks can be sold unless all linked blocks are sold) or (b) the sale of any particular DAE Block(s) is contingent upon the sale of other DAE Block(s) (such that one or more dependent blocks cannot be sold unless one or more parent blocks are sold first), these shall be indicated at the time of submission to the Auction Administrator pursuant to Section 5.2.1.1 and/or 5.2.1.2.

#### 5.2.2 Seller Offer Prices

5.2.2.1 Prior to the Lock-Down Period for a given DAE Auction, Seller shall notify the Auction Administrator of the Seller Offer Prices for the DAE Blocks offered into such DAE Auction.

5.2.2.2 Determination of the Seller Offer Prices for the DAE Auction shall be in accordance with the formulas and processes described in Appendix DA-2.

#### 5.3 Submission of DAE Bids by Bidders

5.3.1 During the DAE Bid Period, Bidders shall be allowed to submit DAE Bids to purchase one or more of the posted DAE Blocks.

5.3.2 Buyers shall submit DAE Bids for Firm LD DAE Blocks independently from DAE Bids for the Recallable DAE Blocks.

5.3.3 A Bidder may modify or withdraw a DAE Bid at any time during the DAE Bid Period.

5.3.4 A Bidder may submit multiple DAE Bids, but each separate bid will be considered independently.

#### 5.4 Auction Evaluation



5.4.1 DAE Bids for Firm LD DAE Blocks and Recallable DAE Blocks shall be evaluated independently by the Auction Administrator.

5.4.2 Upon close of the DAE Bid Period, DAE Blocks shall be awarded as follows.

5.4.2.1 All DAE Bids will be sorted in descending order (highest to lowest implied heat rate) to simulate an economic demand curve.

5.4.2.2 All Seller Offer Prices will be sorted in ascending order (lowest to highest implied heat rate) to simulate an economic supply curve.

5.4.2.3 The intersection of the simulated supply and demand curves shall be determined by locating the quantity on the supply and demand curves where the next highest DAE Bid is less than the next lowest Seller Offer Price.

5.4.2.4 All DAE Bids not exceeding this quantity on the demand curve shall be granted their bid-for DAE Blocks, unless such DAE Blocks are linked with one or more DAE Blocks with higher Seller Offer Prices that exceed this intersection point.

5.4.2.5 In the event two or more DAE Bids specify the same offer price, a bid submitted earlier in time shall receive a higher priority of award than a bid submitted later in time.

5.4.2.6 If there are no DAE Bids that exceed the lowest Seller Offer Price, no DAE Blocks shall be sold.

5.4.3 All DAE Buyers shall pay a price for DAE Blocks awarded based upon the market clearing price ("DAE Market Clearing Price"), calculated as (a) the greater of the highest non-winning DAE Bid or the Seller Offer Price of the last DAE Block sold in the DAE Auction ("DAE Market Clearing Heat Rate") multiplied by (b) the Delivery Day Gas Price.

## 5.5 Notification, Confirmation, and Delivery

5.5.1 As soon as possible after the close of the DAE Bid Period: (a) the Auction Administrator shall notify Seller and all Bidders that submitted DAE Bids during such DAE Bid Period of their respective awarded DAE Blocks; and (b) the Auction Administrator shall notify Seller of the appropriate curtailment priority for all Recallable DAE Blocks.

5.5.2 Buyer shall specify on any transmission tag for such DAE Blocks the transaction or contract identification number provided by Seller.

5.5.3 Upon notification of being awarded a DAE Block, DAE Buyer shall be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (*i.e.*, NERC e-tagging) requirements.

#### 5.6 Recallable DAE Blocks

5.6.1 Seller shall have the right, but not the obligation, to curtail delivery of Energy sold as Recallable DAE Blocks in the event Seller experiences a supply side disruption (*e.g.*, an unplanned outage or derate) affecting the Available Capacity offered into the DAE Auction.

5.6.2 In the event Seller experiences such a supply disruption and determines that it must curtail a portion or all of the Recallable DAE Blocks, it shall do so in the priority order established by the Auction Administrator, determined as follows:

5.6.2.1 Sales of DAE Blocks based on lower DAE Bids shall be curtailed before sales of DAE Blocks based on higher DAE Bids.

5.6.2.2 In the event that two or more DAE Buyers had the same bid, a DAE Block based on a bid submitted later in time shall be curtailed prior to a DAE Block based on a bid submitted earlier in time.

5.6.3 A curtailed DAE Buyer may request continuity of service (*i.e.*, to not be curtailed) at a price equal to the HAE Auction market clearing price applicable to each hour for which such continuity of service occurs. Seller will honor such request if able to do so without adversely impacting system reliability.

#### 5.7 Non Performance

5.7.1 Any attempt by DAE Buyer to schedule delivery from a location other than that location specifically identified as the delivery point for the applicable DAE Block shall be considered non-performance by DAE Buyer and Seller shall have the right to deny the schedule without consequence to itself.

5.7.2 In the case of a Recallable DAE Block, in the event DAE Buyer fails to properly take delivery of the Recallable DAE Block, Seller shall buy back the Energy at 90 percent of the applicable market clearing price and DAE Buyer shall be financially responsible for the difference.

### 6.0 HAE Auction

#### 6.1 Products Sold

6.1.1 All HAE Power shall be for delivery beginning the upcoming Delivery Hour and for duration of one (1) clock hour.

6.1.2 All HAE Power shall be considered delivered "Into Southern."

## 6.2 Seller's Submission of HAE Power Supply Curve and Seller Offer Prices

6.2.1 Prior to the opening of a Bid Period, Seller shall submit to the Auction Administrator a supply curve representing the amount of HAE Power it has available to sell for the next Delivery Hour and associated Seller Offer Prices, the amount of HAE Power and Seller Offer Prices calculated in accordance with Appendices HA-1 and HA-2, respectively.

6.2.2 Such supply curve can be submitted in one (1) MW increments or in blocks of Energy at Seller's discretion.

6.2.3 Seller may submit a revised supply curve to the Auction Administrator at any time prior to the Lock-Down Period applicable to such HAE Auction.

## 6.3 Submission of HAE Bids by Bidders

6.3.1 During the HAE Bid Period, Bidders shall be allowed to submit HAE Bids to purchase HAE Power.

6.3.2 A Bidder may modify or withdraw an HAE Bid at any time during the HAE Bid Period.

6.3.3 A Bidder may submit multiple HAE Bids, but each separate bid will be considered independently.

## 6.4 Auction Evaluation

6.4.1 Upon close of the HAE Bid Period, HAE Power shall be awarded as follows.

6.4.1.1 All HAE Bids will be sorted in descending order (highest to lowest bid price) to simulate an economic demand curve.

6.4.1.2 The intersection of the simulated demand curve and Seller's supply curve for HAE Power shall be determined by locating the quantity on the supply and demand curves where the next highest HAE Bid is less than the next lowest Seller Offer Price.

6.4.1.3 All HAE Bids not exceeding this quantity on the demand curve shall be granted their bid-for HAE Power, unless any such HAE Power is linked with HAE Power with higher Seller Offer Prices that exceed this intersection point.

6.4.1.4 If an HAE Bid directly intersects the Seller's supply curve (i.e., the marginal HAE Bid) and such Bidder indicates a willingness to accept an award of HAE Power for a quantity less than the full amount in the HAE Bid, the Auction Administrator will accept that HAE Bid to the extent such lesser quantity

is available and offered at a price less than or equal to such marginal HAE Bid; otherwise such marginal bid will be rejected.

6.4.1.5 If there are no HAE Bids that exceed the lowest Seller Offer Price, no HAE Power shall be sold for such Delivery Hour.

6.4.1.6 In the event two or more HAE Bids specify the same offer price, a bid submitted earlier in time shall receive a higher priority of award than a bid submitted later in time.

6.4.2 All HAE Buyers shall pay a price for HAE Power awarded based upon the market clearing price (in \$/MWh), calculated as the greater of the highest non-winning HAE Bid and Seller Offer Price of the last MW sold in the HAE Auction for such Delivery Hour (“HAE Market Clearing Price”).

#### 6.5 Notification, Confirmation, and Delivery

6.5.1 As soon as possible after the close of the HAE Bid Period: (a) the Auction Administrator shall notify Seller and all Bidders that submitted HAE Bids during such HAE Bid Period of their respective awarded HAE Power; and (b) the Auction Administrator shall notify Seller of the appropriate curtailment priority for all awarded HAE Power.

6.5.2 Buyer shall specify on any transmission tag for such HAE Power the transaction or contract identification number provided by Seller.

6.5.3 Upon notification of being awarded HAE Power, HAE Buyer shall be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (*i.e.*, “tagging”) requirements.

#### 6.6 Curtailment

6.6.1 Sales of HAE Power based on lower HAE Bids shall be curtailed before sales of HAE Power based on higher HAE Bids.

6.6.2 In the event that two or more HAE Buyers had the same bid, HAE Power based on a bid submitted later in time shall be curtailed prior to HAE Power based on a bid submitted earlier in time.

#### 6.7 Non Performance

6.7.1 In the event HAE Buyer fails to properly take delivery of the awarded HAE Power, Seller shall buy back the Energy at 90 percent of the applicable market clearing price and HAE Buyer shall be financially responsible for the difference.

**7.0 Force Majeure**

7.1 Seller, Auction Administrator, and Independent Auction Monitor shall be excused from non-compliance with these Rules of the Bid-Based Energy Auction, 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.

Issued by: Charles D. Long, IV  
V.P., Fleet Operations & Trading  
Issued on: October 17, 2008

Effective: [First Date  
of Auction Operation]

**Appendix DA-1**  
**Determination of Available Capacity**  
**for DAE Auction**

Seller is not required to offer into the DAE Auction any Energy: (a) in excess of its total Controlled Capacity or (b) that it reasonably deems necessary to serve its 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 Seller will offer into a given DAE Auction.

**1.0 Determine Seller's Available Capacity**

1.1 Determine Seller's Supply Curve

1.1.1 Start with Seller's 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 Seller 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 Seller 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: (a) that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints, (b) that cannot be committed to supply DAE Blocks for the Delivery Day, or (c) uncommitted resources not located in the Southern BAA.

1.2 Determine Seller's Total Obligations

1.2.1 Start with Seller's native load and contractual obligations pursuant to the IIC for the Delivery Day based on (a) Seller's load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Day, adjusted appropriately for load forecast uncertainty, and (b) Seller's 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.

1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations.

## **2.0 Divide Available Capacity into DAE Blocks**

2.1 Available Capacity will be divided into DAE Blocks, 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 50 MW DAE Blocks as appropriate.

2.1.2 In the case of an uncommitted generating unit with a minimum operating limit of more than 50 MW, multiple “linked” DAE Blocks may be created to represent the minimum output of that unit; in which case, additional Available Capacity above the minimum output would be offered as separate, incremental 50 MW Blocks, provided that these incremental blocks would not be sold unless the “linked” minimum output blocks were also sold.

2.1.3 The Available Capacity of generating units with less than 50 MW of Available Capacity in Available Capacity may be combined and “linked” with other, similar generating units to form DAE Blocks to the extent practicable.

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

3.1 The quantity of DAE Blocks 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.

3.2 All DAE Blocks not offered as Recallable DAE Blocks will be placed into the DAE Auction for sale as Firm LD Energy.

**Appendix DA-2**  
**Determination of Seller Offer Prices**  
**for DAE Auction**

Seller 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. Seller 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. The Seller 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 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 linked units or combustion turbines, Commitment Costs will be spread across the total MW of all the linked blocks.

**2.0 Determination of Seller Offer Prices for DAE Blocks**

2.1 The Seller Offer Price for DAE 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.

2.2 The Seller Offer Price for DAE 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.

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2.3 The Seller Offer Price for a DAE 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 The Seller Offer Price for any DAE Block not determined in accordance with Section 2.1 thru 2.3, 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 The Seller Offer Prices for all DAE Blocks shall be converted into an implied heat rate by dividing the Seller Offer Price (expressed in \$/MWh) by Seller's presumed Gas Price (expressed in \$/MMBtu).

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

**Appendix HA-1**  
**Determination of Available Capacity**  
**for HAE Auction**

Seller is not required to offer into the HAE Auction any Energy: (a) in excess of its total Controlled Capacity or (b) that it reasonably deems necessary to serve its 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 Seller will offer into a given HAE Auction.

**1.0 Determine Seller's Residual Supply Curve**

1.1 Determine Seller's Supply Curve

1.1.1 Start with Seller's 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 Seller 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 Seller 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: (a) that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints, (b) that cannot be committed to supply HAE Power for the Delivery Hour, or (c) uncommitted resources not located in the Southern BAA.

1.2 Determine Seller's Total Obligations

1.2.1 Start with Seller's native load and contractual obligations pursuant to the IIC for the Delivery Hour based on (a) Seller's load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Hour and (b) Seller's 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.

1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations.

**2.0 Place Capacity Forming Residual Supply Curve into HAE Auction**

2.1 The capacity forming Available Capacity will be placed into the HAE Auction for sale; provided, however, that the capacity of units with fixed output levels (e.g., combustion turbines) contributing to such uncommitted capacity shall be “linked” together such that the Seller will not sell any of the capacity of such unit unless it receives enough winning bids to account for all of the capacity of such unit.

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**Appendix HA-2**  
**Determination of Seller Offer Prices**  
**for HAE Auction**

Seller 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. Seller 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 Seller Offer Prices**

2.1 The Seller Offer Price level for that portion of the Available Capacity 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 The Seller Offer Price for the Available Capacity 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 Seller Offer Prices. Seller may establish Seller Offer Prices lower than these limits on a unit-by-unit basis so long as the Seller Offer Prices apply to all Bidders.

**ATTACHMENT B**

**MARKET BASED RATE POWER SALES TARIFF  
OF  
ALABAMA POWER COMPANY, GEORGIA POWER COMPANY,  
GULF POWER COMPANY, MISSISSIPPI POWER COMPANY,  
AND SOUTHERN POWER COMPANY**

**General Tariff Provisions**

**1.0 Availability**

1.1 This Tariff provides for sales of capacity and/or energy at market-based rates on a short-term or long-term basis by Alabama Power Company, Georgia Power Company, Gulf Power Company, Mississippi Power Company and Southern Power Company (collectively referred to hereinafter as “Southern Companies” or “Seller”), subject to the establishment and operation of the Energy Auction as set forth in the attached Rules of the Bid-Based Energy Auction and other conditions set forth herein.

1.2 Service under this Tariff is available to any electric utility, rural electric cooperative, municipality, power authority, ~~or agency,~~ or other entity authorized to purchase capacity and/or energy hereunder (hereinafter “Customer”).

1.3 No entity affiliated with Southern Companies is eligible for service under this Tariff.

**2.0 Character of Service**

2.1 Southern Companies may provide capacity and/or energy under this Tariff in varying amounts, at varying levels of firmness or priorities of service, for varying periods of service, and in accordance with varying delivery schedules, all as agreed to between the Customer and Southern Companies.

**3.0 Interconnection and Interchange**

3.1 ~~Unless~~ Except as required by the rules of the bid-based energy auction as provided herein, or otherwise agreed, it shall be the responsibility of the Customer to make any necessary arrangements for delivery of capacity and energy beyond the points of interconnection of Southern Companies’ transmission system facilities with those of other electric systems.

**4.0 Rates**

4.1 ~~The~~ Except as required by the rules of the bid-based energy auction as provided herein, the rates for sales under this Tariff shall be as negotiated by the parties.

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## **5.0 Terms and Conditions of Service**

5.1 Prior to commencement of service, Southern Companies and the Customer shall execute a Service Agreement under this Tariff.

- a) For transactions of more than one year in duration or for a lesser period if desired by the parties, the Service Agreement shall set forth the rates and any additional terms and conditions of service for the transaction.
- b) For all other transactions, the Service Agreement shall allow the parties to engage in multiple transactions with the rates and any additional terms and conditions established at the time the transaction is arranged.

5.2 Except as required by the rules of the bid-based energy auction as provided herein, Southern Companies are under no obligation to provide service hereunder unless the parties mutually agree to the rates, terms and conditions of the transactions.

5.3 Acceptance of service by a Customer pursuant to a Service Agreement commits the Customer both to the provisions of this Tariff and to the terms and conditions of the individual Service Agreement.

## **6.0 Billing**

6.1 Southern Companies will submit to the Customer, as promptly as practicable after the first of each month, an invoice for transactions and the respective amounts due under the terms of this Tariff and the Service Agreement for the preceding calendar month (“delivery month”). Bills for each delivery month shall be due and payable on the 20th day of the succeeding month or the 10th day after the receipt of the invoice, whichever is later. Payment shall be made, on or before the due date, to Southern Companies in accordance with the invoice in immediately available funds through wire transfer, mail or other mutually agreeable method. Bills not paid when due shall accrue interest at one hundred five percent (105%) of the prime lending rate published in The Wall Street Journal or comparable successor publication on the date due (or if not published on the date due on the most recent preceding day on which published), from the due date to the date of payment.

6.2 In the event any portion of any invoice submitted pursuant to this Article is in bona fide dispute for reasons relating to the computation of the invoice, the undisputed amount shall be payable when due; and the remainder, with interest accrued at one hundred percent (100%) of the prime lending rate published in The Wall Street Journal or comparable successor publication on the date due (or if not published on the

## Rules of the Bid-Based Energy Auction

### 1.0 Establishment

1.1 Seller shall cause the establishment and operation of an Energy Auction, as fully described herein, for a period of three (3) years from the effective date of such auction.

1.2 Nothing contained herein shall be construed as affecting in any way the right of Seller to unilaterally make application to the Commission for a change in rates under section 205 of the Federal Power Act and pursuant to the Commission's Rules and Regulations promulgated thereunder to amend these Rules of the Bid-Based Energy Auction; provided, however, that no such filing may have the effect of terminating both the DAE Auction and the HAE Auction during the initial three (3) year period of their operation.

### 2.0 Definitions

These definitions shall apply to these Rules of the Bid-Based Energy Auction as well as Appendices DA-1, DA-2, HA-1, and HA-2, thereto.

2.1 Auction Administrator: Those persons administering the Energy Auction consistent with the provisions set forth herein.

2.2 Available Capacity: See Section 1.3 of Appendix DA-1 and Section 1.3 of Appendix HA-1.

2.3 Bidder: A Customer (as defined in Section 1.2 of the General Tariff Provisions, above) participating in the Energy Auction for the purpose of buying Energy that: (a) has executed a service agreement with Seller that references this Tariff; (b) is in good standing under such service agreement, including having met all credit requirements thereunder; and (c) has registered with the Auction Administrator (such registration to include the provision of contact and related information to the Auction Administrator ).

2.4 Bid Information: The prices, terms, and conditions under which a Bidder offers to purchase Energy through the DAE Auction or HAE Auction.

2.5 Business Day: Each weekday, Monday through Friday, excluding NERC holidays.

2.6 CPT: Central Prevailing Time.

2.7 Commission: The Federal Energy Regulatory Commission.

2.8 Commitment Cost: The cost to start or change operating modes of a generating unit, as specified in Appendices DA-2 and HA-2.

2.9 Controlled Capacity: Capacity controlled by Seller through ownership or contractual arrangement. Capacity shall only be considered "controlled" if Seller has included such capacity in its unit commitment process as a dispatchable resource.



