



BALCH & BINGHAM LLP

Alabama • Georgia • Mississippi • Washington, D.C.

Attorneys and Counselors
1710 Sixth Avenue North
P.O. Box 306 (35201-0306)
Birmingham, AL 35203
(205) 251-8100
(205) 226-8798 Fax
www.balch.com

Andrew W. Tunnell
(205) 226-3439

(205) 488-5858 (direct fax)
atunnell@balch.com

January 31, 2012

By Electronic Submission

Office of Electricity Delivery and Energy
Reliability (OE-20)
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585
Congestionstudy2012@hq.doe.gov

Re: Re Preparation of the 2012 Transmission Congestion Study
Comments of Southern Company Services, Inc.

Southern Company Services, Inc. (“SCS”), as agent for Alabama Power Company, Georgia Power Company, Gulf Power Company and Mississippi Power Company (collectively, “Southern Companies”), appreciates this opportunity to provide these comments to the Department of Energy (“DOE”) as it prepares the 2012 Electric Transmission Congestion Study (“2012 Congestion Study”).¹ Southern Companies have long supported DOE’s efforts in preparing such studies in fulfillment of DOE’s statutory requirements under Section 216 of the Federal Power Act (“FPA”), 16 U.S.C. § 824p. In Southern Companies’ view, DOE has discharged its statutory obligations admirably in its previous congestion studies (in 2006 and 2009). DOE’s observations and findings as part of the study process have represented reasoned analyses of the data available and—particularly with regard to the region in which Southern Companies are located—have accurately portrayed the state of the transmission system. As with the 2006 and 2009 studies, Southern Companies were able to participate in a pre-study workshop coordinated by DOE (the December 6, 2011 Philadelphia workshop) and believe that the information elicited during that meeting will provide useful guidance for DOE. In this regard, Southern Companies appreciate DOE’s continued commitment to the congestion study and national corridor designation processes and reiterate their support to DOE as it moves forward with the 2012 Congestion Study.

¹ Southern Companies are providing these comments in accordance with DOE’s notice of regional workshops and request for written comments that was published in the Federal Register on November 10, 2011. *See* 76 F.R. 70122 (“November 10 Notice”).

I. Background: Southern Companies and the 2006 and 2009 Congestion Studies' Findings Regarding the Southeast

Southern Companies are wholly owned operating subsidiaries of The Southern Company, a public utility holding company, and function as an integrated system within the Southeastern subregion of SERC ("SERC-SE").² Southern Companies are primarily engaged in the transmission, distribution and retail supply of electricity in portions of Alabama, Georgia, Florida and Mississippi, serving 4.4 million customers over a 120,000 square mile service territory. Southern Companies bear responsibility for more than 27,000 miles of transmission lines and continuously develop, operate and maintain this transmission system to meet the growing demands of the region. Importantly for purposes of this evaluation of transmission congestion, Southern Companies are also a North American Electric Reliability Corporation ("NERC")-registered planning authority, with numerous entities recently emphasizing that inquiries concerning the effects of recent regulatory developments should be directed to such transmission planners.³ With the November 10 Notice also making reference to the Eastern Interconnection Planning Authority ("EIPC"), Southern Companies note that they are also both a member in the EIPC and a "Principal Investigator" in the EIPC's American Recovery and Reinvestment Act-funded processes.

Concerning the conclusions in the earlier congestion studies pertaining to Southern Companies, the 2009 Congestion Study made a number of overarching findings as to the philosophy and practices guiding transmission planning and development in the Southeast. Those findings were correct in 2009 and remain correct today. Among other points, the study found that the "SERC region has a unique philosophy with respect to electric system planning and construction" in that "the transmission system within SERC has been planned, designed and is operated such that utilities' generating resources with firm contracts to serve load are not constrained."⁴ Consistent with this philosophy and practice, the 2009 Congestion Study found correctly that "[b]ecause the southeastern utilities build aggressively in advance of load, there is little economic or reliability congestion within the region."⁵ These findings were based upon the then-current NERC reliability assessment, as well as testimony and comments from a number of regional representatives, including State utility regulators.

