

September 30, 2009

The Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Entergy Services, Inc., Docket No. ER05-1065-000  
The ICT's Quarterly Performance Report

Dear Secretary Bose:

The Southwest Power Pool, Inc. ("SPP"), as the Independent Coordinator of Transmission ("ICT") for the Entergy Services, Inc. ("Entergy") system, hereby submits the ICT's Third Quarterly Performance Report for 2009, in accordance with the Federal Energy Regulatory Commission's orders approving the establishment of the ICT and section 7 of Attachment S in Entergy's Open Access Transmission Tariff ("OATT").<sup>1</sup>

The ICT will serve a copy of this report to all Interested Government Agencies and will make the report publicly available by posting it electronically on SPP's website and Entergy's OASIS.

If there are any questions related to this matter, please contact the undersigned at the number listed above.

Respectfully submitted,

/s/ David S. Shaffer  
David S. Shaffer

Counsel for the ICT

Attachments

<sup>1</sup> See Entergy Services, Inc., 115 FERC ¶ 61,095, order on reh'g, 116 FERC ¶ 61,275, order on compliance, 117 FERC ¶ 61,055 (2006), order on reh'g, 119 FERC ¶ 61,187 (2007).



**Independent Coordinator of  
Transmission (ICT) for Entergy -  
Quarterly Performance Report**

**June 1, 2009 – August 31, 2009**

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## **1. Overview**

### **1.1 Entergy**

Entergy Services, Inc. (Entergy or ESI) is a service company providing services for the Entergy Operating Companies, which are a part of a multi-state public utility holding company system. The Entergy Operating Companies include Entergy Arkansas, Inc., Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. Entergy provides electricity to 2.7 million utility customers in Arkansas, Louisiana, Mississippi, and Texas. The Entergy Operating Companies have 15,500 miles of 69kV - 500kV transmission lines and move about 23,000 megawatts of power across the interconnected lines in an 112,000 square-mile area. Entergy also operates more than 40 generating plants using natural gas, nuclear, coal, oil, and hydroelectric power with approximately 30,000 megawatts (MW) of electric generating capacity.

### **1.2 Independent Coordinator of Transmission (ICT)**

On May 27, 2005, Entergy submitted to the Federal Energy Regulatory Commission (hereinafter, FERC or Commission), on behalf of the Entergy Operating Companies, a proposed revision of its Open Access Transmission Tariff (OATT or Tariff) reflecting its proposal to establish an ICT for its energy system and a Weekly Procurement Process (WPP). In its filing, Entergy identified Southwest Power Pool, Inc. (SPP) as the candidate it had chosen to perform the function of the ICT. On April 24, 2006, in Docket No. ER05-1065-000 (hereinafter, ICT Approval Order), the Commission found that SPP, operating as a Regional Transmission Organization (RTO), satisfied the independence requirement of operating in the capacity of the ICT for Entergy and conditionally approved the tariff changes filed by Entergy. The ICT initiated its duties laid out in Attachment A of the ICT Agreement and further defined in Attachment S of Entergy's OATT on November 17, 2006, with select reliability functions starting on November 1, 2006.

### **1.3 ICT Duties Pursuant to Attachment A of the ICT Agreement**

- 1.3.1** Act as Reliability Coordinator for Entergy's transmission system.
- 1.3.2** Calculate Available Flowgate Capability (AFC) and grant and deny requests for transmission service under Entergy's OATT.
- 1.3.3** Grant and deny requests for interconnection service under Entergy's Large Generator Interconnection Procedures (LGIP) and Large Generator Interconnection Agreement (LGIA).
- 1.3.4** Operate Entergy's Open Access Same Time Information System (OASIS).
- 1.3.5** Perform a regional planning function.
- 1.3.6** Implement Entergy's transmission expansion pricing proposal, including preparation of the Base Plan.
- 1.3.7** Oversee the planning and operation of Entergy's transmission system, as well as Entergy's WPP.
- 1.3.8** File such reports as may be required by the ICT Agreement, Attachment S of Entergy's OATT, or as otherwise required by the FERC or Entergy's Retail Regulators.
- 1.3.9** Conduct stakeholder meetings.

### **1.4 Reporting**

The ICT is required by section 7 of Attachment S of Entergy's OATT to provide quarterly reports to all Interested Government Agencies pertaining to SPP's performance as the ICT. Also, in the ICT Approval Order the FERC required that the ICT prepare a yearly report to measure the success of the ICT and the WPP in meeting Entergy's claimed objectives, including benefits, and to ensure that market participant concerns are being adequately addressed. On March 17, 2009, the Commission required the ICT to file a report on WPP operations and savings on a quarterly (rather than annual) basis. See section 5.4.

This quarterly report addresses current ICT duties and briefly discusses WPP operations. In addition, this report contains operational results from the current reporting period and includes a

presentation of certain historical data, e.g., frequency of Transmission Loading Relief (TLR) events, to permit a comparative analysis of ICT performance in areas such as reliability.

**1.4.1** No persons, party, or agent including Entergy, Market Participants, Interested Government Agencies, or any other administrative oversight group has been given authority to screen the findings, conclusions, and recommendations contained in this report. Entergy shall have forty-five (45) days to respond to this report as well as any Market Participant.

**1.4.2** This report shall be forwarded to each of the Interested Government Agencies and will be made publicly available, subject to redaction or other means necessary to protect confidentiality of certain report aspects.

### **1.5 Arkansas Public Service Commission (APSC) Public Hearing**

As previously reported, the APSC has opened a docket to examine transmission issues within SPP and Entergy that affect electric service within Arkansas. On May 29, 2009, the APSC ordered that a comprehensive cost/benefit analysis be performed to determine the benefits of the entire Entergy System, or Entergy Arkansas as a stand-alone entity, joining the SPP-RTO. The APSC directed SPP to be the administrator of this study and to develop a request for proposal to select an independent third-party consultant to conduct the study. The APSC ordered that the cost/benefit study should be completed by December 31, 2009.

In accordance with the directives of the May 29 order, SPP filed its proposed work plan for the cost/benefit analysis on July 1, 2009. The document was prepared by both SPP and Entergy and both parties agreed to the scope of the proposed work plan.

In response to the May 29 order, SPP requested the APSC clarify that the costs and expenses of the cost/benefit analysis should be assumed by Entergy and Entergy Arkansas. In response, Entergy Arkansas argued that there should be equal cost sharing as SPP and its members stand to benefit from the study. On July 31, 2009, FERC Chairman Jon Wellinghoff sent a letter to retail regulators indicating FERC's willingness to fund that portion of the study analyzing the cost and benefits of Entergy Operating Companies joining SPP-RTO. Chairman Wellinghoff's letter made clear, however, that such funding would not extend to the study of state-related cost/benefits associated with possible RTO membership of the individual Entergy operating companies. Accordingly, the APSC accepted Chairman Wellinghoff's offer for FERC to fund a portion of the cost/benefit study and directed Entergy Arkansas to fund the portion of the study on the costs and benefits associated with Entergy Arkansas becoming a stand-alone member of SPP-RTO.

Since the issuance of the APSC's May 29 order, Entergy's state retail regulators have begun exploring the possibility of creating an Entergy – Regional State Committee (E-RSC) to collectively address transmission concerns in the Entergy System. It is also anticipated that the E-RSC, if adopted by the specific jurisdictions, would become the administrator of the cost/benefit study ordered by the APSC. As a result, the timetable for the completion of the cost/benefit study is being reviewed along with the adoption of the proposed E-RSC.

#### **1.6 Public Conference on ICT Arrangement**

On June 24, 2009, the Commission, in conjunction with Entergy's retail regulators, hosted a public conference to undertake a comprehensive assessment of transmission access issues on Entergy's system and the success of the ICT arrangement. At the conference, topics covered by the discussion included Entergy's long-term transmission planning and the differences between Entergy's Construction Plan and the ICT's Base Plan; concerns with transmission investment on the Entergy system and the use of participant funding for transmission upgrades; creation of a regional state committee to facilitate resolution of generation and transmission issues between regions; congestion and the high number of TLR events on the Entergy system; establishment of a comprehensive seams agreement between the Entergy and SPP regions; an increase in the ICT's authority in the AFC process and transmission planning; improvements to the ICT should the arrangement be extended; and exploration of the costs and benefits of Entergy joining SPP-RTO versus renewing the ICT arrangement.

The record for the public conference remains open and several parties have submitted supplemental comments and additional materials to add to the discussion on the various topics. By the end of this reporting period, the Commission had not yet issued an order on the public conference.

## **2. Reliability Coordination (RC)**

### **2.1 Overview**

In the ICT Approval Order, paragraph 94, the Commission stated that the ICT shall act as the Reliability Coordinator for Entergy's transmission system. On November 1, 2006, Entergy formally transitioned the Reliability Coordinator function to the ICT. As the Reliability Coordinator for Entergy, the ICT has authority over all matters within the scope of its duties as a North American Electric Reliability Council (NERC) Reliability Coordinator. The ICT's performance of these duties has been strictly on an independent basis utilizing information from Entergy, Market Participants, and other balancing authorities in making decisions and completing any analysis of Entergy's system. The ICT is in compliance with the standards set forth by NERC and has complied with all Southeastern Electric Reliability Council (SERC) Reporting Standards and deadlines. The ICT participates in the SERC Daily Coordination Telecom, in which the Tennessee Valley Authority (TVA) Reliability Coordinator System Operator initiates and leads the call. In the ICT Approval Order, paragraph 149, the Commission also stated that Entergy will retain its obligations as the Control Area Operator and Transmission Provider.

## 2.2 Monthly SERC Filing Requirements

The ICT submitted monthly SERC RC filings for the period of June 1, 2009 to August 31, 2009. The monthly filings certify the ICT is compliant with the following standards:

- 2.2.1 TOP-007 Reporting System Operating Limits (SOL) and Interconnected Reliability Operating Limits (IROL) Violations: The ICT monitors for IROL and SOL violations and will implement a contingency plan when those events occur, which includes developing an action plan to return the system within limits.

*Note: No SOL or IROL violations occurred within the reporting period of June 1, 2009 to August 31, 2009.*

- 2.2.2 PER-003 Operator Credentials: All ICT RC personnel are NERC Certified and have undergone the proper training to maintain such certification.
- 2.2.3 PER-004 Operator Credentials: RC Operators are present at the RC desk twenty-four (24) hours per day, seven (7) days per week.
- 2.2.4 IRO-004 Reliability Coordination- Operations Planning: The ICT conducts next day reliability analysis for the Entergy footprint to ensure ongoing reliability in the transmission system under normal and contingency situations. In addition, the ICT Reliability Coordinator considers adjacent Reliability Coordinator areas in its analysis to prevent unacceptable burdens being placed on the adjacent system.

## 2.3 Other SERC Filing Requirements

No other SERC filings or self-certifications were required during the current reporting period.

## 2.4 TLR Events

Section 5 of Attachment S to Entergy's OATT in conjunction with the Reliability Coordinator Protocol provides that the ICT shall have exclusive authority to execute TLR procedures under NERC Standards IRO-006-3 and PER-004-1. Therefore, the ICT Reliability Coordinator has and exercises the authority to execute TLR events if it deems necessary. To mitigate TLRs the ICT Reliability Coordinator will re-dispatch generators, reconfigure and modify transmission maintenance and outage schedules, as well as adjust transmission schedules and reduce load to mitigate critical conditions.

TLRs are used to curtail transmission service and help prevent instability, uncontrolled separation, or cascading outages. NERC prescribes eight levels of TLRs. The higher the TLR level, the more critical the potential problem is on the transmission system. Actions taken by the ICT Reliability Coordinator on TLR levels one through four include curtailment or holding of Non-Firm transmission service. Reallocation, curtailment, or holding of Firm transmission service occurs when TLRs reach levels five or above. This report identifies TLR procedures invoked by the ICT during the reporting period in connection with TLR Level 3, 4, and 5 events – i.e., the levels which allow for the curtailment of transmission service.

#### **2.4.1 Review of TLRs**

The ICT Reliability Coordinator initiated one hundred twenty-eight (128) TLR Level 3, 4, and 5 events with a total curtailment of 286,776 MWh's from June 1, 2009 to August 31, 2009. For comparison purposes, during the same period in the previous year there were a total of one hundred thirty-four (134) TLR Level 3, 4, and 5 events initiated with a total of 145,925 MWh's curtailed. Figures 1 and 2 illustrate these TLR events broken down by monthly totals for the current and previous year time period.

Figure 1

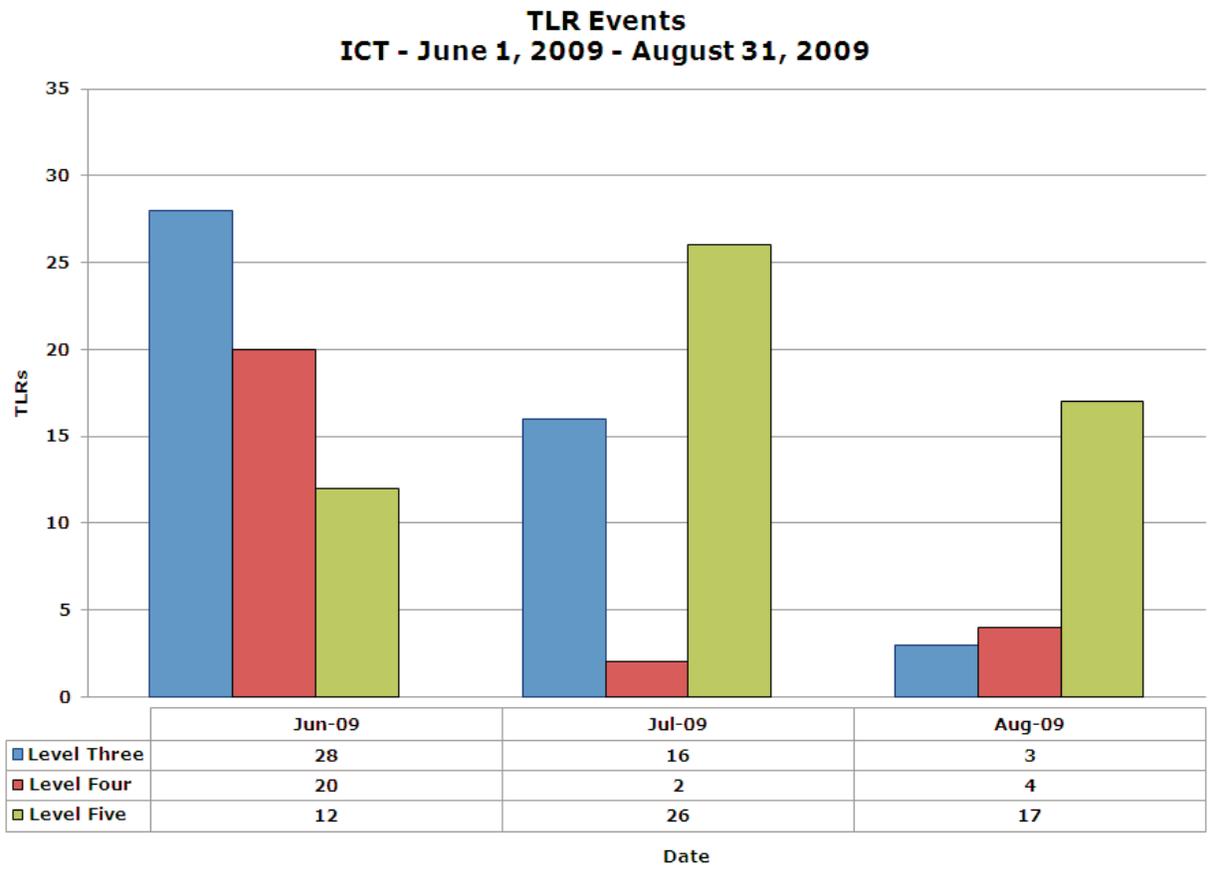
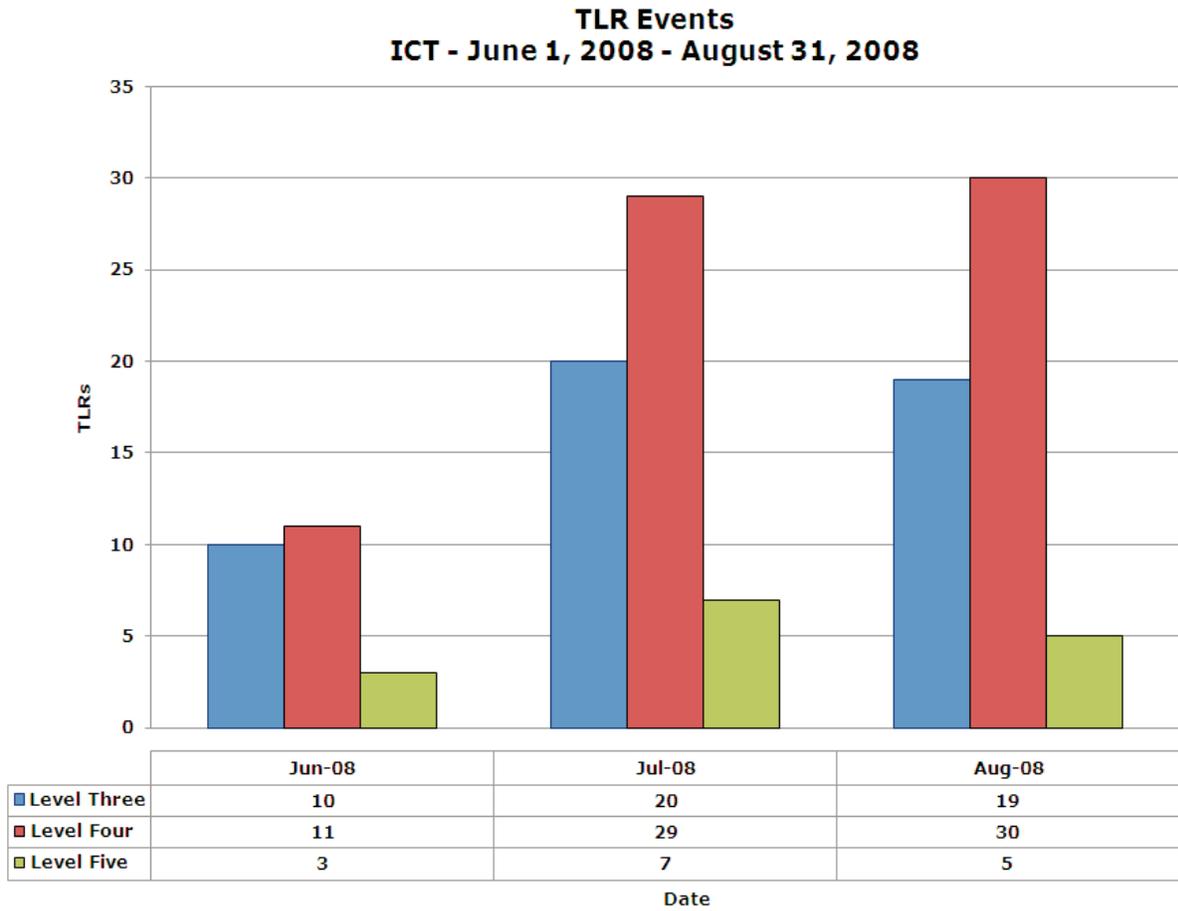


Figure 2



A total of 234,773 MWh's of Non-Firm service and 52,003 MWh's of Firm service were curtailed by the ICT from June 1, 2009 to August 31, 2009. A total of 139,033 MWh's of Non-Firm service and 6,892 MWh's of Firm service were curtailed by the ICT during the same timeframe in the prior year. Figures 3 and 4 illustrate the MWh's curtailed by the ICT broken down by monthly totals and Firm and Non-Firm service.

Figure 3

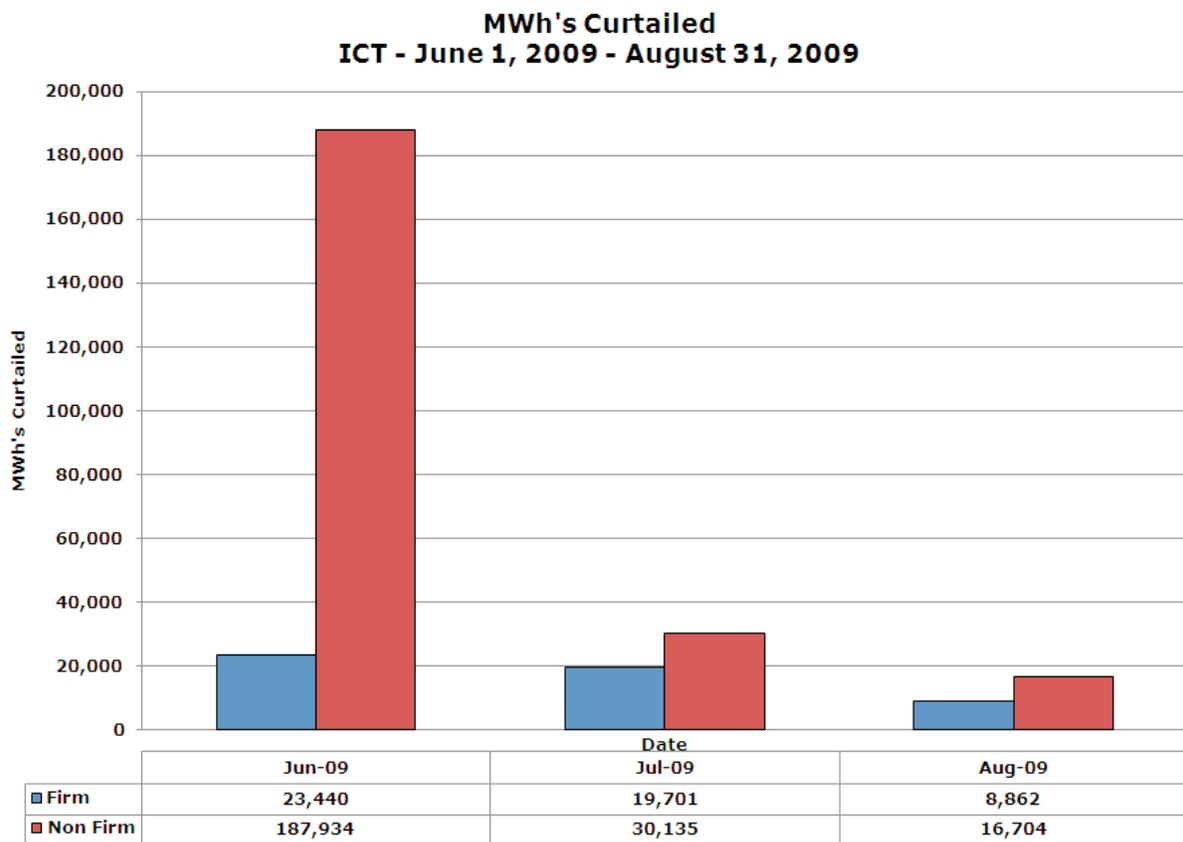
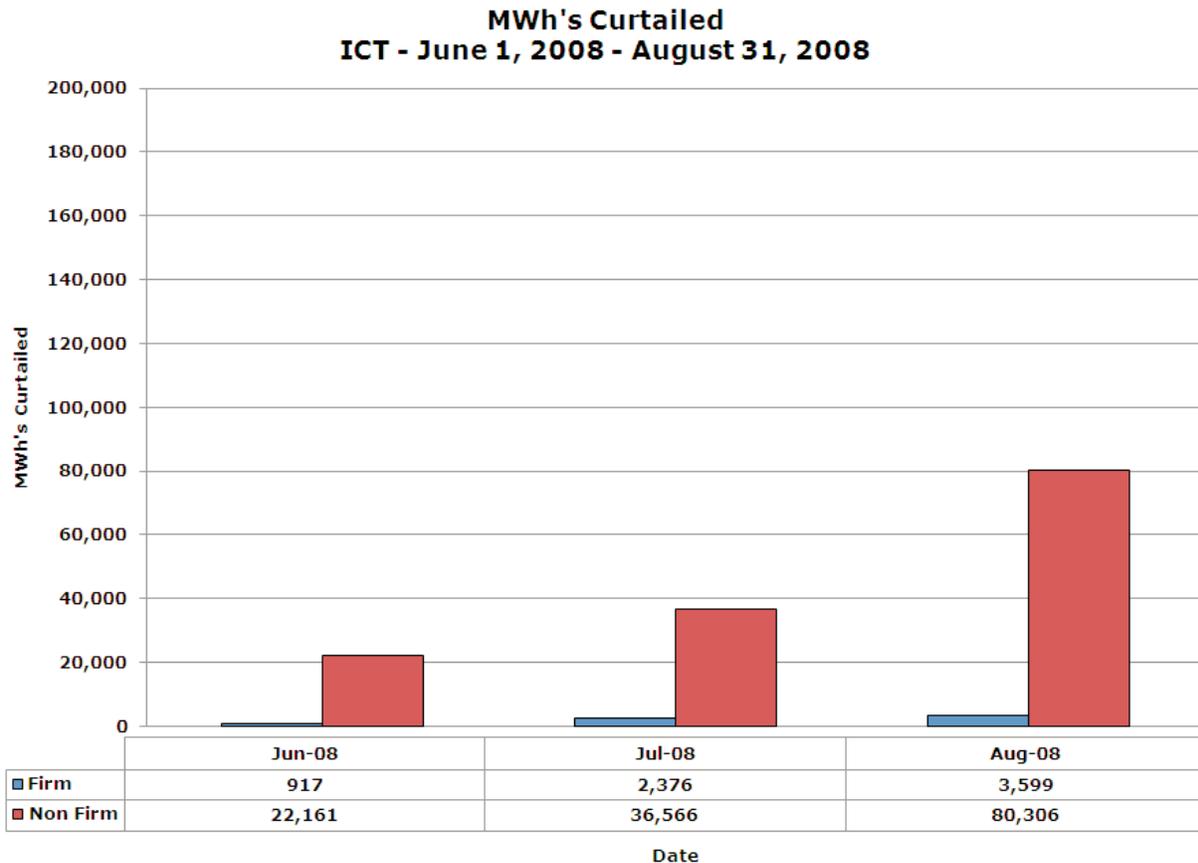


Figure 4



### 2.4.2 TLR Analysis

During the current reporting period, the total number of TLR events decreased by 4.5 percent, but there was an overall increase in the total MWh's curtailed. The increase in MWh's curtailed reflected a 68.9 percent increase in Non-Firm service curtailments and a 654.5 percent increase in Firm service curtailments compared to the same quarter last year.

Circumstances contributing to the TLR events called this period are summarized below:

- The Acadiana Load Pocket (ALP) accounted for fifty-nine (59) TLR events with 3 percent of the total Non-Firm service curtailments and 53.6 percent of the total Firm service curtailments during this reporting period. Within the ALP, the majority of the TLR events were called on the North Crowley – Scott 138 kV for the loss of Wells – Pont D Mouton

230 kV flowgate. These TLR events were caused by high load requirements and unplanned outages in the area. In particular:

- On or about June 9<sup>th</sup>, the load in the ALP began to rise due to unseasonably warm temperatures in south Louisiana. The peak load for the ALP is 1,714 MW recorded in August 2007. During the reporting period the load for this area approached this level several times with an average load of approximately 1,698 MW.
- During this time of unseasonably high temperatures, several area generation units were unavailable.
- Entergy also unexpectedly lost Ninemile #5, a 740 MW generating unit in the southern Louisiana area, due to a rotor fire. This unplanned outage compounded the problem in the area. Entergy reports that Ninemile #5 is expected to remain unavailable until March 2010.
- The Baxter Wilson – Ray Braswell 500 kV for the loss of Grand Gulf – Franklin 500 kV flowgate had eighteen (18) TLRs issued with 28 percent of the total Non-Firm service cut for the quarter and 25 percent of the total Firm service curtailed. The loss of Ninemile #5 contributed to the problems for this flowgate during this reporting period.

Accordingly, these two (2) reported flowgates accounted for 31 percent of the total Non-Firm service and 78.6 percent of the total Firm service curtailed during this reporting period.

#### **2.4.3 ICT Reliability Improvement Plan**

The ICT RC group developed the Reliability Improvement Plan (RIP) in an effort to minimize the level and severity of TLR events on Entergy's system. The ICT RC group took no actions under the RIP during this reporting period.

#### **2.4.4 ALP Agreement**

The recently brokered ALP Agreement was put into effect eight (8) times during this quarter. In accordance with the ALP Agreement, the following statement was included in each TLR issuance by the ICT for the ALP area and posted to the Reliability Coordination Information System (RCIS):

In order to prevent the declaration of an otherwise unavoidable Level 5a or Level 5b Transmission Loading Relief event for ICTE Flowgate 1902, the ICT-RC requested the implementation of the ALP Local Area Procedure. Pursuant to that ALP Local Area Procedure, Cleco Power LLC ("CLEC") and the Lafayette Utilities System ("LAFA") voluntarily increased the energy output of certain specific generating units on their respective systems that have positive Generation Shift Factors on ICTE Flowgate 1902, which is located on the Entergy transmission system. But for the implementation of this voluntary ALP Local Area Procedure, the ICT-RC would have found it necessary to declare a Level 5a or Level 5b TLR event for the ICTE Flowgate 1902. The voluntary ALP Local Area Procedure results in additional system energy costs for CLEC and LAFA but provides operating and service reliability benefits for CLEC, LAFA, and Entergy.

Accordingly, the operation of the ALP Agreement reduced the severity of TLR events on Entergy's system during this reporting period by eliminating the need for the ICT Reliability Coordinator to declare a Level 5a or 5b TLR event for the ALP area.

#### **2.4.5 Designated Network Resource (DNR) Technical Team**

The DNR Technical Team implemented a method to make the calculation of Native Network Load (NNL) responsibility for TLR Level 5 events more accurate by capturing network resources and correctly identifying DNRs in the Interchange Distribution Calculator (IDC) model. In addition, the ICT RC group and Entergy have agreed on a procedure to determine the internal Non-Firm schedules (NN-6) during a TLR Level 5 event and for curtailing internal Non-Firm schedules not currently in the IDC. The ICT RC group and Entergy, however, continue to discuss the necessary changes to Entergy's Tariff to implement this procedure. By the end of this reporting period, Entergy had not filed the necessary tariff changes to implement this procedure.

### **3. Tariff Administration (TA)**

#### **3.1 Overview**

Section 3.1 of Attachment S to Entergy's OATT establishes that the ICT shall oversee the provision of transmission service for Entergy and provide TA functions to evaluate (grant or deny) all transmission service requests (TSR) on a non-discriminatory basis consistent with the TSR Processing Criteria and Transmission Study Criteria. This section of the report will address the ICT's oversight of TA for short-term TSRs. The ICT's oversight of long-term TSRs is discussed in section 4 of this report.

#### **3.2 AFC Studies and Research**

The activities of the ICT TA group from June 1, 2009 through August 31, 2009, included, among other things, the ongoing analysis of models and AFC software errors, work on AFC modeling issues related to the inclusion of transmission upgrades in the short-term models, the WOTAB load pocket, the calculation of net interchange and the dispatching of external control areas, reservation stacking for a Load Serving Entity (LSE), suspension of Non-Firm sales during a TLR, implementing changes to the TSR process required by FERC Order Nos. 890, 890-A, and 890-B, participating in the DNR Technical Team, and coordination of Entergy's move to the Open Access Technology, Inc. (OATI) software. A more detailed description of these and other activities is provided below.

##### **3.2.1 Ongoing studies**

On a daily basis, the ICT's AFC Engineers analyze and respond to TSRs, AFC model problems, transmission constraints, and other issues identified through the TSR process and specific stakeholder concerns and questions.

##### **3.2.2 Suspension of Non-Firm Sales**

The ICT TA and the ICT RC groups continue to work together with stakeholders to address the concern about the sale of Non-Firm transmission service during a TLR. As reported last quarter, the ICT contacted Entergy for details on how the evaluation of Non-Firm service on AFC flowgates during a TLR will be implemented under the OATI software. Subsequently, the ICT TA and RC groups have internally finalized a process that will be implemented to address this issue with the move to OATI. This was presented to the stakeholders during the July 2009 Near-Term Transmission Issues Working Group (NTTIWG) meeting.

### **3.2.3 WPP Support**

The ICT TA group continues to support the interface between the WPP and the AFC process on a weekly basis.

### **3.2.4 Implementation of Order Nos. 890 et seq. Requirements**

The ICT continues to work with Entergy to finalize the business practices associated with the Conditional Firm service established by FERC Order Nos. 890 et seq.

### **3.2.5 Criteria Manuals**

As reported last quarter, Entergy filed the Criteria Manuals (now Attachments C, D, and E to the Entergy OATT) with the Commission on April 3, 2009. By the end of this reporting period, the Commission had not yet acted on Entergy's filing.

In its filing of the Criteria Manuals, Entergy stated that it intended to post certain business practices on the more detailed and technical processes associated with the Criteria Manuals to allow the ICT and stakeholders the flexibility to continue to discuss and make technical improvements and adjustments to these processes. Consistent with this commitment, Entergy circulated a draft of its proposed business practices to stakeholders on July 17, 2009.

### **3.2.6 DNR Technical Team**

During this reporting period, the ICT TA group continued to participate in the DNR Technical Team. See section 2.4.5.

### **3.2.7 AFC Modeling Improvements Task Force**

As reported last quarter, a task force was formed to address three specific issues pertaining to AFC modeling: (i) the modeling of transmission upgrades in the AFC models; (ii) the process for enforcing zonal import limits in the AFC models; and (iii) the process for modeling net interchange and the dispatch of external control areas. A more detailed discussion of these issues is provided in sections 3.2.8, 3.2.9, and 3.2.10 below.