2.10 DAE Auction: That auction, administered in accordance herewith, for the sale of DAE Blocks.

2.11 DAE Bid: A bid by a Bidder to purchase a DAE Block, expressed as an implied heat rate in MMBtu/MWh.

2.12 DAE Bid Period: The period beginning 12:00 Noon CPT two Business Days prior to the Delivery Day and ending at 6:30 am CPT one Business Day prior to the Delivery Day.

2.13 DAE Block: A 50 MW block of Energy offered or sold in the DAE Auction for delivery beginning at 6 am CPT and ending at 10 pm CPT on the Delivery Day.

2.14 DAE Buyer: A Bidder who has been awarded the purchase of a DAE Block.

2.15 DAE Market Clearing Price: See Section 5.4.3.

2.16 DAE Market Clearing Heat Rate: See Section 5.4.3.

2.17 Delivery Day: The calendar day in which the DAE Block sold through the DAE Auction will be delivered.

2.18 Delivery Day Gas Price: As regards a particular Delivery Day, the Gas Index Price for the 24-hour gas flow period most closely correlated to the Delivery Day.

2.19 Delivery Hour: The clock hour in which Energy sold through the HAE Auction will be delivered.

2.20 Energy: Electric energy delivered as three-phase alternating current.

2.21 Energy Auction: As the context may indicate, the DAE Auction and HAE Auction collectively, or the DAE Auction or the HAE Auction individually.

2.22 Firm LD: Energy sold whereby a party shall be relieved of its obligations to sell and deliver or to purchase and receive without liability only to the extent that, and for the period during which, such performance is prevented by Force Majeure.

2.23 Force Majeure: Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment (including computer systems), order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond a party's control.

2.24 Gas Index Price: Henry Hub Midpoint gas price (in \$/MMBtu) published by Platts Megawatt Daily. The Gas Index Price is based on a gas delivery day from 9:00 am CPT on the Delivery Day to 9:00 am CPT on the following day.

2.25 HAE Auction: That auction, administered in accordance herewith, for the sale of HAE Power.

2.26 HAE Bid: A bid by a Bidder to purchase Energy through the HAE Auction, submitted in the form of a MW quantity, denominated in one (1) MW increments with a minimum of one (1) MW, and a maximum price Bidder is willing to pay (in \$/MWh).

2.27 HAE Bid Period: The period beginning 60 minutes prior to the beginning of the Delivery Hour and ending 45 minutes prior to the beginning of the Delivery Hour.

2.28 HAE Buyer: A Bidder who has been awarded the purchase of HAE Power.

2.29 HAE Market Clearing Price: See Section 6.4.1.6.

2.30 HAE Power: Non-Firm Energy offered or sold by Seller through the HAE Auction.

2.31 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

2.32 IIC Manual: That “Allocation Methodology and Periodic Rate Computation Manual” established pursuant to the IIC.

2.33 Independent Auction Monitor: An independent entity engaged by Seller, subject to Commission approval, to monitor and periodically review the DAE Auction and HAE Auction and be responsible for responding to questions from Bidders and/or regulators regarding the integrity of the auction process.

2.34 Into Southern: For purposes of sales through the DAE Auction and the HAE Auction, the term “Into Southern” means that the energy shall be scheduled and delivered to an interconnection or interface either (i) on Seller’s transmission system border or (ii) within the Southern BAA if the Energy is from a source of generation in the Southern BAA, which interface, in either case, the Southern Transmission Provider identifies as available for delivery of the Energy in or into the Southern BAA.

2.35 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.

2.36 MMBtu: Million British Thermal Units.

2.37 MW: Megawatt or megawatts.

2.38 MWh: Megawatt-hour or megawatt-hours.

2.39 NERC: The North American Electric Reliability Corporation or its successor.

2.40 Non-Firm: Energy sold whereby delivery by Seller may be interrupted for any reason or for no reason, without liability on the part of Seller.

2.41 OASIS: The Open Access Same Time Information System implemented by Southern Companies in accordance with FERC Orders 888, 889, and 890.

2.42 Recallable: Energy sold whereby Seller, upon experiencing a supply side disruption, has the right, but not the obligation, to curtail the delivery of such Energy without liability on the part of Seller.

2.43 Seller Offer Price: In the case of the DAE Auction, the minimum price at which Seller will sell a DAE Block, expressed as an implied heat rate in MMBtu/MWh. In the case of the HAE Auction, the minimum price at which Seller will sell HAE Power, expressed in dollars per MWh (\$/MWh).

2.44 SERC: The SERC Reliability Corporation or its successor.

2.45 Southern BAA: The Southern Balancing Authority Area, as that term is defined and used by NERC.

### **3.0 Establishment and Administration**

3.1 The Auction Administrator will establish an auction via the Internet to facilitate: (a) the bilateral sale of DAE Blocks by Seller on a Business Day-ahead basis through the DAE Auction; and (b) the bilateral sale of Energy by Seller on an hour-ahead basis through the HAE Auction.

3.2 The DAE Auction shall take place every Business Day so long as Seller has Available Capacity to sell on a Business Day-ahead basis. The HAE Auction shall take place every hour of every day, including Business Days, weekends, and NERC holidays, provided that Seller has Available Capacity to sell on an hour-ahead basis.

3.3 The Auction Administrator will administer a DAE Auction for DAE Blocks to be delivered on weekend days and NERC holidays at the direction of Seller.

3.3.1 In the event Seller directs the Auction Administrator to operate a weekend DAE Auction for a particular weekend, the delivery term shall be for 16 hours on both Saturday and Sunday (i.e., a 2x16 strip) beginning at 6 am CPT and ending at 10 pm CPT each day.

3.3.2 In the event Seller directs the Auction Administrator to operate a weekend DAE Auction for a NERC holiday, the delivery term shall be for 16 hours on such NERC holiday beginning at 6 am CPT and ending at 10 pm CPT such day.

3.3.3 In the event Seller chooses to run a weekend or NERC holiday auction, the applicable Bid Period shall open two (2) Business Days prior to the Delivery Day and close one (1) Business Day prior to the Delivery Day concurrently with the open and closing times for the DAE Auction for the next Business Day.

3.4 The only employees of Seller permitted to serve as Auction Administrator shall be Seller's "support employees," as that term is used in 18 C.F.R. § 358.4(a)(4), or employees performing similar "back office" or administrative functions.

3.5 All Bid Information submitted to the Auction Administrator shall be used by the Auction Administrator only for auction administration and audit purposes.

3.6 Those employees of Seller directly engaged in wholesale electricity marketing and trading shall not have access to Bid Information for any purpose (except to the extent such information is made available to auction participants pursuant to Section 4.2.4).

3.7 In order to ensure that Bid Information is maintained in a manner consistent with the foregoing paragraphs, Seller shall impose internal data control restrictions consistent with those used for Standards of Conduct compliance.

#### **4.0 General Provisions**

##### **4.1 Sales of Energy Outside the Energy Auction**

4.1.1 During the Bid Period of a DAE Auction for a Delivery Day that is not a weekend day or NERC holiday, Seller 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 am CPT until 10 pm CPT on the Delivery Day applicable to such Bid Period.

4.1.2 During the Bid Period of a HAE Auction, Seller 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 Bid Period.

##### **4.2 Transparency; Confidentiality**

4.2.1 Subject to a determination by the Commission that doing so would qualify for safe harbor protection, Seller will report the quantities and prices of sales made via the Energy Auction to either a reputable index developer or a data hub.

4.2.2 Market-clearing prices of the DAE Auction and HAE Auction shall be made available to Bidders by the Auction Administrator on the following schedule:

4.2.2.1 DAE Market Clearing Heat Rate – Within one (1) hour of the close of the applicable DAE Bid Period.

4.2.2.2 DAE Market Clearing Price – No later than the end of the applicable Delivery Day.

4.2.2.3 HAE Market Clearing Price – Within forty-five (45) minutes of the close of the applicable HAE Bid Period.

4.2.3 Subject to a determination by the Commission that doing so would qualify for safe harbor protection, Seller shall make the information described in Section 4.2.2 publicly available (via posting on its website) on the same timeline as such information is made available to Bidders.

4.2.4 No earlier than six (6) months after a particular Energy Auction, the Auction Administrator will make available on a per-request basis all bid information for such particular Energy Auction, subject to the protection of Bidder identities in accordance with the confidentiality provisions set forth herein.

4.2.5 The identity of all Bidders shall be kept confidential from all third party entities, other than the Commission and the Independent Auction Monitor, except to the extent it is required as a result of price reporting, EQR reporting, or auction monitoring/auditing.

#### 4.3 Auditing; Market Monitoring

4.3.1 Seller will engage the Independent Auction Monitor to confirm that the Energy Auction is being properly administered in accordance with these Rules of the Bid-Based Energy Auction.

4.3.2 The Auction Administrator will ensure that all pertinent documentation associated with auction decisions shall be made available as required to the Independent Auction Monitor and the Commission.

### 5.0 DAE Auction

#### 5.1 Products Sold

5.1.1 All DAE Blocks auctioned in the DAE Auction shall be one of two products: (a) Firm LD Energy for a term of 16 hours beginning 6:00 am CPT on the Delivery Day and ending 10:00 pm CPT on the Delivery Day, or (b) Recallable Energy for a term of 16 hours beginning 6:00 am CPT on the Delivery Day and ending 10:00 pm CPT on the Delivery Day.

5.1.2 Blocks of Firm LD Energy and Recallable Energy (all referred to as “DAE Blocks”) shall be offered simultaneously, but via separate auctions.

5.1.3 All DAE Blocks shall be considered delivered “Into Southern.”

#### 5.2 Submission by Seller of DAE Blocks and Seller Offer Prices

##### 5.2.1 DAE Blocks

5.2.1.1 Prior to the opening of a DAE Bid Period, Seller shall submit to the Auction Administrator the number of DAE Blocks of each type it has available to sell, such figures calculated in accordance with Appendix DA-1.

5.2.1.2 At any time after the provision of such information to the Auction Administrator pursuant to Section 5.2.1.1 but before the Lock-Down Period applicable to such DAE Auction, Seller may notify the Auction Administrator of a change in the number of DAE Blocks available, provided that such change is the direct result of one or more of the following occurring after Seller's initial notification of DAE Blocks to the Auction Administrator: (a) a non-discretionary event affecting one of the primary inputs to Seller's calculation of Available Capacity or (b) Seller entering into one or more sales of Energy outside of the Energy Auction.

5.2.1.3 To the extent that: (a) the sale of any particular DAE Block(s) is linked to the sale of any other DAE Block(s) (such that none of the linked blocks can be sold unless all linked blocks are sold) or (b) the sale of any particular DAE Block(s) is contingent upon the sale of other DAE Block(s) (such that one or more dependent blocks cannot be sold unless one or more parent blocks are sold first), these shall be indicated at the time of submission to the Auction Administrator pursuant to Section 5.2.1.1 and/or 5.2.1.2.

#### 5.2.2 Seller Offer Prices

5.2.2.1 Prior to the Lock-Down Period for a given DAE Auction, Seller shall notify the Auction Administrator of the Seller Offer Prices for the DAE Blocks offered into such DAE Auction.

5.2.2.2 Determination of the Seller Offer Prices for the DAE Auction shall be in accordance with the formulas and processes described in Appendix DA-2.

#### 5.3 Submission of DAE Bids by Bidders

5.3.1 During the DAE Bid Period, Bidders shall be allowed to submit DAE Bids to purchase one or more of the posted DAE Blocks.

5.3.2 Buyers shall submit DAE Bids for Firm LD DAE Blocks independently from DAE Bids for the Recallable DAE Blocks.

5.3.3 A Bidder may modify or withdraw a DAE Bid at any time during the DAE Bid Period.

5.3.4 A Bidder may submit multiple DAE Bids, but each separate bid will be considered independently.

#### 5.4 Auction Evaluation

5.4.1 DAE Bids for Firm LD DAE Blocks and Recallable DAE Blocks shall be evaluated independently by the Auction Administrator.

5.4.2 Upon close of the DAE Bid Period, DAE Blocks shall be awarded as follows.

5.4.2.1 All DAE Bids will be sorted in descending order (highest to lowest implied heat rate) to simulate an economic demand curve.

5.4.2.2 All Seller Offer Prices will be sorted in ascending order (lowest to highest implied heat rate) to simulate an economic supply curve.

5.4.2.3 The intersection of the simulated supply and demand curves shall be determined by locating the quantity on the supply and demand curves where the next highest DAE Bid is less than the next lowest Seller Offer Price.

5.4.2.4 All DAE Bids not exceeding this quantity on the demand curve shall be granted their bid-for DAE Blocks, unless such DAE Blocks are linked with one or more DAE Blocks with higher Seller Offer Prices that exceed this intersection point.

5.4.2.5 In the event two or more DAE Bids specify the same offer price, a bid submitted earlier in time shall receive a higher priority of award than a bid submitted later in time.

5.4.2.6 If there are no DAE Bids that exceed the lowest Seller Offer Price, no DAE Blocks shall be sold.

5.4.3 All DAE Buyers shall pay a price for DAE Blocks awarded based upon the market clearing price (“DAE Market Clearing Price”), calculated as (a) the greater of the highest non-winning DAE Bid or the Seller Offer Price of the last DAE Block sold in the DAE Auction (“DAE Market Clearing Heat Rate”) multiplied by (b) the Delivery Day Gas Price.

5.5 Notification, Confirmation, and Delivery

5.5.1 As soon as possible after the close of the DAE Bid Period: (a) the Auction Administrator shall notify Seller and all Bidders that submitted DAE Bids during such DAE Bid Period of their respective awarded DAE Blocks; and (b) the Auction Administrator shall notify Seller of the appropriate curtailment priority for all Recallable DAE Blocks.

5.5.2 Buyer shall specify on any transmission tag for such DAE Blocks the transaction or contract identification number provided by Seller.

5.5.3 Upon notification of being awarded a DAE Block, DAE Buyer shall be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (i.e., NERC e-tagging) requirements.

## 5.6 Recallable DAE Blocks

5.6.1 Seller shall have the right, but not the obligation, to curtail delivery of Energy sold as Recallable DAE Blocks in the event Seller experiences a supply side disruption (e.g., an unplanned outage or derate) affecting the Available Capacity offered into the DAE Auction.

5.6.2 In the event Seller experiences such a supply disruption and determines that it must curtail a portion or all of the Recallable DAE Blocks, it shall do so in the priority order established by the Auction Administrator, determined as follows:

5.6.2.1 Sales of DAE Blocks based on lower DAE Bids shall be curtailed before sales of DAE Blocks based on higher DAE Bids.

5.6.2.2 In the event that two or more DAE Buyers had the same bid, a DAE Block based on a bid submitted later in time shall be curtailed prior to a DAE Block based on a bid submitted earlier in time.

5.6.3 A curtailed DAE Buyer may request continuity of service (i.e., to not be curtailed) at a price equal to the HAE Auction market clearing price applicable to each hour for which such continuity of service occurs. Seller will honor such request if able to do so without adversely impacting system reliability.

## 5.7 Non Performance

5.7.1 Any attempt by DAE Buyer to schedule delivery from a location other than that location specifically identified as the delivery point for the applicable DAE Block shall be considered non-performance by DAE Buyer and Seller shall have the right to deny the schedule without consequence to itself.

5.7.2 In the case of a Recallable DAE Block, in the event DAE Buyer fails to properly take delivery of the Recallable DAE Block, Seller shall buy back the Energy at 90 percent of the applicable market clearing price and DAE Buyer shall be financially responsible for the difference.

## 6.0 HAE Auction

### 6.1 Products Sold

6.1.1 All HAE Power shall be for delivery beginning the upcoming Delivery Hour and for duration of one (1) clock hour.

6.1.2 All HAE Power shall be considered delivered "Into Southern."



6.2 Seller's Submission of HAE Power Supply Curve and Seller Offer Prices

6.2.1 Prior to the opening of a Bid Period, Seller shall submit to the Auction Administrator a supply curve representing the amount of HAE Power it has available to sell for the next Delivery Hour and associated Seller Offer Prices, the amount of HAE Power and Seller Offer Prices calculated in accordance with Appendices HA-1 and HA-2, respectively.

6.2.2 Such supply curve can be submitted in one (1) MW increments or in blocks of Energy at Seller's discretion.

6.2.3 Seller may submit a revised supply curve to the Auction Administrator at any time prior to the Lock-Down Period applicable to such HAE Auction.

6.3 Submission of HAE Bids by Bidders

6.3.1 During the HAE Bid Period, Bidders shall be allowed to submit HAE Bids to purchase HAE Power.

6.3.2 A Bidder may modify or withdraw an HAE Bid at any time during the HAE Bid Period.

6.3.3 A Bidder may submit multiple HAE Bids, but each separate bid will be considered independently.

6.4 Auction Evaluation

6.4.1 Upon close of the HAE Bid Period, HAE Power shall be awarded as follows.

6.4.1.1 All HAE Bids will be sorted in descending order (highest to lowest bid price) to simulate an economic demand curve.

6.4.1.2 The intersection of the simulated demand curve and Seller's supply curve for HAE Power shall be determined by locating the quantity on the supply and demand curves where the next highest HAE Bid is less than the next lowest Seller Offer Price.

6.4.1.3 All HAE Bids not exceeding this quantity on the demand curve shall be granted their bid-for HAE Power, unless any such HAE Power is linked with HAE Power with higher Seller Offer Prices that exceed this intersection point.

6.4.1.4 If an HAE Bid directly intersects the Seller's supply curve (i.e., the marginal HAE Bid) and such Bidder indicates a willingness to accept an award of HAE Power for a quantity less than the full amount in the HAE Bid, the Auction Administrator will accept that HAE Bid to the extent such lesser quantity

is available and offered at a price less than or equal to such marginal HAE Bid; otherwise such marginal bid will be rejected.

6.4.1.5 If there are no HAE Bids that exceed the lowest Seller Offer Price, no HAE Power shall be sold for such Delivery Hour.

6.4.1.6 In the event two or more HAE Bids specify the same offer price, a bid submitted earlier in time shall receive a higher priority of award than a bid submitted later in time.

6.4.2 All HAE Buyers shall pay a price for HAE Power awarded based upon the market clearing price (in \$/MWh), calculated as the greater of the highest non-winning HAE Bid and Seller Offer Price of the last MW sold in the HAE Auction for such Delivery Hour (“HAE Market Clearing Price”).

#### 6.5 Notification, Confirmation, and Delivery

6.5.1 As soon as possible after the close of the HAE Bid Period: (a) the Auction Administrator shall notify Seller and all Bidders that submitted HAE Bids during such HAE Bid Period of their respective awarded HAE Power; and (b) the Auction Administrator shall notify Seller of the appropriate curtailment priority for all awarded HAE Power.

6.5.2 Buyer shall specify on any transmission tag for such HAE Power the transaction or contract identification number provided by Seller.

6.5.3 Upon notification of being awarded HAE Power, HAE Buyer shall be responsible for taking delivery from the delivery point, including all transmission reservations and scheduling (i.e., “tagging”) requirements.