The 2009 Congestion Study further found that new transmission lines had been placed into service to address two areas of historical constraints in Southern Companies' footprint that

² SERC-SE is a summer-peaking reporting area consisting of the following four balancing authorities: PowerSouth Energy Cooperative, South Mississippi Electric Power Association, Southeastern Power Administration, and Southern Company Services, Inc. 2011 LTRA, at 426.

³ See e.g., Written Remarks of Mark Lauby, Vice President and Director of Reliability Assessment and Performance Analysis, North American Electric Reliability Corporation, FERC Reliability Conference, Docket No. AD12-1, at p. 7 (November 30, 2011) (Stating that in evaluating recent regulatory developments impacting system reliability, "NERC will leverage the expertise of the Planning Authorities").

⁴ 2009 Congestion Study, at 60 (quoting NERC's 2009 Summer Reliability Assessment, at <http://www.nerc.com/files/summer2009.pdf>, p. 131).

⁵ 2009 Congestion Study, at 61.

had been identified in the 2006 Congestion Study.⁶ Furthermore, while the 2006 Congestion Study identified the Southeast as a “conditional constraint area” over concerns that a large regional concentration of new nuclear capacity would require further assessment as to the need for new transmission facilities to deliver the new generation,⁷ the 2009 Congestion Study removed that identification.⁸ Among other things, the 2009 Congestion Study found that “the pending nuclear projects have been proposed by sponsors that plan to secure the needed transmission to interconnect the generator to the grid, so reactor development will not be contingent primarily upon transmission availability.”⁹

II. Developments in SERC-SE since 2009: SERC-SE Remains Free of Significant Economic or Reliability Congestion

From 2008-2010, Southern Companies invested \$1.7 billion in transmission assets (lines and substations) and distribution substations across their collective footprint.¹⁰ In so doing, Southern Companies continued meeting their service obligations economically and reliably and also avoided the development of congestion. Accordingly, for purposes of the 2012 Congestion Study, SERC-SE remains free of significant transmission congestion. As recently noted in NERC’s 2011 Long-Term Reliability Assessment (“2011 LTRA”) concerning SERC-SE, “[n]o transmission reliability concerns are expected to significantly impact Bulk Electric System reliability for this assessment period.”¹¹ Plans for the period maintain the philosophy previously identified by NERC (and recognized in the 2009 Congestion Study) of planning the system such that generators with long-term firm transmission commitments are able to serve load without constraint. As stated in the 2011 LTRA:

The majority of the projects reported are load-serving in nature, with the goal of maintaining reliable service throughout the planning horizon. Plans for 500 kV expansions are primarily limited to long range needs for potential base-load plants or major load centers. Currently, there are no concerns with meeting in-service dates for transmission improvements.¹²

In order to allow for the generation in the SERC-SE having long-term firm commitments to serve load without constraint, the utilities in the SERC-SE “are planning an additional 1,100 miles of 100-120 kV, 38 miles of 151-199 kV, 882 miles of 200-299 kV and 81 miles of 400-599 kV transmission lines to be in-service by 2021.”¹³

⁶ *Id.* Those two areas of historical constraints identified in the 2006 Congestion Study and noted as having been addressed by new lines in the 2009 Congestion Study are: i) a constraint affecting flows from the north into Atlanta and ii) from TVA into Southern.

⁷ 2006 Congestion Study, at 57-58.

⁸ *Id.* at 64.

⁹ *Id.*

¹⁰ See <http://www.southerncompany.com/transmission/home.aspx> (as posted on January 20, 2012).

¹¹ 2011 LTRA, at 191.

¹² *Id.* at 424.

¹³ *Id.* at 191.