### **3.2.8 Modeling of Transmission Upgrades**

Starting in October 2008, the ICT TA group has expressed its concerns about Entergy's current practice of excluding all transmission upgrades in the short-term AFC models until the time the upgrades are actually placed in-service, but allowing the transmission service associated with those upgrades to be reflected in the AFC models. In the ICT's view, if the granted transmission

service is included in the AFC base case models, then the upgrades for that service should also be included in the models as of the date those upgrades are projected to go into service. Entergy stated that, in its view, the criteria under section 2.3.1.1 of Attachment D for including certain “provisional” transmission upgrade facilities in the long-term modeling process do not apply to the short-term AFC models.

As part of the discussions over the Criteria Manuals, the ICT TA group recommended that Entergy not put any language in Attachment C about its current practice of excluding upgrades not yet in-service from the AFC models. Instead, the ICT asked Entergy to post its current short-term modeling process in a business practice to make it easier to continue further discussions and explore alternative solutions to improve Entergy’s current modeling practice. As reflected in the Criteria Manuals filing, Entergy agreed to this recommendation and Attachment C included a reference to business practices on Entergy’s short-term modeling.

As reported above, Entergy has circulated its draft business practices to stakeholders. The task force has not yet addressed this issue. During the next quarter, however, the task force intends to review this issue and provide its recommendation on the proposed business practices to the NTTIWG.

### **3.2.9 Modeling Issues Identified for the WOTAB Load Pocket**

As previously reported, the ICT and Entergy have identified improvements needed to the current modeling practice involving the dispatch of units in the load pockets needed to enforce the zonal import limits in the AFC models.

As part of the discussions over the Criteria Manuals, the ICT TA group and Entergy agreed that the details about the process for enforcing zonal import limits would be included in posted business practices and not in Attachment C. Entergy also agreed that the business practice on zonal import limits will be subject to further stakeholder review and additional development activities to explore alternative solutions to improve Entergy’s current modeling practice.

As reported above, Entergy has circulated its draft business practices to stakeholders. The task force has discussed this issue and determined that the zonal import limit adjustment in the AFC models was no longer needed. This was presented at the July 2009 NTTIWG meeting. There were no objections by stakeholders or Entergy to the task force’s conclusions. The task force’s recommendation will be finalized during the upcoming quarter and reflected in Entergy’s business

practices. In addition, the necessary details about enforcing zonal limits are still being worked on and will be added to Entergy's business practices.

### **3.2.10 Net Interchange and External Control Area Dispatch Modeling**

As previously reported, Entergy and the ICT have discussed the need to modify the current AFC modeling assumptions related to first-tier external control area dispatch and net interchange, which rely on real-time adjustments from Entergy's state estimator model.

As part of the discussions over the Criteria Manuals, Entergy agreed to modify its current practices. However, Entergy and the ICT could not reach a final conclusion on how to modify these assumptions. Therefore, the ICT recommended that Entergy remove the detailed description of the external control area dispatch and net interchange modeling practices from the tariff and place it in a business practice to allow the ICT, Entergy, and stakeholders the flexibility to explore alternative assumptions and develop specific recommendations to improve the process. Entergy, however, included the process-related detail in the Criteria Manual filing, but agreed to continue to discuss alternatives to the current modeling practices with stakeholders. Entergy also agreed to work with the ICT to implement more targeted generation dispatch and net interchange alternatives that would not require software modifications.

The task force has discussed this issue and recommended that Entergy use coordinated TSR and unit dispatch from the external control areas to calculate net interchange and set the dispatch for those areas. This was presented at the July 2009 NTTIWG meeting. There were no objections by stakeholders or Entergy to the task force's conclusions. Accordingly, the ICT and Entergy have begun coordinating with the external control areas to include this information in the AFC models.

### **3.2.11 Reservation Stack for Load-Only Balancing Authorities**

Entergy has agreed to work with the software vendor to implement an automated modeling process to allow LSE customers to provide a stack of reservations for the modeling of network service to meet their load in the Study Horizon. Entergy has informed the ICT, however, that the work on the software patch has been delayed due to higher priority issues, including the replacement of Entergy's OASIS Vendor. See section 3.2.12.

During this reporting period, Entergy has not provided any updates on the progress made to implement the software patch for the automated process.

### **3.2.12 AFC Systems Capability/OASIS Replacement Project**

As previously reported, Entergy plans to move to OATI as the software vendor to replace their current OASIS and OASIS Automation (OA) tools. The OATI products for these functions are webOASIS and webTrans. In previous reports, Entergy had estimated that the new OATI software would be in production in August 2009.

At the July 2009 Stakeholder Policy Committee (SPC) meeting, stakeholders requested that additional training sessions on webTrans and webOASIS be held before transitioning to OATI and that the transition date be delayed until after the summer peak months. Accordingly, Entergy, the ICT, and stakeholders agreed to delay the start-up of OATI until September 28, 2009. Entergy notified the Commission of this new expected implementation date on August 18, 2009. See Attachment 1.

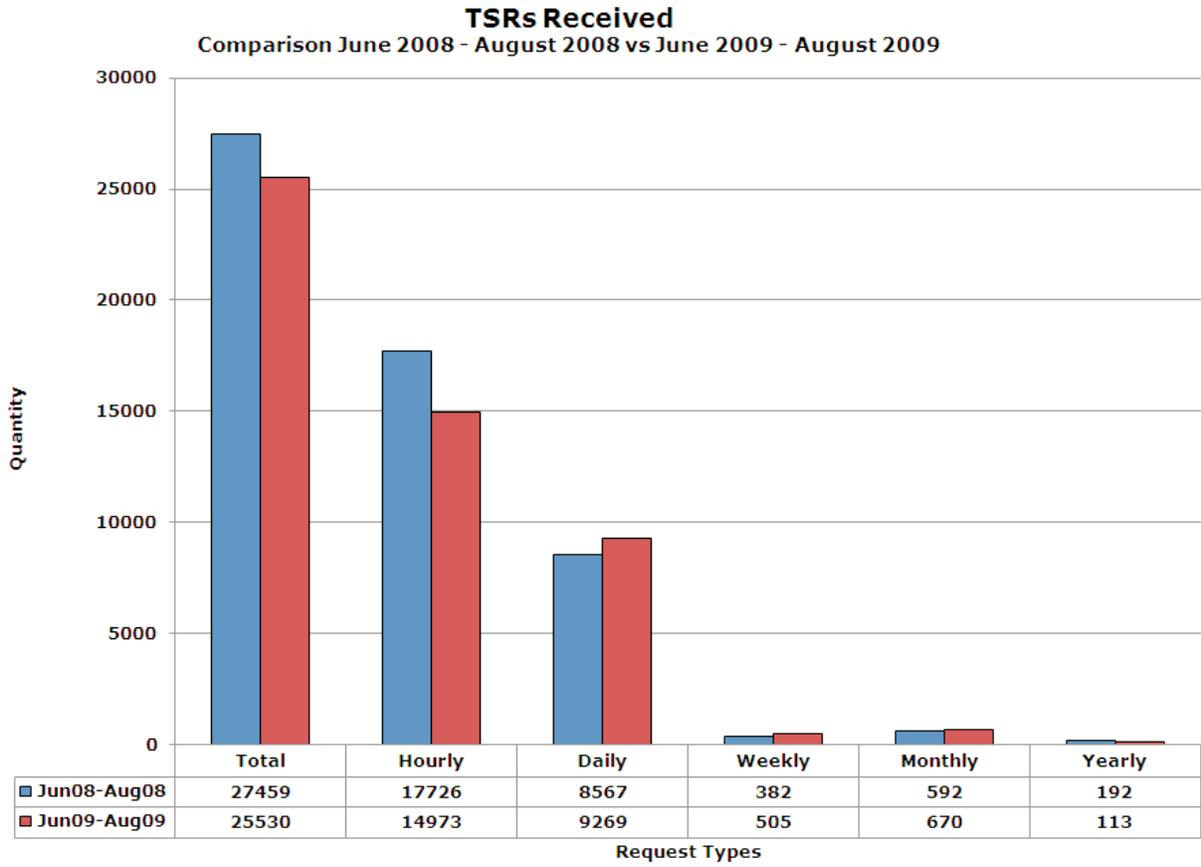
### **3.3 ICT Processing of TSRs**

Transmission Customers have the responsibility to submit a complete and accurate request for service via the OASIS website. The ICT TA group then assesses the completed requests for Non-Firm Hourly service, Firm and Non-Firm Daily, Weekly, and Monthly service. The ICT TA personnel utilize the e-terra automation software to access and evaluate TSRs to determine whether each TSR should be accepted or refused. The ICT TA group will accept or refuse short-term TSRs based upon the AFC at that particular time. Long-term TSRs or requests outside the AFC Study Horizon (18 months) require a System Impact Study (SIS) and/or a Facilities Study (FS) performed by ICT Planning Engineers. The ICT's oversight of long-term TSRs and the planning process will be discussed in detail in section 4 of this report.

#### **3.3.1 Review of TSRs**

3.3.1.1 Figure 5 illustrates the number of TSRs received and acted on by the ICT from June 1, 2009 to August 31, 2009, as compared to the same time period in the prior year. As shown, there was a 7.0 percent decrease in the total number of TSRs received by the ICT during this reporting period. The percentage difference for each type of service by duration was as follows: Hourly -15.5 percent, Daily +8.2 percent, Weekly +32.2 percent, Monthly +13.2 percent, and Yearly -41.1 percent. These percentage changes can also be seen in Figure 12.

**Figure 5**



3.3.1.2 The following figures (Figures 6, 7, and 8) illustrate the total number and percentage change of confirmed versus refused service requests for the period from June 1, 2009 through August 31, 2009, compared to the same period in the previous year. The request type of “other” includes TSRs that are in the following statuses: study, accepted, withdrawn, displaced, invalid, declined, superseded, counteroffer, annulled, and retracted. Also, included in the figures below is the total number of requests received by month during the same time periods.

**Figure 6**

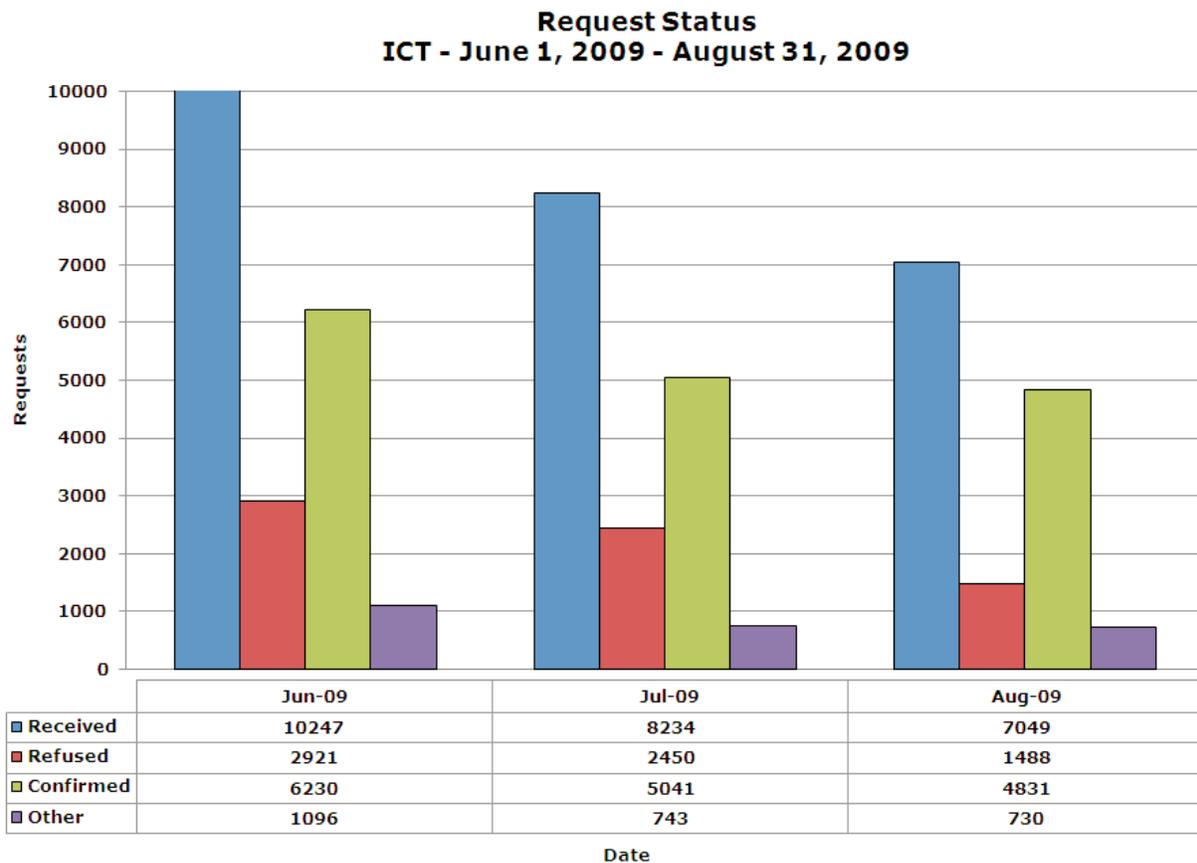


Figure 7

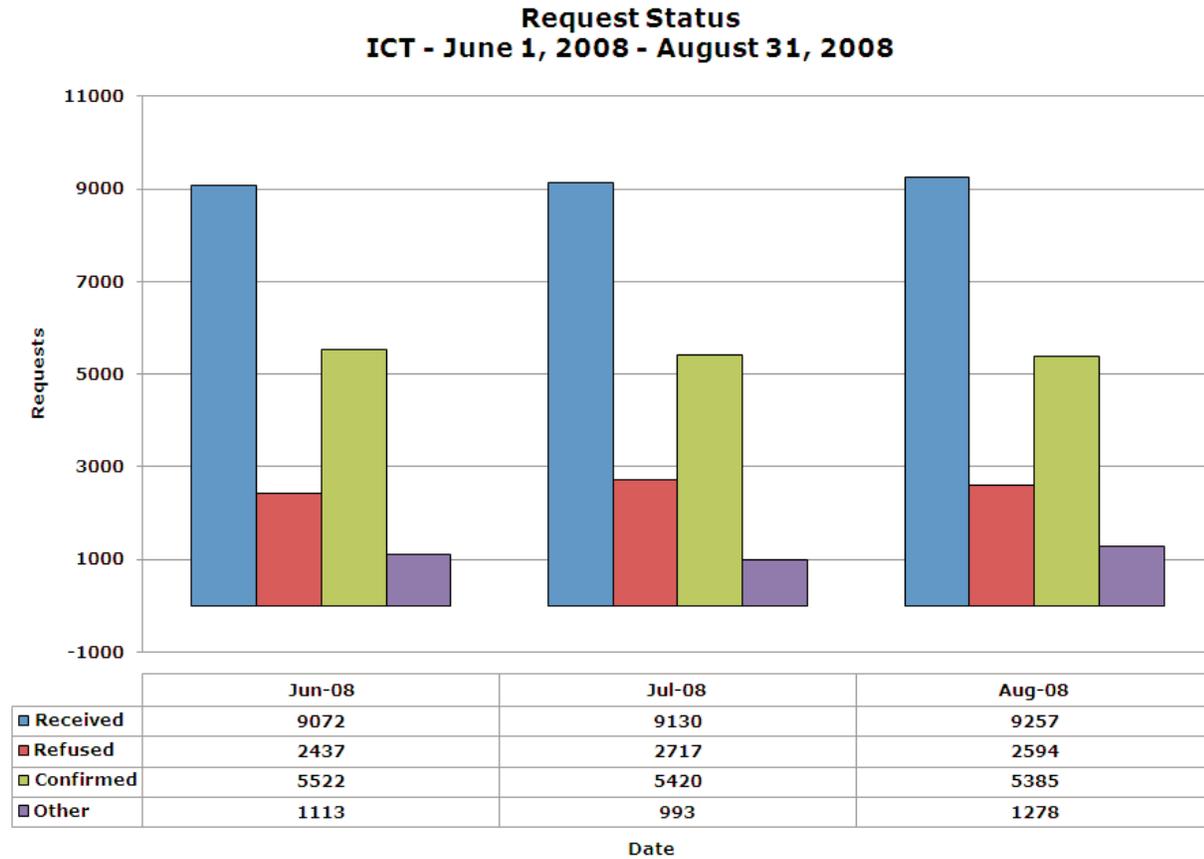


Figure 8

**Year to Year Comparison of Request Status**  
**Jun 2008 - Aug 2008 vs. Jun 2009 - Aug 2009**

Status	Jun	Jul	Aug	Total
Received	13.0%	-9.8%	-23.9%	-7.0%
Refused	19.9%	-9.8%	-42.6%	-11.5%
Confirmed	12.8%	-7.0%	-10.3%	-1.4%
Other	-1.5%	-25.2%	-42.9%	-24.1%

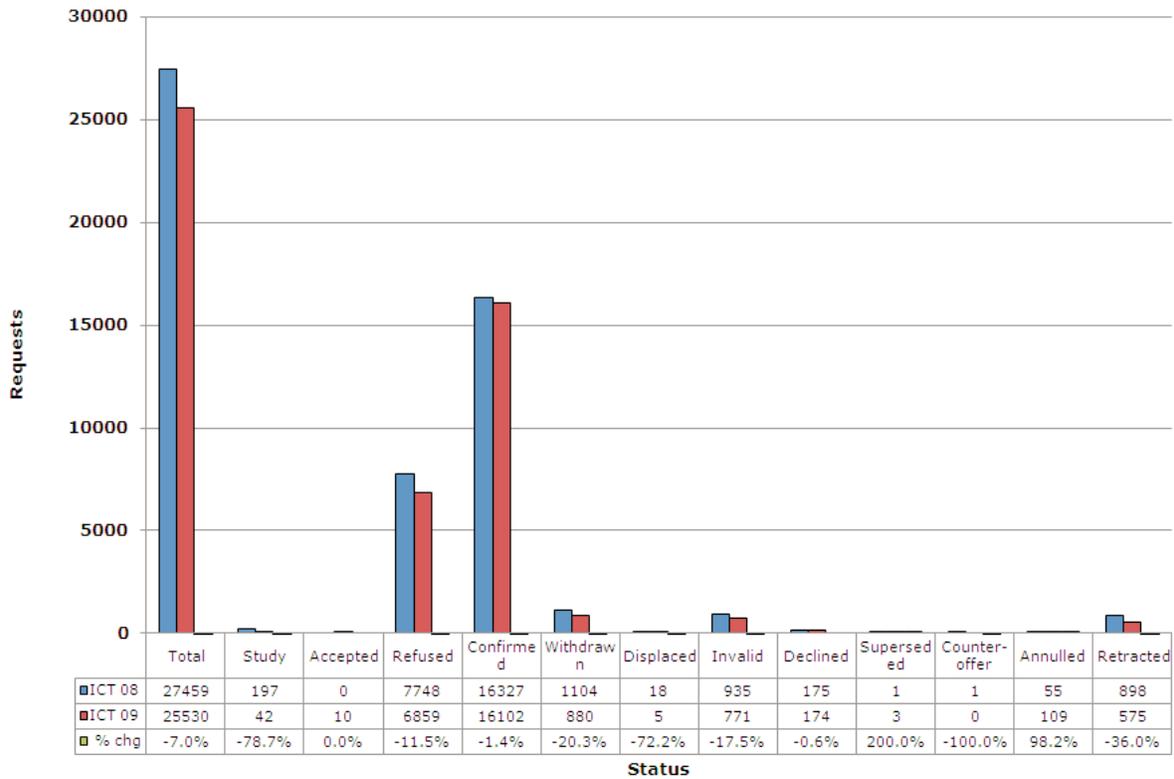
3.3.1.3 Figure 9 compares the ultimate disposition for the total amount of TSRs received by the ICT from June 1, 2009 through August 31, 2009, and the same time period for the previous year. Since each TSR is received and queued with a status of “study” pending final disposition, some TSRs received by the ICT are currently listed in “study” due to the fact that a final decision has not yet been made on the TSR.

The ICT reports that due to a change in the procedure to comply with Order No. 890 the number of TSRs in “declined” status now includes the following additional reasons: an Hourly Secondary request is submitted that is not a re-direct; a reservation is overbooked; a reservation window is not yet open; or an e-mail for DNR is not received.

In addition, Attachment 2 to this report provides a more detailed analysis of the TSRs received during the current reporting period. The graphs in Attachment 2 present the disposition of each TSR received by service duration.

**Figure 9**

**Request Status Comparison**  
 ICT June - August 2008 vs. June - August 2009



3.3.1.4 The following Figures 10 and 11 illustrate the number of TSRs, sorted by type, the ICT processed from June 1, 2009, to August 31, 2009, and for the same period of the previous year. Figure 12 offers an illustration of the percentage change in service types from June 1, 2009, to August 31, 2009, versus the same period of the previous year.

**Figure 10**

**Requests By Type  
ICT - June 1, 2009 - August 31, 2009**

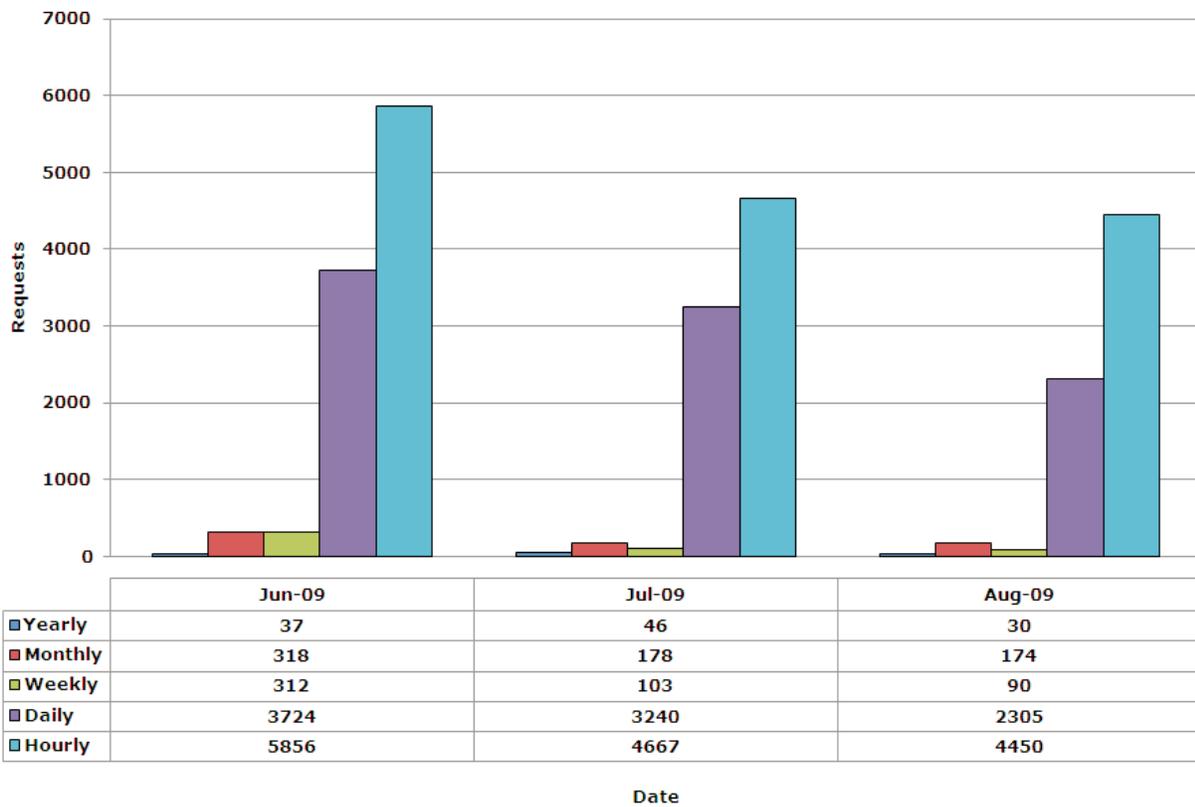


Figure 11

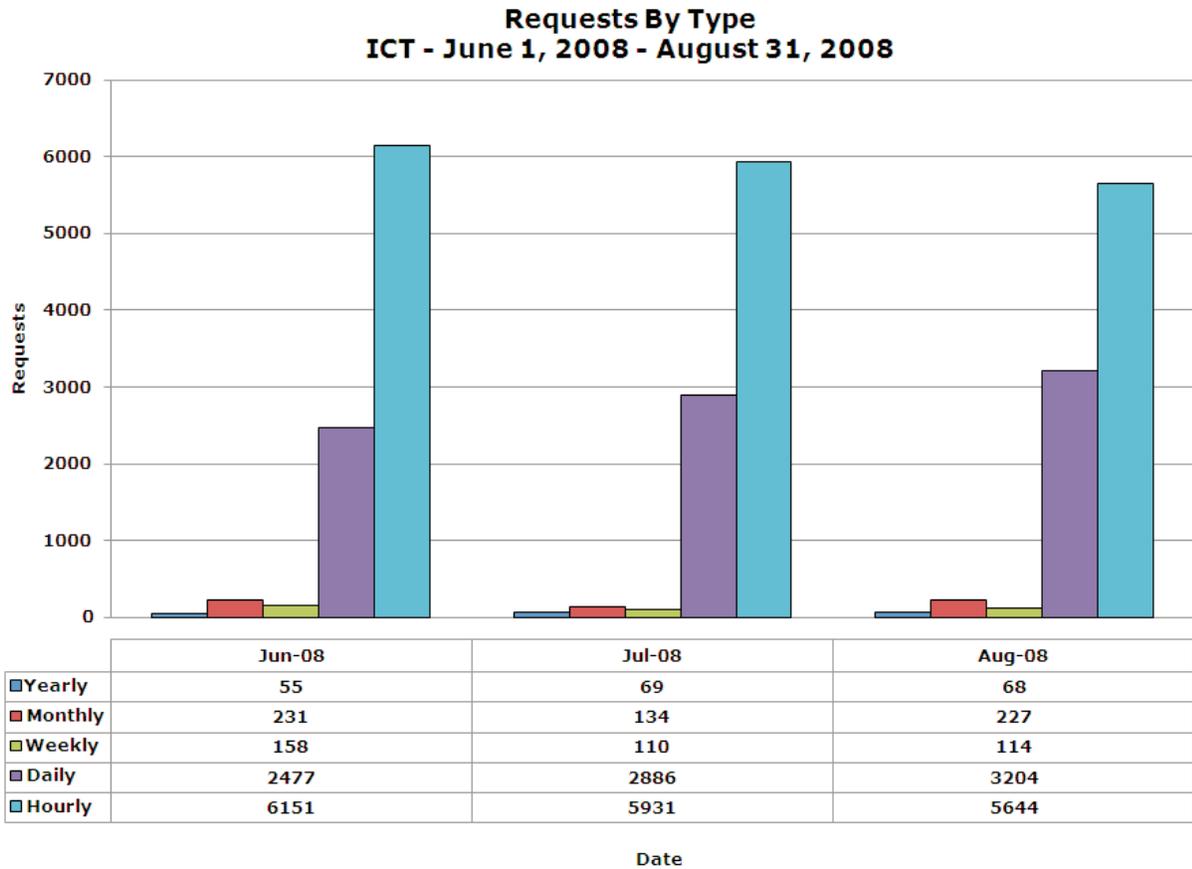


Figure 12

**Request Status Percentage Change**  
**June 2008 - August 2008 vs. June 2009 - August 2009**

	Jun	Jul	Aug	Total
Yearly	-32.7%	-33.3%	-55.9%	-41.1%
Monthly	37.7%	32.8%	-23.3%	13.2%
Weekly	97.5%	-6.4%	-21.1%	32.2%
Daily	50.3%	12.3%	-28.1%	8.2%
Hourly	-4.8%	-21.3%	-21.2%	-15.5%

## **4. Planning and Tariff Studies**

### **4.1 Overview**

Section 3.1 of Attachment S states “[t]he ICT shall oversee the provision of transmission service pursuant to the OATT and the provision of interconnection service pursuant to the [LGIP] and [LGIA].” Section 3.1 (a) (5) of Attachment S also states “[t]he ICT shall prepare the Base Plan pursuant to the Transmission Planning Protocol.” The ICT assumed the planning function for Entergy on November 17, 2006, the ICT implementation date. This section of the report will describe all the ICT functions that relate to generation interconnection, long-term planning, and the approval of long-term transmission service.

### **4.2 Recommended Expansion Planning/Investment**

#### Base Plan/Construction Plan

The ICT posted Entergy’s draft 2010-2012 Construction Plan on Entergy’s OASIS on May 13, 2009. Entergy reviewed the draft Construction Plan with stakeholders at the June 9, 2009 Long-Term Transmission Issues Working Group (LTTIWG) meeting. Stakeholders were invited to comment on the plan. Entergy subsequently revised the draft Construction Plan twice.

Revision 1 was posted on July 16, 2009 and was made to add a project committed to by a Transmission Customer.

Revision 2 was posted on August 3, 2009, and it greatly expanded the number of proposed construction projects, containing twenty-five (25) additional projects and accelerating the in-service dates of eleven (11) others. The main driver for this second revision was the anticipated changes in NERC’s planning standards. In addition, the 2008 “Differences Report” identified twenty (20) projects that were contained in the ICT’s 2008 Base Plan that were not included in Entergy’s 2009-2011 Construction Plan. Of those twenty (20), twelve (12) have now been included in the draft 2010-2012 Construction Plan. Entergy also added alternative projects which are intended to displace another seven (7) of the ICT’s Base Plan projects. Finally, Entergy added a part of one Base Plan project and indicated that the full project is expected to be completed in a later Construction Plan. Therefore, all twenty (20) projects reported in the 2008 Differences Report have been addressed in some way in Revision 2 of the draft 2010-2012 Construction Plan.

On July 17, 2009, the ICT posted its draft reliability assessment report which included an evaluation of Entergy’s draft 2010-2012 Construction Plan. This report was reviewed with stakeholders at the July 22, 2009 LTTIWG meeting. After considering input of stakeholders, the ICT finalized the reliability assessment and posted the report on Entergy’s OASIS on August 6, 2009.

The ICT hosted the annual Transmission Planning Summit on August 11, 2009. At the Summit, presentations were given on Entergy's draft 2010-2012 Construction Plan, followed by the ICT's reliability assessment which evaluated the effectiveness of Entergy's plan, focusing on areas that still need to be addressed by Entergy. The ICT also presented a report on the joint Entergy/SPP regional and inter-regional planning activities, particularly the Southeastern Regional Transmission Planning (SERTP) and Southeastern Inter-Regional Participation Process (SIRPP), and gave an update on economic studies, including the ICT Strategic Transmission Expansion Plan (ISTEP). In addition to the formal presentations, breakout sessions were held for each local area within Entergy's transmission system in order to facilitate discussion of transmission issues with stakeholders, Entergy, and the ICT planning staffs. Stakeholder comments were also solicited after the Summit. These comments and discussions will be reviewed at the September LTTIWG meeting where additional stakeholder input will be solicited.

#### **4.3 10 Year Strategic Plan**

In accordance with the process established under the ISTEP, the ICT is proceeding with its work on the following ISTEP 2009 matters:

##### Entergy System Economic Studies

The SPC has requested the ICT to perform free economic studies in 2009 for the following five (5) projects:

1. South Central Arkansas / Northeast Louisiana Constraint - this project is meant to address North to South flows
2. Central Arkansas constraint - this project is meant to address South to North flows
3. Lake Charles 230kV Loop – this project is meant to relieve the 138kV flowgate issues
4. Baton Rouge / South Mississippi Constraint - this project is meant to address Central to South flows
5. Jackson Area - this project is meant to improve load-serving capability in the Jackson Area

The ICT presented preliminary results for projects 1 and 2 at the Transmission Planning Summit. The ICT reports that it expects to complete the thermal and transfer analysis for all projects by December 31, 2009, and begin the economic analysis early next year.

#### **4.4 WOTAB and Amite South Recommendation**

At the July 2009 LTTIWG meeting, a recommendation was adopted that the ICT perform an economic/transmission study to determine the set of transmission upgrades needed to significantly

reduce or stop the use of reliability must run (RMR) units located in the WOTAB and Amite South load pockets, while providing net savings to customers. The recommendation was discussed at the July 2009 SPC meeting and the SPC agreed that additional background and supporting information was needed before the SPC could vote on the matter. Therefore, the recommendation was sent back down to the LTTIWG to compile the requested information. By the end of this reporting period, the LTTIWG had not circulated a “revised” recommendation.

#### **4.5 Inter-Regional Coordination**

During the current reporting period, the ICT has been actively involved in inter-regional coordination. The ICT’s activities in each region are discussed below.

##### SPP RTO

As reported last quarter, stakeholders narrowed their list of regional economic studies for consideration under the Entergy/SPP Regional Planning Process (ESRPP) to the following five (5) projects:

1. Turk-McNeil 345 kV Line
2. Spadra-Russellville 161 kV Line
3. Turk-Fulton-El Dorado 345 kV Line
4. Messick 500/230 kV Auto
5. Flint Creek-Chamber Springs-Fort Smith-ANO 345 kV Line

The second meeting of the ESRPP was held August 12, 2009. At the meeting, the ICT presented an overview of the initial results of the stakeholders’ regional economic studies. Stakeholders were invited to comment and ask questions. The ICT expects the draft study results to be completed in the fourth quarter.

##### Southeast

The ICT is actively involved in the Southeast Regional Planning Stakeholder Group (RPSG). The second meeting of the 2009 planning cycle was held June 24, 2009. At that meeting, the Southeast Transmission Owners presented their preliminary expansion plans and solicited stakeholder input and feedback. The ICT will continue to follow and participate in the study process as it affects the Entergy system.

As reported last quarter, stakeholders selected the following five (5) sensitivity studies to address economic constraints to regional transfers within the southeast region, which is adjacent to Entergy:

1. Savannah to GA 60%, AL 20%, MS 20% - 1000 MW
2. Gulfport to Georgia - 1000 MW
3. Ties to SCEG to Georgia - 1000 MW
4. Murray 500 to Florida Border - 650 MW
5. Washington County to Georgia - 5000 MW

The five (5) sensitivity studies are ongoing, with preliminary study results expected in the fourth quarter and final results available for presentation at the annual Southeastern Regional Transmission Planning Summit (date to be announced). None of the selected studies directly involve Entergy as a source or sink region. Nonetheless, the ICT will monitor the study process for any incidental impact on Entergy.