#### 6.6 Curtailment

6.6.1 Sales of HAE Power based on lower HAE Bids shall be curtailed before sales of HAE Power based on higher HAE Bids.

6.6.2 In the event that two or more HAE Buyers had the same bid, HAE Power based on a bid submitted later in time shall be curtailed prior to HAE Power based on a bid submitted earlier in time.

#### 6.7 Non Performance

6.7.1 In the event HAE Buyer fails to properly take delivery of the awarded HAE Power, Seller shall buy back the Energy at 90 percent of the applicable market clearing price and HAE Buyer shall be financially responsible for the difference.

**7.0 Force Majeure**

7.1 Seller, Auction Administrator, and Independent Auction Monitor shall be excused from non-compliance with these Rules of the Bid-Based Energy Auction, 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.

Issued by: Charles D. Long, IV  
V.P., Fleet Operations & Trading  
Issued on: October 17, 2008

Effective: [First Date  
of Auction Operation]

**Appendix DA-1**  
**Determination of Available Capacity**  
**for DAE Auction**

Seller is not required to offer into the DAE Auction any Energy: (a) in excess of its total Controlled Capacity or (b) that it reasonably deems necessary to serve its 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 Seller will offer into a given DAE Auction.

**1.0 Determine Seller's Available Capacity**

**1.1 Determine Seller's Supply Curve**

1.1.1 Start with Seller's 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 Seller 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 Seller 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: (a) that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints, (b) that cannot be committed to supply DAE Blocks for the Delivery Day, or (c) uncommitted resources not located in the Southern BAA.

**1.2 Determine Seller's Total Obligations**

1.2.1 Start with Seller's native load and contractual obligations pursuant to the IIC for the Delivery Day based on (a) Seller's load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Day, adjusted appropriately for load forecast uncertainty, and (b) Seller's 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.

**1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations.**

## **2.0 Divide Available Capacity into DAE Blocks**

2.1 Available Capacity will be divided into DAE Blocks, 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 50 MW DAE Blocks as appropriate.

2.1.2 In the case of an uncommitted generating unit with a minimum operating limit of more than 50 MW, multiple “linked” DAE Blocks may be created to represent the minimum output of that unit; in which case, additional Available Capacity above the minimum output would be offered as separate, incremental 50 MW Blocks, provided that these incremental blocks would not be sold unless the “linked” minimum output blocks were also sold.

2.1.3 The Available Capacity of generating units with less than 50 MW of Available Capacity in Available Capacity may be combined and “linked” with other, similar generating units to form DAE Blocks to the extent practicable.

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

3.1 The quantity of DAE Blocks 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.

3.2 All DAE Blocks not offered as Recallable DAE Blocks will be placed into the DAE Auction for sale as Firm LD Energy.

**Appendix DA-2**  
**Determination of Seller Offer Prices**  
**for DAE Auction**

Seller 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. Seller 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. The Seller 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 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 linked units or combustion turbines, Commitment Costs will be spread across the total MW of all the linked blocks.

**2.0 Determination of Seller Offer Prices for DAE Blocks**

2.1 The Seller Offer Price for DAE 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.

2.2 The Seller Offer Price for DAE 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.

2.3 The Seller Offer Price for a DAE 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 The Seller Offer Price for any DAE Block not determined in accordance with Section 2.1 thru 2.3, 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 The Seller Offer Prices for all DAE Blocks shall be converted into an implied heat rate by dividing the Seller Offer Price (expressed in \$/MWh) by Seller's presumed Gas Price (expressed in \$/MMBtu).

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

**Appendix HA-1**  
**Determination of Available Capacity**  
**for HAE Auction**

Seller is not required to offer into the HAE Auction any Energy: (a) in excess of its total Controlled Capacity or (b) that it reasonably deems necessary to serve its 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 Seller will offer into a given HAE Auction.

**1.0 Determine Seller's Residual Supply Curve**

1.1 Determine Seller's Supply Curve

1.1.1 Start with Seller's 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 Seller 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 Seller 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: (a) that is unavailable for dispatch due to existing or planned outages, de-rates, or operational constraints, (b) that cannot be committed to supply HAE Power for the Delivery Hour, or (c) uncommitted resources not located in the Southern BAA.

1.2 Determine Seller's Total Obligations

1.2.1 Start with Seller's native load and contractual obligations pursuant to the IIC for the Delivery Hour based on (a) Seller's load forecast for retail and wholesale native load for the instantaneous peak of the Delivery Hour and (b) Seller's 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.

1.3 The "Available Capacity" is that portion of the Supply Curve in excess of Total Obligations.



**2.0 Place Capacity Forming Residual Supply Curve into HAE Auction**

2.1 The capacity forming Available Capacity will be placed into the HAE Auction for sale; provided, however, that the capacity of units with fixed output levels (e.g., combustion turbines) contributing to such uncommitted capacity shall be “linked” together such that the Seller will not sell any of the capacity of such unit unless it receives enough winning bids to account for all of the capacity of such unit.

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V.P., Fleet Operations & Trading  
Issued on: October 17, 2008

Effective: [First Date  
of Auction Operation]

**Appendix HA-2**  
**Determination of Seller Offer Prices**  
**for HAE Auction**

Seller 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. Seller 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 Seller Offer Prices**

2.1 The Seller Offer Price level for that portion of the Available Capacity 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 The Seller Offer Price for the Available Capacity 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 Seller Offer Prices. Seller may establish Seller Offer Prices lower than these limits on a unit-by-unit basis so long as the Seller Offer Prices apply to all Bidders.

**ATTACHMENT C**

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Southern Company Services, Inc. *et al.***

) **Docket No. ER09-\_\_\_ - \_\_\_**

**Affidavit of Rodney Frame**

**I. INTRODUCTION**

1. My name is Rodney Frame. I am a Managing Principal with Analysis Group, Inc. (Analysis Group), a consulting firm that provides microeconomic, strategy and financial analyses. My business address is 1899 Pennsylvania Avenue, N.W., Suite 200, Washington, DC 20006. Analysis Group has approximately 430 employees and offices in Boston, Chicago, Dallas, Denver, Los Angeles, Menlo Park, Montreal, New York City, San Francisco and Washington, D.C. I have been employed by Analysis Group since January 1998. Prior to my affiliation with Analysis Group, I was a Vice President at National Economic Research Associates, Inc., where I was employed from 1984 to January 1998. My professional experience and qualifications are summarized in my résumé, which is included as Attachment 1 to this affidavit.
  
2. Most of my work in the last several years has involved consulting with electric industry clients on a variety of matters including restructuring issues, wholesale bulk power markets and competition, transmission access and pricing, contractual terms for wholesale service, mergers and acquisitions and contracting for generation supplies from non-utility suppliers. I have testified on numerous occasions on these and related topics, before the Federal Energy Regulatory Commission (Commission or FERC), state regulatory commissions, federal and local courts and the Commerce Commission of New Zealand.

## II. BACKGROUND AND PURPOSE OF AFFIDAVIT

3. The Commission uses two indicative horizontal (generation) market power screens—referred to as the market share screen and the pivotal supplier screen—as part of the process to assess the appropriateness of market-based rate authority by jurisdictional suppliers. The Commission makes a rebuttable presumption that a supplier failing one or both of its indicative horizontal market power screens has horizontal market power in the geographic market where the screen failure(s) occurred. That rebuttable presumption of market power potentially can be overcome by the preparation and filing of an acceptable “delivered price test” (DPT) analysis and/or by the filing of other alternative evidence.
  
4. In this affidavit, I refer to Southern Company, acting as agent for Alabama Power Company (Alabama Power), Georgia Power Company (Georgia Power), Gulf Power Company (Gulf Power), Mississippi Power Company (Mississippi Power) and Southern Power Company (Southern Power), collectively as “Southern Companies”. Southern Companies have been authorized by the Commission to sell electricity to wholesale purchasers at market-based rates.<sup>1</sup> However, in their first indicative screen filing after those indicative market power screens were implemented by the Commission,<sup>2</sup> Southern Companies failed the market share screen in the Balancing Authority Area (BAA) operated by Southern Companies’

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<sup>1</sup> The subsidiaries of Southern Company that have been authorized by the Commission to sell electricity to wholesale purchasers at market-based rates are: Alabama Power, Georgia Power, Gulf Power, Mississippi Power, Southern Power (market-based rate tariff originally filed in Docket No. ER96-780); Southern Company—Florida, LLC (market-based rate tariff originally filed in Docket No. ER00-3240); Oleander Power Project, LP (market-based rate tariff originally filed in Docket No. ER01-1633); and DeSoto County Generating Company (market-based rate tariff originally filed in Docket No. ER03-1383).

<sup>2</sup> The indicative screens originally were set forth on an interim basis in *AEP Power Marketing, Inc. et al.*, 107 FERC ¶ 61,018 (2004) (*AEP I*), *order on reh’g*, 108 FERC ¶ 61,026 (2004) (*AEP II*). They were then codified in the Final Rule in *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, 119 FERC ¶ 61,295 (2007), *clarified*, 121 FERC ¶ 61,260 (2007) (Clarifying Order), *order on reh’g and clarification*, 123 FERC ¶ 61,055 (2008) (Order No. 697-A), *further reh’g and clarification*, 124 FERC ¶ 61,055 (2008) (July 17 Order).

transmission-owning affiliates (*i.e.*, the Southern BAA).<sup>3</sup> As a result, the Commission then made a rebuttable presumption that Southern Companies possess market power over sales of wholesale electricity in the Southern BAA and instituted Docket No. EL04-124 to determine whether Southern Companies' market-based rate authority in the Southern BAA should be continued.<sup>4</sup> That proceeding remains pending.

5. Additionally, on September 2, 2008, in accordance with Order No. 697 and its progeny, Southern Companies filed updated horizontal market power screen analyses for the Southern BAA and the 12 directly interconnected BAAs. This updated horizontal market power screen analysis indicates that Southern Companies continue to fail the market share screen in the Southern BAA.
6. On several occasions in Docket No. EL04-124 and other proceedings, I have presented affidavits and testimony discussing, among other things, the reasons why Southern Companies do not possess market power over sales of wholesale electricity in the Southern BAA notwithstanding the failed market share screen. These materials have included DPT and other analyses. My view on this topic has not changed—I do not believe that Southern Companies possess, nor can they exercise, market power over wholesale sales of electricity in the Southern BAA.
7. However, to address any residual concerns that the Commission and others might hold about Southern Companies' possession and potential exercise of market power in the Southern BAA, Southern Companies have developed a market power mitigation proposal. My affidavit examines how this market power mitigation proposal directly addresses, and should alleviate, potential concerns about Southern Companies' ability to exercise market power over wholesale sales of electricity in the Southern BAA.

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<sup>3</sup> *AEP I* was issued April 14, 2004. Southern Companies made their first indicative screen filing after *AEP I* was issued on August 9, 2004.

<sup>4</sup> See 109 FERC ¶ 61,275 (2004) at P 34.

### III. SOUTHERN COMPANIES' BID-BASED ENERGY AUCTION PROPOSAL

8. Southern Companies' market power mitigation proposal (referred to herein as the Energy Auction Proposal) consists of the implementation of a formal internet-based auction process pursuant to which: (i) Southern Companies would offer to sell day ahead (DA) daily firm energy, DA recallable energy and hour ahead (HA) non-firm energy for delivery in the Southern BAA at offer prices that are capped at cost-based levels; (ii) potential buyers would submit demand bids to buy such products; (iii) the potential buyers' demand bids would be combined into a market demand curve and Southern Companies' offer prices would be combined into a supply curve; and (iv) the clearing price would be determined by intersection of the supply and demand curves.<sup>5</sup>
  
9. Complete details of the Energy Auction Proposal are provided in the revisions to Southern Companies' Market-Based Rate Power Sales Tariff (MBR Tariff) that are being filed concurrently with this affidavit. As a practical matter, as discussed further below, the Energy Auction Proposal has important similarities with the mechanisms used in the energy auctions operated by the PJM Interconnection L.L.C. (PJM) to mitigate sellers believed to be able to exercise market power in transmission constraint-created local market areas. These important similarities include the use of bid caps, the use of a clearing price mechanism and the "must offer" requirement.
  
10. Salient features of the Energy Auction Proposal for considering its effect on potential market power concerns include the following:
  - a. On both a DA and HA basis, Southern Companies will offer through the auction process *all* of the available output from their thermal generating stations beyond the amounts required to meet Southern Companies' expected load (including appropriate amounts for operating reserves) and

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<sup>5</sup> In particular, the clearing price will be determined as the greater of the highest non-winning bid or the Seller Offer Price for the last increment of output that is sold.

third-party contractual obligations. However, on a DA basis, Southern Companies' will not offer uncommitted capacity with a greater-than-24 hour commitment notice and, on a DA and HA basis, Southern Companies will not offer capacity not reasonably expected to be available during the upcoming auction delivery periods due to outages or other operational constraints.

- b. The offer prices for the energy made available by Southern Companies through the auction—referred to as the Seller Offer Prices—will be capped at cost-based levels, Southern Companies' variable costs plus 10 percent, plus a demand charge. The variable costs used to determine the cost-based amounts for the Seller Offer Prices will include, among other things, marginal replacement fuel costs, in-plant fuel handling costs, variable operation and maintenance expenses, emission allowance replacement costs, transmission losses and commitment costs. The cost-based amounts will represent caps, with Southern Companies retaining the flexibility to develop Seller Offer Prices that are lower than these caps to facilitate sales or address an operational issue. The Seller Offer Prices for different “energy blocks” will be combined to develop a Seller Offer Curve that includes all of the energy that Southern Companies have for sale for each upcoming (DA or HA) auction period. Because more expensive units are brought into operation (or used more intensively) as demand levels increase, the Seller Offer Prices will increase with volume, and therefore the resulting Seller Offer Curve will generally slope upwards to the right.
- c. Potential buyers in the auction (referred to as Bidders) will bid for the energy made available from Southern Companies' generating units. The bids from multiple buyers and for multiple energy blocks will be combined into a “market demand curve” that will slope downwards from the left.



- d. The prices paid by buyers for the respective energy products bought through the auctions and the prices received by Southern Companies for the energy products sold through the auctions, each will be determined by the intersection of the buyers' downward sloping market demand curves and the upward sloping Seller Offer Curves. All buyers will pay the same market-clearing price for the same product purchased via a given auction.
- e. In the DA auctions, 50 MW blocks will be traded. In the HA auction, the traded blocks can be any amount in increments of 1 MW.
- f. There will be two separate DA auctions. The product that trades in one of these auctions, the Firm DA Auction, will be Firm LD as defined in the EEI Master Purchase and Sale Agreement, for a term of 16 hours beginning 0600 Central Prevailing Time (CPT) of the delivery day and ending at 2200 CPT on the delivery day. This product is referred to as Firm LD Energy herein. Southern Companies also will conduct a separate DA auction, the Recallable DA Auction, for Recallable Energy.<sup>6</sup> Recallable Energy is defined as energy sold on a DA basis whereby the seller, upon experiencing a supply side disruption, has the right, but not the obligation, to curtail such energy. Recallable Energy will have a term of 16 hours beginning 0600 CPT of the delivery day and ending at 2200 CPT on the delivery day. The amount of capacity offered in the Recallable DA Auction will be that determined as necessary to maintain reliable operation of the system. Potential buyers will have the opportunity to bid in the Firm DA Auction, the Recallable DA Auction, or both.
- g. There will be an HA auction each hour. The product that trades in the HA auction will be non-firm for delivery in the upcoming clock hour.
- h. The HA auction will take place for every hour of every day, including normal business days, weekends and NERC holidays provided that

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<sup>6</sup> The capacity offered in the Recallable DA Auction will not be offered in the Firm DA Auction.

Southern Companies have energy to sell on each of the hours of each of these days. The DA auctions will take place every Monday-Friday, excluding NERC holidays, provided that Southern Companies have energy to sell on each of these days. Southern Companies will have the option but not the obligation to implement a DA auction for the weekend days and NERC holidays.

- i. Deliveries of the products purchased in the auctions will be made at points within the Southern BAA not subject to transmission operational constraints. Buyers will be responsible for meeting all transmission and scheduling requirements.
- j. For buyers transacting for electricity supplies from Southern Companies, the DA and HA auctions provide an alternative mechanism to existing bilateral markets but will not replace those existing bilateral markets. The DA and HA auctions thus are not intended to be the exclusive vehicle for electricity transactions with Southern Companies. Buyers in the auctions also will be able to pursue transactions outside the auction process, either with Southern Companies or with other parties.
- k. Similarly, Southern Companies will be free to pursue other energy (and capacity) transactions both inside and outside the Southern BAA, subject to specific restrictions for certain “Bid Period” transactions in the Southern BAA.<sup>7</sup> Because buyers have access to the DA and HA auctions and the Seller Offer Prices into these auctions are subject to cost-based caps, the prices charged by Southern Companies’ for their out-of-auction transactions—both inside and outside the Southern BAA and for any

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<sup>7</sup> The “Bid Period” for the two DA auctions will run between 1200 CPT two days before the delivery day and 0630 CPT on the day before the delivery day. The Bid Period for the HA auction will run between 60 minutes prior to beginning of the delivery hour and 45 minutes prior to the beginning of the delivery hour. The Seller Offer Prices and the Seller Offer Curve will be finalized by one hour before the close of the Bid Period for the DA Auction and by five minutes before the close of the Bid Period for the HA Auction. The remaining portion of the Bid Period is referred to as the “lock down” period. For the products sold in the DA auctions, Southern Companies will not make any DA sales for delivery inside the Southern BAA during the Bid Period. Likewise, for the product sold in the HA auction, Southern Companies will not make any sales for delivery inside the Southern BAA during the Bid Period.

duration and product type—will not be subject to any cost-based or other limits on the prices charged.

- l. The DA auctions will close at 0630 CPT on the day before the delivery day. Thus, the DA auctions will be conducted in a time frame so as to allow the consummated transactions to be reflected in Southern Companies' unit commitment process for the delivery day. This time frame will also allow both Southern Companies and auction buyers to make out-of-auction transactions after the close of the DA auctions but prior to the finalization of Southern Companies' unit commitment process. Closing the DA auction on the day before delivery also enables unsuccessful bidders to assess their supply options and, if they choose to do so, participate in the HA auction.
- m. The HA auctions will conclude 45 minutes prior to the delivery hour. This time frame should be sufficient so as to allow both Southern Companies and potential buyers to consummate other (out-of-auction) transactions before the beginning of the delivery hour and to allow buyers to arrange delivery of their auction-procured supplies.
- n. Southern Companies will administer the auctions using “support employees” as that term is used in 18 C.F.R. §358.4(a)(4). Southern Companies' employees that are directly engaged in wholesale electricity marketing and trading will not have any access to bid information for any purpose, except to the extent that it is made available to all auction participants. Thus, the employees that are involved in developing the Seller Offer Prices and Seller Offer Curves will not know what demand bids have been submitted by Bidders.
- o. Southern Companies will retain the services of an Independent Auction Monitor (IAM) to ensure that the auctions are properly conducted in accordance with the approved market rules. Among other things, the IAM will monitor and review the amount of supply that Southern Companies offer through the auctions, the calculation of the Seller Offer Prices and

Seller Offer Curves, the determination of successful bidders, the information restrictions related to bid information, and other matters reasonably related to the performance and integrity of the auction process.