The 2009 Congestion Study discussed some of the demand side management ("DSM") and smart grid developments in other areas of the country. The utilities in the Southeast have also been very active in pursuing DSM and smart grid options providing benefits to consumers on a least-cost basis. Among other things, Southern Companies continue to advance their EarthCents initiative. Through its various programs, EarthCents has helped Southern Companies reduce peak demand for electricity by 3,424 megawatts, which is equivalent to the electrical demand of more than 500,000 homes. Some of the EarthCents energy efficiency programs for retail customers include:

- Time-of-use and real-time pricing options;¹⁴
- Energy Checkups/Audit;
- Low-income weatherization;
- ENERGY STAR® practices, products, and whole home programs;
- Geothermal and solar heating and cooling programs; and
- Other energy services designed for the larger commercial and industrial customers.

Between now and 2020, Southern Companies plan to invest substantial amounts (approximately \$1 billion) on energy efficiency and demand control programs, reducing peak demand by an additional 1,000 megawatts. When comparing energy companies with peak demand of 2,000 megawatts and greater, the average reduction reported to U.S. Energy Information Administration from demand-side management is 8.7 percent. Through 2010, Southern Companies have reduced peak demand by 10.7 percent.

As to smart grid-related activities, Southern Companies signed a Smart Grid Investment Grant agreement with DOE and have accepted a \$165 million award (to be dispensed throughout the service territories of the operating companies over a three-year period). This federal funding, which will be matched by Southern Companies, will further enhance the transmission and distribution infrastructure by making it smarter, more resilient, and more efficient through the application of intelligent electronic devices. Southern Companies expect to install advanced hardware including SCADA-enabled, automated transmission and distribution line devices, an Integrated Distribution Management System ("IDMS"), which includes automatic fault isolation and service restoration, and a number of smart substations. This installation should be completed by December 2013. In addition, since the 2009 Congestion Study, approximately 3.9 million of a planned 4.6 million smart meters have been deployed throughout Southern Companies' service territories, with the majority of the installations expected to be complete in 2012.

¹⁴ Georgia Power's real-time pricing program for industrial and commercial customers lets customers choose whether to buy or not every hour, based on price. This program has equated to several hundred megawatts for Georgia Power. Some of these megawatts are treated as a dispatchable resource option for the company, with the remainder available as a DSM resource.

III. DOE Should Proceed with Caution Concerning the Use of Projected/Forecast Data

A. Primary Reliance upon Projected Data Would Be Inappropriate for National Corridor Designations or the Labeling of an Area as Significantly Constrained.

Southern Companies support DOE's approach in the 2009 Congestion Study of largely focusing upon historical data to develop that study. While the 2009 Congestion Study focused upon the use of historical data, the November 10th Notice makes several references to potentially using "projected", "planned", and "forecasted" elements. Relying heavily upon projected data for purposes of the 2012 Congestion Study would involve substantial speculation of material facts and would be inherently unreliable and would undermine the value of the study (adding controversial and potentially political/policy dimensions). As DOE is aware, a primary purpose of the congestion study is to provide a basis for DOE to designate national corridors, which are "geographic area[s] experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers."¹⁵ Given such a statutory directive, the use of projected data to base a designation of a congested/constrained area could well prompt additional legal challenges to DOE's efforts under FPA Section 216.¹⁶

Notwithstanding the foregoing, while the use of projected data would not be appropriate for national corridor designations or the identification of areas as being so critically constrained as to potentially lead to a national corridor designation, Southern Companies recognize that there may be some merit in identifying trends of significant future transmission congestion. Based upon the discussions at the Philadelphia workshop, Southern Companies understand that DOE is considering providing some information pertaining to future trends in congestion with the recognition that such prospective information would not be appropriate to identify national corridors.¹⁷

B. Potential Impact of EPA Rules

While SERC-SE forecasts sufficient transmission investment so as to prevent the development of long-term transmission congestion, the 2011 LTRA identifies one area of future concern in SERC-SE that, among other things, has transmission congestion overtones. In particular, the 2011 LTRA notes that "[t]he utilities in SERC-SE area have identified the pending environmental regulations as an emerging issue."¹⁸ While much of the discussion in the 2011

¹⁵ 16 U.S.C. § 824p(a)(2) (emphasis added).