The ICT also participates in the SIRPP, which addresses inter-regional planning for the SERC region as required under Order No. 890. The ICT staff is directly involved in the Study Team and Process Team which evaluate studies across the southeast region. A stakeholder meeting was held on August 19, 2009, to review the draft results of the following five (5) sensitivity studies performed by the Study Team:

1. Entergy to Georgia ITS = 2000 MW
2. PJM West and MISO to Southern = 2000 MW
3. Southern to PJM classic (Non AEP/ComEd part of PJM) = 3000 MW
4. PJM classic to Southern = 3000 MW
5. SPP to Southern = 5000 MW

These sensitivity studies are intended to address economic constraints to inter-regional transfers across the southeast region and adjacent systems, including Entergy. Stakeholders were invited to comment and provide feedback on the draft results. The ICT will continue to follow and participate in the study process as it affects the Entergy system.

#### **4.6 Louisiana Public Service Commission (LPSC) Technical Conference**

As reported last quarter, a LPSC-led task force was created to engage in a collaborative effort to consider the following issues: (i) the potential benefits to Entergy ratepayers of transmission upgrade alternatives; (ii) the effect of transmission upgrades on Entergy Gulf States Louisiana, LLC and Entergy Louisiana, LLC RMR units; (iii) a congestion cost/benefit analysis; (iv) methods to potentially reduce high-level TLRs (both economic and reliability); (v) the cost of requiring Transmission Customers to

re-dispatch; (vi) benefits or costs of transmission upgrades to Transmission Owners other than Entergy; and (vii) an SPP update on the South Louisiana Reliability Loop.

On August 12, 2009, the task force held its first meeting. At the meeting, LPSC staff facilitated the discussion of several issues and identified action items. The task force scheduled a follow-up conference call for September 11, 2009.

**4.7 Generation Interconnection Request Studies (GIRS)**

When a Transmission Customer requests to connect a generation facility to the transmission grid, the request must go through the Entergy interconnection process as defined in Attachment N of Entergy’s OATT. A series of three (3) studies are performed by the ICT and its contractors for each interconnection request: a Feasibility Study, a SIS, and a FS. Prior to each study phase, the Transmission Customer is tendered a study agreement, which they must respond to within thirty (30) days to continue the study process. Each study phase has its respective time limit for completion or explanation for extension of the due date:

- Feasibility Study (45 day limit)
- SIS (90 day limit)
- FS (90 day limit for a 20 percent cost estimate, 180 day limit for 10 percent cost estimate)

At the conclusion of this quarter (June 1, 2009 – August 31, 2009), there were two (2) active Feasibility Study projects; one (1) active SIS project and three (3) active FS projects being conducted by the ICT. Additionally, the study process for seven (7) generation interconnection projects was completed. Four (4) new generation interconnection projects were also added to the GIRS queue during the reported quarter.

This section discusses the status of GIRS for the quarter, including occurrences where due dates for studies were met or delayed and a delay letter was sent to the Transmission Customer. Generally, the ICT is in constant contact with a customer throughout the course of a study and the transmittal of a delay letter is not the customer’s first notification of a delay. It also bears noting that Entergy’s OATT requires that all studies be processed and studied in queue order. For this reason, the ICT is required to consider the implications of all prior studies before commencing the next study in the queue. Accordingly, a primary reason for many of the study delays involves events that are beyond the ICT’s control.

4.7.1 Figure 14 shows the twenty (20) GIRS that were active during the reporting period and their current status.

**Figure 14**

GI Project #	Fuel Type	Capacity Requested	Project Validation Date	Delay Letters	Completion Date	Status
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215	NG	31 MW	8/17/2007	SIS delay letters were sent on 3/27/08 5/22/08 6/26/08 A delay letter for the FS was issued 12/8/08	LGIA Tendered 3/16/2009	LGIA Executed 8/20/2009
216	NG	251 MW	10/18/2007	Feasibility Study delay letters were sent on 1/25/08 3/18/08 9/9/08 Delay letter for SIS issued 10/29/08	LGIA Tendered 5/13/2009	Awaiting Executed LGIA
217	NG	42.4 MW	12/20/2007	SIS delay letters were sent on 4/30/08 7/22/08 8/20/08 Delay letter for FS issued 1/5/09 2/4/09 & 4/13/2009	LGIA Tendered 5/28/2009	Awaiting Executed LGIA
220	NG	41 MW	3/8/2008	SIS delay letters were sent on 7/31/08 9/25/08 11/3/08 Delay letter for FS issued 3/19/2009	LGIA Tendered 5/21/2009	Withdrawn 6/22/2009
221	NG	875 MW	4/15/2008	SIS delay letters were sent on 10/9/08 11/17/08 Delay letter for FS issued	LGIA Tendered 7/14/2009	Awaiting Executed LGIA

				3/24/2009		
222	NG	570 MW	5/16/2008	SIS delay letters were sent on 10/9/08 11/17/08 12/12/08 Delay letter for FS issued 4/13/2009	LGIA Tendered 7/10/2009	Awaiting Executed LGIA
223	Wind	125 MW	5/21/2008	FS delay letter was sent on 5/4/09	LGIA Tendered 8/26/2009	Awaiting Executed LGIA
224	Wind	100 MW	8/27/2008	FS delay letter was sent on 5/4/09	LGIA Tendered 8/26/2009	Awaiting Executed LGIA
225	NG	13 MW	8/27/2008	FS delay letter was sent on 6/2/09	LGIA Tendered 8/12/2009	Awaiting Executed LGIA
226	Nuclear	206 MW	12/23/2008	--	FS Agreement Received 6/15/2009	FS Report To Post 9/14/2009
227	NG	127MW	1/5/2009	--	FS Agreement Received 6/9/2009	FS Report To Post 9/7/2009
228	BIO	115 MW	2/2/2009	--	FS Agreement Received 8/3/2009	FS Report To Post 11/2/2009
229	NG	575 MW	2/26/2009	--	SIS Agreement Issued 7/21/2009	Withdrawn 8/20/2009
230	NG	275 MW	3/17/2009	--	SIS Agreement Issued 7/21/2009	Withdrawn 8/20/2009
231	NG	31 MW	3/18/2009	SIS delay letter was sent on 8/4/09	SIS Agreement Received 5/4/2009	SIS Report To Post 11/20/2009
232	NG	650 MW	4/13/2009	--	SIS Agreement Issued 8/6/2009	SIS Agreement Due 9/7/2009
233	Wind	150 MW	8/27/2009	--	LGIP Validated 8/27/2009	Scoping Call 9/10/2009

234	Wind	199 MW	8/27/2009	--	LGIP Validated 8/27/2009	Scoping Call 9/10/2009
235	NG	510 MW	8/28/2009	--	LGIP Validated 8/28/2009	Scoping Call 9/14/2009
236	NG	510 MW	8/28/2009	--	LGIP Validated 8/28/2009	Scoping Call 9/14/2009

**4.8 TSR Studies (TSRS)**

TSRs are received by the ICT TA group through OASIS. Requests for long-term yearly service or short-term monthly requests that extend partially or completely outside the eighteen (18) month AFC Study Horizon require a SIS and, if needed, a FS. These studies are performed by ICT Planning and its contractors and must be completed in sixty (60) calendar days.

During the current reporting period, the ICT completed thirty-nine (39) SIS. Entergy and the ICT also completed three (3) FS during this reporting period.

**4.8.1** The ICT did not miss the sixty (60) day deadline for any SIS or FS requested.

**4.8.2** The ICT had twenty-two (22) SIS in progress at the end of the current reporting period. The following list provides the OASIS Reservation numbers for the SIS currently in progress:  
1665288, 1665912, 1665913, 1665914, 1667244, 1668149, 1668165, 1669330, 1669331,  
1672981, 1675859, 1675860, 1675861, 1675991, 1676748, 1677749, 1679590, 1679986,  
1679987, 1683020, 1683021, and 1683021.

**4.8.3** Entergy and the ICT had four (4) FS in progress at the end of the current reporting period. The following list provides the OASIS Reservation numbers for the FS currently in progress:  
1648591, 1648592, 1658088, and 1659378.

## **5. Weekly Procurement Process (WPP)**

Section 3.2(a) of Attachment S in Entergy's OATT states "[t]he ICT shall oversee the design and operation of the WPP by the Transmission Provider." Attachment V of Entergy's OATT governs the WPP and took effect March 17, 2009, after the Commission conditionally approved Entergy's filings to amend Attachment V made on January 16, 2009, in Docket Nos. ER08-513 and ER09-555.

### **5.1 ICT Oversight**

The ICT fulfilled its obligation to oversee the design and implementation of the WPP as the start-up of the WPP successfully began the week of March 23, 2009. Now, the ICT will continue to oversee the operation of the WPP and independently review the WPP's results.

The ICT anticipates that the WPP will evolve and improve over time as parties gain more experience with the process. Therefore, the ICT will continue to actively monitor the WPP and recommend enhancements to the process in order to improve the results and benefits of the WPP going forward.

### **5.2 WPP Issues Working Group (WPPIWG)**

Pursuant to the ICT Approval Order and the deliberation of the SPC, the WPPIWG was formed. Members include technical representatives from various Entergy stakeholders, Entergy, and the ICT. The group meets monthly and reports its agenda and minutes to the SPC at their regular meetings.

During the past quarter, the ICT focused on the operation and results of the WPP at the WPPIWG meetings held each month. In these meetings the following items concerning the WPP were discussed: weekly summaries of the WPP results, granting Automatic Generation Control (AGC)/Operating Reserve transmission service through the WPP, review of the WPP Quarterly Report, PMax Flowgate & Tie Cap Validation Process, WPP transparency, revised load pocket soft penalty, and requests to include off-peak offers in the WPP. A more detailed discussion of some of these items is provided below.

#### **5.2.1 AGC/Operating Reserves**

Currently, third-party suppliers with AGC/Operating Reserves capability must qualify for delivery of these services outside the WPP. This can be done by either the third-party supplier having Network Resource Interconnection Service (NRIS) or the Participating Network Customer (PNC) obtaining transmission service by submitting a TSR on behalf of the third-party supplier into the AFC process. This requirement is necessary because the load flow used in the WPP only represents the MWs of energy flowing from the generating unit and does not account for the transmission system impact of providing AGC/Operating Reserves.

Stakeholders, Entergy, and the ICT have discussed ways to grant the AGC/Operating Reserves transmission service within the WPP. At this time, a specific solution has not been identified or tested.

### **5.2.2 PMax Flowgate & Tie Cap Validation**

Prior to beginning the optimization runs, the WPP software performs a validation of certain input data. For example, the software checks to ensure that third-party offers do not violate or exceed the PMax flowgate limits of a resource and the Control Area Interface Limits (i.e., tie cap). This is done by summing the confirmed Network and Point-to-Point (PTP) reservations and the third-party offers and comparing the total to the established limits. If the total exceeds the limit, then Weekly Operations verifies the oversell with the ICT and removes all third-party offers for the oversold plant or tie cap from the WPP prior to beginning the optimization runs for that operating week. Weekly Operations then notifies the PNC of the removal of the offer(s) and the reason for the removal.

Stakeholders asked whether the third-party offer that caused the PMax flowgate violation can be identified and removed rather than removing “all” offers for the oversold plant. The ICT explained that under the established procedure there is no distinction between third-party offers sourced from a plant with a violated PMax flowgate. Therefore, if there is a violation, all the third-party offers from that plant are removed from the WPP for that week.

In order to keep the WPP running smoothly, the ICT has asked third-party suppliers to validate that their resources do not exceed their PMax flowgate limit prior to submitting their offers. The ICT explained that third-party suppliers can perform this check by downloading TSR information on confirmed reservations from OASIS and submitting a generator requestor fax form for non-confirmed PTP TSRs for a specific resource.

The ICT asked Entergy to put the PMax Flowgate and Tie Cap Validation Process into the WPP Manual. The manual was updated to include the written process in August, 2009.

### **5.2.3 WPP Transparency**

At the July 21, 2009, WPPIWG meeting, Roberto Paliza presented a motion on WPP transparency. The motion requested the ICT to post on OASIS the binding transmission constraints, i.e., limiting flowgates, identified by the optimization Runs 0 and 1 in the WPP. The ICT expressed its concern that information on binding transmission constraints was market sensitive and posting this information could lead to strategic bidding. Entergy stated that the

Commission has deemed the WPP to be sufficiently transparent and denied previous requests for disclosure of WPP information due to the potential harm to ratepayers. After some further discussion, stakeholders adopted the transparency recommendation and requested it be put on the agenda for the July 23, 2009 SPC meeting.

The WPPIWG recommendation for increased WPP transparency was discussed at the July 23, 2009 SPC Meeting. The SPC agreed that the WPPIWG recommendation needed additional background information and analysis. Roberto Paliza agreed to compile the information and circulate a revised motion to be considered by the SPC on a conference call on August 7, 2009.

On August 7, 2009, a SPC conference call was held to review the “revised” WPP transparency recommendation. The new recommendation included additional supporting information and analysis. See Attachment 3. The SPC adopted the “revised” recommendation on the call. In accordance with established procedures, the SPC recommendation was forwarded to Entergy for its consideration and formal response. Entergy issued its formal response on August 28, 2009. See Attachment 4. At the conclusion of the period covered by this report, the ICT had not finalized its formal response to the SPC recommendation.

#### **5.2.4 WPP Results**

As reported, the ICT provides a summary of WPP results at each WPPIWG meeting. In doing so, the ICT gives a general discussion about the results without disclosing any information about the underlying data and analysis. Stakeholders have expressed frustration over the lack of detailed information about the WPP results. Due to the strictures of Attachment V, however, the results of the WPP are considered confidential. Therefore, the ICT cannot disclose any details about the WPP results that are not publicly available under the Tariff.

#### **5.2.5 Off-Peak Offers in the WPP**

Stakeholders have asked the ICT to provide reports on what actions are being taken to include off-peak offers in the WPP. In reporting on this issue, the ICT has explained that the reason the off-peak offer component was removed from the WPP was due to limitations in current software and hardware technology. The ICT stated that to date there have been no significant changes in technology that would warrant the ICT conducting any further testing. Therefore, no actions have been taken, or are expected to be taken, until technology advances are seen that can address the complexity of adding this component back into the WPP.

### **5.3 Structural Changes to the WPP - Docket No. ER09-555**

On March 17, 2009, the Commission conditionally accepted Entergy's proposed structural changes to the WPP. Specifically, the Commission approved Entergy's proposals to limit supplier offers in the WPP to on-peak hours and to eliminate PTP transmission service. The Commission also revised the ICT's reporting requirements on WPP operations and savings. In particular, the Commission directed Entergy to engage the ICT to perform a "baseline" study of the estimated savings from transactions by Entergy and each of its network customers with third-party suppliers before the implementation of the WPP. The Commission stated that the results of this study would be compared to the ICT's savings calculation in order to estimate the savings attributable to the WPP. The Commission ordered the ICT to submit this study with the ICT's first quarterly report on the WPP. Finally, the Commission directed the ICT to also report on the savings from transactions by Entergy and each of its network customers with third-party suppliers outside the WPP during the reporting period.

On June 5, 2009, the Commission issued an order on clarification and rehearing of the March 17 order. Specifically, the Commission stated that parties could provide additional data and explanation regarding the historical "baseline" study data in order for the Commission and other parties to properly understand and interpret the study. The Commission also clarified that the third-party transactions analyzed in the baseline study should be of the same duration as the transactions under the WPP (i.e., week ahead). Finally, the Commission stated that the savings data in the baseline study and from the week-ahead transactions with third-party suppliers that occurred outside the WPP should include all of Entergy's network customers, even if they are not now participating in the WPP.

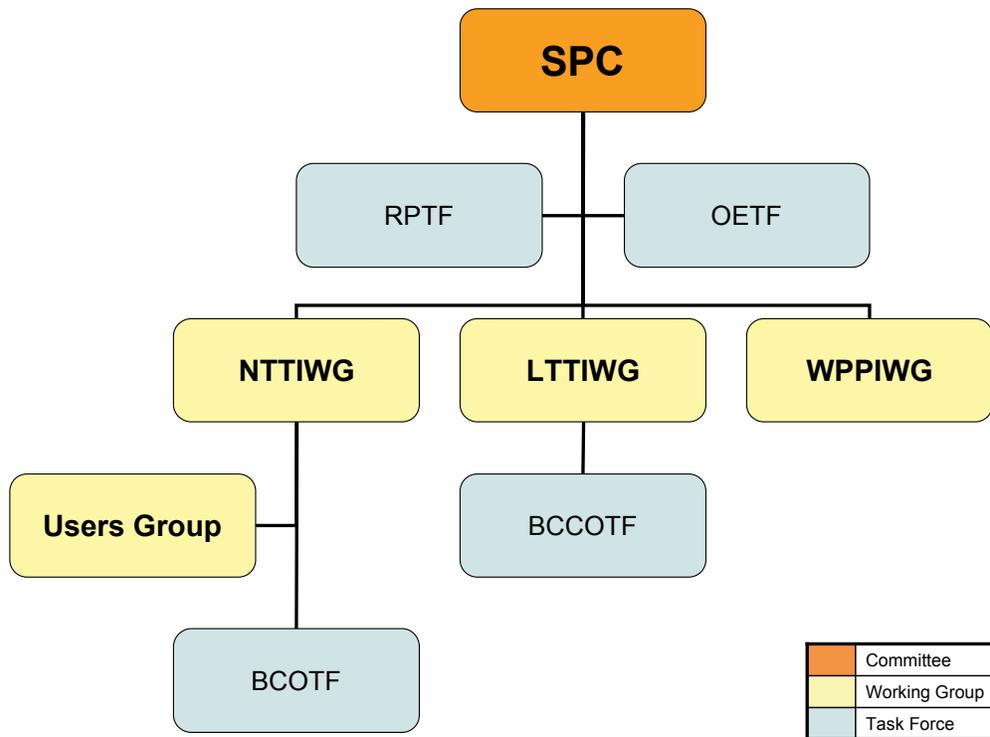
### **5.4 WPP Quarterly Report**

In accordance with the Commission's order in Docket No. ER09-555, the ICT filed its first WPP Quarterly Report on June 15, 2009. As reported, the WPP was successfully implemented and has, to date, operated consistent with the ICT's technical expectations. The report also contained all the required metrics established by prior Commission orders. Further, based on the ICT's calculations, the WPP resulted in more than \$2 million in estimated savings for the first quarterly reporting period. The ICT stated that this represented a reasonable level of savings due to the new and unique process and the low-load spring months. The ICT reported that the level of WPP savings should increase in the summer months due to greater load requirements and as parties gain more experience with the process. More details and analysis on the WPP's operations for the first quarter of 2009 can be found in the filed report. The filing date for the ICT's second quarterly report is September 15, 2009.

## **6. Stakeholder Process**

### **6.1 SPC Organization Chart**

The following chart displays the organization of the various stakeholder groups that make up the stakeholder process that was mandated in the ICT Approval Order. At the top of the chart is the SPC. The SPC is a broad committee of all interested Entergy stakeholders that makes specific recommendations to the ICT based on the consensus of the group. The SPC has also formed the Rate Pancaking Task Force (RPTF). Next, various permanent working groups exist under the direction of the SPC, including the NTTIWG, the LTTIWG, the WPPIWG, and the Users Group (which is formed as an adjunct to the NTTIWG). Each working group is designed to investigate technical issues and make recommendations for the SPC to consider. The working groups also have the ability to form temporary task forces that study discrete issues and present findings back to the working group. As shown in the third level of the chart, two such groups are the Base Case Overload Task Force (BCOTF), which is formed under the NTTIWG, and the Base Case Contingency Overload Task Force (BCCOTF), which is formed under the LTTIWG. In the April 23, 2009 ICT SPC Meeting it was decided to re-engage the Operational Efficiency Task Force (OETF) to look specifically at the issue of one-stop shopping (i.e., utilizing one OASIS site and a single TSR to reserve transmission on the Entergy and SPP systems) that was re-introduced during the RPTF study process.



## 6.2 IssueTrak Update

As previously reported, the ICT implemented IssueTrak to help manage stakeholder communications with the ICT. The SPP IssueTrak can be viewed at: [www.spp.issuetrak.com](http://www.spp.issuetrak.com).

The ICT continues to encourage stakeholders to access and utilize IssueTrak for all informal communications with the ICT. ICT Management reviews IssueTrak to make certain that open items are responded to in a timely manner.

Since the last report, a total of twenty-five (25) issues have been entered into IssueTrak. Figure 15 below shows the breakdown of the issues by ICT department.

**Figure 15**

**Issues Received by IssueTrak  
June 2009 – August 2009**

<b>Contract Services - General</b>	<b>1</b>
<b>ICT Planning</b>	<b>0</b>
<b>ICT Reliability</b>	<b>3</b>
<b>ICT Tariff</b>	<b>21</b>
<b>ICT WPP</b>	<b>0</b>
<b>Total</b>	<b>25</b>

The statistics for June 2009 to August 2009 are below:

- A total of twenty-five (25) new issues were assigned this quarter:

Disposition:

Nineteen (19) issues have been closed with an average close time of 9.32 days

Six (6) remain open and have been open for an average of 47.70 days.

Priority:

8 were marked Critical

16 were marked High

1 was marked Medium

- For the six (6) that were in opened status at the end of August:

Priority:

2 issues were marked Critical

4 issues were marked High

### **6.3 SPC Meeting Reports**

- 6.3.1** July 23, 2009, SPC Meeting – Sheraton, New Orleans, LA: Thirty-two (32) attendees participated in person and on the phone. Meeting minutes and all meeting attachments are provided in this report. See Attachment 5.

### ICT Staff Report and Communications

The ICT reported multiple ongoing activities whose progress is represented in the working group reports noted below and in sections 3, 4, 5, and 8 of this document.

### ICT Regulatory Update

The ICT reported that the cost-benefit study (APSC Docket #08-136-U, FERC Docket No. ER05-1065) for Entergy/Entergy Arkansas joining the SPP-RTO or continuing with the ICT arrangement was required by the APSC to be completed by year-end. See section 1.5. The ICT also reported that Attachment C of the Entergy OATT was filed with modifications to reflect the transition to OATI software. The effective date of those changes will be subject to OATI implementation.

### Operational Efficiency Task Force (OETF)

The OETF was recently re-engaged to investigate the possibility for one-stop shopping (i.e., utilizing one OASIS site and a single TSR to reserve transmission) between SPP and Entergy. The OETF has developed a two-phase plan. The first phase will concentrate on possible actions without changes to existing OATT's. The second phase will focus on long-term solutions to operational and planning issues. See section 6.5.

### Working Group Reports

The ICT presented additional updates from the NTTIWG, LTTIWG, WPPIWG, and Users Group teams. Each working group submitted presentations containing updates for each group. Those presentations are included in the SPC meeting minutes and attachments referenced therein. Additional details can also be found in the updates provided in sections 3, 4, 5, and 8, respectively.

## **6.4 RPTF Update**

As previously reported, on March 23, 2009, CRA completed its final Rate Pancaking study and the RPTF posted the report on SPP's website. Also previously reported, there was stakeholder interest in performing additional sensitivity studies to better determine the long-term value from eliminating pancaked rates. By the end of this reporting period, no stakeholder funding arrangements had been finalized to allow for these studies to move forward.

## **6.5 OETF Update**

The OETF was asked to develop a proposal for a "One-Stop Shop" approach to address issues regarding the separate tariff processes and study parameters for provision of transmission service across

the SPP-RTO and Entergy transmission systems. On a July 2, 2009 conference call and in a meeting held July 14, 2009, the OETF met to discuss the development of this concept and came up with a two-phase approach:

- Phase One consists of defining initiatives for implementation in 2009 without making changes to existing OATTs or OASIS and developing a customer-focused process for a One-Stop Shop. These efforts will include:
  - Concentrating only on the impact to Monthly and Yearly transmission service.
  - Creating a new Transmission Request Advocacy Assistance and Coordination (TRAAC) function. TRAAC's role is still to be determined, but any proposal from the OETF will define the oversight responsibilities, reporting structure, funding structure, requirements for enhanced customer service, and coordination of TSRs between the Entergy and SPP-RTO regions.
- Phase Two will focus on long-term operational and planning issues with expanded initiatives through Seams Agreements that could include changes to OATTs and OASIS software. These efforts will include:
  - Reviewing current seams agreements for areas of increased synergy of operational efficiency.
  - Reviewing several processes shared by Entergy and SPP-RTO, including coordination of study processes, AFC/ATC data, cost allocation, congestion management, long-term redispatch, shared database of confirmed service, and creation of One-Stop Shop software solutions.

The next steps for the OETF will be to develop and finalize a proposal for Phase One as a recommendation to the SPC. The OETF continues to seek input from both SPP members and Entergy stakeholders on the proposal and plans to have a completed proposal for Phase One by October 13, 2009.

## 7. Stakeholder Communication

As outlined in the ICT's first quarterly report, the stakeholder process developed protocols for communications between stakeholders and the ICT. The protocols developed by the stakeholder process state that communications between stakeholders and the ICT will be classified as either formal or informal. If stakeholders desire to have their positions noted and documented in regulatory reports, the communication must be formal and follow the guidelines for formal communication provided below. This procedure by no means is intended to limit communications with the ICT or regulatory bodies, but provides an operating procedure the ICT will use for its communication processes.

Stakeholders may provide written positions at stakeholder and working group meetings and all written material will be considered a formal communication. Stakeholder communication on issues currently under consideration in the stakeholder process must be presented at stakeholder and working group meetings or through the established exploder protocols to be considered formal communications. Stakeholders may also provide written communication directly to the ICT on issues that are not under consideration in the stakeholder process but are relevant to ongoing ICT activities. The stakeholders must conspicuously mark the written communication as formal. Stakeholders may provide positions over e-mail to the ICT management. E-mail messages must be identified as formal; otherwise, e-mail messages will be considered informal communication. All communication required to be posted pursuant to FERC regulations shall be sent to the ICT as required and will be considered formal communication.

Stakeholders should be actively engaged in the SPC meetings and may also have representatives at the working groups. The ICT may refer to positions taken during meetings in its FERC reports, but will consider this informal communication. A written follow-up to a position taken at a meeting will be required to identify a position as a formal communication. Periodic meetings will take place between the ICT and stakeholders. These meetings will be considered informal unless a stakeholder requests in writing that the meeting be considered formal. All telephone calls will be considered informal communication.

In comments to prior reports, stakeholders have expressed concern that the ICT report only accounts for formal communications and do not adequately reflect the stakeholders' informal communications with the ICT. While the ICT continues to believe that the reporting of only "formal" communications is consistent with the communication procedures unanimously adopted prior to the start-up of the ICT operations, the ICT agrees that stakeholders' informal communications should also be

accounted for and tracked in the report. Accordingly, the ICT proposed and implemented IssueTrak to manage these stakeholder communications. See section 6.2.

## **7.1 Formal Communications During the Current Reporting Period**

**7.1.1** On August 25, 2009, David Baugh, on behalf of Cottonwood Energy, sent a formal communication to the ICT requesting a copy of all operation guides used to develop the ICT's 2010 Base Plan and Entergy's 2010-2012 Construction Plan. He requests this information so that Cottonwood may replicate the transmission planning studies done by the ICT and Entergy. See Attachment 6. During the period covered by this report, the ICT had not yet responded to Cottonwood's request and will be reflected in the next quarterly report.

## 8. Users Group and Data/Software Management

### 8.1 Overview

The ICT Approval Order (at paragraph 109) states “the Commission proposes that users of Entergy’s transmission and data systems form a Users Group to assess how the Entergy transmission and data (IT) systems are performing.” Pursuant to this directive from the Commission, the Users Group was formed under the SPC and addresses specific IT and data system issues as well as other issues brought forth by the SPC.

The actions of the Users Group will target Entergy’s transmission and data systems and assess how these systems are performing in the area of data access, quality, and data retention. In addition, the Users Group, either in conjunction with the ICT or separately, will evaluate Entergy’s IT systems and IT resource allocations to measure their efficiency. If deemed necessary, recommendations for change will be addressed to the Commission in order to correct the accuracy of data received by Transmission Customers.

### 8.2 Assessment of Entergy’s AFC Backup Process

The quarterly on-site assessment of the Entergy AFC Backup Process was performed by the ICT on August 20, 2009, and subsequently reported to the Users Group. See Attachment 7.

**Assessment Discussion** The ICT’s on-site audit examined both the regular AFC and WPP-AFC data retention processes. The ICT investigated the FERC Lost, Inaccurate, or Mishandled Data submissions submitted since the last assessment. The ICT also reviewed the pending recommendations and issues from the May 2009 assessment.

The specifics on the data requested and validated can be found in the meeting report referenced above. All requested documentation was available with the exception of the July 2009 archive cycle, which is behind schedule due to excessive workload. However, it should be noted that the ICT audit confirmed that AFC data files were being properly backed-up and test stored and there were no notable exceptions with the WPP-AFC back-up processes. The ICT Users Group recommended Entergy should add more resources to the team responsible for the maintenance of this critical data. Current staffing appears to be overloaded given workload related to the Critical Infrastructure Protection (CIP) and Host Plan projects.

The ICT was unable to determine that backup tapes were properly sent offsite for storage during the August assessment. The examination of Entergy’s internal Information Vaulting Service (IVS) transmittal documentation and an examination of the restoration testing logs were not sufficient to confirm

that the second (offsite) copies of the backup tapes were properly sent offsite for storage. Additional information was requested on August 27 from Entergy. The ICT Users Group recommends that the verification of the offsite data storage process remain as an open item until the additional requested information is received and any recommendations will be made at that time.

During the August 2008 assessment, the ICT recommended that Entergy use the Network Operations Manager software currently being rolled out to track media errors as well as alert support staff in real time when an error occurs. As part of the assessment, the ICT confirmed that tape errors were being tracked as recommended using a combination of Remedy and an Excel spreadsheet. No tapes experienced multiple failures during the review period, thus no tapes were removed from the library. During the current assessment, the ICT was advised that the Network Operations Manager software was still pending installation due to higher priority tasks and is expected to be installed by the end of 2009. In the interim, the migration to VERITAS Version 6 provides e-mail notifications of problems encountered during the backup process, resolving the immediate need for the Network Operations Manager software. The ICT recognizes that installing the Network Operations Manager software is lower in priority than other time-critical tasks, but recommends the task be completed as soon as practical.

The ICT continues to find the restoration testing occasionally suspends due to lack of available disk space. When it does Entergy staff is able to detect the suspension and manually expand the space to allow the job to resume. During the August 2008 assessment, the ICT recommended configuration of additional disk space on the restoration test environment. As of this assessment date, however, the additional disk space is still not in place. The disk space previously ordered that was to be installed by August 2008 was needed in another area, and additional disk space has been reordered. Entergy has also assigned additional system administration staff to ensure obsolete data is promptly deleted from the restoration test server. This additional staff ensures that OASIS posting data older than three months is promptly deleted from the ET.COM web site to prevent OASIS posting failures caused by insufficient disk space. The ICT Users Group will verify in its next assessment that the additional disks have been received and installed.

In addition to reviewing the pending recommendations and issues from the May 2009 assessment, the ICT and Entergy IT Staff also reviewed and discussed most of the Lost, Inaccurate, or Mishandled Data submissions made by Entergy during the current reporting period. These filings are discussed in more detail in section 8.3.2 below.

### **8.3 Data Accuracy and Management**

Pursuant to the ICT Approval Order at paragraphs 110 and 304, the ICT and Users Group are required to track and provide an annual report on certain metrics related to the occurrences by Entergy of software or data management errors that have resulted in lost, inaccurate, or mismanaged data. In anticipation of providing that information in its annual report, the ICT is collecting data for each category identified in the ICT Approval Order. In addition, when problems are discovered, the ICT and Users Group work with Entergy to alleviate incompleteness and improve the accuracy of data. Such issues may include, but are not limited to, AFC data availability and accuracy as well as various other customer complaints regarding transmission service availability, approvals, or denials.

During the current reporting period, the ICT is not aware of any occurrences of lost AFC data. The ICT, working with the stakeholders and Entergy, identified instances during the current reporting period which may have impacted the proper evaluation of TSRs due to inaccurate modeling assumptions or mismanaged data. Additional details concerning these incidents are provided in section 8.3.2 below.

In addition, the ICT Approval Order, at paragraph 110, established procedures the ICT must follow for reporting complaints and errors related to Entergy's data systems. Under those procedures, the ICT shall post any Transmission Customer complaints related to Entergy's data systems on OASIS within 24 hours of such complaint. In addition, the ICT shall post on OASIS within 24 hours any notice received by Entergy that Entergy has discovered data has been lost, reported inaccurately, or mismanaged. Further, in the next scheduled report, the ICT shall advise Interested Government Agencies whether Entergy has remedied the problem, if not, when Entergy proposes to implement a remedy, and the ICT's views on the adequacy of the remedy. See section 8.3.2. Each filed data error report discussed in section 8.3.2 below was posted to Entergy's OASIS within 24 hours after filing.

#### **8.3.1 Inaccurate Data**

As of the date of this report, no instances of inaccurate data were known to the ICT that had not already been reported as discussed in more detail in section 8.3.2.

#### **8.3.2 Filed Data Error Reports**

##### *8.3.2.1 June 11, 2009, Docket No. ER05-1065-000: Report of AFC Related Error*

#### **OA Configuration Error**

On May 27, 2009, the ICT reported to Entergy that the preemption functionality of Entergy's OA software was failing to consistently identify for operators all preemption eligible, lower priority, TSRs and reservations when a higher priority TSR was being

evaluated. Accordingly, the ICT suspended the preemption functionality in Energy's OA software on May 28, 2009.