- p. The clearing prices from the DA and HA auctions will be posted after the close of each bid period.

#### **IV. ADDRESSING POTENTIAL MARKET POWER CONCERNS**

- 11. This section of my affidavit describes the manner in which Southern Companies' Auction Proposal addresses potential market power concerns.
- 12. Market power is the ability of one supplier, or a group of suppliers, profitably to raise prices above competitive levels by a significant amount for a non-transitory time period. Market power is sometimes classified as either "horizontal" market power or "vertical" market power. The Commission's indicative screens focus on horizontal market power and so that is the focus of the discussion herein. Concerns about horizontal market power can arise when a single supplier or small number of suppliers holds "too great" of a portion of the capacity that can supply a market (and where other conditions, such as relative ease of entry and the availability of close substitutes, are not present).
- 13. An electric generator that has horizontal market power can exercise it by withholding otherwise economic (*i.e.*, "in-the-money") generating capacity from the market or by offering it to the market only at a price that is "too high". The former is sometimes referred to as "physical withholding" while the latter is sometimes referred to as "economic withholding". In either case, however, the effects are the same: the market must call on higher cost generating resources to meet total demand than it would otherwise. The need to call on these higher cost generating resources causes the market-clearing prices to rise. An electric generator that possesses and exercises market power theoretically loses money on the supply that it withholds—since that withheld capacity receives no market revenue—but, if its strategy is successful, the losses incurred for the withheld capacity are more than offset by higher profits from its generators that continue to

operate. Those generators that continue to operate reap higher profits than they would have without the withholding strategy because the withholding strategy, if successful, has increased the market price above the level that would prevail otherwise.<sup>8</sup>

14. The exercise of market power by electric generators results in both an inefficient commitment and dispatch process—because a more costly than necessary mix of generators is used to meet market demand—and a transfer of wealth from purchasers to generators—because the market-clearing prices are higher than they would be otherwise.
15. As indicated, a key ingredient of a strategy for an electric generator to exercise horizontal market power is withholding otherwise economic generating capacity and forcing the market to call upon higher cost generating resources to meet market demand. Southern Companies’ Energy Auction Proposal directly addresses potential concerns about both physical and economic withholding.
16. The Energy Auction Proposal directly addresses any potential concerns about physical withholding because it includes a “must offer” obligation that encompasses all of Southern Companies’ available and uncommitted thermal generation capacity. While the precise mechanics of the process differ somewhat between the DA and HA auctions, and between the Firm DA Auction and the Recallable DA Auction, the overall principles are the same for each. Thus, under the Energy Auction Proposal, Southern Companies will first determine their total generating capacity including owned generating units and third-party purchases.

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<sup>8</sup> Of course, any attempt by a generation owner to exercise market power via a withholding strategy is likely to be much more complicated than this simple explanation suggests. Several factors must be considered in assessing whether market power actually can be exercised by a particular supplier including, among other things, the need for that supplier to meet its load and contractual supply obligations, alternatives available to the buyers (including self-supply and purchases from out of the BAA market area being studied), uncertainty about the responses of other suppliers to the withholding, how any withholding will affect market price, the extent to which the operating characteristics of the generation owners are consistent with a withholding strategy and the regulatory sanctions that could be triggered by an attempt to exercise market power.

From this amount they will make two general subtractions, neither of which present concerns about inappropriate withholding. First, Southern Companies will subtract the portion of their total generating capacity that is unavailable due to planned or existing outages, derates or operational constraints. Second, Southern Companies will subtract the amount of capacity that is already committed (*i.e.*, for meeting native load, for providing operating reserves and for meeting third-party contractual obligations). The remaining amounts constitute Southern Companies' "available capacity", all of which will be offered into the auctions. *The offering to the market of all available capacity directly counters any concern that Southern Companies might be able to engage in physical withholding and, indeed, is fundamentally inconsistent with any such practice.*

17. Importantly, under the Auction Proposal Southern Companies will not be offering to the market a pre-determined amount of capacity—for example, that which would suffice to bring their indicative screen or DPT results within "safe harbor" levels. Instead, Southern Companies will be offering through the auctions *all* of their available and uncommitted thermal generating capacity, as described above. At some times (*e.g.*, when Southern Companies' load obligations are relatively high and/or they are experiencing significant generator outages), the amount that is offered through the auctions could be relatively low, or even zero. At other times, however, the quantities will be substantial. But in any event the amount of capacity that is offered through the auctions will not be related to the amount of any indicative screen or DPT "failures" but instead will be all that is available.
18. The Energy Auction Proposal also directly addresses any potential concerns about economic withholding because Southern Companies' Seller Offer Prices will be capped using cost-based pricing principles that previously have been accepted by the Commission as appropriate to address concerns about the exercise of horizontal market power. By definition, therefore, the Seller Offer Prices are not "too high" and cannot be construed as embodying economic withholding.

Southern Companies propose that the Seller Offer Prices will be capped at variable cost plus 10 percent plus a demand charge.<sup>9</sup>

19. This approach (variable cost + 10 percent + a demand charge) is consistent with what the Commission has accepted as a cost based mitigation method for companies that have market power within their respective BAAs. (e.g., *Duke Power*, letter order issued in Docket No. ER05-1272 on April 13, 2005 and *AEP Power*, letter order issued on January 13, 2006 in Docket No. ER96-2495). Southern Companies will be using the demand charge based on the outcome of the contemporaneously filed Docket No. ER09-\_\_\_\_-000, concerning their cost-based rate wholesale sales proposal.
20. The Energy Auction Proposal also contains other important features that guard against the potential exercise of market power by Southern Companies. Given the Seller Offer Curve and the demand bids of potential buyers, the determination of the market-clearing price will be formulaic. Moreover, Southern Companies will engage the IAM to ensure that the auctions are being properly administered in accordance with the auction rules. The IAM will be tasked specifically with reviewing Southern Companies' determination of the amount of capacity that they will offer in the auctions. In this function, it will address potential concerns about physical withholding. The IAM also will be tasked specifically with reviewing Southern Companies' determination of their Seller Offer Prices. In this function it will address potential concerns about economic withholding. As well, as per the MBR Tariff, the IAM (and the Commission's Office of Enforcement) will have access to "all pertinent documentation associated with auction decisions".<sup>10</sup>

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<sup>9</sup> It is the Seller Offer Prices that will be capped. However, at times the market-clearing price can rise above the capped Seller Offer Price for the marginal output block. The markets will clear at the point where the downward sloping market demand curves intersects the upward sloping Seller Offer Curves. The incremental costs for consecutive "blocks" of Southern Companies' capacity may be such that there are discontinuities in the Seller Offer Curves at some points. It is possible that, at times, the market demand curves will intersect the Seller Offer Curves in the "vertical" (i.e., discontinuous) segments. At such times, the market clearing price will be greater than the capped Seller Offer Price for the marginal output block.

<sup>10</sup> MBR Tariff at ¶ 4.3.2.

21. Additional comfort with regard to the integrity of the auction process is provided because Southern Companies' wholesale electricity marketing personnel will not have access to the bid data that the auction administration personnel receive.<sup>11</sup> Accordingly, even if the Seller Offer Prices were not constrained by other factors (which they are), the wholesale electricity marketing personnel will not have access to the actual buyer bid data that might allow them to alter the Seller Offer Prices to take advantage of less elastic demands. Further comfort on this score is provided by the "lock down" period pursuant to which the Seller Offer Prices and Seller Offer Curves are finalized before the potential buyers' demand bids will be finalized.
22. Under the Energy Auction Proposal, Southern Companies will offer a portion of its uncommitted generating capacity on a recallable basis. While necessary and appropriate for reliability reasons, the Energy Auction Proposal contains specific protections to address any concerns that Southern Companies might use this provision to withhold firm capacity from the market inappropriately. First, the IAM will have access to data to be able to monitor the process by which Southern Companies designate capacity as recallable. Second, to the extent that Southern Companies have designated capacity to be recallable, and therefore do not offer it in the Firm DA Auction, that capacity will be offered in the separate but simultaneous Recallable DA Auction.<sup>12</sup> Accordingly, the recallable capacity in fact will not be withheld. Moreover, during the delivery period, the Recallable Energy will be subject to recall only when supply side disruptions have occurred. Third, when Southern Companies have energy available to sell in the HA Auction, buyers of Recallable Energy will have the right (by paying the

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<sup>11</sup> Southern Companies' wholesale electricity marketing personnel will have access to bid data only to the same extent, if any, that all other auction participants have such access. For example, no earlier than six months after the delivery date for a particular auction, the auction administrator will make available on a per-request basis all bid information, with appropriate provisions to protect bidder identities.

<sup>12</sup> The design of the DA auctions will result in prices for Recallable Energy that are no greater than (or equal to) those for Firm Energy—thereby appropriately aligning relative prices and product value.



appropriate HA energy price) to “buy through” supply side disruptions that otherwise would result in curtailments. Finally, the rationale for not making recallable capacity available in the Firm DA Auction—associated with the possibility that outages might occur between the lock down of the Seller Offer Curve and the delivery period—does not arise to the same extent in the HA auction. The fact that Southern Companies will offer this Recallable Energy initially in the separate Day-Ahead Auction and subsequently, if not purchased, in the Hour-Ahead Auction, addresses any concerns that Southern Companies would be inappropriately withholding this capacity from the market.<sup>13</sup>

23. The Energy Auction Proposal will result in a higher degree of price transparency than is the case today for bilateral electricity transactions in the Southern BAA or the southeastern U.S. generally. Today publicly-available pricing information for day ahead energy transactions in the Southern BAA and other portions of the southeast is available from index providers such as Megawatt Daily and ICE. These provide daily high, low and average prices for various pricing points, including the Southern BAA, based on a sample of such day ahead transactions. While certainly helpful to market participants, pricing transparency will be greatly enhanced by the information resulting from the Energy Auction Proposal, especially with the development of a new hourly spot-market price index. Price information for bilateral transactions also is available from the Commission’s Electric Quarterly Report system, but that information is subject to substantial interpretational difficulties and, in any case, is available only with a substantial time lag.
24. Under the Energy Auction Proposal, qualified bidders will have access to the auctions’ market clearing prices, as reported on the auction platform, shortly after

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<sup>13</sup> Of course, it is possible that the concern that caused the capacity to be designated as recallable in the first place might cause it to be removed from service between the beginning of the lock down period for the DA auctions and the HA auctions the next day. It is also possible that the recallable capacity was not committed day ahead. In such cases, of course, the recallable capacity would not be offered in the HA auction.

the close of each bid period. Moreover, I understand that Southern Companies are willing to provide the auction prices and volumes to index developers, provided such reporting qualifies for the Commission's "safe harbor" protection. Accordingly, the market clearing prices from the auctions will provide more timely, transparent signals associated with transactions cleared through the Southern BAA, and would be indicative of market prices in the Southeast.

25. The Energy Auction Proposal does not cover sales made by Southern Companies outside the Southern BAA. This is appropriate because it is only in the Southern BAA where the Commission has made a presumption that Southern Companies possess market power. Accordingly, Southern Companies' wholesale electricity sales outside the Southern BAA, including those at the border between the Southern BAA and adjacent BAAs, are not affected by the Energy Auction Proposal.
26. Apart from certain restrictions during the bid period, the Energy Auction Proposal does not prohibit other market-based electricity sales that Southern Companies might make inside the Southern BAA. This is appropriate. The ability of customers to buy wholesale electricity in the DA and HA auctions under the procedures of the Energy Auction Proposal serves as a "fallback" mechanism and therefore protects against the exercise of market power by Southern Companies both in the auction markets and for all other sales in the Southern BAA.
27. In this regard, the Energy Auction Proposal is similar to the systems used to address concerns about the exercise of local market power in PJM. Sellers that are believed to have market power in these local market areas in PJM are subject to cost-based caps for their offers into both the DA and real-time energy markets run by PJM, but are not subject to analogous cost-based caps on bilateral transactions outside PJM's formal markets. Rather, market power protection in these other markets is provided by the possibility of arbitrage between these other markets and the directly mitigated DA and real-time markets operated by PJM.

The Commission explicitly recognized in Order No. 697-A that the potential for arbitrage between markets could allow protections in one market also to prevent the exercise of market power in other markets as well. In Order No. 697-A, the Commission concluded that centralized bid-based RTO/ISO markets “will discipline a seller’s attempt to exercise market power in long-term contracts because the would-be buyer can always purchase from the short-term market if a seller tries to charge an excessive price.”<sup>14</sup> Just as the potential for arbitrage between the RTO/ISO administered short-term markets and long-term markets disciplines market power in the long-term markets, so too would other (*i.e.*, not centralized) short-term market mechanisms serve to discipline long-term markets. Indeed, such discipline would extend to other short term markets as well.

## **V. SUMMARY AND CONCLUSION**

28. As previously stated, I do not believe that, in fact, Southern Companies possess or can exercise market power over wholesale sales of electricity in the Southern BAA. Nevertheless, in an attempt to address concerns that they possess market power over wholesale sales of electricity in the Southern BAA, Southern Companies have developed an Energy Auction Proposal designed to mitigate any such perceived market power concerns.
29. Under the Energy Auction Proposal, Southern Companies will offer all of their available capacity into DA and HA energy auctions at prices no greater than cost-based caps and potential buyers will make bids for the output from that capacity. Each market will clear at the point where the potential buyers’ downward sloping demand curve intersects Southern Companies’ upward sloping Seller Offer Curve. All buyers will pay, and Southern Companies will be paid, the same market-clearing price for the applicable energy product.
30. The essence of an exercise of horizontal market power is the physical or economic withholding of otherwise in-the-money generation capacity. The

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<sup>14</sup> Order No. 697-A at P 285.

Energy Auction Proposal directly addresses potential concerns about physical withholding since it imposes a “must offer” requirement on Southern Companies that encompasses all of its available and uncommitted generation capacity. The Energy Auction Proposal directly addresses potential concerns about economic withholding by Southern Companies since it caps their offer prices at cost-based levels deemed by the Commission to be sufficient to prevent the exercise of market power. The Energy Auction Proposal also incorporates several other features discussed above that mitigate concern about Southern Companies’ ability to exercise market power. These include the use of separate DA and HA auctions (and the use of both firm and recallable DA auctions), the review and oversight role of the IAM, the formulaic determination of market-clearing prices and quantities, the lock down of the Seller Offer Prices and Seller Offer Curves, and enhanced price transparency.

31. The Energy Auction Proposal is being offered as an additional mechanism for electricity trades in the Southern BAA. As such, it supplements but does not replace existing bilateral trading mechanisms. Southern Companies’ sales in the Southern BAA that are made outside the DA and HA auctions would not be subject to the offer price limits under the Energy Auction Proposal. This is appropriate because of the market power protection provided by the cost-based offer caps and other features of the Energy Auction Proposal, coupled with the ability of customers to arbitrage between other trading mechanisms and the mitigated DA and HA markets created by the Energy Auction Proposal.
32. Even absent the proposed energy auctions, I do not believe that Southern Companies actually possess or could exercise market power over wholesale sales of electricity in the Southern BAA. To the extent such concerns are deemed present, however, they are fully addressed by Southern Companies’ Energy Auction Proposal. Accordingly, the Energy Auction Proposal should be accepted by the Commission.

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

Southern Company Services, Inc. *et al.*        )    Docket No. ER09-\_\_\_\_-\_\_\_\_

**Affidavit of Rodney Frame**

Rodney Frame, being first duly sworn, deposes and says that he has read the foregoing Affidavit of Rodney Frame, and that the matters and things set forth therein are true and correct to the best of his knowledge, information, and belief.

  
\_\_\_\_\_  
Rodney Frame

Sworn to and subscribed before me this 17<sup>th</sup> day of October, 2008.

  
\_\_\_\_\_  
Richard Peeks  
Notary Public

**My Commission Expires  
December 14, 2011**

**ATTACHMENT 1**

**RODNEY FRAME**  
**Managing Principal**

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Mr. Frame has consulted with electric utility clients on a variety of matters including industry restructuring, retail competition, wholesale bulk power markets and competition, market power and mergers, transmission access and pricing, contractual terms for wholesale service, and contracting for non-utility generation. A substantial portion of the work has been in conjunction with litigated antitrust and federal and state regulatory proceedings.

Mr. Frame frequently speaks before electric industry groups on competition-related topics. He has testified in federal and local courts, before federal and state regulatory commissions, and before the Commerce Commission of New Zealand.

Prior to joining Analysis Group, Mr. Frame was a Vice President at National Economic Research Associates. Mr. Frame graduated from George Washington University and pursued graduate work there under a National Science Foundation Traineeship. His areas of specialization were public finance and urban economics. He completed all requirements for his Ph.D. degree in economics with the exception of the thesis.

**EDUCATION**

1970	B.B.A., George Washington University
1970 - 73	Ph.D. coursework (all requirements for degree in economics completed except thesis), George Washington University

**PROFESSIONAL EXPERIENCE**

1998 -	Analysis Group <i>Managing Principal</i>
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- 1984 - 1998      National Economic Research Associates  
*Vice President and Senior Consultant.* Participated in projects dealing with retail competition, wholesale competition, market power assessment and determination of relevant markets for electricity supply, electric utility mergers, transmission access and pricing, partial requirements ratemaking, contractual terms for wholesale service, and contracting for non-utility generation supplies. Principal clients were investor-owned electric utilities.
- 1975 - 1984      Transcomm, Inc.  
*Senior Economist.* Worked on a variety of projects concerning market structure, pricing and cost development in regulated industries. Clients included the U.S. Departments of Commerce, Defense and Energy, the Nuclear Regulatory Commission, the State of Oregon, bulk mailers and various communications equipment manufacturers and service providers. Participated in numerous federal and state regulatory proceedings and was principal investigator for a multi-year Department of Energy study addressing various aspects of electric utility competition.
- 1974 - 1975      *Independent Economic Consultant*  
Advised telephone equipment manufacturers concerning cost and rate development for competitive telephone offerings, analyzed alternative travel agent compensation arrangements and examined nonbank activity by bank holding company firms.
- 1973 - 1974      Program of Policy Studies in Science and Technology  
*Research Staff*
- 1973              Urban Institute  
*Research Staff*

#### TESTIFYING EXPERIENCE

- Affidavit on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. ER97-2801 *et al.*, providing updated delivered price test and other analyses in support of continued market-based pricing by PacifiCorp after its acquisition of new generation capacity and after commercial operation of new generating facilities, October 15, 2008.
- Affidavit on behalf of MidAmerican Energy Holdings Company, before the Federal Energy Regulatory Commission in Docket No. EC09-\_\_\_\_, concerning competitive analyses raised by MEHC's proposed merger with Constellation Energy Group, October 14, 2008.
- Additional Affidavit on behalf of the FirstEnergy Operating Companies *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER01-1403 *et al.*, providing revised pivotal supplier and market share screen analyses to reflect updated simultaneous import limit values, September 2, 2008.
- Additional Affidavit on behalf of Public Service Electric and Gas Company *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER99-3151 *et al.*, providing revised indicative screen and DPT analyses to reflect updated simultaneous import limit values, and assessing the need for additional market power mitigation measures, September 2, 2008.



- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER08-\_\_\_\_, *et al.*, providing updated indicative screen analyses, September 2, 2008.
- Affidavit on behalf of Berkshire Power Company, LLC and Waterside Power, LLC, before the Federal Energy Regulatory Commission in Docket Nos. ER99-3502-000 and ER02-1884-000, applying the Commission's pivotal supplier and market share screens, June 30, 2008.
- Affidavit on behalf of Astoria Energy LLC, before the Federal Energy Regulatory Commission in Docket No. ER01-3103-\_\_\_\_, applying the Commission's pivotal supplier and market share screens, June 30, 2008.
- Affidavit on behalf of MidAmerican Energy Holdings Company, before the Federal Energy Regulatory Commission in Docket No. ER96-719-002 *et al.*, applying the Commission's pivotal supplier and market share screens, June 30, 2008.
- Affidavit on behalf of Black River Generation, LLC and Northbrook New York, LLC, before the Federal Energy Regulatory Commission in Docket Nos. ER04-617-003 and ER99-3911-006, applying the Commission's pivotal supplier and market share screens, June 2, 2008.
- Affidavit on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. EC08-\_\_\_\_, concerning competitive issues raised by PacifiCorp's proposed acquisition of Chehalis Power Generating, LLC, April 29, 2008.
- Affidavit on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. ER97-2801 *et al.*, providing updated indicative horizontal market power screen, delivered price test and other analyses to support continued market-based pricing by PacifiCorp after its acquisition by contract of new generation capacity and after commercial operation of certain new generating facilities, March 31, 2008.
- Supplemental affidavit on behalf of the FirstEnergy Operating Companies *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER01-1403 *et al.*, responding to intervenor arguments supporting certain adjustments to previously-submitted horizontal market power screen analyses, March 31, 2008.
- Affidavit on behalf of Idaho Power Company, before the Federal Regulatory Commission in Docket No. ER97-1481, updating Idaho Power's market screen analysis to reflect the addition of its new Danskin No. 1 generator, March 21, 2008.
- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER96-780 *et al.*, providing updated market screen analyses to support continued market-based pricing by those affiliates after the operation of Southern Power Company's new Franklin 3 generating facility, February 11, 2008.
- Affidavit on behalf of Public Service Electric and Gas Company *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER99-3151 *et al.*, applying the Commission's pivotal supplier and market share screens to Public Service Electric and Gas Company and its affiliates, providing a delivered price test analysis for PJM East and assessing the need for additional market power mitigation measures, January 14, 2008.

- Affidavit on behalf of the FirstEnergy Operating Companies *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER01-1403 *et al.*, applying the Commission's pivotal supplier and market share screens to the FirstEnergy Operating Companies, January 14, 2008.
- Affidavit on behalf of FirstEnergy Mansfield Unit 1 Corp, before the Federal Energy Regulatory Commission in Docket No. ER08-107, assessing the appropriateness of market-based rate authority for FirstEnergy Mansfield, October 26, 2007.
- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER96-780 *et al.*, providing updated market screen analyses to support continued market-based pricing by those affiliates after Southern Companies' purchase of capacity and energy from Calpine, August 31, 2007.
- Affidavit on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. ER97-2801, providing updated delivered price test and other analyses to support continued market-based pricing by PacifiCorp after commercial operation of its new Lake Side, Marengo and Goodnoe Hills generating facilities, August 27, 2007.
- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. RM04-7-000, identifying and assessing the significance of various aspects of FERC's Order No. 697, its Final Rule pertaining to regulations governing market-based rate authority for wholesale sales of electricity, July 23, 2007.
- Affidavit on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. ER97-2801 *et al.*, providing updated market screen analyses to support continued market-based pricing by PacifiCorp after commercial operation of its new Lake Side, Marengo and Goodnoe Hills generating facilities, June 8, 2007.
- Affidavit on behalf of affiliates of MidAmerican Energy Holdings Company, before the Federal Energy Regulatory Commission in Docket No. ER96-719 *et al.*, concerning the extent to which MidAmerican Energy Company's operation of Council Bluffs Energy Center Unit 4, the Victory Wind Project and the Pomeroy Wind Project represents a significant change in status regarding the characteristics relied upon by the Commission in granting market-based pricing authority to affiliates of MEHC, March 2, 2007.
- Rebuttal Testimony on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. EL04-124 *et al.*, concerning various computational and conceptual issues that arise in applying the Commission's delivered price test to Southern Companies for the Southern Control Area, February 20, 2007.
- Affidavit on behalf of PSEG Energy Resources & Trade LLC *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER99-3151 *et al.*, applying the Commission's pivotal supplier and wholesale market share screens to Public Service Electric and Gas Company and its affiliates, November 29, 2006.
- Affidavit on behalf of PacifiCorp and PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2801 *et al.*, providing revised delivered price test analyses to support continued market-based rate authority by PacifiCorp and PPM Energy, Inc., November 6, 2006.

- Affidavit on behalf of Southern Company Services, Inc. *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER96-780 *et al.*, concerning the extent to which Southern Company's acquisition of the Rowan generating station represents a significant change in status regarding the characteristics relied upon by the Commission in granting market-based pricing authority to affiliates of Southern Company, October 2, 2006.
- Affidavit on behalf of Oleander Power Project, L.P., before the Federal Energy Regulatory Commission in Docket No. ER00-3240-\_\_\_, applying the Commission's pivotal supplier and wholesale market share screens to affiliates of Southern Company, September 27, 2006.
- Direct Testimony on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. ER04-124 *et al.*, applying the Commission's delivered price test to Southern Companies for the Southern Control Area, September 18, 2006.
- Supplemental Testimony on behalf of PacifiCorp, before the Federal Energy Regulatory Commission in Docket No. ER97-2801-007 and ER97-2801-010, providing updated market screen, delivered price test and other analyses to support continued market-based pricing by PacifiCorp after commercial operation of its new Currant Creek, Goshen and Leaning Juniper generators, August 21, 2006.
- Affidavit on behalf of various affiliates of D.E. Shaw, before the Federal Energy Regulatory Commission in Docket No. ER03-879 *et al.*, applying the Commission's pivotal supplier and wholesale market share screens to the D.E. Shaw affiliates, July 24, 2006.
- Affidavit on behalf of DeSoto County Generating Company, LLC, before the Federal Energy Regulatory Commission in Docket No. ER03-1383 *et al.*, demonstrating that the company's acquisition by Southern Power allows certain restrictions on its market-based rate authority to be removed, June 30, 2006.
- Affidavit on behalf of Southern Power Company, before the Federal Energy Regulatory Commission in Docket No. EC06-132-000, concerning competitive issues raised by Southern Power's proposed acquisition of Rowan County Power, LLC from Progress Energy, June 16, 2006.
- Affidavit on behalf of MidAmerican Energy Company and its affiliates, before the Federal Regulatory Commission in Docket No. ER96-719-\_\_ *et al.*, examining the extent to which MidAmerican's acquisition of PacifiCorp presents a departure from the conditions relied upon by the Commission in granting market-based rate authority to MidAmerican and its affiliates, April 20, 2006.
- Affidavit on behalf of Southern Power Company, before the Federal Energy Regulatory Commission in Docket No. EC06-112-000, concerning competitive issues raised by Southern Power's acquisition of the DeSoto Generating Station from Progress Energy, April 14, 2006.
- Affidavit on behalf of PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. EL05-95-\_\_\_ and ER03-478-\_\_\_, providing a market screen analysis to reflect the change of status as a result of the acquisition of PPM's former affiliate PacifiCorp by MidAmerican Energy Holdings Company, April 10, 2006.

- Supplemental Testimony on behalf of PacifiCorp and PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2801-006 *et al.*, providing additional market screen and delivered price test analyses to assess whether PacifiCorp and PPM have market power for wholesale sales of electricity, March 29, 2006.
- Supplemental Testimony on behalf of Public Service Electric and Gas Company and Exelon Corporation (with Michael M. Schnitzer), before the State of New Jersey Board of Public Utilities in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874, addressing analyses provided by PJM's Market Monitoring Unit and market power mitigation measures proposed by Joint Petitioners, March 17, 2006.
- Affidavit on behalf of PSEG Power Connecticut, LLC, before the Federal Energy Regulatory Commission in Docket No. ER99-967-\_\_\_, applying the Commission's pivotal supplier and wholesale market share screens to PSEG Connecticut, February 28, 2006.
- Affidavit on behalf of Union Electric Company d/b/a AmerenUE and NRG Audrain Generating, LLC, before the Federal Energy Regulatory Commission in Docket No. EC06-55-000, concerning competitive issues raised by AmerenUE's proposed acquisition of the Audrain generating station from NRG, December 28, 2005.
- Affidavit on behalf of Union Electric Company d/b/a AmerenUE and affiliates of Aquila, Inc. before the Federal Energy Regulatory Commission in Docket No. EC06-56-000, concerning competitive issues raised by AmerenUE's proposed acquisition of the Goose Creek and Raccoon Creek generating stations from Aquila, December 28, 2005.
- Supplemental Rebuttal Testimony on behalf of Public Service Electric and Gas Company and Exelon Corporation, before the Board of Public Utilities of New Jersey in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874-05, responding to testimony on behalf of the BPU staff concerning the horizontal competitive effects of the proposed merger of Public Service Enterprise Group and Exelon, December 12, 2005.
- Rebuttal Testimony on behalf of Public Service Electric and Gas Company and Exelon Corporation, before the Board of Public Utilities of New Jersey in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874-05, responding to intervenor concerns about the competitive effects of the proposed merger of Public Service Enterprise Group and Exelon, December 5, 2005.
- Affidavit on behalf of Electric Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER05-1482-000, applying the Commission's pivotal supplier and wholesale market share screens to the Electric Energy, Inc. control area, November 3, 2005.
- Direct Testimony on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. EL04-124 providing various delivered price test analyses to support Southern Companies' request for continuing market-based rate authority, September 20, 2005.
- Surrebuttal Testimony on behalf of the Ameren Companies, before the Illinois Commerce Commission in Docket No. 05-0160 *et al.*, responding to intervenor concerns about the underlying maturity and competitiveness of the wholesale electricity markets in which Illinois BGS auction participants can procure the wholesale supplies needed to support their auction bids, August 29, 2005.

- Additional Testimony on behalf of Public Service Electric and Gas Company, before the State of New Jersey Board of Public Utilities in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874-05, that addresses the effect of the proposed merger of PSEG and Exelon on competition in the New Jersey Basic Generation Service Auction and that applies FERC's market power screen measures to the post-merger firm, August 15, 2005.
- Rebuttal Testimony on behalf of the Ameren Companies, before the Illinois Commerce Commission in Docket No. 05-0160 *et al.*, responding to intervenor arguments that there are likely to be competitive problems with Ameren's proposed competitive procurement of wholesale supplies used to provide "basic generation service," July 13, 2005.
- Direct Testimony on behalf of PacifiCorp and PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2801-\_\_ *et al.*, providing a delivered price test and other evidence rebutting the Commission's presumption that PacifiCorp and PPM possess market power over wholesale sales of electricity, July 8, 2005.
- Supplemental Affidavit on behalf of PacifiCorp and PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2801-\_\_ *et al.*, providing additional information and analyses concerning the application of the Commission's pivotal supplier and wholesale market share screens to PacifiCorp and PPM, June 8, 2005.
- Affidavit on behalf of Astoria Energy, LLC, before the Federal Energy Regulatory Commission in Docket No. ER01-3103-\_\_\_, applying the Commission's pivotal supplier and wholesale market share screen to Astoria, May 23, 2005.
- Supplemental Testimony on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER97-4166-015 *et al.*, responding to issues raised by intervenors Calpine Corporation and Shell Trading Gas and Power Company concerning the "delivered price test" competitive analysis provided by Southern Company, May 16, 2005.
- Affidavit on behalf of Lake Road Generating Company, L.P., before the Federal Energy Regulatory Commission in Docket No. ER99-1714-\_\_\_, applying the Commission's pivotal supplier and wholesale market share screens to Lake Road, May 13, 2005.
- Supplemental Testimony on behalf of Public Service Electric and Gas Company, before the State of New Jersey Board of Public Utilities in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874-05, addressing revised market power mitigation proposal of merging parties PSEG and Exelon Corporation, May 12, 2005.
- Affidavit on behalf of Idaho Power Company, before the Federal Regulatory Commission in Docket No. ER97-1481-009, updating Idaho Power's market screen analysis to reflect the addition of its new Bennett Mountain generator, May 2, 2005.
- Affidavit on behalf of Southern Power Company, before the Federal Energy Regulatory Commission in Docket No. EC05-71-000, concerning competitive issues raised by Southern's proposed acquisition of the Oleander Power Project from Constellation Energy Group, April 20, 2005.
- Affidavit on behalf of UGI Development Company and UGI Energy Services, before the Federal Energy Regulatory Commission in Docket No. ER97-2817 *et al.*, applying the Commission's pivotal supplier and wholesale market share screens to UGI, April 12, 2005.

- Affidavit on behalf of La Paloma Generating Company, LLC, before the Federal Energy Regulatory Commission in Docket No. ER00-107-\_\_\_\_, applying the Commission's pivotal supplier and wholesale market share screens to La Paloma and its affiliates, March 31, 2005.
- Supplemental Affidavit on behalf of the Detroit Edison Company and certain of its affiliates, before the Federal Energy Regulatory Commission in Docket No. ER93-324 *et al.*, providing additional information concerning the application of the Commission's new interim generation market power screens to Detroit Edison, March 21, 2005.
- Direct Testimony on behalf of Public Service Electric and Gas Company, before the State of New Jersey Board of Public Utilities, in BPU Docket No. EM05020106 and OAL Docket No. PUC-1874-05, assessing the competitive effects of the proposed merger of Public Service Enterprise Group Incorporated and Exelon Corporation, February 28, 2005.
- Direct Testimony on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER97-4166-015 *et al.*, providing a delivered price test and other evidence rebutting the Commission's presumption that Southern Company possesses market power over wholesale sales of electricity, February 15, 2005.
- Affidavit on behalf of PacifiCorp and PPM Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2801-005 *et al.*, applying the Commission's new pivotal supplier and wholesale market share screens to PacifiCorp and PPM, February 14, 2005.
- Affidavit on behalf of PSEG Lawrenceburg Energy Company LLC and PSEG Waterford Energy LLC, before the Federal Energy Regulatory Commission in Docket No. ER01-2460-002 *et al.*, applying the Commission's pivotal supplier and wholesale market share screens, February 7, 2005.
- Affidavit on behalf of the First Energy Operating Companies *et al.*, before the Federal Energy Regulatory Commission in Docket No. ER01-1403-\_\_\_\_ *et al.*, applying the Commission's pivotal supplier and wholesale market share screens, February 7, 2005.
- Supplemental Affidavit on behalf of Idaho Power Company, before the Federal Regulatory Commission in Docket No. ER97-1481-003, responding to issues raised in a Commission Staff letter relating to Idaho Power's application of the Commission's pivotal supplier and wholesale market share screens, January 19, 2005.
- Affidavit on behalf of various affiliates of Ameren Corporation, before the Federal Energy Regulatory Commission in Docket No. ER-01-294-002 *et al.*, applying the Commission's new pivotal supplier and wholesale market share screens to Ameren's affiliates, December 27, 2004.
- Affidavit on behalf of Detroit Edison and various of its affiliates, before the Federal Energy Regulatory Commission in Docket No. ER02-963-002 *et al.*, applying the Commission's new pivotal supplier and wholesale market share screens to Detroit Edison Company and its affiliates, December 23, 2004.
- Affidavit on behalf of various affiliates of Black Hills Corporation, before the Federal Energy Regulatory Commission in Docket No. ER-00-1952-000 *et al.*, applying the Commission's new pivotal supplier and wholesale market share screens to Black Hills' affiliates, December 23, 2004.

- Affidavit on behalf of Minnesota Power Company, before the Federal Energy Regulatory Commission in Docket No. ER01-2636-001, applying the Commission's new pivotal supplier and wholesale market share screens to Minnesota Power and its affiliates, November 9, 2004.
- Affidavit on behalf of Oasis Power Partners, LLC, before the Federal Energy Regulatory Commission in Docket No. ER05-\_\_\_-000, applying the Commission's new screens for market-based rate authority to enXco, the owner of OASIS, October 12, 2004.
- Affidavit on behalf of Idaho Power Company, before the Federal Energy Regulatory Commission in Docket No. ER97-1481-003, applying the Commission's new pivotal supplier and wholesale market share screens to Idaho Power Company, September 27, 2004.
- Affidavit on behalf of Alliant Energy Corporate Services, Inc. before the Federal Energy Regulatory Commission in Docket No. ER99-230-002, applying the Commission's new pivotal supplier and wholesale market share screens to Alliant Energy, August 20, 2004.
- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. ER96-2495-018 *et al.*, concerning the application of the Commission's new screens for determining the appropriateness of market-based rate authority to Southern Company, August 9, 2004.
- Affidavit on behalf of Fulton Cogeneration Associates, L.P. and Renssalaer Plant Holdco, L.L.C. in Docket No. ER04-1044-000, ER04-1045-000 and ER04-1046-000 before the Federal Energy Regulatory Commission applying FERC's new screens for determining the appropriateness of market-based rate authority, July 28, 2004.
- Rebuttal Testimony on behalf of Ameren Corporation, before the Illinois Commerce Commission in Docket No. 04-0294, concerning issues raised by Ameren's acquisition of Illinois Power Company, July 23, 2004.
- Direct Testimony on behalf of Ameren Energy Marketing Company and Central Illinois Public Service Company d/b/a AmerenCIPS, before the Federal Energy Regulatory Commission in Docket No. ER04-\_\_\_, concerning competitive issues raised by the two year extension of a power supply agreement between AEM and AmerenCIPS, July 9, 2004.
- Affidavit on behalf of Constellation Generation Group, before the New York State Public Service Commission in Case No. 04-E-0630, concerning competitive issues raised by Constellation's proposed acquisition of an interest in the Flat Rock Wind Project currently in development, May 27, 2004.
- Additional Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. PL02-8-000 *et al.*, addressing the new market power screens and mitigation rules contained in the Commission's April 14, 2004 Order on Rehearing (107 FERC ¶ 61,018), May 14, 2004.
- Affidavit on behalf of Interstate Power and Light Company, before the Federal Energy Regulatory Commission in Docket No. EC04-61-000, concerning competitive issues raised by IPL's acquisition of an additional interest in the George Neal Generating Station Unit 4, April 26, 2004.