¹⁶ Concerning future trends, some speakers at the workshops from other areas of the country indicated a belief that FERC's Order No. 1000 might provide significant benefits to their regions. While such a result might prove true elsewhere, the vast majority of planning authorities and load serving entities in the Southeast are concerned that Order No. 1000 will disrupt the currently effective transmission planning processes that have been used in this area of the country to produce the robust grid that DOE has recognized as being free of any significant reliability or economic congestion.

¹⁷ See Philadelphia Transcript, at 136 (David Meyer of DOE stating, "we want to do [the congestion studies] in way that provides useful information to people who are interested in transmission issues. The further step to national corridors, that comes later. But I wouldn't limit the congestion studies to simply providing a possible basis for corridors.")

¹⁸ *Id.* at 425.

LTRA concerning these environmental regulations pertains to generation adequacy matters, the report also notes that “transmission adequacy ... and operations may be impacted.”¹⁹ Concerns pertaining to the potential impacts of the environmental regulations were also emphasized at the different DOE workshops held in December 2011 in preparation of the 2012 Congestion Study.²⁰

Importantly, several speakers at those workshops as well as the 2011 LTRA referenced that the affected entities continue to study the potential impacts of these regulations and much uncertainty remains.²¹ With the Mercury Air Toxics Standards (“MATS”) rule for power plants pending being published in the Federal Register and other key environmental rules still being promulgated and with implementation time lines unclear, Southern Companies and other utilities continue to analyze its potential impacts, as well as the effects of the other recent environmental regulatory developments directed at electric utilities. Should DOE continue to explore the potential congestion impacts that may be presented by these environmental rules for purposes of the 2012 Congestion Study, Southern Companies recommend that DOE seek input on this matter later this year when it issues the draft of this study so as to afford the NERC-registered planning authorities more time to perform their analyses.

With the potential impacts of the environmental rules still being studied and with implementation and compliance issues remaining unclear, the potential transmission congestion impacts of such rules are a prime example of a type of forecasted/projected data with which DOE should proceed with caution for purposes of the 2012 Congestion Study. While the potential problems with the implementation of these rules should not be discounted (particularly should utilities not be provided sufficient time to implement those rules’ requirements), it bears emphasizing that any resulting transmission congestion should only be *transitional* in nature until any environmental controls, replacement capacity, and/or associated transmission facilities (and the associated work are completed). In this regard, the transmission system impacts associated with MATS are largely driven by the specific locations of affected generation resources, with it remaining uncertain which resources will be so affected, and involve local transmission enhancements to address the potential unavailability of such resources within a compliance/implementation window. Since a primary purpose of the DOE congestion studies is to identify areas of the country potentially needing FERC “backstop siting” authority under Section 216(b), such transitional congestion would not, as a practical matter, be appropriate for a designation as any type of congested area that could lead to a national corridor designation. This is because the majority of impacts are thought to involve reinforcements of existing facilities not requiring backstop siting authority and the associated implementation time frame is considered to be of a shorter duration than the amount of time necessary to construct a major transmission project, which often can take ten (10) years or more.²²

¹⁹ *Id.*

²⁰ St. Louis Transcript, at pp. 28, 43-45, 79-80, 97, 99, 116, 121-129.

²¹ *E.g.*, St. Louis Transcript at 121-129.

²² Furthermore, and as previously discussed, such a designation would not be appropriate as a matter of law. Section 216(a)(2) effectively prohibits the a national corridor designation based upon projected what may occur in the future as the statute specifically states that the concerned area must be “experiencing” the constraints in the present tense. *See* 16 U.S.C. § 824p(a)(2).