Upon investigation, Entergy determined that the error was being caused by a default setting in the OA software that was limiting the character and path size of the query used to identify reservations and TSRs that were impacted by the constrained flowgate(s) of the preemptor. As a result, if the constrained flowgate(s) had more than the default source/sink combinations settings then the OA query string would be cut short and some source/sink combinations and associated reservations or TSRs would not be included in the defender queue causing it to be inaccurate.

On June 4, 2009, Entergy increased the characters in the default setting for the OA software. With this new setting, Entergy confirmed that all source/sink combinations could be accommodated in the OA query string of reservations and TSRs and will, therefore, be properly reflected in the defender queue returned in future responses. Subsequent testing by Entergy and the ICT confirmed this finding. Accordingly, on June 5, 2009, the ICT reinstated the preemption functionality in Entergy's OA software.

Entergy reported that the exact conditions for the evaluation of each TSR could not be recreated, and therefore, the impact of the error in the OA software could not be ascertained. See Attachment 8.

The ICT reviewed this issue with Entergy during the August audit and confirmed that the corrective action taken by Entergy has resolved the problem. No further issues related to this problem have been observed by the ICT.

#### 8.3.2.2 *June 18, 2009, Docket No. ER05-1065-000 Report of AFC Related Error*

##### **AFC Impact Log**

On June 3, 2009, the ICT notified Entergy that ICT operators were unable to act on TSRs using OA. Upon investigation, Entergy determined that the available disk drive space on the servers that host the OA system had been reduced to an inadequate level resulting in OA not functioning properly.

The ICT reports that the identified issue with OA did not impact the processing of TSRs as ICT operators were able to act upon TSRs in a timely manner and appropriately through Entergy's OASIS. The lack of disk drive space on the OA system server, however, temporarily prevented creation of AFC Impact Logs. The AFC Impact Logs,

which are a snapshot of real-time information, contain the calculations and data used when evaluating TSRs. This data includes, but is not limited to, the capacity requested, the impacted flowgates, the pre-existing flows on those flowgates, the sensitivity of the requested path on each flowgate, the impact of the request on each flowgate. While all of this information was available in real-time on June 3, 2009, some of this information was not recorded or archived in the AFC Impact Logs. See Attachment 9.

The ICT reviewed this issue with Entergy during the August audit. At that time, Entergy explained that the lack of available disk space was due to a configuration problem with the monitoring solution. Entergy reported that this issue has been addressed by correcting the configuration of the monitoring software and purging data to provide enough space to allow proper execution of OA. The ICT has confirmed that the corrective action taken by Entergy should resolve the problem. No further issues related to this problem have been observed by the ICT. In addition, the ICT recommended that Entergy undertake a systematic review of the configuration of their monitoring software on each server to ensure that all drives that contain critical data are being properly monitored for space.

#### 8.3.2.3 July 23, 2009, Docket No. ER05-1065-000: Report of AFC Related Error

##### **OASIS Scenario Analyzer**

On July 11, 2009, the Entergy System Operation Center (SOC) performed its annual back-up drill (Drill) for 2009 as required by NERC Reliability Standard EOP-008. The Drill involved the deactivation of all systems and operations at the SOC while simultaneously activating all systems and operations at Entergy's Back-Up Center. During the Drill, all deactivations at the SOC and activations at the Back-Up Center performed normally. However, Entergy determined that its OASIS Scenario Analyzer was not functioning properly. Upon returning operations to the SOC from the Back-Up Center, Entergy determined that its OASIS Scenario Analyzer functionality was fully restored. See Attachment 10.

The ICT reviewed this issue with Entergy during the August audit. At that time, Entergy explained that the problem with the OASIS Scenario Analyzer functionality was due to a network issue that caused a disconnection between OASIS (in Seattle) and OA (in Arkansas). Neither Areva (the OASIS software vendor) nor Entergy could determine a root cause for the problem. The same problem happened last year and, despite

investigation, the root cause was never identified. The ICT and Entergy have conferred and agreed that with the transition of Entergy's OASIS from Areva to OATI, this issue can be considered closed.

8.3.2.4 *August 5, 2009, Docket No. ER05-1065-000: Report of AFC Related Error*

**AFC Data File Inputs**

Entergy routinely copies files from the primary Energy Management System (EMS) servers, typically at the SOC, to the secondary EMS servers, typically at the Back-Up Center, to maintain operational readiness. On July 21, files were erroneously copied from the secondary EMS servers to the primary EMS servers while simultaneously attempting to copy the same files from the primary EMS servers to the secondary EMS servers. This resulted in corruption of some of the files utilized by RFCALC to calculate AFCs. In particular, RFCALC intermittently utilized incomplete Unit Commitment, Load Forecast and Outage data to re-sync the Operating and Planning Horizons on July 21 and July 22, 2009. Entergy reported that the use of these corrupted files affected RFCALC re-syncs for one hour of the Operating Horizon on July 21 and seven hours on July 22 and twenty-seven (27) hours of the Planning Horizon from July 21 to July 22. Entergy implemented a new procedure on July 22 which returned the RFCALC re-syncs to normal operations and should prevent the error from occurring in the future. The re-syncs of RFCALC that used incomplete input data could have impacted the calculation of AFCs, but the specific impact is indeterminable. See Attachment 11.

The ICT has confirmed that the corrective action taken by Entergy should resolve the problem. No further issues related to this problem have been observed by the ICT.

#### **8.4 Modeling Assumptions Log**

As discussed in section 7, the ICT has established a formal communication procedure for a stakeholder to raise any issue or make a reasonable request to the ICT. Under this procedure, a stakeholder must either provide a written request to ICT management or provide a written request to one of the stakeholder e-mail exploder lists. The ICT has discussed the process for formal communication in multiple stakeholder committee and working group meetings and has highlighted the adopted procedure in these meetings.

During the current reporting period, the ICT received no formal requests to make a specific change in modeling assumptions. However, numerous policy-related assumptions continue to be considered by the various SPC working groups referenced in section 6.

# **Attachment 1**

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**Joseph Charles Hall**  
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August 18, 2009

**VIA HAND DELIVERY**

The Honorable Kimberly Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**Re: Entergy Services, Inc., Docket No. ER09-1180, Notice of Effective Date for Transition to OATi Software**

Dear Secretary Bose:

On May 5, 2009, in the above-referenced proceeding, Entergy Services, Inc. (“Entergy”), on behalf of the Entergy Operating Companies,<sup>1</sup> submitted revised tariff sheets for the currently effective version of Attachment C to Entergy’s Open Access Transmission Tariff (“OATT”) reflecting Entergy’s anticipated transition to software developed by OATi for the calculation of Available Flowgate Capability (“AFC”) values (“webTrans”) and for the evaluation of transmission service availability for Entergy’s Operating, Planning, and Study Horizons (respectively, “webOASIS” and “May 5 Filing”). In the May 5 Filing, Entergy explained that it anticipated transitioning to webTrans and webOASIS on June 1, 2009 and requested that the tariff sheets included in its filing be accepted to become effective on that date.

On May 28, 2009, Entergy filed a notice with the Federal Energy Regulatory Commission (“Commission”) explaining that Entergy and Entergy’s Independent Coordinator of Transmission (“ICT”) believed that additional testing and training was warranted before the transition to webTrans and webOASIS could be implemented (“May 28 Notice”). In that filing, Entergy proposed to defer the June 1, 2009 transition date originally proposed for the implementation of webTrans and webOASIS until August 2009. The May 28 Notice explained that Entergy would submit a second notice to the Commission notifying it of the actual transition date to webTrans and webOASIS at least fifteen (15) days prior to implementation of webTrans and WebOASIS. This notice would include the Attachment C tariff sheets included in the May 5 Filing revised to reflect the actual implementation date for webTrans and webOASIS.

After submitting the May 28 Notice, Entergy conducted additional testing and continued to prepare for the transition to webTrans and webOASIS. At the July 23, 2009 Stakeholder Policy Committee (“SPC”) meeting, Entergy announced its plan to transition to webTrans and

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<sup>1</sup> The Entergy Operating Companies are Entergy Arkansas, Inc, Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc.

The Honorable Kimberly Bose  
August 18, 2009  
Page 2

**Morgan Lewis**  
C O U N S E L O R S   A T   L A W

webOASIS in August 2009, and its intent to provide training for its customers on webOASIS. After several training sessions had been conducted with stakeholders, several stakeholders requested that Entergy conduct additional training sessions before transitioning to webTrans and webOASIS, and that the transition date itself be delayed until after the Summer peak months. This issue was discussed at a specially convened August 13, 2009 SPC teleconference, during which Entergy, the ICT and the stakeholders agreed to defer the transition to webTrans and webOASIS until September 28, 2009.

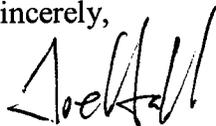
During the August 13 teleconference, the parties also agreed that additional Entergy-specific training sessions would be held before Entergy's transition to webTrans and webOASIS. Further, the parties agreed that the Near Term Transmission Issues Working Group ("NTTIWG") will compile a list of additional or revised functionalities that the stakeholders desire as enhancements to the webTrans and webOASIS software. This list will be provided to Entergy and the ICT by September 15, 2009 for review, and Entergy will work with OATi to determine if these additional or revised functionalities are feasible. The parties agreed, however, that there is insufficient time to include any of the NTTIWG's requested enhancements in the webTrans and webOASIS software by September 28, 2009. Attachment 1 to this notice includes the draft minutes from the August 13, 2009 SPC teleconference.

Accordingly, and pursuant to its commitment in the May 28 Notice and the August 13, 2009 SPC teleconference, Entergy hereby notifies the Commission that Entergy intends to transition to webTrans and webOASIS on September 28, 2009. Attachments 2 and 3 to this notice include clean and redlined Attachment C tariff sheets revising the original June 1, 2009 effective date for the transition to webTrans and webOASIS to September 28, 2009.

Good cause exists to grant any necessary waivers in order to allow the revised tariff sheets included in this filing to be effective September 28, 2009. The Attachment C tariff sheets included in this filing contain no substantive revisions from those included in the May 5 Filing. They reflect only the deferred implementation date of September 28, 2009 for the transition to webTrans and webOASIS. In light of the fact that no substantive revisions are being proposed in this filing, the Commission should grant any and all necessary waivers to allow the September 28, 2009 effective date requested by Entergy.

Please do not hesitate to contact me with any questions at the contact information provided above.

Sincerely,



Joseph C. Hall

Attorney for Entergy Services, Inc.

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon those designated on the official service list compiled by the Secretary in this proceeding.

Dated 18th day of August 2009.



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## Attachment 1

Minutes from the Stakeholder Policy Committee  
Teleconference  
Held on August 13, 2009



**Southwest Power Pool, Inc.**

**ICT STAKEHOLDERS POLICY COMMITTEE MEETING**

**August 13, 2009**

**Conference Call**

**• Draft MINUTES •**

SPP Chair, Bruce Rew, called the conference call to order at 3:00 p.m. There were 26 in attendance on the call (Table 1 – Attendance List). The conference call had been requested by a group of stakeholders. The stakeholders presented a recommendation included in appendix one of these minutes. Bruce Rew discussed the urgency of the meeting and discussion to decide the action to be taken on implementation of the new OASIS system. Entergy currently has a FERC filing in place with the intent of implementing the new OATI system no later than August 31 and has an advance notification requirement of 15 days.

Peter Collins, NRG, discussed the proposed motion and the reasons for the concerns. There is additional training required and they desired to have enhanced functionality of the new OASIS system. In their opinion the current system provides functionality that needs to be included in the new system. Mark McCulla, Entergy, discussed the process that Entergy has gone through to get to this point. Entergy could support a delay of implementation until September 28, 2009. Implementing enhancements to the application at this point would most likely not be possible in the time frame proposed in the motion.

The SPC discussed at length the new OATI application and functionality that would provide stakeholders improved functionality.

A compromise SPC position was reached as follows:

The SPC supports a proposed September 28, 2009 implementation of the new OATI system. The NTTIWG will immediately begin development of an OATI application enhancement list that will be provided to Entergy with a target of September 15. This list will contain OATI OASIS application enhancements that Entergy will pursue with OATI.

The motion was approved by the SPC. The call finished up with a discussion of how Entergy can improve the training they are providing for the new system. Training calls will be held at 1 pm central time to facilitate greater participation by stakeholders.

Meeting adjourned at approximately 4:11 p.m.

Respectfully Submitted,  
Bruce Rew

<b>TABLE ONE:</b>		
<u>Company</u>	<u>Last Name</u>	<u>First Name</u>
Arkansas Electric Coop. Corp.	Frizzell	Ronnie
ConocoPhillips	Clynes	Terri
Entegra Power Group	Heisey	John
Entegra Power Group/UPP	Turner	Rebecca
Entergy	Bornholdt	Mary
Entergy	Norton	Mac
Entergy	McCulla	Mark
Entergy	Wells	Connie
Entergy	Cassingham	Paul
Entergy	Goin	Michael
Entergy	Bigelow	Christina
Entergy Services, Inc.	Wolf	Matt
Fordis Energy	Chang	Richard
Kelson Energy	Saylor	Woody
KGen Power	Lee	Tina
NRG	Collins	Peter
NRG Louisiana Generating, LLC	Vosburg	Jennifer
Paliza Consulting, LLC.	Paliza	Roberto
RRI Energy	Simpson	John
Southwest Power Pool	Rew	Bruce
Southwest Power Pool	Hudson	Dowell
Southwest Power Pool	Woods	Jodi
Southwest Power Pool	Mitchell	Ty
Southwest Power Pool	Davis	Julie
Suez	LONA	ROBERT
Zachary David Wilson, P.A.	Wilson	Zachary

**APPENDIX ONE:**

**PROPOSED MOTION TO SPC**

**Background:**

Entergy is converting its current OASIS operating platform from Areva to OATI. At the July 23, 2009 ICT SPC meeting, Entergy announced that it would activate the new OATI software during the month of August, 2009. Beginning in July, 2009, Entergy and OATI held training and demonstrations for Entergy transmission customers on the new OATI system. There are serious concerns on the part of the transmission customers regarding the cutover to OATI:

- 1) The transition to a new operating system in what has historically been a month with peak loads adds uncertainty to the transmission customers who heavily rely on the accessibility and functionality of the transmission system. Given the peak season, it is best to delay the implementation of the new software to a less critical timeframe so as to minimize any inadvertent impact that the transition may entail. The possible interruptions created by the transition to a new software platform during peak loads could impact the transmission customer's requirements to meet its energy needs, and as such a deferral of the release to a less critical time is prudent.
- 2) The limited training that has been available to the transmission customers has raised concerns and questions on several critical functionalities of the existing software that do not seem to be currently functional in the OATI system. Additional time is needed to continue to work with OATI and the transmission customers to make sure the functionality of the OATI product matches the expectations of the transmission customers and maintain the functionality of the existing system.
- 3) Additional training is needed for transmission customers before the system goes live. Although the training provided has given a general overview of the new system, additional training to better understand all the functionalities is needed.

Therefore, the SPC stakeholders move that the ICT and Entergy delay the go live transition of the Entergy Oasis from August, 2009 to a date not earlier than November 1, 2009 to allow for the resolution of the above referenced problems.

## Attachment 2

Clean Tariff Sheets Revising the Original June 1, 2009  
Effective Date to September 28, 2009

Provider will provide the ICT with an updated Master List and the ICT will post such updated Master List to the Entergy OASIS.

As indicated in 2.2.2.4, the process is designed to retain a constant number of flowgates (approximately 300 flowgates) on the Master List. Expansion of this total number of flowgates may be necessary as system conditions change on the Transmission System.

### **3. CALCULATION OF AFC VALUES**

#### **3.1 Base Case Models**

The AFC process generates a base case model that simulates anticipated system conditions. The base system conditions include projected load, generation dispatch, system configuration/outages, and base flow transactions. RFCalc produces power flow models representing the two distinct time periods: (1) hourly models in the Operating and Planning Horizons for Hour 1 to Hour 168; (2) daily models in the Planning Horizon for Day 8 to Day 31. An off-line planning model process using PSS/E produces monthly power flow models for Month 2 to Month 18 of the Study Horizon. In accordance with Sections 8.1 and 8.2 of the Transmission Service Protocol, the Transmission Provider maintains and services the AFC Software, including webTrans. webTrans is a software application developed by OATI used to process TSRs and to calculate AFC values, and serves as the interface to web OASIS.

The power flow model used to determine constrained facility base flow and Response Factors for the Operating and Planning Horizons is based on the Transmission Provider's EMS and a state estimator snapshot of the real-time system. The power flow model for the Study Horizon uses off-line power flow studies, such as PSS/E and MUST. During the resynchronization process, the base case models are modified to reflect additional transactions as discrete injections and withdrawals. Using these models as the starting point, RFCalc applies the formulas described below to compute the AFC value on each monitored flowgate. Under Sections 6 and 8 of the Transmission Service Protocol, the Transmission Provider is responsible for supplying data inputs and information necessary for creating hourly, daily and monthly base case models. The ICT will be responsible for reviewing and validating the data inputs, information and base case models.

For purposes of this Section 3, the responsibility of the ICT to "review and validate" shall mean that the ICT will take reasonable steps to ensure that the data inputs are properly loaded and reflected in either RFCalc or the Transmission Provider's modeling processes and that the resultant AFC values (i) reasonably reflect the application and product of RFCalc or the Transmission Provider's modeling processes and (ii) are reasonably consistent with the current topology of the Transmission System.

#### **3.2 AFC Formula for Non-firm Transmission Service Requests**

WebTrans computes Non-Firm AFC for the Operating, Planning and Study Horizons. Non-Firm AFC is the capacity that remains on a constrained facility after subtracting power flows for service to Native Load Customers, Network Customers, Firm Point-to-Point Customers, Non-Firm Point-to-Point Customers and other firm and non-firm transactions. Non-Firm AFC is computed in the Planning Horizon using the same power flow solution as used for Firm AFC, with the exception that the effects of non-firm reservations will not be removed from base flows by webTrans. After the power flow model has been solved for a time segment, RFCalc and PAAC take the base flows of constrained facilities and adjust them to remove a percentage of the counter-flows from both firm and non-firm reservations. After

adjusting base flows for the effects of counterflow, webTrans uses the following formula to determine Non-Firm AFC:

$$\text{Non-Firm AFC} = \text{Rating} - \text{TRM} - \text{ETC} - \text{Adjusted Base Flow}_{\text{NON-FIRM}}$$

Where:

Non-Firm AFC	=	the amount of non-firm transfer capability over that flowgate that remains available for additional transmission service reservations above and beyond existing uses of the transmission system
Rating	=	the capability of a flowgate in a time period
TRM	=	Transmission Reliability Margin
ETC	=	Existing Transmission Commitments (reservations) not included in the base flow calculation which are handled algebraically by webTrans
Adjusted Base Flow (Non-Firm)	=	the expected firm and non-firm power flow through a Flowgate in a time period with all pertinent flows included in the power flow base case and adjusted for counterflow impacts

### 3.3 AFC Calculation Horizons

AFC values are calculated for three different time periods: (1) the Operating Horizon, which includes all hours of the current day (Day 1) and, after 12:00 p.m., all hours of the next day (Day 2); (2) the Planning Horizon, which extends from the end of the Operating Horizon through the thirty-first day (Day 31); and (3) the Study Horizon, which extends from the end of the Planning Horizon through the eighteenth month (Month 18).

#### 3.3.1 Operating Horizon

In the Operating Horizon, the Non-Firm AFC values for each flowgate are calculated by webTrans, which uses Response Factors and base flow calculated by RFCalc. The topology for the base case model for the first three hours in the Operating Horizon is generated by Entergy's State Estimator. The relevant unit commitment and load forecast inputs are incorporated into the model. Beyond the first three hours, RFCalc creates the base case model using Entergy's EMS as modified to take into account outages, unit commitment, load forecasts and other system conditions. Using the power flow models and Non-Firm AFC formula discussed above, webTrans calculates Non-Firm AFC values for all hours of Day 1 and, after 12:00 p.m., all hours of Day 2. This calculation is performed for Non-firm AFC values only. Firm AFC values are not calculated for the Operating Horizon because requests for firm Transmission Service must be submitted by 12:00 p.m. on the day prior to commencement of such service. Because firm service cannot be requested during the Operating Horizon, only Non-Firm AFCs are calculated for that horizon. All Non-Firm AFC values and Response Factors for the Operating Horizon are calculated and updated at least on an hourly basis to reflect changing system conditions, including additional confirmed Transmission Service reservations and schedules. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs.

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### **3.3.2 Planning Horizon**

In the Planning Horizon, Firm and Non-Firm AFC values for each flowgate are calculated by webTrans, which uses Response Factors and base flow calculated by RFCalc. The base case model is generated by RFCalc using data from Entergy's EMS as modified to take into account outages, unit commitment, load forecasts and other system conditions. WebTrans calculates hourly Firm and Non-Firm AFC values for each flowgate for Day 2 through Day 7 and daily Firm and Non-Firm AFC values for Day 3 to Day 31. WebTrans updates both Firm AFC and Non-Firm AFC values for the Planning Horizon at least every day to reflect changing system conditions, including additional confirmed Transmission Service reservations. In between such updates, Non-Firm and Firm AFC values are decremented algebraically to reflect subsequent Transmission Service reservations.

### **3.3.3 Study Horizon**

In the Study Horizon, the ICT, using data inputs and power flow models developed by the Transmission Provider and reviewed and validated by the ICT, calculates monthly Response Factors and AFC values by conducting off-line power flow studies, such as PSS/E and MUST. The off-line planning models are developed on a rolling eighteen-month basis and are representative of monthly peak-hour conditions. webTrans calculates both Firm and Non-Firm AFC values for the Study Horizon and updates those value at least on a monthly basis to reflect changing system conditions and additional confirmed transmission reservations. In between such updates, Non-Firm and Firm AFC values are decremented algebraically to reflect subsequent Transmission Service reservations.

## **3.4 AFC Formula for Firm Transmission Service Requests**

WebTrans computes Firm AFC for the Planning and Study Horizons. Firm AFC is not available for the Operating Horizon, and therefore, is not computed for this time frame. Firm AFC is the capacity that remains on the constrained facility after subtracting power flows for service to Native Load Customers, Network Customers, Firm Point-to-Point Customers and other firm transactions.

For the Planning Horizon, Firm AFC will be determined at least once a day during the daily resynchronization by solving a power flow model that includes both firm and non-firm transmission reservation and is based on data from the Transmission Provider's Energy Management System (EMS). For the Study Horizon, Firm AFC will be determined on a monthly basis by solving off-line power flow models that include firm transmission reservations. In the Study Horizon, the impact of Non-Firm reservations will be algebraically decremented by webTrans and not included in the base flow. The flows on constrained facilities should represent base flows that serve Native Load Customers, Network Customers, Firm Point-to-Point Customers and other firm transactions.

After the power flow model has been solved for a time segment for the Planning Horizon, webTrans takes the base flows of constrained facilities and adjusts them to remove the effects of non-firm reservations from the most limiting facilities that were evaluated in the power flow model. RFCalc and PAAC also take the base flows of constrained facilities and adjusts them to remove a percentage of the counter-flows from firm reservations (subject to Section 4.6) for the Planning Horizon and the Study Horizon. WebTrans uses the following formula to determine Firm AFC:

$$\text{Firm AFC} = \text{Rating} - \text{TRM} - \text{ETC} - \text{CBM} - \text{Adjusted Base Flow}_{\text{FIRM}}$$

Where:

Firm AFC	=	the amount of firm transfer capability over that flowgate that remains available for additional transmission service reservations above and beyond existing uses of the transmission system
Rating	=	the capability of a flowgate in a time period
TRM	=	Transmission Reliability Margin
CBM	=	Capacity Benefit Margin
ETC	=	Existing Transmission Commitments (reservations) not included in the base flow calculation which are handled algebraically by webTrans
Adjusted Base Flow (Firm)	=	the expected firm power flow through a flowgate in a time period with all pertinent flows included in the power flow base case and adjusted for counterflow impacts

### 3.5 Resynchronization of AFC Values

AFC values will be resynchronized: (i) every hour during the Operating Horizon; (ii) at least every day for the Planning Horizon; (iii) and no less than every month during the Study Horizon. Resynchronizations may occur more frequently if necessary. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs. The ICT may also direct resynchronizations of AFC values pursuant to Section 8.3 of the Transmission Service Protocol.

For the Operating and Planning Horizons, RFCalc incorporates all the data inputs during the resynchronization process to develop power flow models that define each time point included in the Operating and Planning Horizons. During the resynchronization process, prior commitment and confirmed TSRs are modeled into the base case as discrete injections and withdrawals, and new base flows are determined from these models. Using the new base flow amounts and models, RFCalc recalculates the base flow value on each monitored flowgate in the Master List. For the Study Horizon, this process is performed by an off-line AFC calculator. When a new TSR is accepted between resynchronizations, the "Most Limiting Flowgates"<sup>1</sup> that are significantly impacted by that particular request will be updated in webTrans by algebraically decrementing the appropriate AFC values. At the time of the next resynchronization, the TSRs that have been confirmed since the last resynchronization will then be modeled as physical injections and withdrawals in the same manner of all other previously granted service requests.

<sup>1</sup> Although the AFC process will monitor approximately 300-500 flowgates, webTrans will use a more limited set of flowgates, as determined by RFCalc or PAAC, to evaluate individual TSRs. The Most Limiting Flowgates are up to fifteen flowgates with the lowest effective ATC values for the TSR at issue that also have a response factor of at least 3%.

## **4. INPUTS TO BASE CASE MODELS AND THE AFC FORMULAS**

### **4.1 Base Flow**

The Base Flow calculation for Firm AFC values takes into account all existing firm Transmission Service, including capacity reserved for: (1) Firm Point-to-Point Transmission Service; (2) service to Network and Native Load customers; and (3) other firm Transmission Service, such as service under pre-Order No. 888 grandfathered agreements. The Base Flow calculation will also take into account any relevant counterflows.

Entergy models the output of QF/Cogeneration units to a level sufficient to meet any host load requirements. To the extent there is a firm or non-firm reservation from a QF, it will be handled the same as a firm or non-firm reservation from any other source on the Transmission System.

Under Sections 6 and 8 of the Transmission Service Protocol, the Transmission Provider is responsible for supplying the data inputs and information necessary for creating the hourly, daily and monthly base case models. RfCalc utilizes this data to create hourly and daily models, while the Transmission Provider creates monthly models for use with off-line power flow applications, such as PSSE/MUST. The ICT is responsible for reviewing and validating the data inputs, information and base case models supplied by the Transmission Provider. The ICT's "review and validation" responsibility shall obligate the ICT to take reasonable steps to ensure that the data inputs are properly loaded and reflected in the Transmission Provider's modeling processes and that the resultant AFC values (i) reasonably reflect the application and product of these modeling processes and (ii) are reasonably consistent with the current topology of the Transmission System.

To account for all existing firm uses of the Transmission System, assumptions must be made for the load forecast, unit commitment, scheduled outages, counterflows, and net interchange. The actual dispatch on the Transmission System may differ from the expected dispatch modeled in the AFC process due to uncertainties involving unplanned unit outages and unplanned derates, Qualified Facility puts, load forecasting, and short-term purchases by Network Customers.

### **4.2 Load Forecast**

For the Operating Horizon and the Planning Horizon, Entergy's System Planning Organization (SPO) and all other AFC process participants will be provided with a secure Web-based portal to upload the load forecast data. Pursuant to Section 4.2.1, SPO and all Network Customers will be required to submit load forecast data for their respective loads through this portal. If a Network Customer does not supply load forecast data for a particular time period, historical data will be used to create a load forecast for purposes of calculating AFC values. SPO supplies a load forecast for the load served by Entergy. All other Network Customers supply a load forecast for their own load. To the extent that RfCalc must calculate a load for load areas not included in the SPO supplied load forecast, this is accomplished by assigning these non-forecasted areas a factor, and then applying the scaling factor to calculate the area load based on an assumed forecast area.

For the Study Horizon, the load forecast is based on inputs received from SPO for the Entergy Control Area. For Network Customers and Control Areas that are embedded in footprint of the Transmission System, the Transmission Provider uses load forecast data to the extent it is supplied by the host entity. If no such data is available, the Transmission Provider defines the load level for these Control Areas/Network Customers based on a scaling factor using the peak load forecast as reference. External Control Area

will first dispatch the AGC generators in the Control Area where the customer load resides. These generators can be dispatched up to their MW max limit. If after this step the load has still not been met, RFcalc will change the NI of the Control Area where the customer load resides to meet the load. If changing the NI also does not meet the load the Powerflow for that timepoint may diverge. For customers who are full or partial requirement customers of SPO, their unbalanced load will be balanced by using SPO resources.

#### **4.2.2.1 Treatment of Excess Reservations for Network/Native Load**

Under the procedures described above in Section 4.2.1.1, there will be instances where reservations that have been confirmed are not modeled or “dispatched” in the base case. These reservations are referred to as “Excess Reservations.” To prevent overselling, RFcalc will algebraically decrement the impact of Excess Reservations on the two proxy flowgates (PMAX and TIECAP). For those reservations that are partially dispatched in the base case model (*i.e.*, not at full output), the un-modeled impact of those reservations will be decremented against these two flowgates also. The impact of Excess Reservations would *not* be decremented against the other flowgates included in the list of the Most Limiting Flowgates.

#### **4.2.2.2 Modeling Point-to-Point Service**

RFcalc will model most firm point-to-point reservations (imports and exports) at their respective reservation levels. There are some customers that serve load using grandfathered point-to-point reservations. For these specific point-to-point reservations that sink to Network Load, RFcalc will utilize the process described in Section 4.2.2.1.

#### **4.2.2.3 Modeling Unconfirmed Reservations**

WebTrans will algebraically decrement the top 15 flowgates for Reservations (both Point-to-Point and new Network Resources) that are in accepted mode and counteroffered. They will not be modeled in base flows after resynchronization. Reservations that are in accepted or counter offer mode will be algebraically decremented against the top fifteen flowgates. The decrementation will be on the proxy flowgates (PMAX and TIECAP) and the remaining flowgates until such time as they are withdrawn, rejected or confirmed. All reservations that are in study mode will be algebraically decremented against the top fifteen flowgates. Once an accepted request is confirmed, it will only be modeled if included in the customer’s dispatch files or until such time as RFcalc requires modeling of those reservations to meet the customer’s load. When an accepted request is confirmed in between resynchronizations, it will continue to be algebraically decremented until such time there is an RFCalc and webTrans resync. Confirmed reservations for Network Resources that are not modeled by RFcalc will be treated as Excess Reservations and will be decremented against the proxy flowgates (PMAX and TIECAP) but not the remaining top-fifteen flowgates.

### **4.2.3 Unit Commitment and Dispatch – Planning Horizon and Study Horizon**

Unit commitment and dispatch is based on information provided by SPO and other Network Customers. For the Entergy Operating Companies serving Entergy native load, the Network Resources of the Entergy Operating Companies are set to meet Entergy’s native load based in part on information provided by the entity responsible for serving that load, *i.e.*, Entergy’s SPO group. This information varies depending on the time horizon in question. Additional information from other sources that is used to determine unit commitment includes updated data regarding Network Resources, purchases and sale transactions, and

shape of load curve. Load forecasts for external areas other than those listed above are derived by using a scaling factor.

Subsystem files for hourly models only include units that are online and have an assigned participation factor. Therefore, these units are the only participants in the transfer because RFCalc specifically uses units that are online in the calculation of response factors.

Transmission outages, both planned and unplanned, for facilities with voltage levels 115 kV or more, are included in AFC operating and planning models. Outages of bus breakers and power transformers are manually inserted into the models.

#### **4.3.2 Study Horizon**

Pursuant to Section 6.2 of the Transmission Service Protocol, the Transmission Provider provides to the ICT and other modeling group participants such data and information as may be necessary to prepare and update the monthly models used in the Study Horizon. The Transmission Provider creates the monthly models used in the Study subject to the ICT's review and validation pursuant to Sections 6.1 and 6.2 of the Transmission Service Protocol. The ICT reviews and validates the data inputs provided by the Transmission Provider to ensure that the data inputs and resulting models are consistent with the Transmission Provider's criteria.

When developing generation dispatch data inputs for monthly models, the Transmission Provider assumes IPP units in the Study Horizon models are dispatched to the level of the reservations that are active for that facility. The Transmission Provider also assumes QF/cogeneration units are dispatched to the level of the load at the facility. If there are any reservations from the QF/cogeneration units, such reservations are added to the units dispatch level. In the absence of any OASIS reservations, the net injection from the QF is zero MWs. Network Resource units are dispatched economically using the ECDI function of PSS/E to create a least-cost dispatch for each case. When necessary to enforce zonal import limits, the case is dispatched by zones rather than by area. When this occurs, an IDEV file that recreates the dispatch is saved.

When developing topology data inputs for monthly models, the Transmission Provider assumes all 500kV lines that are scheduled out of service for one day are modeled out of service for the entire month, and all 115kV – 230kV lines that are scheduled out of service for at least five days are modeled out of service for the entire month. The Transmission Provider schedules multiple lines as out of service when the outages overlap or when non-overlapping outages have no impact on one another. The Transmission Provider also models critical lines as out of service even if the lines are not out of service for the required time frame but should be modeled out of service to better reflect the system conditions for the month. The Transmission Provider updates line outages in models at least once a month and the ICT posts the updates on OASIS. OASIS Study Horizon model postings are updated once a week with new creation times, but newly retrieved line outages information is not included in this update.

When developing load data inputs for monthly models, the Transmission Provider assumes Entergy's load for each month is the peak value forecasted by SPO for the month. Cogeneration, industrial, and auxiliary load is assumed to be constant for every month. LAGN, SMEPA, ETEC, MDEA, SRMPA, and TVA embedded loads are added to the case based on either a load forecast, or monthly factors of the peak value. DENL's load is scaled for each month based on load forecast. CLECO, LAGN, and DERS loads in the non-peak models for each season are scaled by a factor. The LAFA load is modeled based on the load forecast data for each month.