- Direct Testimony on behalf of Ameren Corporation and Dynegy, Inc. before the Federal Energy Regulatory Commission in Docket No. EC04-81-000, concerning competitive issues raised by Ameren's proposed acquisition of Illinois Power Company, March 25, 2004.
- Affidavit on behalf of Constellation Energy Group and Rochester Gas and Electric Corporation, before the Federal Energy Regulatory Commission in Docket No. EC04-79-000, concerning competitive issues raised by Constellation's proposed acquisition of the R.E. Ginna Nuclear Generating Station from Rochester Gas and Electric Corporation, March 23, 2004.
- Affidavit on behalf of Constellation Energy Group and Rochester Gas and Electric Corporation, before the New York State Public Service Commission in Case No. 03-E-1231, concerning competitive issues raised by Constellation's proposed acquisition of the R.E. Ginna Nuclear Generating Station from Rochester Gas and Electric, February 2, 2004.
- Rebuttal Testimony on behalf of Southern Power Company, before the Federal Energy Regulatory Commission in Docket No. ER03-713-000 *et al.*, responding to claims of intervenor witnesses that Southern Power Company's long-term power sales to its Georgia Power Company and Savannah Electric and Power Company affiliates, among other things, represent "affiliate abuse," embody cross-subsidization, are a result of improper advantages and otherwise adversely affect wholesale competition, and rejecting intervenor's proposed recommendations as anti-competitive, designed to reward inefficient competitors and likely to increase customers' costs, January 31, 2004.
- Second Affidavit on behalf of Ameren Energy, Inc. and other affiliates of Ameren Corporation, before the Federal Energy Regulatory Commission in Docket No. ER01-294 *et al.*, responding to intervenor arguments concerning the manner in which the Commission's SMA test should be applied to Ameren, January 15, 2004.
- Affidavit on behalf of various affiliates of Southern Company, before the Federal Energy Regulatory Commission in Docket No. PL02-8-000 *et al.*, addressing alternatives to the SMA and proposed market power mitigation as contained in the Commission's Staff Paper, January 6, 2004.
- Affidavit on behalf of Public Utility Subsidiaries of FirstEnergy Corp., before the Federal Energy Regulatory Commission in Docket No. ER-04-363, concerning the appropriateness of market based rate authority for the Public Utility Subsidiaries of FirstEnergy Corp., December 31, 2003.
- Affidavit on behalf of Ameren Energy, Inc. and other affiliates of Ameren Corporation, before the Federal Energy Regulatory Commission in Docket No. ER00-2687 *et al.*, concerning the appropriateness of market based rate authority for affiliates of Ameren Corporation, December 10, 2003.
- Affidavit on behalf of Idaho Power Company before the Federal Energy Regulatory Commission in Docket No. ER97-1481-003 applying the Commission's SMA test to Idaho Power Company and its affiliates, October 9, 2003.
- Rebuttal Testimony on behalf of Ameren Energy Generating Company and Union Electric Company d/b/a AmerenUE, before the Federal Regulatory Commission in Docket No. EC03-53-000 rebutting intervenor claims that AmerenUE's purchase of generating units from its AEGC affiliate would create competitive concerns, October 6, 2003.



- Direct Testimony on behalf of Southern Power Company, before the Federal Energy Regulatory Commission in Docket No. ER03-713-000 *et al.*, concerning competitive issues raised by long-term power sales agreements between Southern Power and its Georgia Power Company and Savannah Electric and Power Company affiliates, September 22, 2003.
- Third Affidavit on behalf of Alliant Energy Services, Inc. applying the Commission's SMA test to various control area markets, before the Federal Energy Regulatory Commission in Docket No. ER99-230-002 and ER03-762-000, August 15, 2003.
- Affidavit on behalf of The Connecticut Light and Power Company (CL&P) concerning incentive and public interest considerations associated with NRG Energy's attempt to discontinue standard offer service to CL&P, before the Federal Energy Regulatory Commission in Docket No. EL03-123-000 and EL03-134-000, July 18, 2003.
- Direct Testimony on behalf of Ameren Energy Generating Company and Union Electric Company d/b/a AmerenUE, before the Federal Energy Regulatory Commission in Docket No. EC03-53-000, concerning competitive issues raised by AEGC's proposed sale of two affiliated merchant generating stations to AmerenUE, June 10, 2003.
- Affidavit on behalf of DTE East China, LLC, before the Federal Energy Regulatory Commission in Docket No. ER03-931-000, concerning the appropriateness of market based rate authority for DTE East China, an affiliate of Detroit Edison Company, June 5, 2003.
- Testimony on behalf of Detroit Edison Company, before the Michigan Public Service Commission in Case No. U-13797, addressing market power issues raised by restructuring legislation in Michigan, May 29, 2003.
- Testimony on behalf of the PJM Transmission Owners, before the Federal Energy Regulatory Commission in Docket No. ER03-738-000, concerning the appropriate equity return and depreciation lives for new transmission assets constructed by transmission owners pursuant to a regional transmission expansion plan, April 11, 2003.
- Affidavit on behalf of Baltimore Gas & Electric and various of its affiliates before the Federal Energy Regulatory Commission in Dockets No. ER99-2948-002 *et al.*, concerning application of the Commission's SMA test to those entities, March 28, 2003.
- Affidavit on behalf of Ameren Energy Generating Company and Union Electric Company d/b/a AmerenUE, before the Federal Energy Regulatory Commission in Docket No. EC03-53-000, concerning competitive issues raised by the proposed transfer of certain generating facilities from Ameren Energy Generating Company to AmerenUE, March 13, 2003.
- Rebuttal Testimony on behalf of Public Service Electric and Gas Company, before the Federal Energy Regulatory Commission in Docket No. EL02-23-000 (Phase II), concerning financial responsibility for redispatch costs and market power issues associated with certain transmission agreements between Public Service Electric and Gas Company and Consolidated Edison Company, February 20, 2003.
- Testimony on behalf of FirstEnergy Corp and its operating company affiliates The Cleveland Electric Illuminating Company, The Toledo Edison Company, and Ohio Edison Company, before the Public Utilities Commission of Ohio in Case No. 02-1944-EL-CSS, concerning the terms and conditions under which the operating companies should purchase the accounts receivables of competitive retail electric service providers, February 19, 2003.

- Affidavit on behalf of Detroit Edison and various of its affiliates in Dockets No. ER97-324-004 *et al.*, applying the Commission's SMA test to those entities, January 31, 2003.
- Rebuttal testimony on behalf of certain "Classic" PJM Transmission Owners before the Federal Energy Regulatory Commission in Docket No. EL-02-111-000, concerning the appropriateness of "seams" charges for transmission service between the MISO and PJM regions, December 10, 2002.
- Affidavit on behalf of various affiliates of Black Hills Corporation before the Federal Energy Regulatory Commission in Docket No. ER00-3109 *et al.*, concerning application of the Commission's SMA test to those affiliates, November 25, 2002
- Direct testimony on behalf of certain "Classic" PJM Transmission Owners before the Federal Energy Regulatory Commission in Docket No. EL-02-111-000, concerning the appropriateness of "seams" charges for transmission service between the MISO and PJM regions, November 14, 2002.
- Affidavit on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. PL02-8, Conference on Supply Margin Assessment, assessing the Commission's proposed SMA market screen and accompanying market power mitigation measures, October 22, 2002.
- Second affidavit on behalf of Garnet Energy LLC in Docket No. ER02-1190-000, before the Federal Energy Regulatory Commission, responding to intervenor claims about the proper method for applying the Commission's application for market pricing authority, August 2002.
- Direct Testimony on behalf of Ameren Services Company before the Federal Energy Regulatory Commission in Docket No. EC02-96-000 concerning competitive issues raised by Ameren's proposed acquisition of Central Illinois Lighting Company, July 19, 2002.
- Affidavit on behalf of Garnet Energy LLC in Docket No. ER02-1119-000, before the Federal Energy Regulatory Commission, concerning application of the Commission's SMA test to Garnet, an affiliate of Idaho Power Company, July 11, 2002.
- Testimony on behalf of Public Service Electric and Gas Company concerning vertical market power issues associated with certain transmission agreements between Public Service Electric and Gas Company and Consolidated Edison Company, before the Federal Energy Regulatory Commission in Docket No. EL-02-23-000, July 1, 2002.
- Affidavit on behalf of applicants Wisvest Corporation, Wisvest-Connecticut, LLC and PSEG Fossil LLC concerning competitive issues presented by PSEG Fossil's proposed acquisition of Wisvest-Connecticut, before the Federal Energy Regulatory Commission in Docket No. EC02-87-002, ER02-2204-000 and ER99-967-002, June 28, 2002.
- Direct testimony on behalf of Ameren Corporation concerning competitive issues raised by Ameren's proposed acquisition of Central Illinois Lighting Company, before the Illinois Commerce Commission in Docket No. 02-0428, June 19, 2002.
- Rebuttal testimony on behalf of PSEG Power in New York Public Service Commission Case No. 02-M-0132 responding to intervenor concerns about alleged horizontal and vertical market power problems arising from PSEG's construction of the Cross Hudson Project, May, 2002.

- Affidavit on behalf of Southern Company Services, Inc. in Docket No. ER96-780-005, before the Federal Energy Regulatory Commission, describing appropriate procedures for triennial market pricing update and addressing whether Southern Company Services, Inc. has market power in wholesale electricity markets, April 30, 2002.
- Direct testimony on behalf of PSEG Power in New York Public Service Commission Case No. 02-M-0132 concerning market power implications of the application of PSEG Power to construct an approximately eight mile radial connection between Bergen Generating Station in New Jersey and Consolidated Edison Company's West 49<sup>th</sup> Street Substation in New York City, April 26, 2002.
- Expert report on behalf of Virginia Electric and Power Company in Virginia Electric and Power Company v. International Paper Company, Civil Action No. 2:01cv703, United States District Court, Eastern District of Virginia, Norfolk Division, Concerning damages issues associated with terminated NUG contract, March 21, 2002.
- Affidavit on behalf of Crete Energy Venture, LLC in Docket No. ER02-963, before the Federal Energy Regulatory Commission, concerning application of the Commission's SMA test to a joint venture of Entergy and DTE, February 4, 2002.
- Second Affidavit on behalf of Alliant Energy Service, Inc. in Docket No. ER99-230-002, before the Federal Energy Regulatory Commission, concerning appropriate computational procedures and data sources for applying the Commission's SMA test, January 24, 2002.
- Affidavit on behalf of Rainy River Energy Corporation-Taconite Harbor in Docket No. ER02-124-000, before the Federal Energy Regulatory Commission, to apply the Supply Margin Assessment test to Minnesota Power and its affiliates, January 7, 2002.
- Affidavit on behalf of Alliant Energy Services, Inc. in Docket No. ER99-230-002, before the Federal Energy Regulatory Commission, to apply the Supply Margin Assessment test to Alliant Energy Corporation to determine whether mitigation is required for affiliates of Alliant with market pricing authority under the procedures recently promulgated by the Commission, December 18, 2001.
- Affidavit on behalf of Southern Company Services, Inc. in Docket No. ER96-2495-015, ER97-4143-003, ER97-1238-010, ER98-2075-009, ER 98-542-005 and ER91-569-009 before the Federal Energy Regulatory Commission addressing the economic underpinnings of the Commission's SMA test, including its usefulness as a market power screening device, as well as the appropriateness of the mitigation measures that the Commission has ordered, December 14, 2001.
- Affidavit on behalf of Rainy River Energy Corporation – Wisconsin before the Public Service Commission of Wisconsin in Docket No. 05-CE-128, providing a market power screen analysis to support Rainy River's application to the Wisconsin Public Service Commission to construct, own and operate the Superior project, December 3, 2001.
- Affidavit on behalf of Attala Energy Company, LLC before the Federal Energy Regulatory Commission in Docket No. ER02-40-000 providing a Supply Margin Assessment, consistent with proposed FERC rules, for its generation, November 5, 2001.

- Prepared Rebuttal Testimony on behalf of Appalachian Power Company d/b/a American Electric Power before the State Corporation Commission of Virginia in SCC Case No. PUE010011, concerning AEP's corporate separation plan, October 5, 2001.
- Affidavit on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. RM01-8-000 concerning potential competitive harms that could result if commercially sensitive transaction data are made available to the public, October 5, 2001.
- Affidavit on behalf of PSEG Lawrenceburg before the Federal Energy Regulatory Commission in Docket No. ER01-01-2460 concerning market power issues associated with construction of new generation facilities, June 27, 2001.
- Affidavit on behalf of PSEG Waterford Energy Company before the Federal Energy Regulatory Commission in Docket No. ER-01-2482, concerning market power issues associated with construction of new generation facilities, June 27, 2001.
- Prepared Rebuttal Testimony on behalf of Applicants FirstEnergy and Jersey Central Power & Light before the New Jersey Board of Public Utilities in BPU Docket No. EM00110870 and OAL Docket No. PUCOT01585-01N, responding to allegations about defects in the competitive analysis of the proposed FirstEnergy-GPU merger, April 23, 2001.
- Affidavit on behalf of Nine Mile Point Nuclear Station, LLC, before the Federal Energy Regulatory Commission in Docket No. ER01-1654-000, concerning market based pricing by Nine Mile Point Nuclear Station, LLC, March 30, 2001.
- Affidavit on behalf of Niagara Mohawk Power Corporation, New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation and Nine Mile Point Nuclear Station, LLC before the Federal Energy Regulatory Commission in Docket No. EC01-75-000 concerning competitive issues raised by the proposed acquisition of the Nine Mile Point 1 nuclear unit and a portion of Nine Mile Point 2 nuclear unit by an affiliate of Constellation Energy Group, February 28, 2001.
- Affidavit on behalf of Constellation Energy Group *et al.*, before the Federal Energy Regulatory Commission in Docket No. EC01-50-000 and ER01-824-000, concerning market based pricing by affiliates of Constellation Energy Group, December 28, 2000.
- Prepared Direct Testimony on behalf of FirstEnergy and GPU, Inc. before the Federal Energy Regulatory Commission in Docket No. EC01-22-000 concerning competitive issues raised by the proposed merger of FirstEnergy and GPU, November 9, 2000.
- Prepared Direct Testimony on behalf of FirstEnergy and GPU, Inc. before the Pennsylvania Public Utility Commission in Application Docket No. A-110300F0095, *et al* concerning competitive issues raised by the proposed merger of FirstEnergy and GPU, November 9, 2000.
- Prepared Direct Testimony on behalf of FirstEnergy and GPU, Inc. before the Board of Public Utilities of the State of New Jersey in Docket No. EM00110870 concerning competitive issues raised by the proposed merger of FirstEnergy and GPU, November 9, 2000.
- Deposition in the matter of Illinois Power Company and Illinova Corporation v. Wegman Electric Company *et al.*, No. 98-L-280, Circuit Court of the third Circuit of Illinois, Madison County, concerning damages from having electric generating stations out of service, October 17, 2000.

- Affidavit and Declaration on behalf of Alabama Power Company before the Environmental Protection Agency in FOIA RIN 003111-99, concerning appropriateness of protecting certain competitively valuable documents from public release, October 13, 2000.
- Affidavit on behalf of Northeast Utilities Service Company and Select Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. EL00-102-000, concerning the cost of providing ICAP to New England capacity market, September 25, 2000.
- Affidavit on behalf of Ameren Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-3664 and ER00-2687-000 concerning market based pricing of wholesale electricity by Ameren, September 22, 2000.
- Affidavit on behalf of Alabama Power Company before the Federal Communications Commission in P.A. No. 00-003, concerning appropriateness of protecting certain competitively sensitive information from public release, September 6, 2000.
- Affidavit on behalf of Gulf Power Company before the Federal Communications Commission in P.A. No. 00-004, concerning appropriateness of protecting certain competitively sensitive information from public release, September 6, 2000.
- Affidavit on behalf of Southern Company and Southern Energy, Inc. before the Federal Energy Regulatory Commission in Docket No. EC00-121-000, concerning whether the proposed spin-off of Southern Energy, Inc. would create competitive concerns, August 15, 2000.
- Affidavit on behalf of Northeast Utilities Service Company before the Federal Energy Regulatory Commission in Docket No. EL00-62-001 and ER00-2052-002 concerning proposed termination of ICAP market and proposed mitigation of ICAP prices, May 30, 2000.
- Prepared Rebuttal Testimony on behalf of Detroit Edison Company before the Michigan Public Service Commission in Case No. U-12134 concerning the design of a code of conduct for implementing retail customer choice, March 21, 2000.
- Affidavit on behalf of Split Rock Energy LLC in Docket No. ER00-1857-000 concerning Split Rock LLC's application for market based pricing authority, March 10, 2000.
- Affidavit on behalf of Baltimore Gas and Electric Company, Calvert Cliffs, Inc., Constellation Enterprises, Inc. and Constellation Generation, Inc. in Docket No. EC00-57-000 and on behalf of Baltimore Gas and Electric Company, Calvert Cliffs, Inc., Constellation Generation, Inc., and Constellation Power Source, Inc. in Docket No. ER00-1598-000 concerning the application of Calvert Cliffs, Inc. and Constellation Generation, Inc. for market based pricing authority, February 11, 2000.
- Deposition in the matter of Cleveland Thermal Energy Company v. Cleveland Electric Illuminating Company, Case No. 1: 97 CV 3023, United States District Court, Northern District of Ohio, Eastern Division, October 15, December 7 and December 8, 1999, concerning competitive issues and damages.
- Supplemental Expert Report on behalf of Cleveland Electric Illuminating Company in Cleveland Thermal Energy Corp. v. Cleveland Electric Illuminating Company, Case No. 1: 97 CV 3023, United States District Court, Northern District of Ohio, Eastern Division, December 1, 1999, concerning damages issues.

- Expert Report on Behalf of Cleveland Electric Illuminating Company in *Cleveland Thermal Energy Corp. v. Cleveland Electric Illuminating Company*, Case No. 1: 97 CV 3023, United States District Court Northern District of Ohio, Eastern Division, September 27, 1999, concerning allegations that a clause giving Cleveland Electric Illuminating Company the right to purchase electricity at avoided costs from a cogeneration plant that Cleveland Thermal Energy Corp. would have constructed was anticompetitive and an unreasonable restraint of trade, and computing damages.
- Deposition in the matter of *Florida Municipal Power Agency v. Florida Power & Light Company*, Case No. 92-35-CIV-ORL22C, United States District Court, Middle District of Florida, Orlando Division, concerning damages and market issues, August 31, 1999.
- Expert Report on Behalf of Florida Power & Light Company in *Florida Municipal Power Agency v. Florida Power & Light Company* in Case No. 92-35-CIV-ORL22C, United States District Court, Middle District of Florida, Orlando Division, concerning damages and market issues, August 26, 1999.
- Affidavit on behalf of AmerGen Energy Company before the Federal Energy Regulatory Commission in Docket No. EC99-104-000 and ER99-754-001 concerning AmerGen's proposed acquisition of the Clinton nuclear unit, August, 1999.
- Affidavit on behalf of AmerGen Energy Company before the Federal Energy Regulatory Commission in Docket No. EC99-98-000 and ER99-754-002 concerning AmerGen's proposed acquisition of the Nine Mile Point 1 nuclear unit and a portion of the Nine Mile Point 2 nuclear unit, July, 1999.
- Affidavit on behalf of Minnesota Power, Inc. before the Federal Energy Regulatory Commission in Docket No. ER99-3586-000 concerning Minnesota Power's application for market based pricing authority, July, 1999.
- Deposition in the matter of *Allegheny Energy, Inc. v. DQE, Inc.*, Civ. A. No. 98-16396 (RJC), United States District Court, Western District of Pennsylvania, June 11, 1999, concerning issues relating to the value of plaintiff's generating assets.
- Affidavit on behalf of Public Service Electric and Gas Company (PSEG) before the Federal Energy Regulatory Commission concerning PSEG's request to transfer its generating assets to an affiliate in Docket No. EC99-79-000 *et al.*, June 4, 1999.
- Expert Report on behalf of Allegheny Energy in *Allegheny Energy, Inc. v. DQE, Inc.* Civ. A. No. 98-16396 (RJC), United States District Court, Western District of Pennsylvania, May 17, 1999, concerning issues relating to the value of plaintiff's generating assets.
- Affidavit on behalf of Baltimore Gas & Electric (BG&E) Company before the Federal Energy Regulatory Commission concerning BG&E's application for market based pricing authority in Docket No. ER99-2948-000, May 13, 1999.
- Affidavit on behalf of Florida Power & Light in *Florida Municipal Power Agency v. Florida Power & Light Co.*, Case No. 92-35-CIV-ORL-22 concerning legitimacy of Florida Power & Light's conduct, March 22, 1999.