IV. Sources of Publicly Available Data that DOE Could Use to Develop the Study

For purposes of developing the 2009 Congestion Study, Southern Companies identified numerous publicly-available information sources that DOE could pursue to develop the congestion studies required by FPA Section 216. For example, in Southern Companies' October 15, 2008 comments filed with DOE, Southern Companies explained:

As noted by Mr. Carlsen at the Atlanta workshop, there are a number of informational sources that DOE should consider consulting as it prepares its 2009 study. Among these are the Form EIA-411 Coordinated Bulk Power Supply Program Reports, which contain regional information on loads and transmission resource data, and Transmission Loading Relief ("TLR") logs, which are available on NERC's website and reflect possible instances of real-time congestion occurring over the transmission system. Of particular use to DOE in its assessment of the extent to which a particular area experiences significant or material amounts of transmission congestion would be logged TLR events of level 5 and above. DOE also may find useful the regional near- and long-term studies and assessments performed under the auspices of both SERC and the Eastern Interconnection Reliability Assessment Group ("ERAG"). In addition, Southern Companies note that FERC requires each regulated transmission provider to post on its OASIS a list of its transmission studies, and these studies can also provide valuable insight regarding the nature of the transmission grid.²³

Additional Publicly Available Sources of Information

In Southern Companies' comments to DOE's issuance of the 2009 Congestion Study, Southern Companies responded to DOE's call for additional information that could be useful in the performance of future transmission congestion analyses.²⁴ Among other things, Southern Companies explained that significant amounts of transmission schedule information are available at the "scheduledetail" template on OASIS.²⁵ This information is available in read-only format to everyone who has an OASIS ID (IDs are available from Southern Companies free of charge).²⁶

Southern's 2010 Comments also discussed the following sources of publicly available information that remain valid and appropriate for use for purposes of developing the 2012 Congestion Study:

²³ Comments of Southern Company Services, Inc. on the Department of Energy's 2009 Transmission Congestion Study, at 6 (October 15, 2008).

²⁴ Comments of Southern Company Services, Inc. on DOE's 2009 Transmission Congestion Study (June 29, 2010) ("Southern's 2010 Comments").

²⁵ Southern Companies emphasized this availability in part to clarify statements in the 2009 Congestion Study that seemed to indicate that transmission schedule information was not available for SERC (at that study's Table 2-1) or Southern Companies (at Table 4-1).

²⁶ *Id.* at 5.

“Transmission-Related Data Available at NERC’s Central Repository

In addition, there is a tremendous amount of transmission information available at NERC’s Central Repository for Security Events, which is available at NERC’s website at <https://crc.nerc.net/> once one obtains a NERC password (which, we understand, may be readily obtained). The following types of information are available:

- Current CRC Events – Shows:
 - CRC Event ID
 - Facility Name (Flowgate Name)
 - Facility ID (Flowgate Number)
 - Level (TLR Level)
 - Marginal Bucket
 - Initiating Party
 - Direction
 - Responsible Party (RC Issuing TLR)
 - Effective Time (CST)
- Event Postings – Shows:
 - Facility ID (Flowgate Number)
 - Facility Name (Flowgate Name)
 - Procedure Name
 - Level (TLR Level)
 - Initiating Party
 - Direction
 - Responsible Party (RC Issuing TLR)
 - Effective Time (CST)
- Search/Log:
 - Allows for Query of CRC Event Database
- Past CRC Events:
 - Allows for Query of TLR Log
- System Flows – Shows:
 - ID (Flowgate Number)
 - Flowgate (Flowgate Name)
 - Monitored Element Actual MW
 - Monitored Element Post Contingency MW
 - Monitored Element Limit MW
 - Contingent Element Actual MW
 - Contingent Element LODF (Line Outage Distribution Factor)
- EEA’s (Energy Emergency Alert) – Shows:
 - Message Subject
 - Level