There are no assumptions with respect to imports in the monthly models except for the Amite South import limit, which is held to a value of approximately 2000 MW.

When developing transaction data inputs for monthly models, the Transmission Provider models all monthly transactions in the appropriate month. Transactions which serve embedded loads, such as LAGN, SMEPA, ETEC, SRMPA, TVA, and MDEA, will match the value of the embedded load for the month. Transactions between CLECO and LAFA are adjusted so that the Bonin generator only generates 1 MW. Transactions which serve DENL match the load in DENL minus 20 MW of their own generation. Transactions which serve DERS match the load in the Control Area. Long term firm contracts are assumed to expire if not renewed one year prior to the end date of the contract. If the date of the monthly model creation is greater than one year before the end of the contract, rollover rights are assumed. If the date of the monthly model creation is within one year of the transaction end date, and a renewal has not been confirmed, the transaction is removed from the models representing the months after the end date of the contract. Transaction data and all other topology in models are updated and posted on OASIS at least once a month. Transaction data is typically updated weekly in models. Thus, the posting dates on OASIS typically change weekly for Study Horizon models.

When developing unit commitment data inputs for monthly models, the Transmission Provider assumes all units that are offline for at least two weeks are out of service for the entire month. However, if two units in the same region are out of service at non-overlapping intervals during the month, only one unit is modeled offline. IPP units that have reservations are placed on-line, but if the facility has multiple units at one station, only the units that are required to meet the level of reservations are set on-line.

The Transmission Provider models Sterlington 7, Patterson 3 & 4, Moses, Lynch, Monroe, Mabelvale, Ritchie, and Lake Catherine 1, 2, & 3 units as out of service at all times if there is already a sufficient amount of generation. The Natchez unit is also modeled offline.

The formula for determining the amount of generation in the base case is only used for IPPs/QF and base loaded units of Entergy. The value is calculated by adding the MW of base case to the MW of transmission reserved to the MW of transmission scheduled. All other data inputs match the respective models.

There are three separate types of units modeled in the monthly loadflow models (Study Horizon) and the unit commitment and dispatch process varies with each type of unit. The three unit types are IPP units, cogeneration units, and Network Resource units (all other units). The IPP units are dispatched to the level of the reservations that are active for that facility. Cogeneration units are dispatched to the level of the load at the facility so that the host load is served entirely by the cogeneration unit. If there are any reservations from the units, those are added to the dispatch level of the units. In the absence of any OASIS reservations, the net injection from the cogeneration unit into the Entergy system is zero MW. The third type of unit is the Network Resource unit, which utilizes some PSS/E software logic in determining dispatch levels. The Network Resource units are dispatched economically using the ECDI function of PSS/E. An ECDI file containing heat rate and fuel cost information is passed to PSS/E and PSS/E sets the level of generation according to the economic information, so that the case achieves a least cost dispatch.

#### 4.4 TRM

Transmission Reliability Margin (TRM) is the amount of transmission transfer capability needed to provide a reasonable level of assurance that the system will remain reliable. TRM accounts for the inherent uncertainty in system conditions and its associated effects on AFC calculation, and the need for operating flexibility to ensure reliable system operation as system conditions change. The current value of TRM used by Entergy for the purposes of short-term AFC calculations for eighteen months or less is zero.

#### 4.5 Capacity Benefit Margin

Capacity Benefit Margin (CBM) is the amount of firm transmission transfer capability preserved by the transmission provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies. A CBM value of "zero" will be used in calculating AFC values and in reviewing TSRs on the Transmission System, unless Entergy submits a Section 205 filing for a higher value.

#### 4.6 Counter-Flows

RFCalc adjusts the base flow associated with a particular flowgate by removing a percentage of counterflow impacts in the calculation of AFC values. Transmission Provider includes 100% of counterflows created by firm and non-firm reservations when evaluating TSRs in the Operating, Planning and Study Horizons. In the Operating and Planning Horizon, Entergy will include 100% of counterflows created by firm schedules when evaluating TSRs in the Operating Horizon.

The Transmission Provider will review scheduling data and other operational experience on a bi-annual basis to determine the viability of the established counterflow percentages and will provide to the ICT all studies, analysis and research conducted in connection with any proposed change to the counterflow calculation. The ICT will independently review and validate, and shall post on OASIS notice of, any such change prior to effectiveness. For purposes of this Section 4.6, the responsibility of the ICT to "review and validate" shall mean that the ICT will review the inputs and results of any study or analysis provided by the Transmission Provider and shall confirm that the results reasonably reflect the application and product of such studies and analyses.

The formula used for adjusting base flows to take into account counterflows is described below:

$$\text{Adjusted Base Flow}_{\text{Flowgate1}} = \text{Original Base Flow}_{\text{Flowgate1}} + (CF_1 * X')$$

Where,

$X$  = Positive Flow

$X'$  = CounterFlow

$$\text{Original Base Flow}_{\text{Flowgate1}} = X - X'$$

$CF_1$  = Counter Flow factor

circuit elements owned by them and will coordinate the rating of the tie line with the co-owner such that it utilizes the lowest rating between the two systems.

Entergy may have a contractual interest in a joint ownership transmission line whereby the capacity of the line is allocated among the owners. The allocated capacity may be based upon the thermal capacity of the line or other considerations. Entergy will follow this criteria to rate the circuit elements owned by them and will coordinate the rating of the tie line with the co-owner such that it utilizes the lowest rating between the two systems.

There may be instances when a derating of a transmission line element is required due to damaged equipment. The limit may be caused by such factors as broken strands, damaged connectors, failed cooling fans, or other damage reducing the thermal capability.

## **5. RESPONSE FACTORS**

### **5.1 Introduction to Response Factors**

Response Factors measure the impact that each source-to-sink transaction has on a monitored flowgate. Response Factors are calculated on a transaction-specific and flowgate-specific basis. To implement transaction-specific Response Factors, Response Factors are calculated for each generator that is directly interconnected with the Transmission System, including all generators within the Entergy Control Area, regardless of ownership or affiliation. Response Factors are also calculated, on an as needed basis, for other generators that are located in such close electric proximity to the Transmission System that they have a specific impact on the Transmission System. Response Factors are also calculated, on an as needed basis, for Control Areas that are directly interconnected to the Transmission System and are applied to TSRs from generators that do not have specific Response Factors. The RFCalc software utilizes state estimator models to calculate Response Factors in the Operations and Planning Horizons, while the ICT uses off-line planning models developed by the Transmission Provider and commercial power flow applications, such as PSS/E and MUST, to calculate Response Factors in the Study Horizon.

### **5.2 Updating Response Factors**

Response Factors are resynchronized on the same basis as AFC values, *i.e.*, every hour during the Operating Horizon, at least every day (four times a day) for the Planning Horizon, and no less than every month during the Study Horizon. Resynchronizations may occur more frequently if necessary. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs.

### **5.3 Response Factors for Generators Outside of the Entergy Control Area**

For generators outside of the Entergy Control Area, Response Factors will be calculated for the non-Entergy Control Areas. These Response Factors will be used to evaluate service requests from each generator in the non-Entergy Control Area, unless a generator-specific Response Factor has been calculated for a border generating unit.

For transactions that source in a non-Entergy Control Area, Response Factors will be calculated for the non-Entergy Control Area by ramping up available generating facilities in the non-Entergy Control Area on a modified *pro rata* basis, such that all generating facilities reach their rated maximum outputs ( $P_{max}$ ) simultaneously. For transactions that sink in a non-Entergy Control Area, Response Factors will be

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calculated for the non-Entergy Control Area by ramping down available generating facilities in the non-Entergy Control Area on a modified *pro rata* basis, such that all generating facilities reach their rated minimum outputs ( $P_{min}$ ) simultaneously.

Generator-specific Response Factors will be calculated on an as needed basis for border generating units, *i.e.*, generating facilities that are located on other transmission systems/Control Areas and are also in "close electric proximity" to the Transmission System. The ICT or the Transmission Provider may propose that a generator-specific Response Factor be calculated for a border generating unit consistent with the criteria provided below. Response Factor proposals offered by the Transmission Provider will be subject to review and validation by the ICT and shall be accompanied by any studies, analysis and research conducted by the Transmission Provider. For purposes of this Section 5.3, the review and validation responsibility of the ICT shall mean that the ICT will review the studies and analysis to verify that the Transmission Provider followed the applicable criteria and that the results reasonably reflect the application and product of such studies and analyses.

To determine whether generator-specific Response Factors should be calculated for border generating facilities, two criteria are applied. First, the generator will have to be in close electric proximity to the Transmission System such that the generator is either: (1) directly interconnected with the Transmission System, but located in a different Control Area; or (2) interconnected with the Transmission System of another transmission provider within one or two busses of the Transmission System. Second, there will have to be a significant discrepancy between the Response Factors for all other generators in the non-Entergy Control Area and the Response Factors for the specific border generating facility in question.

#### **5.4 Response Factor Cutoff**

In order to evaluate whether a particular service request will use all, some, or none of the AFC for a particular flowgate, RFCalc, State Estimator models and off-line planning models are used to calculate Response Factors. The Response Factors generated by Transmission Provider's AFC process measures the power flow impact that each source-to-sink transaction has on each flowgate for the post-contingency configuration of the system. If the power flow impact of particular TSR has an insignificant impact on a flowgate, that flowgate is not monitored when evaluating the request. To determine whether a flowgate is significantly impacted by a particular TSR, a Response Factor threshold of 3% is applied. Only flowgates with Response Factors at or above the 3% threshold will be considered when determining whether to approve the TSR. Thus, if the Response Factor for a particular flowgate is less than 3%, then the AFC process will not consider the flowgate when determining whether service should be granted. If the Response Factor for a particular flowgate is equal to or greater than 3%, and the AFC value indicates that the flowgate is one of the Most Limiting Flowgates for that transaction, then the flowgate will be evaluated to determine whether the particular TSR should be granted.

#### **5.5 Modified Response Factor Cutoff**

If operating conditions indicate that a revision to the Response Factor threshold is necessary to enable accurate representation of system transfer capability and thereby maintain system reliability, then the Transmission Provider will reevaluate this threshold with notice to ICT. All changes to the Response Factor threshold will be filed with FERC.

### **6. WEBTRANS AND EVALUATING TSRs**

webTrans automatically processes requests for Transmission Service using a flow-based approach to determine AFC for monitored flowgates webTrans is integrated with Transmission Provider's EMS and State Estimator, and uses power flow models developed from both RFCalc and the Transmission Provider's

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off-line planning models used in the Study Horizon. WebTrans will be used as the link between the AFC calculation process and the reserving and scheduling of Transmission Service under the Tariff. As individual TSRs are received, webTrans applies the applicable Response Factors to determine the impact new requests will have on the relevant flowgates and approves or denies the request based on that impact. The ICT determines the final status of each TSR based on the information provided by webTrans.

### **6.1 Flowgates Used to Evaluate Requests**

Although the AFC process will monitor approximately 300-500 flowgates, webTrans will use a more limited set of flowgates, as determined by RFCalc, to evaluate individual service requests. When evaluating individual service requests, webTrans will only consider those flowgates that are: (1) "significantly impacted" by the request at issue, *i.e.*, those flowgates with a Response Factor equal to or greater than 3%; and (2) the Most Limiting Flowgates. Thus, to determine which flowgates should be evaluated for a particular source-sink combination, RFCalc will: (1) ignore all flowgates with a Response Factor of less than the Response Factor cutoff of 3%; and (2) will select from the remaining flowgates the fifteen flowgates with the lowest effective ATC values. The list of flowgates used to evaluate a particular service request will be redetermined during each resynchronization.

### **6.2 Approving and Denying Service**

As individual transmission requests are submitted over OASIS, webTrans will apply the appropriate Response Factors to each request in order to evaluate the impact of the request on the most-limiting, significantly-affected flowgates. The amount of capacity requested will be multiplied by the Response Factor for a particular flowgate. The product of the requested capacity and the Response Factor will represent the additional loading impact of the new service on the flowgate and will be subtracted from the AFC value for that flowgate. As discussed above, this process will be applied to the Most Limiting Flowgates. If the AFC for all the flowgates remains positive or equal to zero after being reduced to account for the new transaction, the request will be approved. If the AFC value on any of the flowgates becomes negative or otherwise exceeds the rated capability of the facilities in question, then the request will be denied, unless service of a lower priority may be preempted to bring the AFC value back to zero or positive. The preempting of service with a lower priority will be conducted pursuant to governing FERC policies.

### **6.3 Pmax and Interface Limits**

Regardless of the applicable AFC values, accepted TSRs from a particular generator shall not exceed the maximum output of that generator. Additionally, the amount of Transmission Service available across a Control Area interface can not exceed the total interface rating between the two Control Areas. Consistent with NERC Operating Policies and operating agreements, the capacity between these interfaces is rated. This limit is typically defined by the thermal limit of all transmission facilities that define the interface. Other Control Area interfaces may be limited based upon the maximum generation capability or load of that neighboring Control Area. Both the Pmax and Interface limits will be honored in the AFC process through a proxy flowgate. To the extent that the service request exceeds either the Pmax or interface limit, the proxy flowgate will appear as one of the Most Limiting Flowgates for that particular transaction.

### **6.4 Redirect Requests**

Requests to redirect all or a portion of a firm transmission reservation from an alternate point-of-receipt (source) or to an alternative point-of-delivery (sink) on a firm basis is evaluated in the following manner. First, the Most Limiting Flowgates by each request (the original request and the redirect request) are identified. Next, the AFC values are used to separate the flowgates into two groups. Group 1 includes flowgates that have an AFC value that is less than or equal to zero *and* are common to both requests.

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Group 2 includes the remaining flowgates identified in the list of the Most Limiting Flowgates by the redirect request. Next, the current impact of the original request is removed from the AFC value of the flowgates in both groups (the AFC value is increased by the capacity of the request multiplied by the response factor of each flowgate). Note that the current impact of the original request may differ from the impact originally evaluated because power flows may have changed since the original request was accepted. The impact of the redirect request is then calculated and evaluated as follows:

- If the impact of the redirect request causes the AFC of any flowgate in Group 1 to decrease, the redirect request will be denied.
- If the AFC value of any flowgate in group 2 is less than or equal to zero, before applying the impact of the redirect request, the redirect will be denied.
- If the impact of the redirect request causes the AFC of any flowgate in Group 2 to drop below zero, a counteroffer may be made for a MW amount equal to the MWs that would cause the AFC of the most limited flowgate (*i.e.*, the flowgate with the largest negative AFC value) in Group 2 to equal zero.
- In all other circumstances, the redirect request will be accepted.

## 7. SCENARIO ANALYZER

### 7.1 Introduction

The Scenario Analyzer allows transmission customers to evaluate transfer capability without actually submitting an OASIS request. The Scenario Analyzer provides customers with an immediate response by performing the same flow-based review that is used by webTrans to determine whether actual service requests can be accommodated. The Scenario Analyzer notifies the customer whether or not the evaluation passes the AFC check and provides an evaluation identification number (SA####). The Customer can then query the request evaluation within OASIS and is provided the following information associated with the request; the timepoints of the request, the amount of flowgate capacity available, the response factor, and the transfer capability that is available. However, because the Scenario Analyzer does not submit an actual service request over OASIS, it does not decrement flowgate AFC. The Scenario Analyzer uses the same flow-based engine as webTrans.

There are two evaluation options under the Scenario Analyzer related to Queue position. The 'Last' Queue Position provides customers with AFC information that reflects all queued requests with a status of Confirmed, Accepted, Counteroffer, and Study taken into account. The 'First' Queue Position option provides customers with AFC results (*i.e.* decrements to the AFC) based only on confirmed reservations. There are also two report format options under the Scenario Analyzer. The 'Brief' Report Format will create a report with the limiting flowgate information. The 'Full' Report Format will create a report containing the flowgate information for all of the impacted flowgates (up to the top fifteen).

### 7.2 How to use the Scenario Analyzer

The Scenario Analyzer is an OASIS module that allows Transmission Customers to evaluate availability on certain designated constrained facilities for the Source and Sink pair, but does not decrement ATC since no request has been submitted. The Scenario Analyzer and the Request Evaluation module can be found on the Reservations tab of the webOASIS by checking the AFC/Flowgate Reports box. The Information that is entered on the Scenario Analyzer Entry Form is:

Provider  
Source name  
Sink name  
POR name  
POD name  
Transmission Service  
Start time (for each time segment)  
Stop time (for each time segment)  
Capacity value (for each time segment)

After entering information in the Scenario Analyzer form on OASIS, 'Enter Scenario' is selected to enter into the Scenario Entry Submission window. From there the user can choose the 'Queue Position' to be used and the 'Report Format' to be used. The user would then select the 'Check AFC' button at the top of the Submission window to view the afc Pass/Fail and the evaluation id. The user can return to the Request Evaluation module and enter the evaluation id from the Scenario Analyzer to view the report that was created as a result of the analysis. If the user wishes to submit the request on OASIS for an actual evaluation, the user enters the information using the 'new TSR' Reservation Entry Form on OASIS.

User certification is required for access to the Scenario Analyzer.

## 9.2 Input files

From the monthly models, the Transmission Provider will also provide a subsystem file that defines all sources and sinks used for calculating AFC values, and such data will be posted by the ICT. User certification is required for access to this data.

The Transmission Provider also posts the following informational files related to AFC:

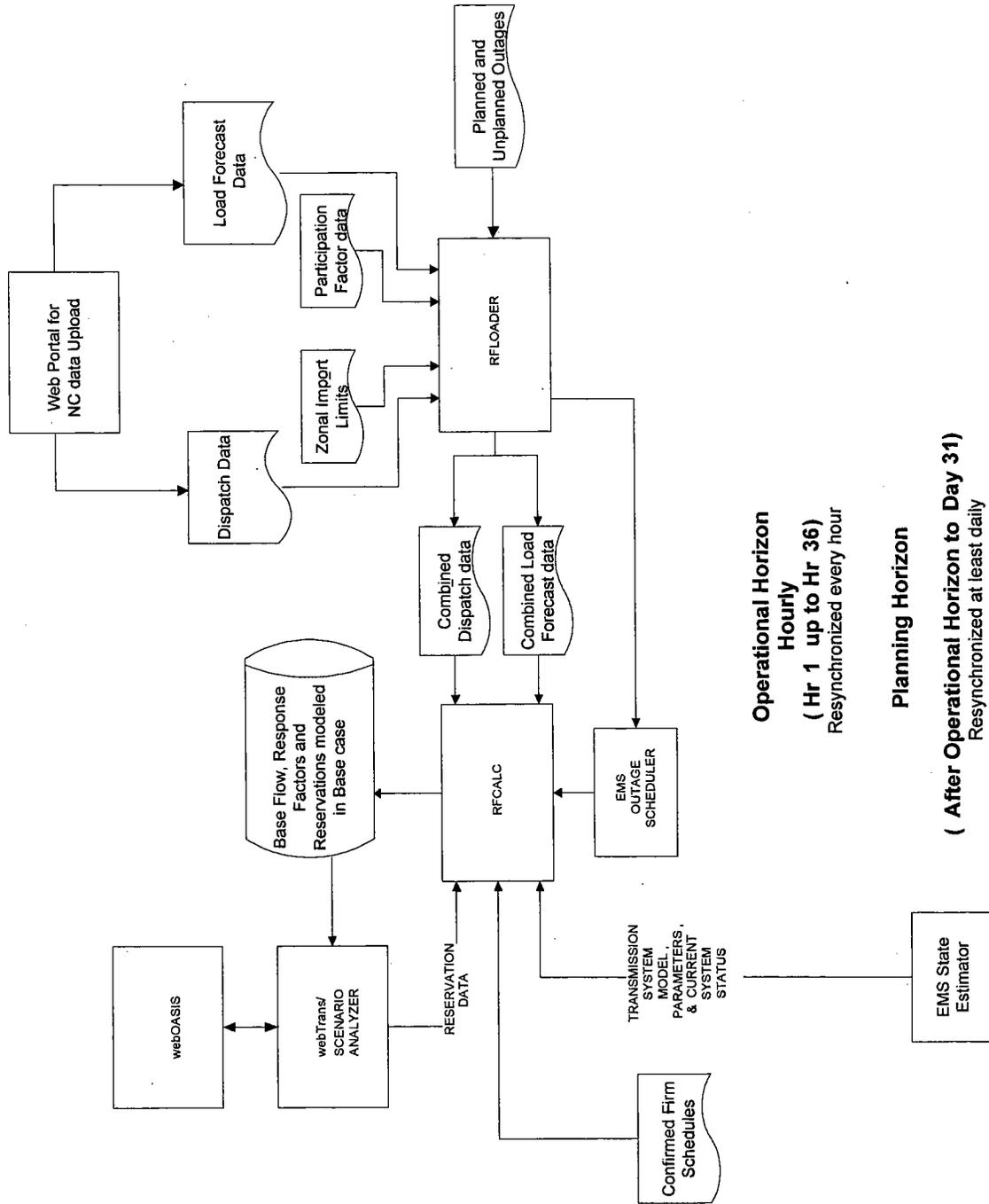
- A file containing response factors of the Most Limiting Flowgates per path and base flow for each flowgate for each time point. The file is refreshed with each resynchronization pursuant to section 5.2.
- A file containing the Effective ATC value of each path for each time point.
- A file containing the list of generators used as the Entergy Control Area sink for response factor calculation. The file also lists the participation factors for these generators.
- A subsystem files defining all sources and sinks used to calculate AFC.
- A list of flowgates with TTC and a revision log for all flowgate changes that are provided by the Transmission Provider and reviewed and posted by the ICT.

## 9.3 Transmission Outages

The Transmission Provider will post on its OASIS a list of all scheduled outages on transmission facilities on the Transmission System. The posting will include a daily posting for the Day 1 – 31 timeframe and a monthly posting for the Month 2 – 13 time frame.

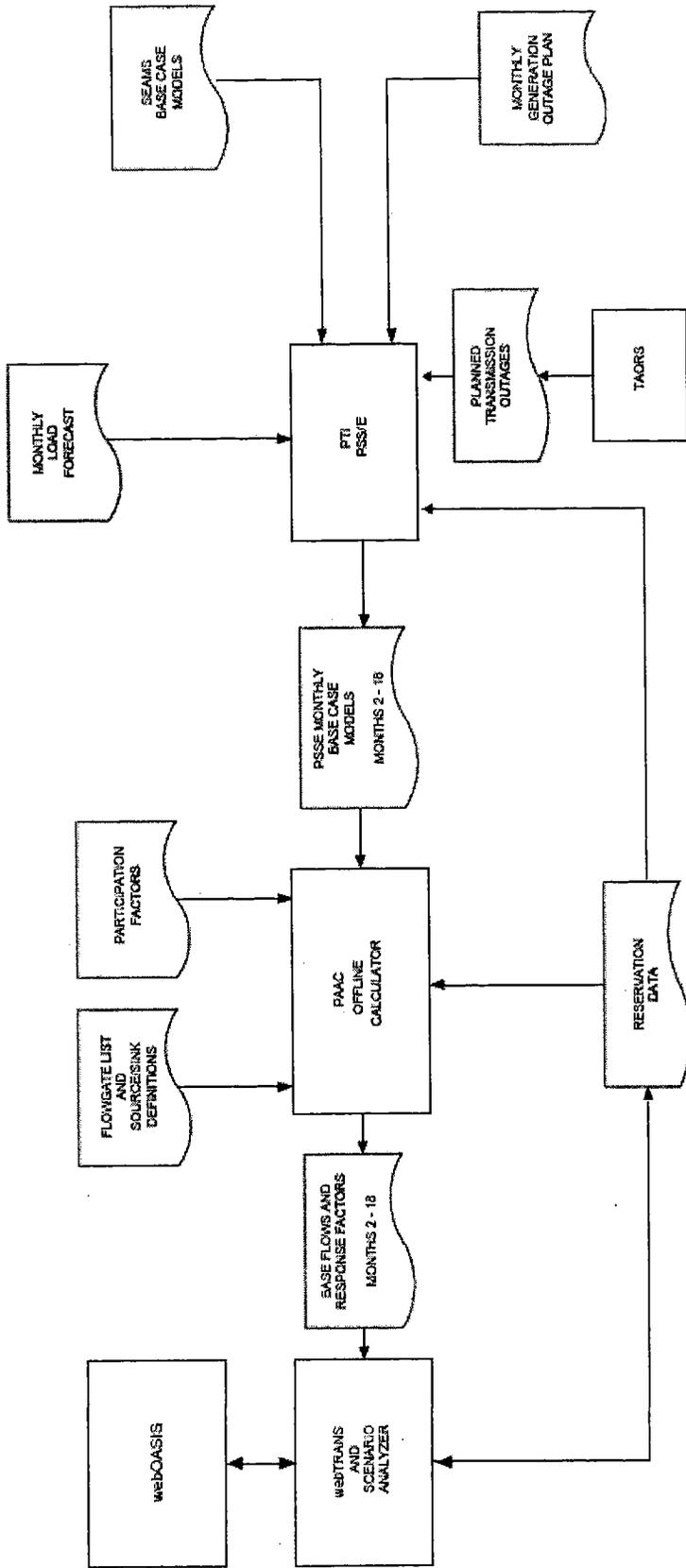
There are two types of outage postings on the Entergy OASIS:

- The first type of outage posting is an *informational posting* of transmission outages, including outages outside of the Entergy Control Area that is provided to customers so that they may be aware of planned outages on the Transmission System. This list is entirely unrelated to the AFC process. It was developed for informational purposes and is not used for modeling purposes. This list is taken directly from Entergy's outage scheduling software, known as "TAORS."
- The second type of outage posting is the list of outages contained in the hourly AFC power flow models posted on OASIS. RFCalc imports these outages from TAORS and COS, but only uses those outages that are relevant for the particular time period being modeled. This ensures that RFCalc has updated outage information each time that RFCalc resyncs or calculates new AFC values. This outage list was not developed to provide customers with information regarding all planned outages during a particular month, and instead is used to model the system at a particular point in time.



**Operational Horizon**  
**Hourly**  
 ( Hr 1 up to Hr 36)  
 Resynchronized every hour

**Planning Horizon**  
 ( After Operational Horizon to Day 31)  
 Resynchronized at least daily



**Study Horizon**  
**Monthly**  
**(Month 2 to Month 18)**  
 Resynchronized at least once a month

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## Attachment 3

Redline Tariff Sheets Revising the Original June 1, 2009  
Effective Date to September 28, 2009

$$\text{Firm AFC} = \text{Rating} - \text{TRM} - \text{ETC} - \text{CBM} - \text{Adjusted Base Flow}_{\text{FIRM}}$$

Where:

Firm AFC	=	the amount of firm transfer capability over that flowgate that remains available for additional transmission service reservations above and beyond existing uses of the transmission system
Rating	=	the capability of a flowgate in a time period
TRM	=	Transmission Reliability Margin
CBM	=	Capacity Benefit Margin
ETC	=	Existing Transmission Commitments (reservations) not included in the base flow calculation which are handled algebraically by webTrans
Adjusted Base Flow (Firm)	=	the expected firm power flow through a flowgate in a time period with all pertinent flows included in the power flow base case and adjusted for counterflow impacts

### 3.5 Resynchronization of AFC Values

AFC values will be resynchronized: (i) every hour during the Operating Horizon; (ii) at least every day for the Planning Horizon; (iii) and no less than every month during the Study Horizon. Resynchronizations may occur more frequently if necessary. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs. The ICT may also direct resynchronizations of AFC values pursuant to Section 8.3 of the Transmission Service Protocol.

For the Operating and Planning Horizons, RFCalc incorporates all the data inputs during the resynchronization process to develop power flow models that define each time point included in the Operating and Planning Horizons. During the resynchronization process, prior commitment and confirmed TSRs are modeled into the base case as discrete injections and withdrawals, and new base flows are determined from these models. Using the new base flow amounts and models, RFCalc recalculates the base flow value on each monitored flowgate in the Master List. For the Study Horizon, this process is performed by an off-line AFC calculator. When a new TSR is accepted between resynchronizations, the "Most Limiting Flowgates"<sup>1</sup> that are significantly impacted by that particular request will be updated in webTrans by algebraically decrementing the appropriate AFC values. At the time of the next resynchronization, the TSRs that have been confirmed since the last resynchronization will then be modeled as physical injections and withdrawals in the same manner of all other previously granted service requests.

<sup>1</sup> Although the AFC process will monitor approximately 300-500 flowgates, webTrans will use a more limited set of flowgates, as determined by RFCalc or PAAC, to evaluate individual TSRs. The Most Limiting Flowgates are up to fifteen flowgates with the lowest effective ATC values for the TSR at issue that also have a response factor of at least 3%.

## 4. INPUTS TO BASE CASE MODELS AND THE AFC FORMULAS

### 4.1 Base Flow

The Base Flow calculation for Firm AFC values takes into account all existing firm Transmission Service, including capacity reserved for: (1) Firm Point-to-Point Transmission Service; (2) service to Network and Native Load customers; and (3) other firm Transmission Service, such as service under pre-Order No. 888 grandfathered agreements. The Base Flow calculation will also take into account any relevant counterflows.

Entergy models the output of QF/Cogeneration units to a level sufficient to meet any host load requirements. To the extent there is a firm or non-firm reservation from a QF, it will be handled the same as a firm or non-firm reservation from any other source on the Transmission System.

Under Sections 6 and 8 of the Transmission Service Protocol, the Transmission Provider is responsible for supplying the data inputs and information necessary for creating the hourly, daily and monthly base case models. RFCalc utilizes this data to create hourly and daily models, while the Transmission Provider creates monthly models for use with off-line power flow applications, such as PSSE/MUST. The ICT is responsible for reviewing and validating the data inputs, information and base case models supplied by the Transmission Provider. The ICT's "review and validation" responsibility shall obligate the ICT to take reasonable steps to ensure that the data inputs are properly loaded and reflected in the Transmission Provider's modeling processes and that the resultant AFC values (i) reasonably reflect the application and product of these modeling processes and (ii) are reasonably consistent with the current topology of the Transmission System.

To account for all existing firm uses of the Transmission System, assumptions must be made for the load forecast, unit commitment, scheduled outages, counterflows, and net interchange. The actual dispatch on the Transmission System may differ from the expected dispatch modeled in the AFC process due to uncertainties involving unplanned unit outages and unplanned derates, Qualified Facility puts, load forecasting, and short-term purchases by Network Customers.

### 4.2 Load Forecast

For the Operating Horizon and the Planning Horizon, Entergy's System Planning Organization (SPO) and all other AFC process participants will be provided with a secure Web-based portal to upload the load forecast data. Pursuant to Section 4.2.1, SPO and all Network Customers will be required to submit load forecast data for their respective loads through this portal. If a Network Customer does not supply load forecast data for a particular time period, historical data will be used to create a load forecast for purposes of calculating AFC values. SPO supplies a load forecast for the load served by Entergy. All other Network Customers supply a load forecast for their own load. To the extent that RFCalc must calculate a load for load areas not included in the SPO supplied load forecast, this is accomplished by assigning these non-forecasted areas a factor, and then applying the scaling factor to calculate the area load based on an assumed forecast area.

For the Study Horizon, the load forecast is based on inputs received from SPO for the Entergy Control Area. For Network Customers and Control Areas that are embedded in footprint of the Transmission System, the Transmission Provider uses load forecast data to the extent it is supplied by the host entity. If no such data is available, the Transmission Provider defines the load level for these Control Areas/Network Customers based on a scaling factor using the peak load forecast as reference. External Control Area

will first dispatch the AGC generators in the Control Area where the customer load resides. These generators can be dispatched up to their MW max limit. If after this step the load has still not been met, RFcalc will change the NI of the Control Area where the customer load resides to meet the load. If changing the NI also does not meet the load the Powerflow for that timepoint may diverge. For customers who are full or partial requirement customers of SPO, their unbalanced load will be balanced by using SPO resources.

#### **4.2.2.1 Treatment of Excess Reservations for Network/Native Load**

Under the procedures described above in Section 4.2.1.1, there will be instances where reservations that have been confirmed are not modeled or “dispatched” in the base case. These reservations are referred to as “Excess Reservations.” To prevent overselling, RFcalc will algebraically decrement the impact of Excess Reservations on the two proxy flowgates (PMAX and TIECAP). For those reservations that are partially dispatched in the base case model (*i.e.*, not at full output), the un-modeled impact of those reservations will be decremented against these two flowgates also. The impact of Excess Reservations would *not* be decremented against the other flowgates included in the list of the Most Limiting Flowgates.

#### **4.2.2.2 Modeling Point-to-Point Service**

RFcalc will model most firm point-to-point reservations (imports and exports) at their respective reservation levels. There are some customers that serve load using grandfathered point-to-point reservations. For these specific point-to-point reservations that sink to Network Load, RFcalc will utilize the process described in Section 4.2.2.1.

#### **4.2.2.3 Modeling Unconfirmed Reservations**

WebTrans will algebraically decrement the top 15 flowgates for Reservations (both Point-to-Point and new Network Resources) that are in accepted mode and counteroffered. They will not be modeled in base flows after resynchronization. Reservations that are in accepted or counter offer mode will be algebraically decremented against the top fifteen flowgates. The decrementation will be on the proxy flowgates (PMAX and TIECAP) and the remaining flowgates until such time as they are withdrawn, rejected or confirmed. All reservations that are in study mode will be algebraically decremented against the top fifteen flowgates. Once an accepted request is confirmed, it will only be modeled if included in the customer’s dispatch files or until such time as RFcalc requires modeling of those reservations to meet the customer’s load. When an accepted request is confirmed in between resynchronizations, it will continue to be algebraically decremented until such time there is an RFCalc and webTrans resync. Confirmed reservations for Network Resources that are not modeled by RFcalc will be treated as Excess Reservations and will be decremented against the proxy flowgates (PMAX and TIECAP) but not the remaining top-fifteen flowgates.