- Affidavit on behalf of PECO Energy before the Federal Energy Regulatory Commission concerning PECO's application of market based pricing authority in Docket No ER99-1872-000, February, 1999.
- Affidavit on behalf of Northeast Utilities before the Federal Energy Regulatory Commission concerning Northeast Utilities application for market based pricing authority in Docket No. ER 99-1829-000, February, 1999.
- Affidavit on behalf of AmerGen Energy Company, LLC (AmerGen) before the Federal Energy Regulatory Commission in Docket No. EC99-11-000, EL99-13-000 and ER99-754-000 concerning (i) AmerGen's acquisition of Three Mile Island No. 1 from GPU, Inc. and (ii) AmerGen's application for market based pricing authority, November, 1998.
- Affidavit on behalf of Constellation Energy Source, Inc. (CES) before the Federal Energy Regulatory Commission in Docket No. ER99-198-000 concerning CES's application for market based pricing authority, October 14, 1998.
- Affidavit on behalf of Select Energy, Inc. (Select) before the Federal Energy Regulatory Commission in Docket No. ER99-14-000 concerning Select's application for market based pricing authority, October 1, 1998.
- Rebuttal Testimony on Retail Market Power Issues on behalf of Mississippi Power Company, before the Mississippi Public Service Commission in Docket No. 96-UA-389 concerning whether Mississippi Power Company will be able to exercise market power in deregulated retail markets in Mississippi, September 11, 1998.
- Prepared Testimony and Report on Retail Market Power Issues on behalf of Mississippi Power Company, before the Mississippi Public Service Commission in Docket No. 96-UA-389, concerning whether Mississippi Power Company will be able to exercise market power in deregulated retail markets in Mississippi, August 7, 1998.
- Affidavit on behalf of Southern California Edison Company to the Federal Energy Regulatory Commission concerning market power issues associated with the supply of ancillary services to the California ISO, July 13, 1998.
- Prepared Rebuttal Testimony on Behalf of Public Service Electric & Gas Company, with Paul Joskow, before the State of New Jersey, Board of Public Utilities, in Docket No. EX94120585Y, E097070457, E097070460, E097070463 and E097070466, responding to market power issues raised by intervenor witnesses, including in particular the role of transmission constraints in market power analyses, appropriate mitigation measures for "load pocket" situations, proper standards for granting market based pricing authority, the role of transitional mechanisms in mitigating market power concerns and the use and role of market simulations in addressing market power topics, April 13, 1998.
- Prepared Rebuttal Testimony on Behalf of Atlantic City Electric Company, with Paul Joskow, before the State of New Jersey, Board of Public Utilities, in Docket No. EX94120585Y, E097070457, E094770460, E09707463 and E097070466, responding to market power issues raised by intervenor witnesses, including in particular the role of transmission constraints in market power analyses, appropriate mitigation measures for "load pocket" situations, proper standards for granting market based pricing authority and the use and role of market simulations in addressing market power topics, April 13, 1998.

- Prepared Additional Supplemental Direct Testimony on behalf of Ohio Edison and Centerior Energy, before the Federal Energy Regulatory Commission, Docket No. EC97-5-000, concerning the competitive analyses associated with Ohio Edison's merger with Centerior Energy, August 8, 1997.
- Prepared Testimony on behalf of Public Service Electric and Gas Company on Market Power Issues, with Paul Joskow, before State of New Jersey, Board of Public Utilities, concerning market power issues associated with PSEG's proposal to implement retail customer choice in its competitive filings in New Jersey, July 30, 1997.
- Affidavit on behalf of Union Electric Development Corporation before the Federal Energy Regulatory Commission in Docket No. ER97-3663-000, concerning Union Electric Development Corporation's request for the right to make wholesale bulk power sales at market-determined prices, July 8, 1997.
- Affidavit on behalf of Union Electric Company before the Federal Energy Regulatory Commission in Docket No. ER97-3664-000, concerning Union Electric's request for the right to make wholesale bulk power sales at market-determined prices, July 8, 1997.
- Rebuttal Testimony on Reopening on behalf of Union Electric Company and Central Illinois Public Service Company, before the Illinois Commerce Commission in Docket No. 95-0551, addressing competitive issues raised by witnesses for intervenors and the staff of the ICC in response to previous testimony, May 23, 1997.
- Rebuttal Testimony on behalf of Wisconsin Power and Light Company, Interstate Power Company and IES Industries, Inc. before the Public Service Commission of Wisconsin in Docket No. 6680-UM-100, responding to concerns raised by intervenors regarding competitive issues associated with the proposed merger of the three companies, May 20, 1997.
- Direct Testimony on Reopening on behalf of Union Electric Company and Central Illinois Public Service Company, before the Illinois Commerce Commission in Docket No. 95-0551, responding to ICC's request that applicants apply the screening analysis contained in Appendix A of the Federal Energy Regulatory Commission's Order 592 to the effects of the proposed merger on existing and future Illinois retail markets, April 14, 1997.
- Prepared Rebuttal Testimony on behalf of IES Utilities, Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services and Industrial Energy Applications, Inc. before the Federal Energy Regulatory Commission in Docket No. EC96-13-000, responding to issues raised by intervenors concerning the proposed merger and the application of the screening analysis contained in Appendix A of FERC's Order 592, April 14, 1997.
- Affidavit on behalf of Constellation Power Source, Inc. before the Federal Energy Regulatory Commission in Docket No. ER97-2261-000, concerning Constellation's request for the right to make wholesale bulk power sales at market-determined prices, March 25, 1997.
- Prepared Supplemental Direct Testimony on behalf of Ohio Edison Company, Pennsylvania Power Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company, before the Federal Energy Regulatory Commission in Docket No. EC97-5-000, concerning the application of the screening analysis contained in Appendix A of FERC's Order 592 to the applicants' proposed merger, March 20, 1997.



- Prepared Additional Direct Testimony on behalf of IES Utilities, Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services and Industrial Energy Applications, Inc. before the Federal Energy Regulatory Commission in Docket No. EC96-13-000, concerning the application of the screening analysis contained in Appendix A of FERC's Order 592 to the applicants' proposed merger, February 27, 1997.
- Prepared Rebuttal Testimony on behalf of Union Electric Company and Central Illinois Public Service Company before the Federal Energy Regulatory Commission in Docket No. EC96-7-000, *et al* addressing competitive issues related to the proposed merger of Union Electric Company and Central Illinois Public Service Company, January 13, 1997.
- Affidavit on behalf of Union Electric Company and Central Illinois Public Service Company before the Federal Energy Regulatory Commission in Docket No. EC96-7-000 *et al.*, concerning the effect of the FERC's Policy Statement on mergers (Order No. 592) on the proposed merger of Union Electric Company and Central Illinois Public Service Company, January 13, 1997.
- Prepared Supplemental Direct Testimony on behalf of Union Electric Company and Central Illinois Public Service Company before the Federal Energy Regulatory Commission in Docket No. EC96-7-000, *et al* concerning the effects of transmission constraints on the potential to exercise market power as a result of the proposed merger of Union Electric and Central Illinois Public Service Company, November 15, 1996.
- Direct Testimony on behalf of Ohio Edison Company and Centerior before the Federal Energy Regulatory Commission in Docket No. EC97-5-000 concerning the effect of the proposed merger of Ohio Edison and Centerior on market power and competition, November 8, 1996.
- Prepared Direct Testimony on behalf of Union Electric Company before the Missouri Public Service Commission in Case No. EM-96-149, concerning the effects on various market power concerns of the proposed merger between Union Electric Company and Central Illinois Public Service Company, November 1, 1996.
- Testimony on behalf of Virginia Electric and Power Company in the matter of Gordonsville Energy, L.P. v. Virginia Electric and Power Company before the Circuit Court of the City of Richmond, Case No. LA-2266-4, concerning damages suffered by VEPCO as a result of a NUG outage, and the appropriateness of a liquidated damages provision in the contract between VEPCO and the NUG, October 23, 1996.
- Prepared Direct Testimony on behalf of Southern Company Services, Inc. before the Federal Energy Regulatory Commission in Docket No. ER96-780-000, concerning whether constraints on the Florida/Southern interface give Southern the ability to exercise market power, September 23, 1996.
- Deposition in the matter of Gordonsville Energy, L.P. v. Virginia Electric and Power Company before the Circuit Court of the City of Richmond, Case No. LA-2266-4, concerning damages suffered by VEPCO as a result of a NUG outage, September 17, 1996.
- Prepared Rebuttal Testimony on behalf of Public Service Company of New Mexico before the Federal Energy Regulatory Commission in Docket No. ER95-1800-000 *et al.*, addressing market power issues raised by intervenors in response to previous testimony, August 30, 1996.

- Prepared Testimony on behalf of Public Service Company of New Mexico before the Federal Energy Regulatory Commission in Docket No. ER96-1551-000, concerning whether PNM possesses market power in transmission-constrained areas, July 10, 1996.
- Affidavit on behalf of Central Louisiana Electric Company before the Federal Energy Regulatory Commission in Docket No. ER96-2677-000, concerning CLECO's request for the right to make wholesale bulk power sales at market-determined prices, July 9, 1996.
- Supplemental Direct Testimony on behalf of IES Utilities, Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services and Industrial Energy Applications, Inc. before the Federal Energy Regulatory Commission in Docket No. EC96-13-000, examining the effects of the proposed formation of a regional Independent System Operator on the analyses and conclusions contained in previous testimony in support of the companies' proposed merger, June 5, 1996.
- Prepared Testimony on behalf of Minnesota Power & Light Company before the Federal Energy Regulatory Commission in Docket No. EC95-16-000, concerning Minnesota Power & Light's request for the right to make wholesale bulk power sales at market-determined prices, May 16, 1996.
- Prepared Rebuttal Testimony on behalf of IES Industries, Inc., Interstate Power Company and WPL Holdings, Inc. before the Iowa Utilities Board in Docket No. SPU-96-6 addressing market power and competition issues raised by intervenors in response to previous merger testimony, April 22, 1996.
- Prepared Direct Testimony on behalf of IES Utilities, Inc., Interstate Power Company, Wisconsin Power & Light Company, South Beloit Water, Gas & Electric Company, Heartland Energy Services and Industrial Energy Applications, Inc. before the Federal Energy Regulatory Commission in Docket No. EC96-13-000, concerning the effects of their proposed merger on market power and competition, February 29, 1996.
- Deposition in the matter of Westmoreland-LG&E Partners v. Virginia Electric and Power Company, Case No. LX-2859-1, concerning interpretation of capacity payment provisions in power purchase agreement under which Westmoreland-LG&E sells output of non-utility generator to VEPCO, February 23, 1996 and October 9, 1998.
- Prepared Testimony on behalf of Union Electric Company and Central Illinois Public Service Company before the Federal Energy Regulatory Commission in Docket No. EC96-7-000 and ER96-679-000, concerning the effects of their proposed merger on market power and competition, December 22, 1995.
- Prepared Testimony on behalf of Northeast Utilities before the Federal Energy Regulatory Commission in Northeast Utilities Service Company, Docket No. ER95-1686-000, concerning FERC's generation dominance standard in support of Northeast Utilities' request for market-based pricing authority, November 13, 1995.
- Sur-reply affidavit on behalf of Rochester Gas & Electric before the U.S. District Court, Western District of New York, in Kamine/Besicorp Allegheny L.P. v. Rochester Gas & Electric Corporation, Case No. 95-CIV-6045L, in response to motion by Kamine/Besicorp Allegheny L.P. for a preliminary injunction, July 10, 1995.

- Prepared Supplemental Rebuttal Testimony on Transmission NOPR Issues on behalf of Florida Power & Light Company before the Federal Energy Regulatory Commission in Florida Power & Light Company, Docket No. ER93-465-000 *et al.*, addressing transmission NOPR issues raised by FERC Staff and Intervenors, May 19, 1995.
- Prepared Direct Testimony on Transmission NOPR Issues on behalf of Florida Power & Light before the Federal Energy Regulatory Commission in Florida Power & Light Company, Docket No. ER93-465-000, *et al.*, concerning the effects of FERC's recent Notice of Proposed Rulemaking on issues in FPL's ongoing case, April 25, 1995.
- Affidavit on behalf of Rochester Gas & Electric before the U.S. District Court, Western District of New York, in Kamine/Besicorp Allegheny L.P. v. Rochester Gas & Electric Corporation, Case No. 95-CIV-6045L, in support of its opposition to a request by Kamine/Besicorp Allegheny L.P. for a temporary restraining order, March 9, 1995.
- Testimony on behalf of Virginia Power before the Circuit Court of the City of Richmond in Case No. LW-730-4, Doswell Limited Partnership v. Virginia Electric Power Company concerning the level of fixed gas transportation costs associated with the proxy unit which forms the basis for VEPCO's payments to Doswell, March 2, 1995.
- Prepared Rebuttal Testimony on behalf of American Electric Power Service Corporation before the Federal Energy Regulatory Commission in Docket No. ER93-540-001 addressing issues concerning FERC's new comparability standard and its implications for AEP's transmission service offerings, January 17, 1995.
- Deposition on behalf of El Paso Electric Company and Central and South West Services, Inc. before the Federal Energy Regulatory Commission in Docket No. EC94-7-000 and ER94-898-000 concerning comparability and other transmission issues, December 22, 1994.
- Prepared Rebuttal Testimony on behalf of Florida Power & Light Company before the Federal Energy Regulatory Commission in Florida Power & Light Company, Docket No. ER93-465-000 *et al.* concerning market power and competitive issues, comparability and other transmission issues, wholesale electric service tariff revisions, and issues concerning interchange contract revisions, December 16, 1994.
- Prepared Rebuttal Testimony on behalf of El Paso Electric Company and Central and South West Services, Inc. before the Federal Energy Regulatory Commission, Dockets No. EC94-7-000 and ER94-898-000, concerning network transmission service and point-to-point transmission service, December 12, 1994.
- Prepared Direct Testimony on behalf of Midwest Power Systems, Inc. and Iowa-Illinois Gas and Electric Company before the Federal Energy Regulatory Commission, Docket No. EC95-4-000, concerning competitive issues raised by their proposed merger to form MidAmerican Energy Company, November 10, 1994.
- Deposition on behalf of Florida Power Corporation in Orlando Cogen, Inc. *et al.*, v. Florida Power Corporation, Case No. 94-303-CIV-ORL-18, US District Court in and for the Middle District of Florida, Orlando Division, involving a contract dispute between FPC and one of its NUG suppliers, August 30, 1994.

- Prepared Direct Testimony on Comparability Issues on behalf of Florida Power & Light Company in Florida Power & Light Company, Docket No. ER93-465-000 and ER93-922-000 concerning a discussion of the differences between types of transmission services, usage of transmission systems by their owners, transmission services that FPL provides, and how those services compare and contrast with FPL's own uses of the transmission system, August 5, 1994.
- Prepared Answering Testimony on behalf of Florida Power & Light Company in Florida Power & Light Company, Docket No. ER93-465-000 and ER93-922-000 concerning (i) whether municipal systems should receive billing credits for certain transmission facilities which they own which were argued to be part of an "integrated" transmission grid, and (ii) FPL's obligation to sell wholesale power under its Nuclear Regulatory Commission antitrust license conditions, July 7, 1994.
- Deposition on behalf of Virginia Electric & Power Co. in re: Doswell Limited Partnership v. Virginia Electric & Power Co., Case No. LW-730-4, Circuit Court for the City of Richmond, involving an alleged fraud and breach of contract relating to payments by VEPCO to one of its NUG suppliers, April 5, 1994.
- Prepared Final Rebuttal Testimony on behalf of Central Louisiana Electric Company before the Federal Energy Regulatory Commission in Docket No. ER93-498-000, examining an allegation of predatory pricing, March 16, 1994.
- Prepared Rebuttal Testimony on behalf of Central Louisiana Electric Company before the Federal Energy Regulatory Commission in Docket No. ER93-498-000, examining an allegation of a municipal joint action agency that Central Louisiana's contract to provide bulk power service to a new municipal system customer constituted predatory pricing, December 23, 1993.
- "Comments on the Commerce Commission's Draft Determination Concerning Trans Power's Proposal to Recover Fixed/Sunk Transmission Costs," testimony on competitive issues prepared at the request of The Electricity Industry Committee, New Zealand, November 30, 1993.
- Prepared Direct Testimony on behalf of Florida Power & Light Company in Florida Power & Light Company, Docket No. ER93-465-000 and ER93-922-000 concerning competitive implications of wholesale tariff revisions, interchange contract revisions and a proposed "open access" transmission tariff, November 26, 1993.
- Deposition on Behalf of Florida Power & Light in Florida Municipal Power Agency v. Florida Power & Light Co. Case No. 92-35-CIV-ORL-22 concerning damage related issues, July 21 and 22, 1993.
- Affidavit on behalf of Florida Power & Light in Florida Municipal Power Agency v. Florida Power & Light Co. Case No. 92-35-CIV-ORL-22 concerning damage related issues, July 14, 1993.
- Prepared Direct Testimony on behalf of the Detroit Edison Company In the Matter of the Application of the Association of Businesses Advocating Tariff Equity for Approval of an experimental retail wheeling tariff for Consumers Power Company, Case No. U-10143, and In the Matter on the Commission's own motion, to consider approval of an experimental retail wheeling tariff for The Detroit Edison Company, Case No. U-10176 before the Michigan Public Service Commission, March 1, 1993.