- Sender
- Date/Time (CST)
- GSF (Generation Shift Factors) Viewer
- TDF (Transfer Distribution Factors) Viewer
- Site Links – Shows Links to:
 - Book of Flowgates
 - Reference Base Cases
 - Energy Emergency Alert Logs (Level 3 Reports)
 - E-Tagging Files
 - TDF Factors Viewer
 - CIPAG (Threat Levels) – Critical Infrastructure Protection Advisory Group
- TLR Final Reports – Shows:
 - Rolling 12 Month Archive of TLR Final Reports
- Downloads – Provided in CSV and XML Formats:
 - Flowgate Data
 - Current CRC Event Data
 - CRC Events in Progress
- 10000 Flowgates – Temporary Flowgates – Lists:
 - The last 30 days of temporary flowgate messages

Federal Energy Regulatory Commission Information

FERC Electric Quarterly Reports (EQRs): FERC jurisdictional entities are required to submit (on a quarterly basis) transaction information related to all short-term and long-term transactions. These submittals include price and quantity information for each wholesale power sale transaction for entities subject to FERC's jurisdiction. This data is publicly available at www.ferc.gov.

FERC Form 1 and Form 1F: On an annual basis, major and non-major electric utilities are required to file the FERC Form 1 and Form 1F, respectively, which includes significant amounts of information on wholesale sales and purchases (including price and quantity), as well as installed capacity, plant type, etc.

FERC Form 714: This report provides hourly scheduled and actual interchange information for each Balancing Authority, as well as hourly system lambda and hourly demand.

Other FERC Filings and Reports: Additional power sale transaction data is also available through other FERC filings (e.g., market-based rate triennial

filings, Form 566 (List of 20 Largest Retail Customers), etc.) and FERC's periodic market and reliability assessments.

Department of Energy / Energy Information Administration

DOE Electric Power Flash Report: This monthly report provides an estimate of the total power generation in the United States based on historical trends.

DOE Electric Power Monthly Report: This monthly report includes information on retail sales and revenues (including existing and planned generation).

DOE Electric Power Annual Report: This annual report includes information on wholesale power sales and purchases and retail sales (including existing and planned generation).

EIA-923 (formerly FERC Form 423) – This form provides fuel cost and Btu (heat) content of fuels delivered to each power plant.

Available Market Data: Market data is also available through private sources such as Platts and SNL Energy.²⁷

V. Definition of Congestion and Appropriate Study Metrics

At the Philadelphia workshop, Jim Busbin of Southern Companies addressed the definition of congestion and the metrics that DOE should use to perform the 2012 Congestion Study.²⁸ The discussion below echoes the key points of that feedback.

A. The Evaluation of Congestion Should Be Based upon Firm Schedules

As explained by Jim Busbin at the Philadelphia workshop, as well as in Southern Companies' 2010 Comments, DOE's evaluation of congestion should only be based upon firm schedules. The 2009 Transmission Congestion Study defines congestion as, "[t]he condition that occurs when transmission capacity in a specific location is not sufficient to enable safe delivery of all scheduled or desired wholesale electricity transfers simultaneously."²⁹ Unfortunately, "[a]ll ... transfers" as used in the 2009 Congestion Study includes both firm and non-firm schedules. Congestion for purposes of the congestion studies performed under FPA Section 216 should be measured in terms of restrictions and curtailments on the delivery of firm service, as

²⁷ Southern's 2010 Comments, at 5-8.

²⁸ Philadelphia Transcript, at 99-102.

²⁹ 2009 Congestion Study, at 105; *see also id.*, at 6 ("congestion occurs when actual or scheduled flows of electricity on a transmission line or across a price of transmission equipment are restricted below the level that grid users desire...").

congestion connotes a need to expand transmission capacity (or equivalent or superior non-transmission alternatives) and only firm commitments support such construction (at least in bilateral markets). In bilateral markets, such as that in SERC-SE, the transmission system is only expanded based upon long-term firm commitments as those commitments provide *physical* rights to the transmission system. In contrast, RTO markets that employ locational marginal pricing (“LMP”) provide *financial* rights to the system. As such, if a customer in the Southeast desires additional transmission capacity in order to accommodate increased service obligations or to meet a public policy requirement it might have under state or federal law, all it has to do is commit in a timely manner to the necessary long-term firm service to have the system expanded as appropriate to increase transmission capacity and physically eliminate the congestion constraints.