### **4.2.3 Unit Commitment and Dispatch – Planning Horizon and Study Horizon**

Unit commitment and dispatch is based on information provided by SPO and other Network Customers. For the Entergy Operating Companies serving Entergy native load, the Network Resources of the Entergy Operating Companies are set to meet Entergy’s native load based in part on information provided by the entity responsible for serving that load, *i.e.*, Entergy’s SPO group. This information varies depending on the time horizon in question. Additional information from other sources that is used to determine unit commitment includes updated data regarding Network Resources, purchases and sale transactions, and

Provider will provide the ICT with an updated Master List and the ICT will post such updated Master List to the Entergy OASIS.

As indicated in 2.2.2.4, the process is designed to retain a constant number of flowgates (approximately 300 flowgates) on the Master List. Expansion of this total number of flowgates may be necessary as system conditions change on the Transmission System.

### 3. CALCULATION OF AFC VALUES

#### 3.1 Base Case Models

The AFC process generates a base case model that simulates anticipated system conditions. The base system conditions include projected load, generation dispatch, system configuration/outages, and base flow transactions. RFCalc produces power flow models representing the two distinct time periods: (1) hourly models in the Operating and Planning Horizons for Hour 1 to Hour 168; (2) daily models in the Planning Horizon for Day 8 to Day 31. An off-line planning model process using PSS/E produces monthly power flow models for Month 2 to Month 18 of the Study Horizon. In accordance with Sections 8.1 and 8.2 of the Transmission Service Protocol, the Transmission Provider maintains and services the AFC Software, including webTrans. webTrans is a software application developed by OATI used to process TSRs and to calculate AFC values, and serves as the interface to web OASIS.

The power flow model used to determine constrained facility base flow and Response Factors for the Operating and Planning Horizons is based on the Transmission Provider's EMS and a state estimator snapshot of the real-time system. The power flow model for the Study Horizon uses off-line power flow studies, such as PSS/E and MUST. During the resynchronization process, the base case models are modified to reflect additional transactions as discrete injections and withdrawals. Using these models as the starting point, RFCalc applies the formulas described below to compute the AFC value on each monitored flowgate. Under Sections 6 and 8 of the Transmission Service Protocol, the Transmission Provider is responsible for supplying data inputs and information necessary for creating hourly, daily and monthly base case models. The ICT will be responsible for reviewing and validating the data inputs, information and base case models.

For purposes of this Section 3, the responsibility of the ICT to "review and validate" shall mean that the ICT will take reasonable steps to ensure that the data inputs are properly loaded and reflected in either RFCalc or the Transmission Provider's modeling processes and that the resultant AFC values (i) reasonably reflect the application and product of RFCalc or the Transmission Provider's modeling processes and (ii) are reasonably consistent with the current topology of the Transmission System.

#### 3.2 AFC Formula for Non-firm Transmission Service Requests

WebTrans computes Non-Firm AFC for the Operating, Planning and Study Horizons. Non-Firm AFC is the capacity that remains on a constrained facility after subtracting power flows for service to Native Load Customers, Network Customers, Firm Point-to-Point Customers, Non-Firm Point-to-Point Customers and other firm and non-firm transactions. Non-Firm AFC is computed in the Planning Horizon using the same power flow solution as used for Firm AFC, with the exception that the effects of non-firm reservations will not be removed from base flows by webTrans. After the power flow model has been solved for a time segment, RFCalc and PAAC take the base flows of constrained facilities and adjust them to remove a percentage of the counter-flows from both firm and non-firm reservations. After

adjusting base flows for the effects of counterflow, webTrans uses the following formula to determine Non-Firm AFC:

$\text{Non-Firm AFC} = \text{Rating} - \text{TRM} - \text{ETC} - \text{Adjusted Base Flow}_{\text{NON-FIRM}}$
---

Where:

Non-Firm AFC	=	the amount of non-firm transfer capability over that flowgate that remains available for additional transmission service reservations above and beyond existing uses of the transmission system
Rating	=	the capability of a flowgate in a time period
TRM	=	Transmission Reliability Margin
ETC	=	Existing Transmission Commitments (reservations) not included in the base flow calculation which are handled algebraically by webTrans
Adjusted Base Flow (Non-Firm)	=	the expected firm and non-firm power flow through a Flowgate in a time period with all pertinent flows included in the power flow base case and adjusted for counterflow impacts

### 3.3 AFC Calculation Horizons

AFC values are calculated for three different time periods: (1) the Operating Horizon, which includes all hours of the current day (Day 1) and, after 12:00 p.m., all hours of the next day (Day 2); (2) the Planning Horizon, which extends from the end of the Operating Horizon through the thirty-first day (Day 31); and (3) the Study Horizon, which extends from the end of the Planning Horizon through the eighteenth month (Month 18).

#### 3.3.1 Operating Horizon

In the Operating Horizon, the Non-Firm AFC values for each flowgate are calculated by webTrans, which uses Response Factors and base flow calculated by RFCalc. The topology for the base case model for the first three hours in the Operating Horizon is generated by Entergy's State Estimator. The relevant unit commitment and load forecast inputs are incorporated into the model. Beyond the first three hours, RFCalc creates the base case model using Entergy's EMS as modified to take into account outages, unit commitment, load forecasts and other system conditions. Using the power flow models and Non-Firm AFC formula discussed above, webTrans calculates Non-Firm AFC values for all hours of Day 1 and, after 12:00 p.m., all hours of Day 2. This calculation is performed for Non-firm AFC values only. Firm AFC values are not calculated for the Operating Horizon because requests for firm Transmission Service must be submitted by 12:00 p.m. on the day prior to commencement of such service. Because firm service cannot be requested during the Operating Horizon, only Non-Firm AFCs are calculated for that horizon. All Non-Firm AFC values and Response Factors for the Operating Horizon are calculated and updated at least on an hourly basis to reflect changing system conditions, including additional confirmed Transmission Service reservations and schedules. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs.

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### 3.3.2 Planning Horizon

In the Planning Horizon, Firm and Non-Firm AFC values for each flowgate are calculated by webTrans, which uses Response Factors and base flow calculated by RFCalc. The base case model is generated by RFCalc using data from Entergy's EMS as modified to take into account outages, unit commitment, load forecasts and other system conditions. WebTrans calculates hourly Firm and Non-Firm AFC values for each flowgate for Day 2 through Day 7 and daily Firm and Non-Firm AFC values for Day 3 to Day 31. WebTrans updates both Firm AFC and Non-Firm AFC values for the Planning Horizon at least every day to reflect changing system conditions, including additional confirmed Transmission Service reservations. In between such updates, Non-Firm and Firm AFC values are decremented algebraically to reflect subsequent Transmission Service reservations.

### 3.3.3 Study Horizon

In the Study Horizon, the ICT, using data inputs and power flow models developed by the Transmission Provider and reviewed and validated by the ICT, calculates monthly Response Factors and AFC values by conducting off-line power flow studies, such as PSS/E and MUST. The off-line planning models are developed on a rolling eighteen-month basis and are representative of monthly peak-hour conditions. webTrans calculates both Firm and Non-Firm AFC values for the Study Horizon and updates those value at least on a monthly basis to reflect changing system conditions and additional confirmed transmission reservations. In between such updates, Non-Firm and Firm AFC values are decremented algebraically to reflect subsequent Transmission Service reservations.

## 3.4 AFC Formula for Firm Transmission Service Requests

WebTrans computes Firm AFC for the Planning and Study Horizons. Firm AFC is not available for the Operating Horizon, and therefore, is not computed for this time frame. Firm AFC is the capacity that remains on the constrained facility after subtracting power flows for service to Native Load Customers, Network Customers, Firm Point-to-Point Customers and other firm transactions.

For the Planning Horizon, Firm AFC will be determined at least once a day during the daily resynchronization by solving a power flow model that includes both firm and non-firm transmission reservation and is based on data from the Transmission Provider's Energy Management System (EMS). For the Study Horizon, Firm AFC will be determined on a monthly basis by solving off-line power flow models that include firm transmission reservations. In the Study Horizon, the impact of Non-Firm reservations will be algebraically decremented by webTrans and not included in the base flow. The flows on constrained facilities should represent base flows that serve Native Load Customers, Network Customers, Firm Point-to-Point Customers and other firm transactions.

After the power flow model has been solved for a time segment for the Planning Horizon, webTrans takes the base flows of constrained facilities and adjusts them to remove the effects of non-firm reservations from the most limiting facilities that were evaluated in the power flow model. RFCalc and PAAC also take the base flows of constrained facilities and adjusts them to remove a percentage of the counter-flows from firm reservations (subject to Section 4.6) for the Planning Horizon and the Study Horizon. WebTrans uses the following formula to determine Firm AFC:

shape of load curve. Load forecasts for external areas other than those listed above are derived by using a scaling factor.

Subsystem files for hourly models only include units that are online and have an assigned participation factor. Therefore, these units are the only participants in the transfer because RFCalc specifically uses units that are online in the calculation of response factors.

Transmission outages, both planned and unplanned, for facilities with voltage levels 115 kV or more, are included in AFC operating and planning models. Outages of bus breakers and power transformers are manually inserted into the models.

#### **4.3.2 Study Horizon**

Pursuant to Section 6.2 of the Transmission Service Protocol, the Transmission Provider provides to the ICT and other modeling group participants such data and information as may be necessary to prepare and update the monthly models used in the Study Horizon. The Transmission Provider creates the monthly models used in the Study subject to the ICT's review and validation pursuant to Sections 6.1 and 6.2 of the Transmission Service Protocol. The ICT reviews and validates the data inputs provided by the Transmission Provider to ensure that the data inputs and resulting models are consistent with the Transmission Provider's criteria.

When developing generation dispatch data inputs for monthly models, the Transmission Provider assumes IPP units in the Study Horizon models are dispatched to the level of the reservations that are active for that facility. The Transmission Provider also assumes QF/cogeneration units are dispatched to the level of the load at the facility. If there are any reservations from the QF/cogeneration units, such reservations are added to the units dispatch level. In the absence of any OASIS reservations, the net injection from the QF is zero MWs. Network Resource units are dispatched economically using the ECDI function of PSS/E to create a least-cost dispatch for each case. When necessary to enforce zonal import limits, the case is dispatched by zones rather than by area. When this occurs, an IDEV file that recreates the dispatch is saved.

When developing topology data inputs for monthly models, the Transmission Provider assumes all 500kV lines that are scheduled out of service for one day are modeled out of service for the entire month, and all 115kV – 230kV lines that are scheduled out of service for at least five days are modeled out of service for the entire month. The Transmission Provider schedules multiple lines as out of service when the outages overlap or when non-overlapping outages have no impact on one another. The Transmission Provider also models critical lines as out of service even if the lines are not out of service for the required time frame but should be modeled out of service to better reflect the system conditions for the month. The Transmission Provider updates line outages in models at least once a month and the ICT posts the updates on OASIS. OASIS Study Horizon model postings are updated once a week with new creation times, but newly retrieved line outages information is not included in this update.

When developing load data inputs for monthly models, the Transmission Provider assumes Entergy's load for each month is the peak value forecasted by SPO for the month. Cogeneration, industrial, and auxiliary load is assumed to be constant for every month. LAGN, SMEPA, ETEC, MDEA, SRMPA, and TVA embedded loads are added to the case based on either a load forecast, or monthly factors of the peak value. DENL's load is scaled for each month based on load forecast. CLECO, LAGN, and DERS loads in the non-peak models for each season are scaled by a factor. The LAFA load is modeled based on the load forecast data for each month.

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There are no assumptions with respect to imports in the monthly models except for the Amite South import limit, which is held to a value of approximately 2000 MW.

When developing transaction data inputs for monthly models, the Transmission Provider models all monthly transactions in the appropriate month. Transactions which serve embedded loads, such as LAGN, SMEPA, ETEC, SRMPA, TVA, and MDEA, will match the value of the embedded load for the month. Transactions between CLECO and LAFA are adjusted so that the Bonin generator only generates 1 MW. Transactions which serve DENL match the load in DENL minus 20 MW of their own generation. Transactions which serve DERS match the load in the Control Area. Long term firm contracts are assumed to expire if not renewed one year prior to the end date of the contract. If the date of the monthly model creation is greater than one year before the end of the contract, rollover rights are assumed. If the date of the monthly model creation is within one year of the transaction end date, and a renewal has not been confirmed, the transaction is removed from the models representing the months after the end date of the contract. Transaction data and all other topology in models are updated and posted on OASIS at least once a month. Transaction data is typically updated weekly in models. Thus, the posting dates on OASIS typically change weekly for Study Horizon models.

When developing unit commitment data inputs for monthly models, the Transmission Provider assumes all units that are offline for at least two weeks are out of service for the entire month. However, if two units in the same region are out of service at non-overlapping intervals during the month, only one unit is modeled offline. IPP units that have reservations are placed on-line, but if the facility has multiple units at one station, only the units that are required to meet the level of reservations are set on-line.

The Transmission Provider models Sterlington 7, Patterson 3 & 4, Moses, Lynch, Monroe, Mabelvale, Ritchie, and Lake Catherine 1, 2, & 3 units as out of service at all times if there is already a sufficient amount of generation. The Natchez unit is also modeled offline.

The formula for determining the amount of generation in the base case is only used for IPPs/QF and base loaded units of Entergy. The value is calculated by adding the MW of base case to the MW of transmission reserved to the MW of transmission scheduled. All other data inputs match the respective models.

There are three separate types of units modeled in the monthly loadflow models (Study Horizon) and the unit commitment and dispatch process varies with each type of unit. The three unit types are IPP units, cogeneration units, and Network Resource units (all other units). The IPP units are dispatched to the level of the reservations that are active for that facility. Cogeneration units are dispatched to the level of the load at the facility so that the host load is served entirely by the cogeneration unit. If there are any reservations from the units, those are added to the dispatch level of the units. In the absence of any OASIS reservations, the net injection from the cogeneration unit into the Entergy system is zero MW. The third type of unit is the Network Resource unit, which utilizes some PSS/E software logic in determining dispatch levels. The Network Resource units are dispatched economically using the ECDI function of PSS/E. An ECDI file containing heat rate and fuel cost information is passed to PSS/E and PSS/E sets the level of generation according to the economic information, so that the case achieves a least cost dispatch.

#### 4.4 TRM

Transmission Reliability Margin (TRM) is the amount of transmission transfer capability needed to provide a reasonable level of assurance that the system will remain reliable. TRM accounts for the inherent uncertainty in system conditions and its associated effects on AFC calculation, and the need for operating flexibility to ensure reliable system operation as system conditions change. The current value of TRM used by Entergy for the purposes of short-term AFC calculations for eighteen months or less is zero.

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#### 4.5 Capacity Benefit Margin

Capacity Benefit Margin (CBM) is the amount of firm transmission transfer capability preserved by the transmission provider for Load-Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies. A CBM value of "zero" will be used in calculating AFC values and in reviewing TSRs on the Transmission System, unless Entergy submits a Section 205 filing for a higher value.

#### 4.6 Counter-Flows

RFCalc adjusts the base flow associated with a particular flowgate by removing a percentage of counterflow impacts in the calculation of AFC values. Transmission Provider includes 100% of counterflows created by firm and non-firm reservations when evaluating TSRs in the Operating, Planning and Study Horizons. In the Operating and Planning Horizon, Entergy will include 100% of counterflows created by firm schedules when evaluating TSRs in the Operating Horizon.

The Transmission Provider will review scheduling data and other operational experience on a bi-annual basis to determine the viability of the established counterflow percentages and will provide to the ICT all studies, analysis and research conducted in connection with any proposed change to the counterflow calculation. The ICT will independently review and validate, and shall post on OASIS notice of, any such change prior to effectiveness. For purposes of this Section 4.6, the responsibility of the ICT to "review and validate" shall mean that the ICT will review the inputs and results of any study or analysis provided by the Transmission Provider and shall confirm that the results reasonably reflect the application and product of such studies and analyses.

The formula used for adjusting base flows to take into account counterflows is described below:

$$\text{Adjusted Base Flow}_{\text{Flowgate1}} = \text{Original Base Flow}_{\text{Flowgate1}} + (CF_1 * X')$$

Where,

$X$  = Positive Flow

$X'$  = CounterFlow

$$\text{Original Base Flow}_{\text{Flowgate1}} = X - X'$$

$CF_1$  = Counter Flow factor

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circuit elements owned by them and will coordinate the rating of the tie line with the co-owner such that it utilizes the lowest rating between the two systems.

Entergy may have a contractual interest in a joint ownership transmission line whereby the capacity of the line is allocated among the owners. The allocated capacity may be based upon the thermal capacity of the line or other considerations. Entergy will follow this criteria to rate the circuit elements owned by them and will coordinate the rating of the tie line with the co-owner such that it utilizes the lowest rating between the two systems.

There may be instances when a derating of a transmission line element is required due to damaged equipment. The limit may be caused by such factors as broken strands, damaged connectors, failed cooling fans, or other damage reducing the thermal capability.

## **5. RESPONSE FACTORS**

### **5.1 Introduction to Response Factors**

Response Factors measure the impact that each source-to-sink transaction has on a monitored flowgate. Response Factors are calculated on a transaction-specific and flowgate-specific basis. To implement transaction-specific Response Factors, Response Factors are calculated for each generator that is directly interconnected with the Transmission System, including all generators within the Entergy Control Area, regardless of ownership or affiliation. Response Factors are also calculated, on an as needed basis, for other generators that are located in such close electric proximity to the Transmission System that they have a specific impact on the Transmission System. Response Factors are also calculated, on an as needed basis, for Control Areas that are directly interconnected to the Transmission System and are applied to TSRs from generators that do not have specific Response Factors. The RFCalc software utilizes state estimator models to calculate Response Factors in the Operations and Planning Horizons, while the ICT uses off-line planning models developed by the Transmission Provider and commercial power flow applications, such as PSS/E and MUST, to calculate Response Factors in the Study Horizon.

### **5.2 Updating Response Factors**

Response Factors are resynchronized on the same basis as AFC values, *i.e.*, every hour during the Operating Horizon, at least every day (four times a day) for the Planning Horizon, and no less than every month during the Study Horizon. Resynchronizations may occur more frequently if necessary. Resynchronization may be delayed in certain circumstances, including but not limited to, allowing for the archiving of data associated with the prior resynchronization. To the extent that RFCalc cannot compute a scheduled resynchronization, the last valid RFCalc resynchronization is used to post AFC values and to evaluate TSRs.

### **5.3 Response Factors for Generators Outside of the Entergy Control Area**

For generators outside of the Entergy Control Area, Response Factors will be calculated for the non-Entergy Control Areas. These Response Factors will be used to evaluate service requests from each generator in the non-Entergy Control Area, unless a generator-specific Response Factor has been calculated for a border generating unit.

For transactions that source in a non-Entergy Control Area, Response Factors will be calculated for the non-Entergy Control Area by ramping up available generating facilities in the non-Entergy Control Area on a modified *pro rata* basis, such that all generating facilities reach their rated maximum outputs ( $P_{max}$ ) simultaneously. For transactions that sink in a non-Entergy Control Area, Response Factors will be

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calculated for the non-Entergy Control Area by ramping down available generating facilities in the non-Entergy Control Area on a modified *pro rata* basis, such that all generating facilities reach their rated minimum outputs ( $P_{min}$ ) simultaneously.

Generator-specific Response Factors will be calculated on an as needed basis for border generating units, *i.e.*, generating facilities that are located on other transmission systems/Control Areas and are also in "close electric proximity" to the Transmission System. The ICT or the Transmission Provider may propose that a generator-specific Response Factor be calculated for a border generating unit consistent with the criteria provided below. Response Factor proposals offered by the Transmission Provider will be subject to review and validation by the ICT and shall be accompanied by any studies, analysis and research conducted by the Transmission Provider. For purposes of this Section 5.3, the review and validation responsibility of the ICT shall mean that the ICT will review the studies and analysis to verify that the Transmission Provider followed the applicable criteria and that the results reasonably reflect the application and product of such studies and analyses.

To determine whether generator-specific Response Factors should be calculated for border generating facilities, two criteria are applied. First, the generator will have to be in close electric proximity to the Transmission System such that the generator is either: (1) directly interconnected with the Transmission System, but located in a different Control Area; or (2) interconnected with the Transmission System of another transmission provider within one or two busses of the Transmission System. Second, there will have to be a significant discrepancy between the Response Factors for all other generators in the non-Entergy Control Area and the Response Factors for the specific border generating facility in question.

#### **5.4 Response Factor Cutoff**

In order to evaluate whether a particular service request will use all, some, or none of the AFC for a particular flowgate, RFCalc, State Estimator models and off-line planning models are used to calculate Response Factors. The Response Factors generated by Transmission Provider's AFC process measures the power flow impact that each source-to-sink transaction has on each flowgate for the post-contingency configuration of the system. If the power flow impact of particular TSR has an insignificant impact on a flowgate, that flowgate is not monitored when evaluating the request. To determine whether a flowgate is significantly impacted by a particular TSR, a Response Factor threshold of 3% is applied. Only flowgates with Response Factors at or above the 3% threshold will be considered when determining whether to approve the TSR. Thus, if the Response Factor for a particular flowgate is less than 3%, then the AFC process will not consider the flowgate when determining whether service should be granted. If the Response Factor for a particular flowgate is equal to or greater than 3%, and the AFC value indicates that the flowgate is one of the Most Limiting Flowgates for that transaction, then the flowgate will be evaluated to determine whether the particular TSR should be granted.

#### **5.5 Modified Response Factor Cutoff**

If operating conditions indicate that a revision to the Response Factor threshold is necessary to enable accurate representation of system transfer capability and thereby maintain system reliability, then the Transmission Provider will reevaluate this threshold with notice to ICT. All changes to the Response Factor threshold will be filed with FERC.

### **6. WEBTRANS AND EVALUATING TSRs**

webTrans automatically processes requests for Transmission Service using a flow-based approach to determine AFC for monitored flowgates. webTrans is integrated with Transmission Provider's EMS and State Estimator, and uses power flow models developed from both RFCalc and the Transmission Provider's

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off-line planning models used in the Study Horizon. WebTrans will be used as the link between the AFC calculation process and the reserving and scheduling of Transmission Service under the Tariff. As individual TSRs are received, webTrans applies the applicable Response Factors to determine the impact new requests will have on the relevant flowgates and approves or denies the request based on that impact. The ICT determines the final status of each TSR based on the information provided by webTrans.

### **6.1 Flowgates Used to Evaluate Requests**

Although the AFC process will monitor approximately 300-500 flowgates, webTrans will use a more limited set of flowgates, as determined by RFCalc, to evaluate individual service requests. When evaluating individual service requests, webTrans will only consider those flowgates that are: (1) "significantly impacted" by the request at issue, *i.e.*, those flowgates with a Response Factor equal to or greater than 3%; and (2) the Most Limiting Flowgates. Thus, to determine which flowgates should be evaluated for a particular source-sink combination, RFCalc will: (1) ignore all flowgates with a Response Factor of less than the Response Factor cutoff of 3%; and (2) will select from the remaining flowgates the fifteen flowgates with the lowest effective ATC values. The list of flowgates used to evaluate a particular service request will be redetermined during each resynchronization.

### **6.2 Approving and Denying Service**

As individual transmission requests are submitted over OASIS, webTrans will apply the appropriate Response Factors to each request in order to evaluate the impact of the request on the most-limiting, significantly-affected flowgates. The amount of capacity requested will be multiplied by the Response Factor for a particular flowgate. The product of the requested capacity and the Response Factor will represent the additional loading impact of the new service on the flowgate and will be subtracted from the AFC value for that flowgate. As discussed above, this process will be applied to the Most Limiting Flowgates. If the AFC for all the flowgates remains positive or equal to zero after being reduced to account for the new transaction, the request will be approved. If the AFC value on any of the flowgates becomes negative or otherwise exceeds the rated capability of the facilities in question, then the request will be denied, unless service of a lower priority may be preempted to bring the AFC value back to zero or positive. The preempting of service with a lower priority will be conducted pursuant to governing FERC policies.

### **6.3 Pmax and Interface Limits**

Regardless of the applicable AFC values, accepted TSRs from a particular generator shall not exceed the maximum output of that generator. Additionally, the amount of Transmission Service available across a Control Area interface can not exceed the total interface rating between the two Control Areas. Consistent with NERC Operating Policies and operating agreements, the capacity between these interfaces is rated. This limit is typically defined by the thermal limit of all transmission facilities that define the interface. Other Control Area interfaces may be limited based upon the maximum generation capability or load of that neighboring Control Area. Both the Pmax and Interface limits will be honored in the AFC process through a proxy flowgate. To the extent that the service request exceeds either the Pmax or interface limit, the proxy flowgate will appear as one of the Most Limiting Flowgates for that particular transaction.

### **6.4 Redirect Requests**

Requests to redirect all or a portion of a firm transmission reservation from an alternate point-of-receipt (source) or to an alternative point-of-delivery (sink) on a firm basis is evaluated in the following manner. First, the Most Limiting Flowgates by each request (the original request and the redirect request) are identified. Next, the AFC values are used to separate the flowgates into two groups. Group 1 includes flowgates that have an AFC value that is less than or equal to zero *and* are common to both requests.

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Group 2 includes the remaining flowgates identified in the list of the Most Limiting Flowgates by the redirect request. Next, the current impact of the original request is removed from the AFC value of the flowgates in both groups (the AFC value is increased by the capacity of the request multiplied by the response factor of each flowgate). Note that the current impact of the original request may differ from the impact originally evaluated because power flows may have changed since the original request was accepted. The impact of the redirect request is then calculated and evaluated as follows:

- If the impact of the redirect request causes the AFC of any flowgate in Group 1 to decrease, the redirect request will be denied.
- If the AFC value of any flowgate in group 2 is less than or equal to zero, before applying the impact of the redirect request, the redirect will be denied.
- If the impact of the redirect request causes the AFC of any flowgate in Group 2 to drop below zero, a counteroffer may be made for a MW amount equal to the MWs that would cause the AFC of the most limited flowgate (*i.e.*, the flowgate with the largest negative AFC value) in Group 2 to equal zero.
- In all other circumstances, the redirect request will be accepted.

## 7. SCENARIO ANALYZER

### 7.1 Introduction

The Scenario Analyzer allows transmission customers to evaluate transfer capability without actually submitting an OASIS request. The Scenario Analyzer provides customers with an immediate response by performing the same flow-based review that is used by webTrans to determine whether actual service requests can be accommodated. The Scenario Analyzer notifies the customer whether or not the evaluation passes the AFC check and provides an evaluation identification number (SA####). The Customer can then query the request evaluation within OASIS and is provided the following information associated with the request; the timepoints of the request, the amount of flowgate capacity available, the response factor, and the transfer capability that is available. However, because the Scenario Analyzer does not submit an actual service request over OASIS, it does not decrement flowgate AFC. The Scenario Analyzer uses the same flow-based engine as webTrans.

There are two evaluation options under the Scenario Analyzer related to Queue position. The 'Last' Queue Position provides customers with AFC information that reflects all queued requests with a status of Confirmed, Accepted, Counteroffer, and Study taken into account. The 'First' Queue Position option provides customers with AFC results (*i.e.* decrements to the AFC) based only on confirmed reservations. There are also two report format options under the Scenario Analyzer. The 'Brief' Report Format will create a report with the limiting flowgate information. The 'Full' Report Format will create a report containing the flowgate information for all of the impacted flowgates (up to the top fifteen).

### 7.2 How to use the Scenario Analyzer

The Scenario Analyzer is an OASIS module that allows Transmission Customers to evaluate availability on certain designated constrained facilities for the Source and Sink pair, but does not decrement ATC since no request has been submitted. The Scenario Analyzer and the Request Evaluation module can be found on the Reservations tab of the webOASIS by checking the AFC/Flowgate Reports box. The Information that is entered on the Scenario Analyzer Entry Form is:

Provider  
Source name  
Sink name  
POR name  
POD name  
Transmission Service  
Start time (for each time segment)  
Stop time (for each time segment)  
Capacity value (for each time segment)

After entering information in the Scenario Analyzer form on OASIS, 'Enter Scenario' is selected to enter into the Scenario Entry Submission window. From there the user can choose the 'Queue Position' to be used and the 'Report Format' to be used. The user would then select the 'Check AFC' button at the top of the Submission window to view the afc Pass/Fail and the evaluation id. The user can return to the Request Evaluation module and enter the evaluation id from the Scenario Analyzer to view the report that was created as a result of the analysis. If the user wishes to submit the request on OASIS for an actual evaluation, the user enters the information using the 'new TSR' Reservation Entry Form on OASIS.

User certification is required for access to the Scenario Analyzer.

## 9.2 Input files

From the monthly models, the Transmission Provider will also provide a subsystem file that defines all sources and sinks used for calculating AFC values, and such data will be posted by the ICT. User certification is required for access to this data.

The Transmission Provider also posts the following informational files related to AFC:

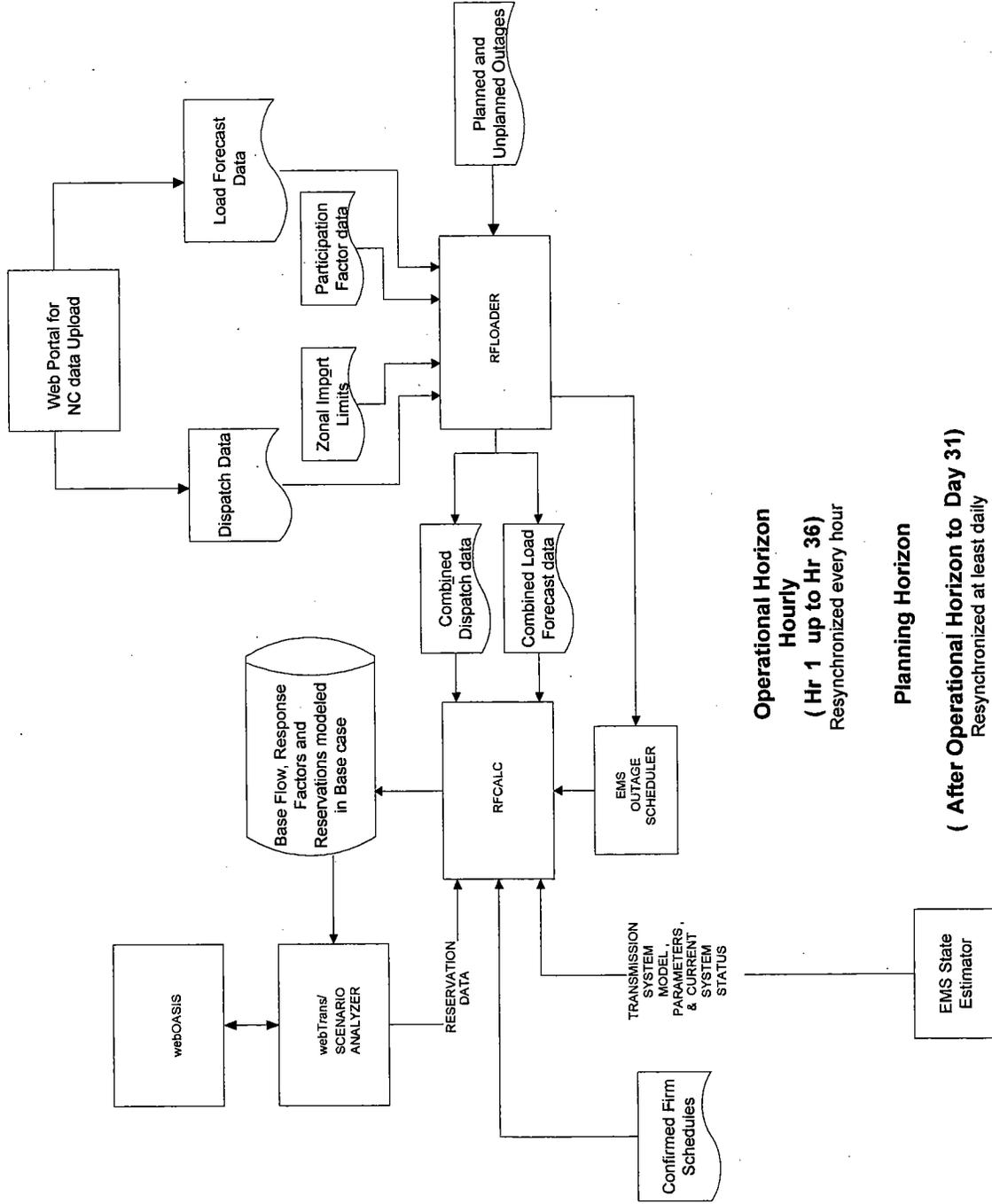
- A file containing response factors of the Most Limiting Flowgates per path and base flow for each flowgate for each time point. The file is refreshed with each resynchronization pursuant to section 5.2.
- A file containing the Effective ATC value of each path for each time point.
- A file containing the list of generators used as the Entergy Control Area sink for response factor calculation. The file also lists the participation factors for these generators.
- A subsystem files defining all sources and sinks used to calculate AFC.
- A list of flowgates with TTC and a revision log for all flowgate changes that are provided by the Transmission Provider and reviewed and posted by the ICT.

## 9.3 Transmission Outages

The Transmission Provider will post on its OASIS a list of all scheduled outages on transmission facilities on the Transmission System. The posting will include a daily posting for the Day 1 – 31 timeframe and a monthly posting for the Month 2 – 13 time frame.