- Deposition on behalf of Florida Power & Light in Florida Municipal Power Agency vs. Florida Power & Light Company, Case No. 92-35-CIV-ORL-22, concerning relevant markets, market power and competitive issues, February 25, 1993.
- Deposition in Tucson Electric Power Company v. SCE Corporation *et al.*, Superior Court of the State California, Case No. 628170, June 19, 1992.
- Affidavit on behalf of Iowa Power Inc. and Iowa Public Service Company, Federal Energy Regulatory Commission, Concerning the Competitive Effects of a Merger of the Two Companies, 1991.
- Testimony on behalf of Defendants Union Electric and Missouri Utilities, in City of Malden, Missouri v. Union Electric Company and Missouri Utilities Company, U.S. District Court, Eastern District of Missouri, Southeastern Division, Civil Action No. 83-2533-C, 1988.
- Testimony on behalf of Defendant Union Electric, in City of Kirkwood, Missouri v. Union Electric Company, U.S. District Court, Eastern District of Missouri, Civil Action No. 86-1787-C-6 (deposition testimony), 1987.
- Testimony on behalf of Defendant Union Electric Company, in Citizens Electric Corporation v. Union Electric Company, U.S. District Court, Eastern District of Missouri, Eastern Division, Civil Action No. 83-2756C(c), 1986.
- Testimony on behalf of Advo-System, Inc. before the Postal Rate Commission, Docket No. R84-1, Concerning Rates for Third Class Mail, 1984.
- Testimony on behalf of D/FW Signal, Inc. before the Federal Communications Commission, Docket No. CC83-945, Concerning Cellular Telephone Service in Dallas-Fort Worth, 1983.
- Testimony on behalf of the Department of Defense, before the Montana Public Service Commission, Docket No. 82.2.8, Concerning Telephone Service Rate Structure, 1982.
- Testimony on behalf of Multnomah County, before the Public Utility Commissioner of Oregon, Docket UF 3565, Concerning Telephone Service Rate Structure, 1980.
- Testimony on behalf of the Louisiana Consumer League, before the Louisiana Public Service Commission, Docket No. U-14078, Concerning Marginal Cost Pricing for Louisiana Power and Light Company, 1979.
- Testimony on behalf of the State of Oregon, City of Portland, and County of Multnomah, before the Public Utility Commissioner of Oregon, Dockets UF3342 and UF3343, concerning Rates for Centrex and ESSX Telephone Service, 1978.

#### **SELECTED REPORTS AND PAPERS**

- “Comments” in Federal Energy Regulatory Commission Docket No. RM04-7-000 concerning rules governing short-term transactions between generation-owning regulated electric utilities and their marketing affiliates, June 30, 2004.
- “Large RTOs and Traditional Transmission Pricing Don’t Mix,” with Michael Quinn, prepared for The Electricity Journal, January/February 2002.

- “Potential Adverse Consequences of Poor Transmission Pricing,” prepared for Southern Company Services, Inc., October 23, 2001.
- “An Economic Assessment of the Benefits of Repealing PUHCA,” with John Landon, Ajay Gupta and Virginia Perry-Failor, prepared for Mid-American Energy Holdings, April 2000.
- Updated Market Power Analysis for Detroit Edison Company, concerning Detroit Edison Company’s market based pricing authority, submitted to the Federal Energy Regulatory Commission, December 17, 1999.
- Report of Ameren to the Public Service Commission of Missouri on Market Power Issues, concerning whether Ameren, created by the merger of Union Electric Company and Central Illinois Public Service Company, is likely to have market power if deregulation and retail competition are introduced in Missouri, February 27, 1998.
- “Supporting Companies’ Report on Horizontal Market Power Analysis,” with Paul Joskow, concerning analysis of market power issues in connection with a proposed reorganization of the PJM Pool, July 14, 1997.
- “International Electricity Sector Investment by US Electric Utilities,” with Graham Hadley, Paul Hennemeyer and Barbara MacMullen, prepared for The Kansai Electric Power Company, Inc., March 5, 1997.
- “Report on Horizontal Market Power Issues,” with Paul Joskow, prepared for Southern California Edison Company in FERC Docket No. ER96-1663-000, May 29, 1996.
- “Recent Developments in North American Electric Generation Capacity Procurement Systems,” with Mahim Chellappa, prepared for Electricite de France (EDF), Paris, France, August 1994.
- “Comments on Transmission Reform Proposals,” report prepared for the Edison Electric Institute, October 1993.
- “Sunk Transmission Cost Recovery Issues,” report prepared for The Electricity Industry Committee, New Zealand, September 1, 1993.
- “Opportunity Cost Pricing for Electric Transmission: An Economic Assessment,” report prepared for Edison Electric Institute, June 1992.
- “Transmission Access and Pricing: What Does A Good ‘Open Access’ System Look Like,” NERA Working Paper #14, January 1992.
- “Evaluation of Qualifying Facility Proposals,” prepared for Florida Power Corporation, March 1991.
- “Design of Capacity Procurement Systems,” prepared for Electricite de France, January 1991.
- “Issues in the Design of Generating Capacity Procurement Systems,” prepared for TransAlta Utilities, January 1991.
- “Government Regulators and Market Power Issues,” prepared for Edison Electric Institute, January 1991.

- “A Critique and Evaluation of the Large Public Power Council’s Transmission Access and Pricing Proposal,” prepared for Edison Electric Institute, December 1990.
- “The Effects of a Premature Shutdown of the Trojan Nuclear Power Plant,” prepared for Portland General Electric Company, October 1990.
- “An Examination of the Proper Role for Utilities in Promoting Conservation Expenditures,” prepared for Public Service Electric and Gas Company with T. Scott Newlon, 1990.
- “Issues Concerning Selection Criteria Development for Capacity RFPs,” prepared for the Bonneville Power Administration, February 15, 1990.
- “Nonutility Generators and Bonneville Power Administration Resource Acquisition Policy,” prepared for the Bonneville Power Administration, with David L. Weitzel, January 31, 1990.
- “An Evaluation of Resource Solicitation Alternatives,” prepared for the Bonneville Power Administration, January 31, 1990.
- “Approaching the Transmission Access Debate Rationally,” Transmission Research Group Working Paper Number 1, with Joe D. Pace, November 1987.
- “The Essential Facilities Doctrine,” NERA, June 1985.
- “The Nuclear Regulatory Commission’s Antitrust Review Process: An Analysis of the Impacts,” Transcomm, Inc., prepared for the U.S. Department of Energy, 1981.
- “Competitive Aspects of Utility Involvement in Cogeneration and Solar Programs,” Transcomm, Inc., prepared for the U.S. Department of Energy, June 1981.
- “An Appraisal of Antitrust Review Extension in the Context of Small Utility Fuel Use Act Compliance,” Transcomm, Inc., prepared for the U.S. Department of Energy, July 28, 1980.
- “Analysis of Proposed License Conditions with Respect to Antitrust Deficiencies,” Transcomm, Inc., prepared for the U.S. Nuclear Regulatory Commission, 1978.
- “Analysis of NRC Staff’s Proposed License Conditions for Midland Units,” Transcomm, Inc., prepared for the U.S. Nuclear Regulatory Commission, August 7, 1978.

#### **SELECTED SPEECHES**

- Panelist at Edison Electric Institute’s Supply Policy Task Force conference discussing various topics associated with proposed revisions to FERC’s procedures for determining when market-based as opposed to cost-based pricing is appropriate, Washington, DC, July 18, 2006
- “Resource Acquisition and Market Power Topics: Overview of FERC’s Current and Evolving Practices,” presented to Edison Electric Institute Workshop on Market Power Policies and Current Practices at the NARUC’s Summer Committee Meetings, Salt Lake City, Utah, July 10, 2004.
- “Examining the Commission’s Recent Treatment of Market Power and Competitive Issues,” speech presented to the Edison Electric Institute Spring Legal Conference, Scottsdale, Arizona, March 29, 2004.

- Presentation on Transmission Pricing Issues to the EEI Winter Chief Executive Conference and Board of Directors Meeting, Scottsdale, AZ, January 10, 2002.
- Presentation to the Board of Directors of the Salt River Project on Code of Conduct Issues Associated with Industry Restructuring, November 9, 1998.
- “FERC’s Approach To Addressing Horizontal Market Power in Electric Mergers,” speech presented to Infocast Conference on Utility Mergers & Acquisitions, Washington, D.C., July 17, 1998.
- “Problems in Applying the Appendix A Analytical Screen,” speech presented to the Edison Electric Institute Workshop on Practical Applications of the FERC Merger Policy Guidelines, Arlington, Virginia, April 1, 1997.
- “Evolving Market Power Issues in the Context of Electric Restructuring,” speech presented to Eastern Mineral Law Foundation Forum on Natural Resources and Energy Law, Sanibel Island, Florida, February 13, 1997.
- “An Overview of Antitrust in the Electric Industry,” speech presented to Antitrust Law & Economics for the Electric Industry, sponsored by Energy Business, Inc., Washington, D.C., February 22, 1996.
- “Moving From Here to There: Some Implications for Electric Transmission,” speech presented to the Infocast Power Industry Forum, Palm Springs, California, February 17, 1995.
- “What Does ‘Comparability’ Really Mean?,” speech presented to The Federal Energy Bar Association, Washington, D.C., November 17, 1994.
- “Current Transmission Topics” and “Trans Alta’s Unbundled Rate Proposal,” presented to the Canadian Electrical Association, Montreal, PQ, Canada, May 9, 1994.
- “Retail Wheeling Issues,” speech presented to the Edison Electric Institute National Accounts Workshop, Atlanta, Georgia, February 7, 1994.
- “Retail Wheeling: Doing It the Right Way,” speech presented to the Retail Wheeling Conference, Denver, Colorado, November 8, 1993.
- “Retail Wheeling,” speech presented to the Missouri Valley Electric Association Division Conference, Kansas City, Missouri, October 22, 1993.
- “An Economic Perspective on Current Transmission Pricing Issues,” speech presented to the Edison Electric Institute 1993 Fall Legal Committee Meeting, Minneapolis, Minnesota, October 7, 1993.
- “Characteristics of a ‘Good’ Retail Wheeling System,” speech presented to the Second Annual Electricity Conference sponsored by Executive Enterprises, Inc., Washington, D.C., April 21-22, 1993.
- “Characteristics of a ‘Good’ Retail Wheeling System,” speech presented to the Electric Utility Business Environment Conference sponsored by Electric Utility Consultants, Inc., Denver, Colorado, March 16-17, 1993.



- “Change in the Industry,” seminar presentation on privatization and service unbundling presented to Ontario Hydro management and special strategy task force, Ontario, Canada, February 3, 1993.
- “The U.S. Experience and What Is To Come,” speech presented to NERA Seminar on Competition in the Regulated Industries (Electric/Telecommunications), Rye Town Hilton, Rye Town, New York, October 30, 1992.
- “Emerging Transmission Pricing Issues,” speech presented to Electric Utility Consultants, Inc.’s 3rd Annual Transmission & Wheeling Conference, Chicago, Illinois, September 22-23, 1992.
- “Emerging Transmission Pricing Issues,” speech presented to Executive Enterprises, Inc., 1992 Electricity Conference: Restructuring the Electricity Industry, Washington, D.C., September 15-16, 1992.
- “A Pragmatic Look at Open Access,” presented to DOE/NARUC Workshop on Electricity Transmission, Stockbridge, Massachusetts, June 2, 1992.
- “Some Thoughts About Open Access,” presented to EMA’s Issues and Outlook Forum, Atlanta, Georgia, May 5, 1992.
- “Transmission Access: How Should We Proceed?” Speech presented to the Second Annual Transmission and Wheeling Conference, Denver, Colorado, November 21, 1991.
- “Can We Implement Reasonable Transmission Pricing and Access Procedures?” presented to the Edison Electric Institute System Planning Committee, Dallas, Texas, October 24, 1990.
- “Issues in the Design of Competitive Bidding Systems,” presented at the Pennsylvania Electric Association System Planning Meeting,” 1990.
- “Should We Use Opportunity Cost Pricing for Transmission?” presented to the Edison Electric Institute Interconnection Arrangements Committee, 1990.
- “Recent Changes in the Electric Power Industry and Pressures on the Transmission System,” presented at seminar “Competitive Electricity: Why the Debate?” Sponsored by the Electricity Consumers Resource Council, 1988.
- “Some Thoughts on New Transmission Access and Pricing Proposals,” presented at conference “Transmission Pricing and Access: Reinventing the Wheel,” sponsored by Cogeneration and Independent Power Coalition of America and American Cogeneration Association, 1988.

**ATTACHMENT D**

## SOUTHEAST STATE COMMISSION CONSIDERATION OF DEREGULATION

### 1. Mississippi

The Mississippi Commission has found:

[T]he regulatory structure established by this Commission, which has facilitated and encouraged the efficient production and distribution of reliable, low-cost power should not be changed without a clear and convincing demonstration that change would be in the public interest.... IT IS THEREFORE ORDERED, that based upon this Commission's findings that retail competition in the provision of electric generation service in Mississippi may not be in the public interest at this time, this Generic Docket should be and is hereby suspended and no formal hearings on the matter will be held until further ordered by the Commission.<sup>1</sup>

### 2. Alabama

A paper published by the Alabama Public Service Commission staff in 2000 stated:

The policy of the Legislature was to put the Public Service Commission in place of competition in the electric utility industry beginning in 1915. That was the mandate then, and that is the Commission's mandate now. In addition, the Territorial Franchise Act, §37-14, *Code of Alabama* 1975, and the Consumer Protection Act, §37-4, *Code of Alabama* 1975, are both testaments to the policy and will of the Legislature that the Commission continue the regulation of electric utilities under its jurisdiction in the manner originally proscribed.<sup>2</sup>

### 3. Georgia

In Georgia, the Territorial Act was enacted March 29, 1973, to assure the most efficient, economical and orderly rendering of retail electric service within the state, avoid duplication of electric lines, foster the extension and location of electric suppliers' lines in a manner most compatible with the state's preservation and enhancement of the physical environment, and to

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<sup>1</sup> See *In Re: Order on the Mississippi Public Service Commission Establishing a Generic Docket to Consider Competition in the Provision of Retail Electric Service*, Mississippi Public Service Commission Case No. 96-UA-389 (May 2000) (capitalization in original).

<sup>2</sup> Alabama Commission Staff Paper, October 2000 at p. 7, available at <http://www.psc.state.al.us/Electric%20Restruct/26427rpt.pdf>.

protect and conserve lines lawfully constructed by electric suppliers.<sup>3</sup> To this end, the law requires customers with connected loads of less than 900 kW (about the size of a modern grocery store) to take electricity from the franchised supplier.<sup>4</sup>

#### **4. Florida**

A report prepared by the Florida Public Service Commission (“FPSC”) Staff in 2000 noted that Florida has not initiated retail choice and it would take formal legislative authority for retail choice to be made available. The report also noted that Florida’s unique customer base (predominantly retail with little industry) and unique geography (with limited interconnections outside peninsular Florida) raised questions as to the potential benefits from restructuring.<sup>5</sup> Florida’s Long Range program released in September 2007 noted a number of initiatives for its electric utilities including distribution reliability, infrastructure hardening, fuel diversity, and renewable generation.<sup>6</sup> Restructuring was not listed.

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<sup>3</sup> Electric suppliers under the jurisdiction of the Territorial Act are Georgia Power Company, Georgia’s Electric Membership Cooperatives (42 EMCs), Municipal Electric Authority of Georgia (MEAG), Savannah Electric and Power Company, North Carolina’s Haywood EMC, and Tennessee’s Electric Power Board of Chattanooga. Under the Territorial Act, every geographic area within the state was either assigned to an electric supplier or declared unassigned as to any electric supplier by the Commission.

<sup>4</sup> However, if any customer with a load of 900 kW or more locates within the corridors of an electric supplier’s lines, that customer may have a choice of suppliers. Once a customer chooses a supplier, the Territorial Act provides that the chosen electric supplier has the exclusive right to serve that customer for the life of the premises.

<sup>5</sup> Florida Public Service Commission, “Key Aspects of Electric Restructuring and Their Relevance for Florida’s Electricity Market,” Sep. 2000, *available at* <http://www.psc.state.fl.us/publications/pdf/pai/keyrelv.pdf>.

<sup>6</sup> Florida Public Service Commission, “Long Range Program Plan, Fiscal Year 2008-09 through 2012-13,” Sep. 2007, *available at* <http://www.psc.state.fl.us/publications/pdf/general/LRPP2007.pdf>.

**ATTACHMENT E**

## SOUTHEASTERN STATE COMMISSION IRP MODELS

### 1. Alabama

Through its Integrated Resource Planning (“IRP”) program, Alabama Power annually assesses its projected system needs and weighs the various supply-side and demand-side options necessary to meet those needs. Alabama Power presents a detailed summary of its IRP program to Alabama Commission Staff no less than every three years.<sup>1</sup> The most recent review occurred in 2007. Prior to commencing construction of any generating facility, Alabama Power must make a filing with the Alabama Public Service Commission and receive a certificate of public convenience and necessity.

### 2. Florida

Section 186.801 of the Florida Statutes requires that all major generating electric utilities in Florida annually submit a Ten-Year Site Plan to the FPSC for review. Each plan contains projections of the utility’s electric power needs for the next ten years and the general location of proposed power plant sites and major transmission facilities. In accordance with Florida law, the FPSC performs a preliminary study of each plan and must determine whether it is “suitable” or “unsuitable.” The FPSC receives comments from state, regional, and local planning agencies and upon completion, forwards its findings to the Florida Department of Environmental Protection for use in subsequent power plant siting proceedings. The FPSC requires that Florida utilities must maintain a 15% to 20% reserve margin. Prior to the commencement of construction of any steam-electric generating facility with a capacity greater than 75 megawatts located in Florida, the utility must conduct a Request for Proposals pursuant to the Statute and FPSC rule.

### 3. Georgia

In Georgia, the state’s Integrated Resource Plan Act requires that utilities file a plan at least every three years.<sup>2</sup> The plan must include a 20-year projection of energy requirements and consider the economics of all options available to meet these requirements including supply-side resources, demand-side resources, purchased power, and cogeneration. Long-term plans for the type of facility needed, the size, and the required commercial operation date are determined and approved by the Georgia Public Service Commission (“GPSC”). Before construction of a facility has begun or a purchased power agreement is finalized, the GPSC must first certify the need for the facility, contract, or conservation program, and determine that it is the appropriate type facility based on economic analysis. Once certified, the utility is guaranteed recovery of the actual prudently incurred costs. When the need for new supply-side capacity is identified, the utility must issue a formal written Request for Proposal (“RFP”) to potential utilities,

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<sup>1</sup> See Alabama Public Service Commission, “Consideration of Sections 1251 and 1254 of the Energy Policy Act of 2005,” Docket No. 30066, Mar. 19, 2008.

<sup>2</sup> See Ga. Comp. R. & Regs. § 515-3-4-06 (2008).

cogenerators, power marketers, power brokers, and independent power producers/suppliers with sufficient lead time to allow for bid evaluations, certification, and construction prior to the expected need date. This RFP process, which is followed for each block of required new supply-side resource that is identified in the utility's IRP, provides for competition in supplying new capacity for retail service.

#### **4 Mississippi**

As regards Mississippi, Section 77-3-14 (2) of the Miss. Code Ann. provides that the Mississippi Public Service Commission ("MPSC") will develop, publicize, and keep current an analysis of the longer term needs for expansion for generation of electricity, including probable need for generation reserves, the extent, size and mix of generation, and probable future growth of use of electricity. In addition, if requested by the MPSC, each public utility engaged in the generation, transmission, and distribution of electric energy shall file its forecasts and plans for the addition of generating capacity planned by the utility for an ensuing five-year period. Pursuant to this authority, the MPSC established in 2008 an ongoing proceeding in Docket No. 2008-AD-158 to review the statewide electric generation needs. As explained by the MPSC, the purpose of the proceeding "is to develop, publicize, and keep current an analysis of the five-year long-range generation needs for facilities for the generation of electricity in Mississippi."<sup>3</sup> Prior to commencing construction of any generating facility, the regulated utility must make a filing with the MPSC and receive a certificate of public convenience and necessity.

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<sup>3</sup> See *In Re: Proceeding To Review Statewide Electric Generation Needs*, Mississippi Public Service Commission, Docket No. 2008-AD-158, April 30, 2008.