Accordingly, while physical markets expand the system as necessary to meet long-term firm commitments, non-firm service is specifically predicated on taking the system “as available” with the potential and even likelihood for interruptions, constraints, and curtailments. The transmission provider is under no obligation to expand the transmission system to prevent transmission congestion/interruption for such non-firm service. Thus, the utilization of metrics predicated upon non-firm service would be inappropriate for the FPA Section 216 congestion study, since the underlying purpose of this study is to identify areas experiencing congestion or constraints that would benefit from transmission or non-transmission solutions.

B. Discussion of the Three Congestion Metrics Used in the 2009 Study

The 2009 Congestion Study explains that it used the following three congestion metrics: “Transmission Reservations, Transmission Schedules, and Real-Time Operations.”³⁰ Southern Companies provide the following comments should those metrics be considered for purposes of the 2012 Congestion Study. Southern Companies note that they provided similar feedback to DOE’s contractor, OATI, pertaining to these metrics during the course of its preparation of the 2009 Congestion Study.³¹

As a general comment on all metrics, it should not be forgotten that metrics simply illustrate trends that may warrant further investigation. A metric in itself cannot indicate whether congestion exists or whether identified congestion should even be addressed. In bilateral markets where the transmission system is routinely planned to provide uncongested service commensurate with long-term firm commitments, congestion is addressed on a forward looking basis to meet future changes in commitments. Hence a metric that indicates recent congestion must be reviewed from the perspective of, among other things, whether existing commitments will continue, while a metric that indicates no congestion today could overlook relevant future commitments.

³⁰ 2009 Congestion Study at 29.

³¹ Letter from John E. Lucas of SCS to Jagit Singh of OATI and Joe Eto of Lawrence Berkeley Labs (April 10, 2009).

1. Transmission Reservations Metric.

In the 2009 Congestion Study, “the principal metric for congestion” was “the absence of available transmission capacity (that is, ATC or AFC = 0)”.³² While the 2009 Congestion Study noted “several limitations associated with this metric,” Southern Companies emphasize that there are additional flaws not recognized in that study. ATC is not an indicator of total transmission capacity, but rather of the success of the transmission provider to market remaining headroom available to market participants. Even very large capacity corridors having thousands of megawatts of capacity have zero ATC values at certain times. Moreover, the transmission system is not designed to create headroom (*i.e.*, ATC) but to meet long-term firm needs, with headroom on the system largely being a product of transmission expansion being “lumpy” (in that it may create more TTC than needed to serve firm commitments). Accordingly, having no ATC on an interface/flowgate can just mean that the transmission system has been designed as required to meet firm needs without having to install extraneous, lumpy capacity. Such an interface might be operating just as designed and planned. Again, for a fully utilized interface or an interface fully reserved for firm purposes, there are planning and reservation processes in place that allow for moving beyond the existing limits should a party decide that it is economic to do so.

Further, this metric does not recognize the actual firm scheduled flows. Since market participants do not always schedule the full amount of their transmission reservations, it is possible to have AFC/ATC equal zero even though there is no scheduled, firm energy flowing, an occurrence that can hardly be considered a constraint. When Southern Companies raised this concern during DOE’s development of its 2009 Congestion Study, OATI responded that “[w]hen a Transmission Customer (TC) faces this limitation and the generator is not able to make reservations for the desired deliveries, then it would make arrangements for other deliveries.”³³ However, and as discussed above, if such a customer/generator believed that it was appropriate and economic to have the interface/flowgate expanded so as to provide it additional AFC/ATC, then all it would have to do on Southern Companies’ system is to commit to long-term firm service. The fact that an interface/flowgate on Southern’s system might have AFC/ATC at zero indicates that no one has made the determination that it would be economic to have it expanded to provide additional transmission capacity. The use of this metric misses this important point.