There are two types of outage postings on the Entergy OASIS:

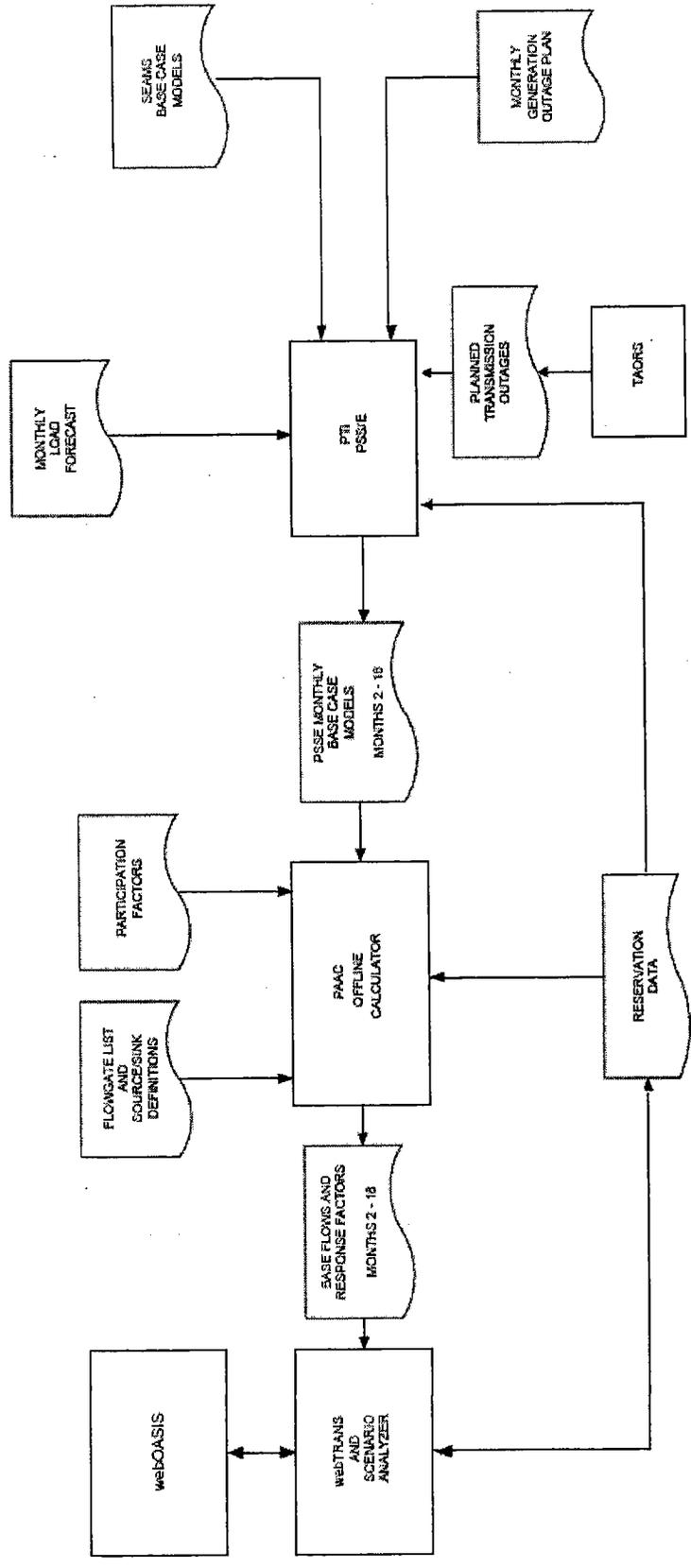
- The first type of outage posting is an *informational posting* of transmission outages, including outages outside of the Entergy Control Area that is provided to customers so that they may be aware of planned outages on the Transmission System. This list is entirely unrelated to the AFC process. It was developed for informational purposes and is not used for modeling purposes. This list is taken directly from Entergy's outage scheduling software, known as "TAORS."
- The second type of outage posting is the list of outages contained in the hourly AFC power flow models posted on OASIS. RFCalc imports these outages from TAORS and COS, but only uses those outages that are relevant for the particular time period being modeled. This ensures that RFCalc has updated outage information each time that RFCalc resyncs or calculates new AFC values. This outage list was not developed to provide customers with information regarding all planned outages during a particular month, and instead is used to model the system at a particular point in time.



**Operational Horizon**  
**Hourly**  
 ( Hr 1 up to Hr 36)  
 Resynchronized every hour

**Planning Horizon**

( After Operational Horizon to Day 31)  
 Resynchronized at least daily



**Study Horizon**  
**Monthly**  
**(Month 2 to Month 18)**  
 Resynchronized at least once a month

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 Vice President, Transmission

Issued on: [May 5,] **August 18, 2009**

APPENDIX A: Historical Reservation Data used for Determination of Counterflows

	Percentage of Reservations Scheduled in Real Time					
	Firm PTP	Firm Network	Firm total	Non-Firm PTP	Non-Firm Network	Non-Firm total
January-2003	35	24	28	102	67	78
February-2003	31	22	26	108	69	78
March-2003	30	21	24	92	61	71
April-2003	27	24	26	99	51	58
May-2003	28	27	27	86	54	60
June-2003	29	23	24	113	55	62
July-2003	33	29	30	87	54	60
August-2003	30	29	31	80	54	60
September-2003	39	25	27	98	70	75
October-2003	43	22	25	96	72	75
November-2003	43	20	24	100	83	86
December-2003	46	21	25	101	69	75
<b>TOTAL</b>	<b>35</b>	<b>24</b>	<b>27</b>	<b>95</b>	<b>62</b>	<b>69</b>

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Entergy Services, Inc.  
FERC Electric Tariff  
Third Revised Volume No. 3

[~~Substitute First~~ **Second** Revised Sheet Nos. 229-257  
Superseding [~~Original~~] **Substitute First Revised** Sheet Nos. 229-257

Reserved For Future Use

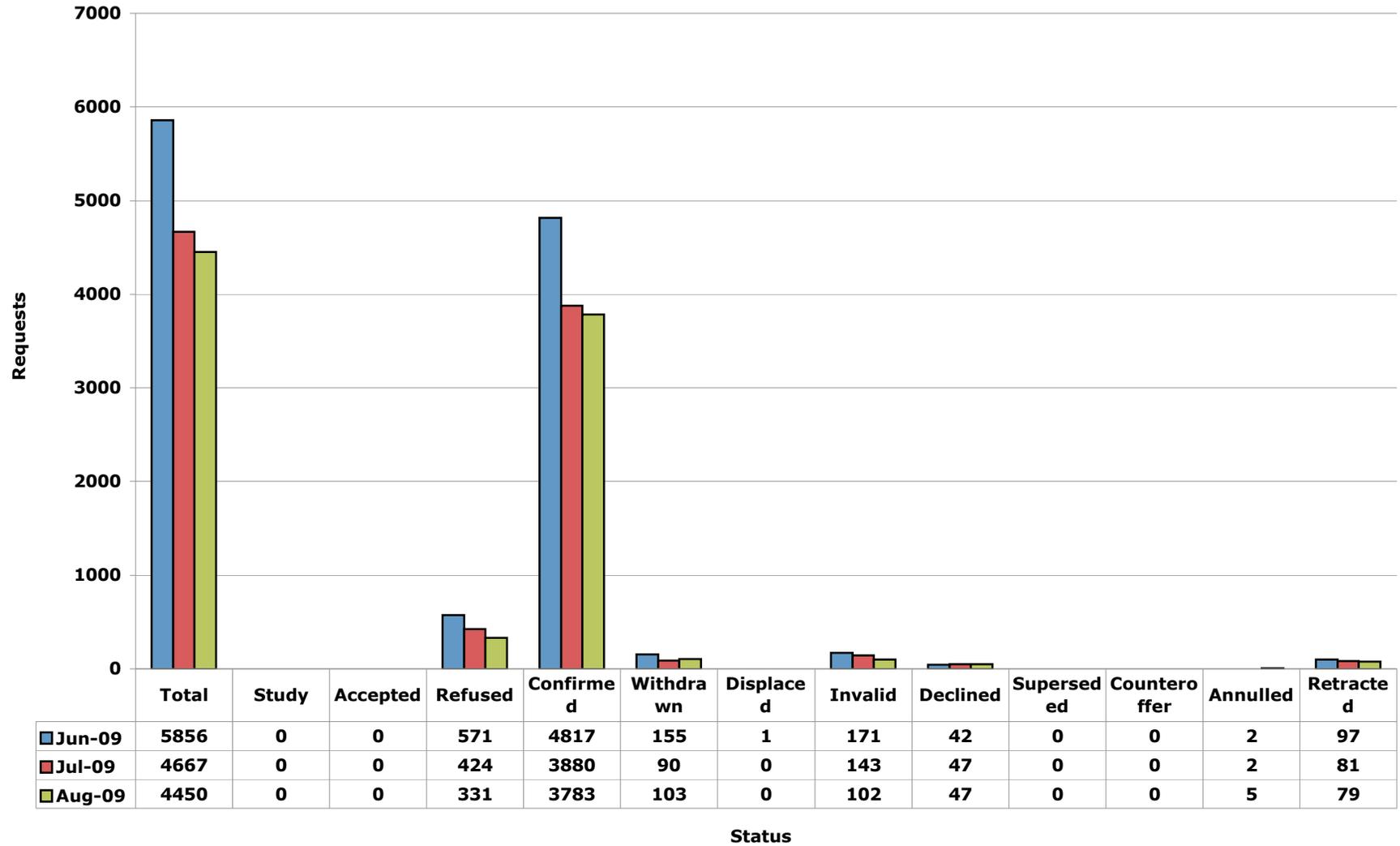
Issued by: Randall Helmick,  
Vice President, Transmission

Effective: [~~June 1,~~] **September 28,** 2009

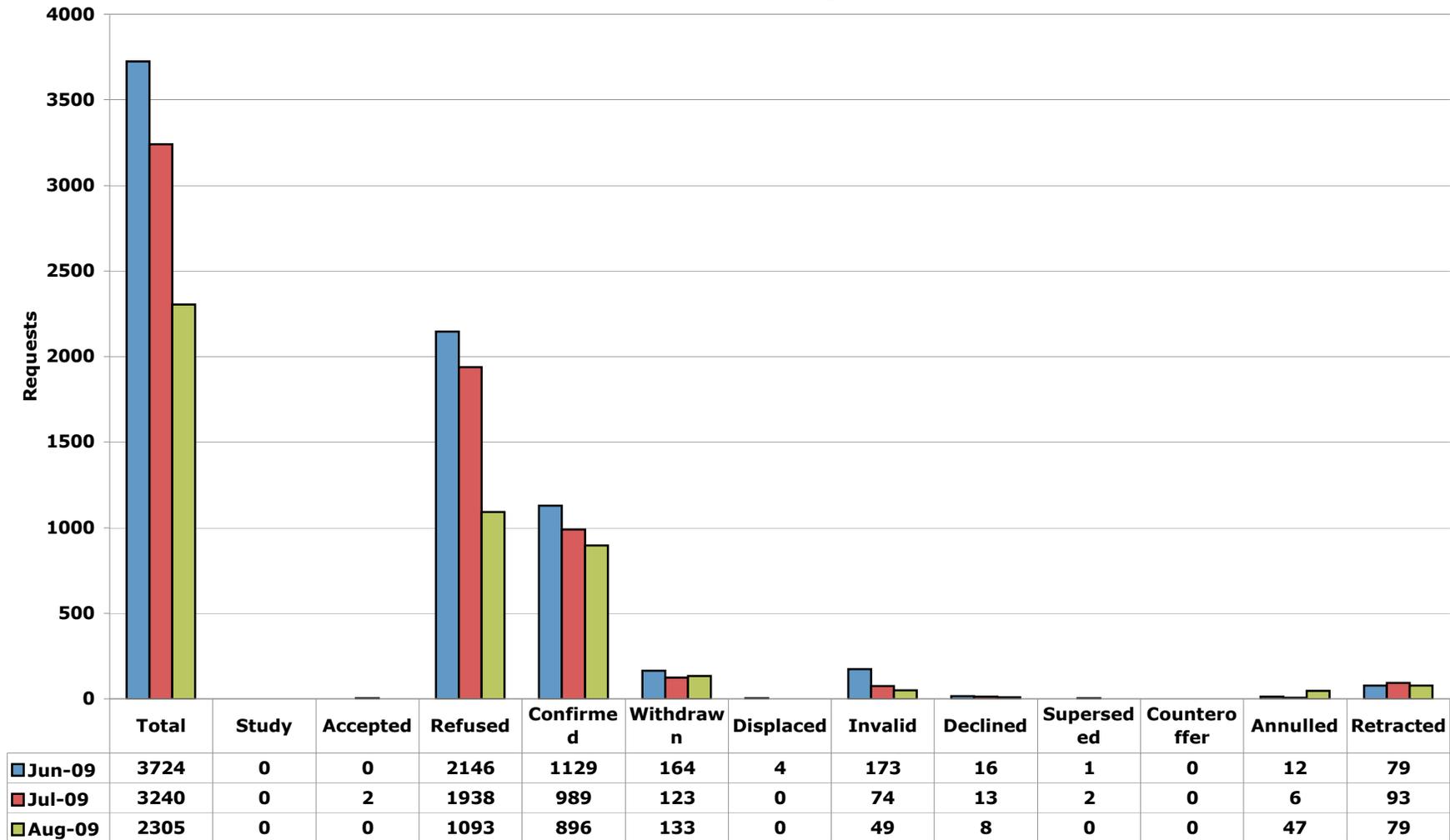
Issued on: [~~May 5,~~] **August 17,** 2009

## **Attachment 2**

## Request Comparison - Hourly Requests ICT - June 1, 2009 - August 31, 2009

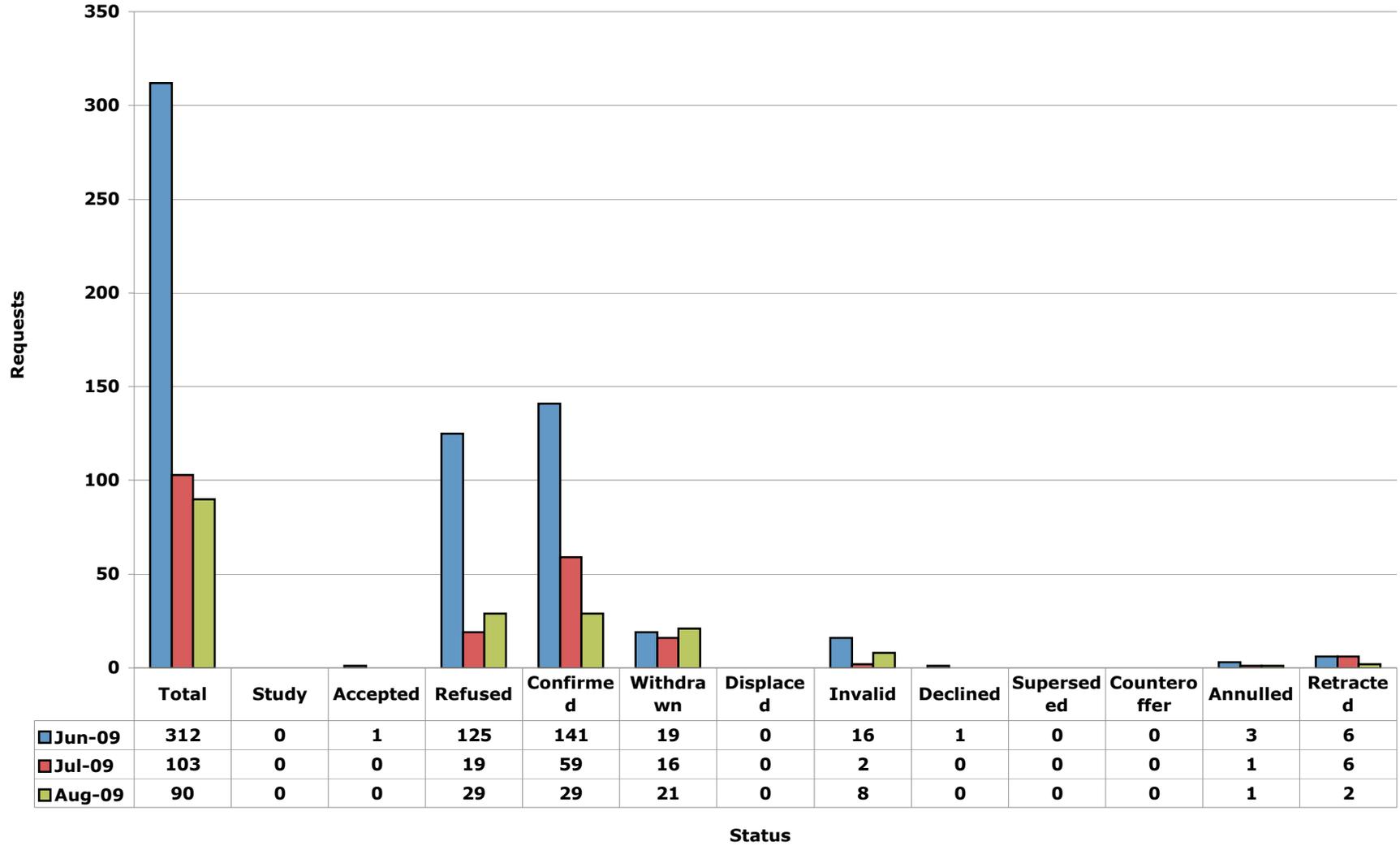


## Request Comparison - Daily Requests ICT - June 1, 2009 - August 31, 2009

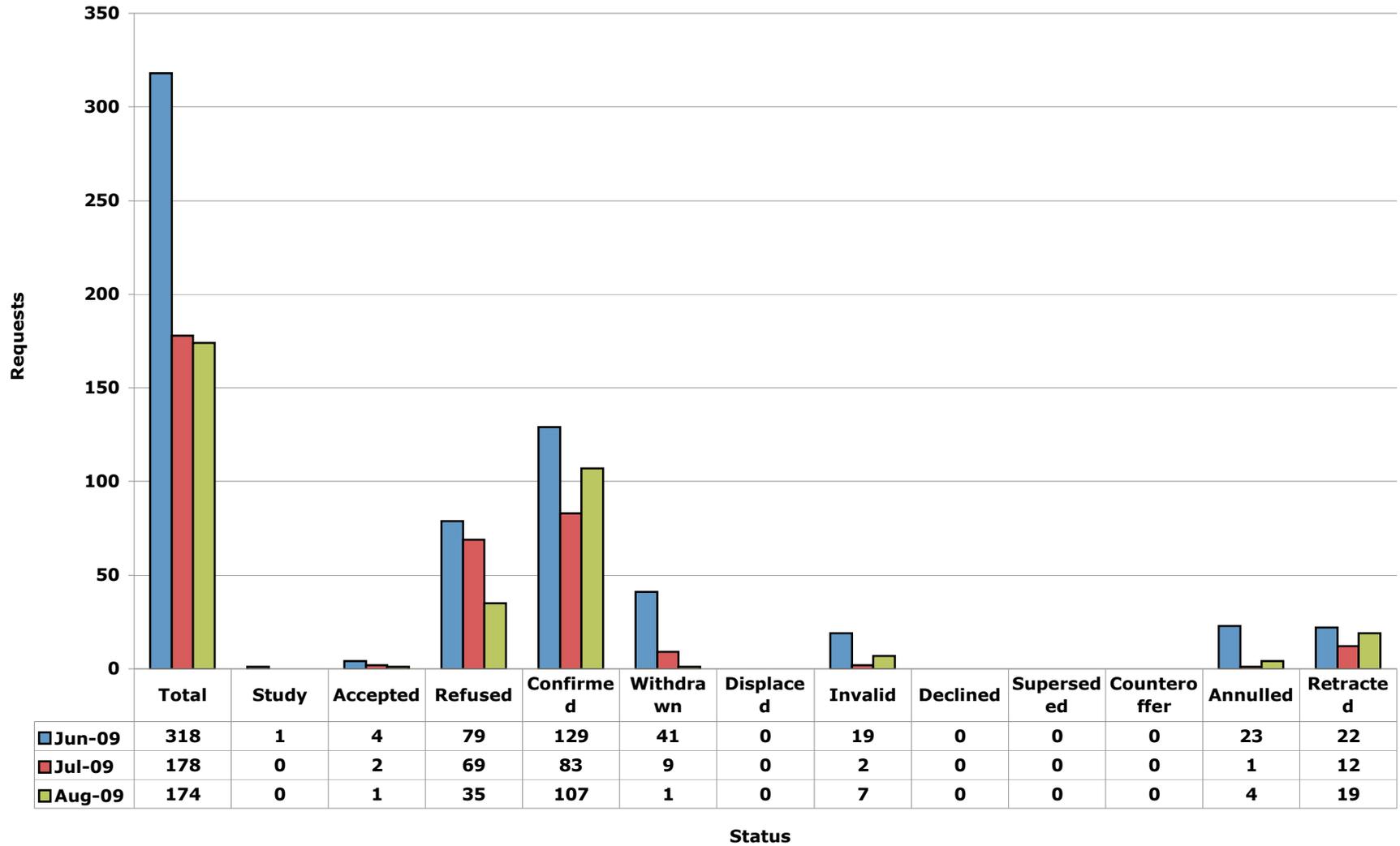


Status

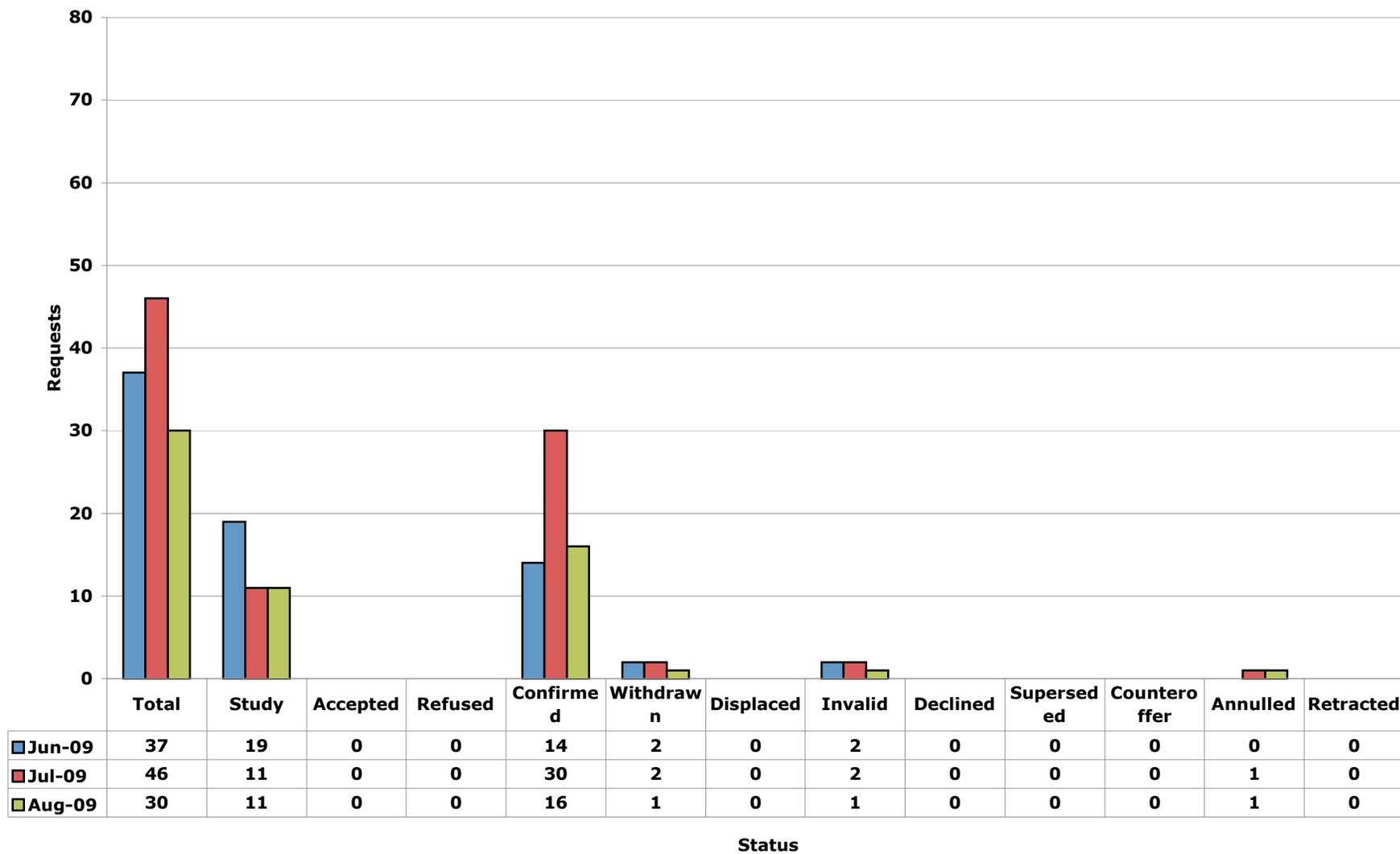
## Request Comparison - Weekly Requests ICT - Jun 1, 2009 - August 31, 2009



## Request Comparison - Monthly Requests ICT - June 1, 2009 - August 31, 2009



## Request Comparison - Yearly Requests ICT - June 1, 2009 - August 31, 2009



# **Attachment 3**

## WPP Issues Working Group

### Recommendation to the Stakeholder Policy Committee

August 7, 2009

#### Posting of Binding Transmission Constraints

##### Background

As part of the WPP process, daily and weekly TSRs are submitted for third-party generators participating in the WPP. The WPP evaluates the offers submitted by these generators along with transmission availability to determine the optimum solution that meets all constraints. Accordingly, the ICT grants or refuses network service to participating generators. At the end of the WPP, the only information posted on the OASIS is the final TSR status, i.e. confirmed or refused, of participating generators.

##### Analysis

1. Increased transparency in the WPP will aid in the understanding of WPP results and instill confidence in the process. This should lead to an increased participation in the WPP and more competition.
2. Markets such as the Midwest ISO, ERCOT, and PJM post binding transmission constraints on a frequent basis for their day-ahead and/or real-time markets. SPP posts binding transmission constraints for its EIS market on a monthly basis.
3. Limiting flowgates are identified in the following processes used by Entergy and posted on the OASIS: AFC process, System Impact Studies, Facility Studies, NERC TLR, and LAP events. The WPP is the only process which evaluates and grants transmission service but does not post the limiting flowgates, i.e. binding transmission constraints.
4. Section 14 of Attachment K states the following in reference to identification of potential economic upgrades: “The ICT will identify such upgrades based on screening criteria, which may include considerations such as frequent transmission loading relief events, frequently constrained flowgates in the Available Flowgate Capability process or the Weekly Procurement Process (WPP), flowgates with high congestion costs as identified in the WPP process, and commonly invoked must-run operating guides.”
5. The WPP has a safety net called the “Hold Harmless” provision to protect against uneconomic outcomes. This provision ensures that valid WPP results will always provide net savings to Participating Network Customers (PNCs). Thus, the “Hold Harmless” provision protects PNCs from any possible increase in projected production costs that may occur as a result of participating in the WPP.

**Recommendation**

The WPP Issues Working Group recommends that the ICT begin posting on the OASIS the binding transmission constraints, i.e. limiting flowgates, identified by the optimization program in Run 0 and Run 1 of the WPP. This posting will provide transparency in the WPP and help in the understanding of the WPP results,

**Action Requested:** Approve Recommendation.

**Approved:** WPP Issues Working Group 7/21/09

Passed Unopposed

# **Attachment 4**

**Entergy Response to August 7, 2009  
ICT Stakeholder Policy Committee Recommendation  
Proposing to Require Disclosure of Limiting Flowgates Identified in  
Run 0 and Run 1 of the Weekly Procurement Process**

**(August 28, 2009)**

On July 21, 2009, the WPP Issues Working Group ("WPPIWG") approved a recommendation to the Stakeholder Policy Committee ("SPC") that the Independent Coordinator of Transmission ("ICT") begin posting on OASIS the binding transmission constraints, *i.e.* limiting flowgates, identified by the optimization program in Run 0 and Run 1 of the Weekly Procurement Process ("WPP"). *See* WPPIWG Recommendation to the ICT Stakeholder Policy Committee (issued August 7, 2009) ("Recommendation"). The SPC approved that motion on August 7, 2009. In accordance with ICT procedures for acting on SPC motions, Entergy hereby provides its response to the Recommendation.

As Entergy explains below, the ICT should not adopt the WPPIWG's Recommendation for the following reasons:

- The Federal Energy Regulatory Commission ("FERC") already has determined that the WPP is sufficiently transparent. Under these circumstances, the ICT will adopt a proposed recommendation only if it is demonstrated that facts or circumstances have changed such that, in the ICT's judgment, FERC could/should reconsider its original decision, or information provided to the ICT indicates that FERC's original decision was based on inaccurate or incomplete data. The analysis offered in the Recommendation is so vague and misapplied that neither of the above criteria are met. The ICT has previously addressed this issue and found itself bound by applicable FERC guidance. It again should reject the proposal in the Recommendation.
- The proposal represents bad public policy, as posting binding transmission constraints could involve the release of market sensitive information that could lead to strategic bidding. More specifically, posting the binding transmission constraints likely will allow suppliers to better determine their relative competitive position, which could facilitate strategic bidding behavior by the offering generators.

***Discussion***

***Standard of Review***

In its orders approving the ICT structure, FERC concluded that, as designed, the WPP is sufficiently transparent. *Entergy Servs., Inc.*, 115 FERC ¶ 61,095 at P 292 (2006) ("April 2006 Order"); *Entergy Servs., Inc.*, 116 FERC ¶ 61,275 at PP 226-27 (2006) (order on rehearing of April 2006 Order). The burden thus is on the WPPIWG to show

that circumstances have changed or that FERC's original decision was based on inaccurate or incomplete data. As the ICT explained when reviewing prior motions of the SPC:

When SPC motions are presented for the ICT's consideration, the ICT will first look to FERC orders for guidance. Where FERC has previously considered and ruled on an issue, the ICT deems itself bound by such a ruling, unless,

- (i) circumstantial changes can be shown that, in the ICT's judgment, could/should cause FERC to reconsider its original decision, or
- (ii) information provided to the ICT indicates that FERC's original decision was based on inaccurate or incomplete data.

When the Recommendation is analyzed according to that standard of review, it is apparent that the Recommendation should be rejected.

Further, the ICT previously addressed the same WPPIWG recommendation regarding the posting of binding constraints from the WPP, and declined to accept such recommendation. In its response to the WPPIWG's previous recommendation, the ICT concluded as follows:

The ICT believes that disclosure of congested flowgates in Runs 0, 1, and 2 could involve the release of market sensitive information that could lead to strategic bidding. The ICT considered providing flowgate congestion information on an aggregate basis, but concluded that such an approach could not be feasibly implemented nor would it provide meaningful benefits to the design of the WPP. Should operational experience following implementation of the WPP suggest a need to revisit this request, and assuming that market sensitivity concerns are adequately addressed, this matter may be reconsidered at a later date.

The burden thus is on the WPPIWG to show that market sensitivity concerns have been addressed or that operational experience suggests a need to revisit the ICT's prior decision. The WPPIWG has not made that showing

### *Analysis*

As Entergy discussed in response to previous requests, antitrust law and economics consistently acknowledge that too much disclosure of information, particularly under these types of circumstances, could facilitate strategic bidding behavior by the offering generators. FERC has agreed with that concern. April 2006 Order, 115 FERC ¶ 61,095 at P 292 ("With regard to transparency of prices, we agree with Entergy

that disclosure of bid and offer data could lead to strategic bidding behavior, not least-cost bidding strategies." ). The ICT also agreed with that concern in responding earlier to the same WPPIWG request that again is presented in the Recommendation.

When the ICT rejected the WPPIWG's earlier request, it explained that it would reconsider its position only if market sensitivity concerns are adequately addressed. In the Recommendation, the WPPIWG does not even address the concern about strategic bidding that its proposal raises, much less alleviate the concern. The fact is, the WPP (a) is a procurement process only in the Entergy region, (b) includes data limited to projected variable production costs for Entergy units, (c) has only one obligatory party, Entergy, and (d) pays its suppliers on a pay-as-bid basis. Under these circumstances, posting binding transmission constraints likely would allow suppliers to better determine their competitive position in relation to other suppliers and Entergy units. Posting of binding transmission constraints identified by the optimization program in Run 0 and Run 1 of the WPP thus would allow third party suppliers to more strategically submit offers.

For that reason alone, the proposal in the Recommendation should be rejected. Entergy nonetheless responds to the WPPIWG's other claims below.

According to the WPPIWG, the posting requirement advocated by the Recommendation "will provide transparency in the WPP and help in understanding of the WPP results" and thus "should lead to an increased participation in the WPP and more competition." Because the WPPIWG offers no evidence in support of these claims, they cannot be properly evaluated nor can a response be developed. Entergy simply notes again that posting the information requested would allow third party suppliers to engage in strategic bidding.

The Recommendation also states that information about constraints is posted in Regional Transmission Organization ("RTO") markets and in association with various Entergy transmission processes--*e.g.*, the Available Flowgate Capability ("AFC") process, System Impact Studies, and Facilities Studies--and states that "[t]he WPP is the only process which evaluates and grants transmission service but does not post the limiting flowgates, *i.e.* binding transmission constraints." The assertions in the Recommendation disregard the differences between the WPP, the AFC process, and other referenced Entergy processes. As noted above, the WPP is a process that (a) is a procurement process only in the Entergy region, (b) includes data limited to projected variable production costs for Entergy units, (c) has only one obligatory party, Entergy, and (d) pays its suppliers on a pay-as-bid basis. It thus raises strategic bidding concerns that may not arise in RTO markets. Further, while the Recommendation correctly indicates that the WPP is the only Entergy process that grants transmission service and does not post information regarding limiting flowgates, the Recommendation fails to mention that the WPP is the only Entergy process that includes detailed optimized production cost data.

The Recommendation also refers to Section 14 of Attachment K. That Section provides no support for the proposal to post binding transmission constraints. The ICT will have available to it all information necessary to implement Attachment K. *E.g.*,

Entergy Open Access Transmission Tariff, Attachment S § 4. A requirement to post binding transmission constraints on OASIS has nothing to do with the ICT's ability to analyze and consider the need for potential economic upgrades.