Another problem associated with this metric is the lack of clarity in how the priority-tiering of transmission reservations (*i.e.*, firm versus non-firm) is recognized in evaluating congestion. As indicated above, non-firm transmission service reservations are not relevant to a transmission congestion analysis since such service assumes the likelihood of congestion.

³² 2009 Congestion Study at 30.

³³ Letter from Jagit Singh, Ph.d., of OATI, to Mr. John E. Lucas, of SCS, at 1, 3 (4/20/2009).

Of the three congestion metrics used in past studies, Southern Companies consider this transmission reservation metric to be the least probative because it describes very little with respect to transmission congestion.

2. Transmission Schedules Metrics

This metric evaluates utilization of a flowgate or interface. To do so, it utilizes a flow duration curve approach that shows accumulated flows over time. Southern Companies encourage the continued use and refinement of this metric. However, for the reasons previously discussed, this metric should only examine firm usage when identifying congestion.

3. Real Time Operations

The 2009 Congestion Study properly used “a transmission loading relief (TLR) event [as] the relevant reliability metric indicating that transmission congestions exists.”³⁴ This metric recognizes the frequency and duration of a TLR event. It identifies the magnitude of the TLR in megawatts curtailed. TLR data can be converted to determine the amount of curtailed energy (MWh), which shows the impact of the curtailment. TLRs are done and identified by transmission priority level.

Southern Companies support such TLR analysis because, as previously discussed, congestion should be measured in terms of restrictions and curtailments on the delivery of firm service. Southern Companies thus encourage the continued use of this metric and urge that it be used in conjunction with TLR data for curtailments of firm schedules, which is for TLR Level 5 and 6. In this regard, the 2009 Congestion Study’s real time operations metric included TLR Levels 3 and above.³⁵ Again, equating congestion with curtailments of non-firm service is inappropriate since the transmission system is not expanded for non-firm purposes.

VI. The Relevance of EIPC/EISPC on the Development of the 2012 Congestion Study

The November 10th Notice seeks input pertaining to potentially using the “[a]nalytic results” from the EIPC and EISPC planning efforts (for the Eastern Interconnection) for purposes of the 2012 Congestion Study. As explained by Mr. Busbin at the Philadelphia workshop and in his written materials, EIPC is a “first of its kind” effort with participation by Planning Authorities, regulators and stakeholders from across the Eastern Interconnection. However, the consensus of the speakers at the Philadelphia and St. Louis workshops is that the EIPC study results have little bearing on the development of the 2012 Congestion Study. Among other things, the EIPC studies do not constitute actual transmission plans but are an examination of transmission options that would be needed to support speculative generation resources resulting from public policy scenarios chosen by stakeholders. Furthermore, the EIPC analyses are for a

³⁴ 2009 Congestion Study, at 7.

³⁵ See 2009 Congestion Study, at p. 36, Table 4-2.

far-distant time period (20-30 years) that go well beyond the current planning horizon used by most planning authorities in the Eastern Interconnection, which is generally 10 years. As a practical matter, Phase II of the EIPC study will not be completed until the end of 2012, which will presumably be too late for purposes of the 2012 Congestion Study. And as explained at the beginning of these comments, DOE would be well-served to focus on historical and current data, rather than speculative, projected data, in performing its transmission congestion analysis.

VII. CONCLUSION

Southern Companies reiterate their support for DOE as it develops the 2012 Congestion Study. If there is anything that Southern Companies can do to support DOE in its efforts, feel free to contact us.

Sincerely,

/s/Andrew W. Tunnell

Andrew W. Tunnell

Attorney for Southern Company Services, Inc.

OF COUNSEL:

BALCH & BINGHAM LLP

Andrew W. Tunnell

Scott B. Grover

P. O. Box 306

Birmingham, AL 35201

(205) 251-8100 (telephone)

(205) 226-8798 (fax)