Finally, the Recommendation points out that the Hold Harmless provision under Attachment V will ensure that the WPP does not require Participating Network Customers to make purchases that would increase their cost. While true, this is disingenuous to the extent that the information that would be posted could potentially be used by suppliers to increase the cost of their offers and thus increase Entergy's (and any other WPP Participant's) costs of purchases in the WPP, and reduce any savings that might be achieved in the WPP. The fact that the Hold Harmless Provision will ensure that Entergy or another WPP Participant is not *harmed* by the WPP does not change that conclusion.

### ***Conclusion***

FERC specifically found that "the [WPP] is sufficiently transparent." April 2006 Order, 115 FERC ¶ 61,095 at P 292. The WPPIWG has identified no circumstantial changes that should cause the ICT to reconsider that conclusion and has provided no indication that FERC's original decision was based on inaccurate or incomplete data. The WPPIWG also has not shown that the ICT's earlier conclusion about strategic bidding has been alleviated.

To the contrary, if the information requested is posted, suppliers may be able to glean sufficient information to increase the cost of their offers to just below Entergy's cost. The result would be that the WPP would produce savings approaching zero and costs to Entergy's native load customers would increase. In addition, to the extent suppliers were able to use the information from the proposed postings in developing offers in bilateral markets, this also could increase Entergy's costs of purchases in the bilateral markets. In light of the harm that can arise when key information about rival firms or other competitively sensitive information is disclosed, the postings advocated by the WPPIWG in the Recommendation should not be adopted.

# **Attachment 5**



Southwest Power Pool, Inc.

**ICT STAKEHOLDERS POLICY COMMITTEE MEETING**

July 23, 2009

Sheraton, New Orleans, LA

• **D r a f t M I N U T E S** •

**Agenda Item 1 – Administrative Items**

SPP Chair, Bruce Rew, called the meeting to order at 8:00 a.m. There were XX in attendance. (Attachment 1 – Attendance List).

**Agenda Item 2 – Agenda Review**

Bruce Rew reviewed the agenda which was posted prior to the meeting. The LTTIWG report will be moved up earlier in the agenda. No additions to the agenda were presented (Attachment 2 – Agenda).

**Agenda Item 3 – Approval of April 23, 2009 Minutes**

The SPC approved the meeting minutes from the April 2009 meeting in Houston, Texas, as posted on the SPP ICT web page (Attachment 3 – April 23, 2009 Minutes).

**Agenda Item 4 ICT Staff Report and Communications**

Bruce Rew discussed that the ICT has several on-going activities that will be presented and discussed. This will be done with separate reports from the working groups or task forces that have responsibility for the projects.

**Agenda Item 9 – LITTWG Report**

Jody Holland, ICT, presented the LTTIWG Report (Attachment 4 - LITTIWG Report). Jody discussed the key items from the June 9, 2009 meeting. These items included a Base Plan and Construction Plan update, Reliability Assessment update, and future transmission planning summits. Entergy will also hold a technical conference on August 11 to discuss the differences between the Base Plan and Construction Plan. This is in conjunction with the ICT Transmission Planning Summit.

At the July 22, 2009 meeting, the focus was the ISTEP update and other activities that are currently being worked on. The draft Reliability Assessment and Construction Plan Evaluation for 2010 has begun. The five free economic studies have been selected and the thermal and transfer analysis is to be completed by December 2009. The economic analysis portion will begin next year. The ICT will provide a posting of the top 15 limiting elements. These have been provided to Entergy and should be posted within 60 days based on staffing devoted to the planning summit activities during the next month.

At the LITTWG meeting the prior day, a recommendation was approved for submittal to the SPC. The recommendation is as follows:

- “The LTTIWG recommends that the ICT performs an economic/transmission study to determine the set of transmission upgrades needed to significantly reduce or stop the use of Reliability Must Run (RMR) units – located in the WOTAB and Amite South load pockets – while providing net savings to customers.”

The SPC charter requires that action items be presented at least five days in advance of any meeting. The SPC discussed what action should be taken. The committee resolved that the recommendation



needed additional background and information to be appropriately evaluated. The requested study may actually already have been done through requirements in Louisiana. The SPC charged the LITTTWG to draft supporting information and provide that to the SPC. Per the SPC charter, if a sufficient number of SPC members recommend scheduling a conference call one will be scheduled, otherwise it will be brought up at the October SPC meeting in Houston.

#### **Agenda Item 5 – ICT Regulatory Update**

Jeff Price, legal for the ICT, presented the regulatory update (Attachment 5– Regulatory Update). Jeff Price discussed the Arkansas Public Service Commission Docket #08-136-U. This docket is on-going in Arkansas and required a cost-benefit study for Entergy and Entergy Arkansas joining the SPP RTO versus continuing the ICT arrangement. This was to be completed by the end of the year. FERC has volunteered to fund part of the study covering the entire Entergy system. Jennifer Vossberg expressed concern about this being an Arkansas docket only. The APSC docket has been filed with FERC in docket ER05-1065. It is expected that there will be a response from FERC related to this effort.

Jeff also provided an update on the LPSC, May 19, 2009, technical conference in which planning issues were discussed. There also was a FERC technical conference in Charleston, SC, on June 24. This conference focused on the future of the Entergy continuing with the ICT or other arrangements such as joining the SPP RTO. Attachment C was filed on May 28, 2009 and was modified to reflect the transition to the OATI software. The effective date is pending OATI implementation.

#### **Agenda Item 6 – Operational Efficiency Task Force**

The OETF report was given by Dowell Hudson, ICT, (Attachment 6 – OETF Report). The OETF was recently restarted to look at the opportunity to perform one-stop shopping between the SPP and Entergy. The OETF has met and developed an initial plan. This effort is planned in two phases. The first phase will focus on defining initiatives for implementation without making changes to existing OATT's. Phase two will be more focused towards resolutions for long-term operational and planning issues and are considered on-going in their development efforts.

#### **Agenda Item 7 – NTTIWG Report**

The Near Term Transmission Issues Working Group report was presented by ICT staff member Jodi Woods (Attachment 7 - NTTIWG Report). The NTTIWG has been working on AFC model improvements and has a task force working on those issues. The three areas are enforcing zonal import limits for load pockets, external control area dispatch, and transmission upgrades in the AFC models.

The NTTIWG is also working on AFC business practices and have circulated a draft to stakeholders. Suspension of non-firm sales during a TLR is also being considered.

#### **Agenda Item 8 – WPPIWG Report**

Bruce Rew gave the WPPIWG Report for Debbie James who was unable to attend the meeting due to the WPP operational analysis (Attachment 8 – WPPIWG Report). The WPPIWG had some action items from the last SPC meeting. Bruce reviewed the list including expanding the range of WPP hours, increase transparency, and AGC/operating reserves process. There was discussion on on-peak vs off-peak hours and the ability to expand to off-peak offers. After some discussion, Bruce agreed to get back with Becky Turner on this issue. The quarterly report was also covered and discussed.

The WPPIWG presented a recommendation that was approved earlier in the week (Attachment 9- - WPPIWG Transparency Recommendation). The following recommendation is presented:

To provide transparency in the WPP and help in the understanding of the WPP results, the WPPIWG recommends that the ICT begin posting on the OASIS the transmission binding



constraints, i.e., limiting flowgates, identified by the optimization program in Run 0 and Run 1 of the WPP.

The SPC discussed the recommendation and requested additional background material. Roberto will work with the ICT staff and WPPIWG to provide a recommendation by close of business on July 30 to the SPC. The SPC will have a conference call on August 7, 2009 at 10:00 a.m. central time to review the recommendation. If the recommendation is not received, the SPC conference call meeting will be postponed or canceled.

#### **Agenda Item 10 – Users Group Report**

Ty Mitchell gave the Users Group Report (Attachment 9 - Users Group Report). Ty covered the AFC and WPP-AFC data backup review performed. The FERC filings were also reviewed and discussed.

#### **Agenda Item 11 – Action Items review**

The following actions items were noted from the meeting.

1. WPPIWG provide the SPC with a detailed transparency recommendation to the SPC for further action.
2. ICT staff will provide further response to the addition of off-peak impacts of the current on-peak assessments used in the WPP.
3. The LTTIWG will provide a detailed recommendation regarding the proposal presented to the SPC.

The next ICT SPC meeting will be held during October 21, 2009 in Houston, TX.

#### **Agenda Item 13 – Adjournment**

Meeting adjourned at approximately 11:23 a.m.

Respectfully Submitted,

Bruce Rew, Secretary



321-3198

Southwest Power Pool, Inc.

ICT STAKEHOLDERS POLICY COMMITTEE MEETING

JULY 23, 2009

Sheraton - New Orleans, LA

• ATTENDANCE LIST •

Name	System
George Heintzen	Conway Corp
Alan Wilson	SM EPA
Matt Wolf	Entergy
Cornie wells	Entergy
Teo Thomas	Ark. Commission
Jody Holland	SPP
Jodi Woods	SPP
Scott Brown	ETEC
Todd Petersen	West Memphis
Calvin Daniels	Energy Consulting Group
Brenda Harris	Oxy
John L. Simpson	RRS Energy
Greg Walker Ruddy	ConocoPhillips
Mak McCall	Entergy
MARY BORNHOUST	Entergy
Keith Perry	APSC
Noel Dance	Louisiana PSC
Prasley Reed	Council of New Orleans









**Southwest Power Pool, Inc.**  
**ICT STAKEHOLDERS POLICY COMMITTEE MEETING**  
**July 23, 2009**  
**Sheraton, New Orleans, LA**

**• D R A F T   A G E N D A   •**

8:00 a.m. – 2 p.m.

1. Introductions and roll call..... Bruce Rew
2. Review of meeting agenda..... All
3. Approval of April 2009 minutes..... All
4. ICT Staff report ..... Bruce Rew
5. ICT Regulatory update ..... ICT/Entergy
6. OETF ..... Dowell Hudson
7. NTTIWG Report ..... Jodi Woods
8. WPPIWG Report ..... Debbie James
9. LTTIWG Report ..... Jody Holland
10. Users Group report ..... ICT Staff
11. Action Items review ..... All
12. Adjournment ..... Bruce Rew



**Southwest Power Pool, Inc.**  
**ICT STAKEHOLDERS POLICY COMMITTEE MEETING**  
**April 23, 2009**  
**Sheraton North Houston, TX**

• **D r a f t   M I N U T E S** •

**Agenda Item 1 – Administrative Items**

SPP Chair, Bruce Rew, called the meeting to order at 9:00 a.m. There were 40 in attendance. (Attachment 1 – Attendance List).

**Agenda Item 2 – Agenda Review**

Bruce Rew reviewed the agenda which was posted prior to the meeting. No additions to the agenda were presented.

**Agenda Item 3 – Approval of January 28, 2009 Minutes**

The SPC approved the meeting minutes from the January 2009 meeting in Houston, Texas, as posted on the SPP ICT web page.

**Agenda Item 4 ICT Staff Report and Communications**

Bruce Rew gave a discussion presentation outlining the action items from the January 2009 SPC meeting. All of the action items from the previous meeting have either been completed or are in progress. The action items are:

1. The ICT will review the priority list and bring back to the SPC for discussion at its April meeting.
2. The ICT will add a link to OASIS for customers to go directly to Issuetrak.
3. The ICT will report back on benchmarking and timelines related to AFC.
4. The ICT will provide a report to the SPC on inter-regional coordination on modeling improvements related to AFC calculations.
5. The ICT will look at reliability and economics criteria related to the economic studies being performed by the ICT as part of 890 requirements.
6. The ICT will provide a detailed explanation of the five projects selected to be studied for the economic analysis.

Items 1 and 2 are completed. Items 3 and 4 are being worked on. Items 5 and 6 have been discussed at the LTTIWG meeting. Jody Holland stated that long-term reliability will provide economic benefits in the short-term. Details will be provided to the LTTIWG and will be discussed in the Stakeholder Policy Committee Meeting.

**Agenda Item 5 – Stakeholder Priority List**

Ben Bright, ICT, gave a presentation on AFC priority action list (Attachment 2 – AFC Priority Action List). Ben also handed out a detailed list of the original prioritization list of 28 items and the current state (Attachment 3 – Summary of IPP AFC Issues). This was developed with stakeholder input to prioritize



the work items. Ben then discussed the ten audit recommendations. The recommendations were discussed at length with SPC.

Roberto Paliza, Paliza Consulting, LLC, said he would like to see completion dates (TVA and SPP) for recommendation 5. OATI OASIS system will facilitate more data exchange. Greg Camet stated that the 890 exchange requires NERC Standards that are pending and we don't have those in place. Until then, the coordination efforts are ad-hoc. Roberto said a process is needed and encouraged continued work on the project. A question was asked if NERC Standards would improve the coordination with the TVA. Dowell replied that they are working within the process that is in place.

Roberto discussed base case overloads. The ICT conclusion was not what ICT Stakeholders desired. ICT benchmarking will help on the base case overload issue and he thought it was a dispatch issue.

Action item: The ICT to discuss those recommendations for which we have not identified a solution.

### **Agenda Item 6 – ICT Regulatory Update**

Jeff Price, legal for the ICT, presented the regulatory update (Attachment 4 – ICT Regulatory Update - Attachment C, D, and E). Gary Newell asked if Attachment C that is in effect needs to be modified to reflect the OATI changes. The Tariff will be required to have minor modifications made to be consistent with the new OATI OASIS. A discussion followed on Attachment T annotation.

### **Agenda Item 7 – Rate Pancaking Task Force**

Bruce Rew gave an update on the Rate Pancaking Task Force activities (Attachment 5 - RPTF Presentation). The RPTF has completed the study and posted it on the web site. The study showed to provide a benefit with the elimination of pancaked rates between Entergy and SPP. Most of the benefits go to Entergy using the study assumptions. The SPC discussed next steps related to the study and developed two action items.

Action Item: The Rate Pancaking Task Force is to look at sensitivities.

Action Item: The OETF is going to meet to propose development of one-stop shopping.

### **Agenda Item 8 – NTTIWG Report**

Dowell Hudson gave the NTTIWG Report (Attachment 6 – NTTIWG Report). Matt Harward gave a DNR technical team update. Dowell said the OATI change over is projected for late May. Becky Turner inquired on how big of a change this would be. Methodology and internal operations would not change. Cameron Warren's detailed presentations from previous day would be posted for everyone to review. Steve Pertuit outlined the testing of procedures and processes which is being done to the new system. Roberto provided comments on OATI and wanted to have access to the demo version to allow for feedback on the new system.

Action Item: ICT to get with Entergy when access is provided to demo.

Action Item: Also provide process for communicating concerns related to new OATI system.

The AFC issues the group has been working on:

1. Transmission upgrade in AFC Models
2. Enforcing zonal limits in operating and planning
3. External Control Area dispatch and Network Integration

Dowell asked for volunteers to address these three issues.



### **Agenda Item 9 – WPPIWG Report**

Bruce Rew gave the WPPIWG Report for Debbie James who was unable to attend the meeting (Attachment 7 – WPPIWG Report). The WPP has been implemented with some initial selection of offers. Roberto questioned if the ICT/Entergy are looking at expanding on-peak vs. off-peak offers. Entergy is in process of filing the market details with FERC as required.

Action Item: See if range of hours could be expanded.

At Becky's suggestion, Debbie James is going to look at regulation of service during on-peak and transparency in the WPP rejection process. Pat Caufield, NRG, asked how savings would be calculated as defined in the order. The Order defines the savings as Run 1 minus Run 0.

### **Agenda Item 10 – LTTIWG Report**

Jody Holland went through current LTTIWG activities (Attachment 8 – LTTIWG Report). The LTTIWG has several activities in progress and is working on the economic analysis. Roberto compared Facility Studies and asked if that was the same as a Feasibility Study for Transmission Service Requests (TSR) or Generation Interconnection (GI) studies. Jody discussed that Entergy performs more detailed analyses. The differences are Base Plan and Construction Pending projects and that there are not Construction Pending projects that are Base Plan projects.

Generation Interconnection metrics are posted in the quarterly report.

### **Agenda Item 11 – Users Group Report**

Ty Mitchell (on the phone) gave the Users Group Report (Attachment 9 - Users Group Report). Attachment C could affect the quarterly assessment report.

Action Item: Possible follow-up to SPC if there is any impact to the assessment from Attachment C changes.

### **Agenda Item 12 – Action Items review**

The following actions items were noted from the meeting.

1. Discuss those recommendations for which we have not identified a solution.
2. Rate Pancaking Task Force to look at sensitivities.
3. OETF meet to propose development of one-stop shopping.
4. ICT to get with Entergy when access to demo is provided for OATI.
5. Provide process for communicating concerns relating to new OATI system.
6. Follow-up to SPC if there is impact to Quarterly Assessment.
7. Can range of WPP hours be expanded?
8. Follow-up on more transparency in WPP rejection process.

The next ICT SPC meeting will be held during July in New Orleans, LA.

### **Agenda Item 13 – Adjournment**

Meeting adjourned at approximately 2:00 p.m.

Respectfully Submitted,  
Bruce Rew



LTTIWG Report

**SPC Meeting – New Orleans, LA**  
**July 23, 2009**



## Since 4/23/2009 SPC Meeting

- **LTTIWG meeting 6/9/2009 by netconference**
- **LTTIWG meeting 7/22/2009 in New Orleans**



## 6/9/2009 discussion overview

- **Base Plan and Construction Plan update**
- **Entergy 2010-2012 Draft Construction Plan**
- **Reliability Assessment update for 2010 Base Plan**
- **Transmission Planning Summits 8/11 & 12**
- **Other discussion**



## Base Plan and Construction Plan update

- **ICT presented changes included in May 12<sup>th</sup> update to the two plans**
- **Discussion of meaning of three year Construction Plan**
  - **Project's construction date must be within three year window**



# Entergy 2010-2012 Draft Construction Plan

- **Entergy presented Draft Construction Plan for 2010-2012**
- **Discussion of specific projects**
- **Posted in May for comments before Summit**
- **Final CP development to begin after Summit**
- **Entergy expects to deliver final CP to ICT by December**



## Reliability Assessment update for 2010 Base Plan

- **Objective—Assess the ability of the Entergy transmission system to perform according to the Planning Criteria in both near-term and long-term horizons.**
- **Evaluate Entergy's Draft Construction Plan (2010-2012)**
- **Discussion of completed and ongoing activities and next steps**



# Transmission Planning summits

- **Schedules for upcoming summits**
  - **8/11—Entergy ICT Transmission Summit in New Orleans**
  - **8/12—Entergy / SPP RTO Regional Planning Process meeting**



## Other Discussion

- **When will Entergy hold technical conference as discussed by APSC to consider differences between the Base Plan and Construction Plan?**



## 7/22/2009 discussion overview

- **Draft Reliability Assessment and Construction Plan Evaluation 2010**
- **Updates**
  - Limiting Elements Posting Enhancement
  - Modeling Assumptions Document
  - Summit/ESRPP Meetings
- **Free economic studies (ISTEP) update**
- **Other discussion**



# Draft Reliability Assessment and Construction Plan Evaluation 2010

- **Models**
  - **Near-Term Period: Summer & Winter 2010 & 2014**
  - **Longer-Term Period: Summer 2018**
  - **Construction Plan Projects**
    1. **Initial Scan: Approved Projects from 2009-11 Construction Plan**
    2. **CP Eval: Approved and Proposed Projects <2010-12 Construction Plan**
- **System Intact Review – Category A**
- **Contingency Scan – Category B**
- **Sensitivities**
  - **Specific Load Pocket Criteria**
  - **Low Hydro Sensitivity**



## RA and CPE draft results

- **Comments of stakeholders, Entergy, Regulatory Agencies, *et. al.*, will be taken into consideration in the final report**
- **Additional information and/or analysis may change the final report**



## RA and CPE next steps

- **Revisions and refinements based on stakeholder, Entergy, and Regulatory Agencies' input**
- **Post Final Report on OASIS**
- **August 11 Summit: Graphical Presentation & Breakout Focus Discussions**
- **Develop ICT Base Plan**
- **Develop Final Entergy Construction Plan**



# Free economic studies (ISTEP) update

- **Identify projects for study**
  - **First Pass - Identify 10 potential projects for study (completed)**
  - **Second Pass - Reduce to 5 based on stakeholder and ICT evaluation (completed)**
- **5 Studies**
  - **Step 1**
    1. **To be completed December 2009**
    2. **Thermal and Transfer Analysis of 5 projects**
  - **Step 2**
    1. **To be completed 2010**
    2. **Economic Analysis of Step 1 projects determined to have possible economic benefit**



## Free Economic Studies Top Five for 2009

- 1. South Central Arkansas/Northeast Louisiana constraint – to address North to South flows (#11)**
- 2. Central Arkansas constraint – to address South to North flows (#12)**
- 3. Lake Charles 230 kV Loop (relieve 138 kV Flowgate NELLC\_NELLCB) (#2 on original list)**
- 4. Baton Rouge/South MS constraint – to address Central to South flows (#10)**
- 5. Jackson Area (ISTEP Phase 1)**



## Free economic studies (ISTEP) update cont'd

- **Base Models Complete**
- **Work is proceeding on:**
  - **South Central Arkansas / Northeast Louisiana**
  - **Central Arkansas Constraint**
- **Timeline**
  - **Complete ISTEP 2009 Step 1 January 2010**
  - **Perform ISTEP 2009 Step 2 and ISTEP 2010 Step 1 in 2010**



## Limiting Elements Enhancement Posting

- **ICT provided top 15 list to Entergy mid-July**
- **Entergy will verify ICT ratings research**
- **Anticipate 30-60 day turnaround**



## Modeling Assumptions Document

- **Attachment D was filed on 4/3/2009.**
- **Business Practices are being developed.**
- **The Modeling Assumption Document will not be posted until Attachment D is accepted by FERC and Business Practices are complete.**



## Other Discussion

- **LTTIWG recommendation to SPC**
- **“The LTTIWG recommends that the ICT performs an economic/transmission study to determine the set of transmission upgrades needed to significantly reduce or stop the use of Reliability Must Run (RMR) units – located in the WOTAB and Amite South load pockets – while providing net savings to customers.”**



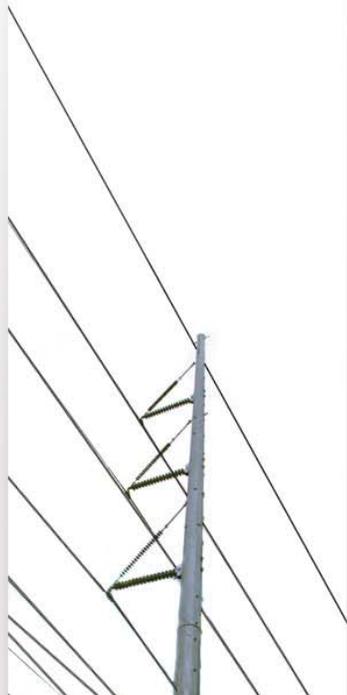
**SPP** *Southwest  
Power Pool*



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**Helping our members work together  
to keep the lights on...  
today & in the future**





ICT Regulatory Update

July 23, 2009



## Current Open Issues Summary

- **APSC Docket 08-136-U**
- **LPSC Docket R-30738**
- **FERC Technical Conference**



## APSC Docket #08-136-U

- **April 22, 2009 Commission Order #9**
  - **All parties invited to file written responses to the March 16 SPP Briefing Document by June 12**
    - **Arkansas Attorney General**
    - **Arkansas Electric Cooperative Corporation**
    - **Entergy Arkansas, Inc**
    - **SWEPCO, OG&E and Empire**



## APSC Docket #08-136-U

- **May 29, 2009 Commission Order #10 discussed:**
  - **Monthly WPP Updates**
  - **Entergy Technical Conference – scheduled for August 11**
  - **Difference between Note B Interpretations**
  - **Independent Cost Benefit of EAI and full Entergy membership in the SPP RTO**
  - **Transmission Planning Horizon comparisons**
  - **Rate Pancaking Study update**
  - **Recommendations for seams agreement**



## APSC Docket #08-136-U

- **July 8, 2009 Commission Order #11**
  - **Modified requirement from Monthly WPP Reports to Quarterly WPP Reports**
  - **Invited comments on Entergy cost benefit study regarding SPP RTO membership**



## LPSC Docket #R-30738

- **May 19, 2009 Technical Conference**
  - Louisiana Bulk Upgrades
  - ICT Differences Report
- **SPP provided additional information regarding certain transmission planning issues as requested by the Commission on June 29**



# FERC Technical Conference

- **June 24, 2009 - Charleston, SC**
  - **ICT/Entergy discussion regarding:**
    - **ICT Annual Report**
    - **Entergy Transmission System**
    - **ICT Agreement including next steps**
  - **Stakeholder Perspectives**
  - **Commissioner-led discussion**

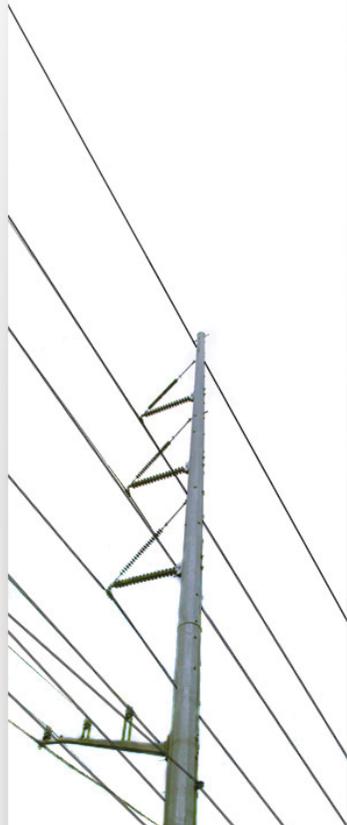


## Other Issues

- **May 28, 2009 - Attachment C Filing**
- **Att. C modified to reflect transition to OATI software**
- **Entergy requested that the effective date be deferred pending OATi implementation**



# Discussion or Questions?



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ICT Policy Committee  
Operating Efficiency Task Force

**One-Stop Shop**



## OETF Meetings

- **July 2, 2009 Teleconference**
  - **2007 draft scope review**
  - **Efforts of SPP – Entergy on Seams Agreement**
  - **SPP members interest**
  - **Schedule face-to-face meeting**
- **July 14, 2009 Meeting Little Rock**
  - **Enhanced scope developed**



## OETF Enhanced Scope – July 14, 2009

- **Develop proposals to address Seams Issues for Transmission Service between Entergy and SPP RTO**
- **Effort to include Entergy stakeholders, SPP members and technical SME from ICT, RTO and Entergy**
- **Review existing documentation on issues and proposals for Seams Agreements with SPP and Entergy**



## Two Phase Approach Proposal

- **July 14<sup>th</sup> meeting with SPP-ICT/RTO, Entergy and OETF members**
  - **Review of Entergy-SPP Seams Agreement Effort**
  - **Review of OETF Draft 2007 Scope Document**
  - **Discussion of efforts and requirements for One-Stop Shop**
  - **Effort focused on Long Term Service**
    - **Annual and monthly service**
  - **OETF decided to separate effort into two development Phases**



## Focus of Phase One

- **Define initiatives for implementation in 2009 without making changes to existing OATTs or making any significant changes to OASIS software**
- **Develop a customer-focused process aimed at the One-Stop Shop requirement for coordination between Entergy and SPP**



## Focus of Phase Two

- **Phase Two to be focused more towards resolutions for long-term operational and planning issues and are considered on-going in their development efforts**
- **Continue the customer-focused process aimed at the One-Stop Shop with expanded initiatives to be developed through Seams Agreements that could include changes to OATTs and software changes to OASIS**



## Phase One efforts addressed

- **Impacts Monthly and Yearly Transmission Service only**
- **Creation of a new function known as the Transmission Advocacy Assistance and Coordination (TRAAC) with focus on:**
  - **Primary customer contact**
  - **Proactive with solutions**
  - **Expertise in SPP and Entergy OATT**
  - **Coordination of timelines, processes and contracts**



## Phase One efforts to be continued

- **TRAAC role to be determined**
  - **Define the oversight responsibilities**
  - **Define the reporting structure**
  - **Define the funding structure**
  - **Define the requirements EES and SPP would provide to facilitate this role by both entities for the enhanced customer service**



## Phase Two proposal for future efforts

- **Review of current Seams Agreement between Entergy and SPP for areas for increased synergy of Operational Efficiency**
  - **Focus on coordination of study processes & AFC/ATC data**
  - **Include third-party studies**
  - **Data coordination (outages, model development, general dispatch check, etc)**
  - **Coordinate timing in study processes**



## Phase Two continued

- **Cost allocation**
- **Congestion management**
  - **Redipatch**
  - **Ops guides**
  - **Market flow**
- **Coordination of long-term redispatch**
- **Creation of a shared database of confirmed service to Seams Boundaries**
- **Creation of One-Stop Shopping software solutions**



## Next Steps - Communications & Efforts

- **OETF to expand the communication of efforts to SPP members and Entergy stakeholders**
- **Seek input to proposals and schedule next meeting to work on the details**
- **Work on details for Phase One**
- **Vetted proposal for Phase One by Oct 13, 2009**
  - **SPC and MOPC**
- **Schedule efforts for beginning Phase Two**



Dowell Hudson  
Manager ICT Tariff Administration  
501-614-3373  
[dhudson@spp.org](mailto:dhudson@spp.org)

# NTTIWG Update

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SPC

4/23/2009

**SPP**  
Southwest  
Power Pool



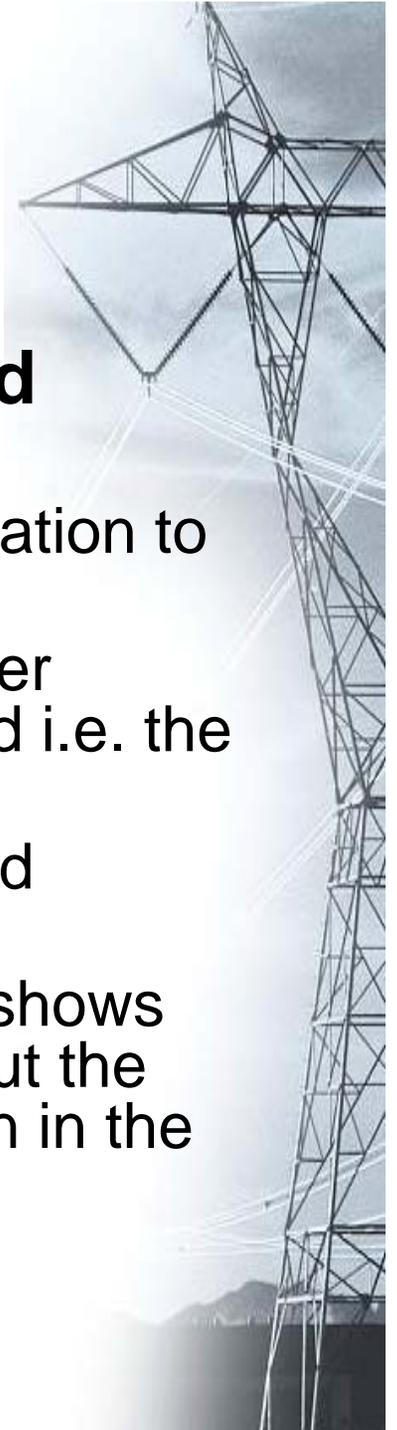
# NTTIWG Update

- AFC Modeling Improvements Task Force - Update
  - Three Issues for Task Force
    - **Enforcing Zonal Import Limits for Load Pockets**
    - **External Control Area Dispatch/Net Interchange**
    - **Transmission Upgrades in the AFC Models**



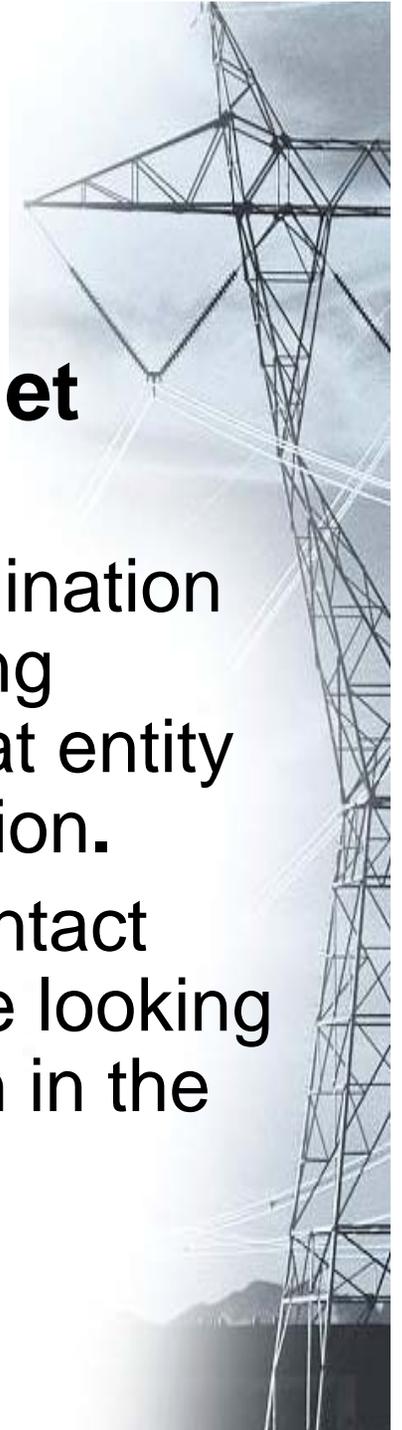
# NTTIWG Update

- **Enforcing Zonal Import Limits for Load Pockets**
  - Automated adjustment causes excess generation to be modeled in the WOTAB load pocket
  - This automation was put in place prior to other improvements which have been implemented i.e. the negative generation solution
  - Task Force discussed whether the automated adjustment was still needed
  - Analysis completed by the ICT and Entergy shows that the import limit can be maintained without the need for the additional increase in generation in the models



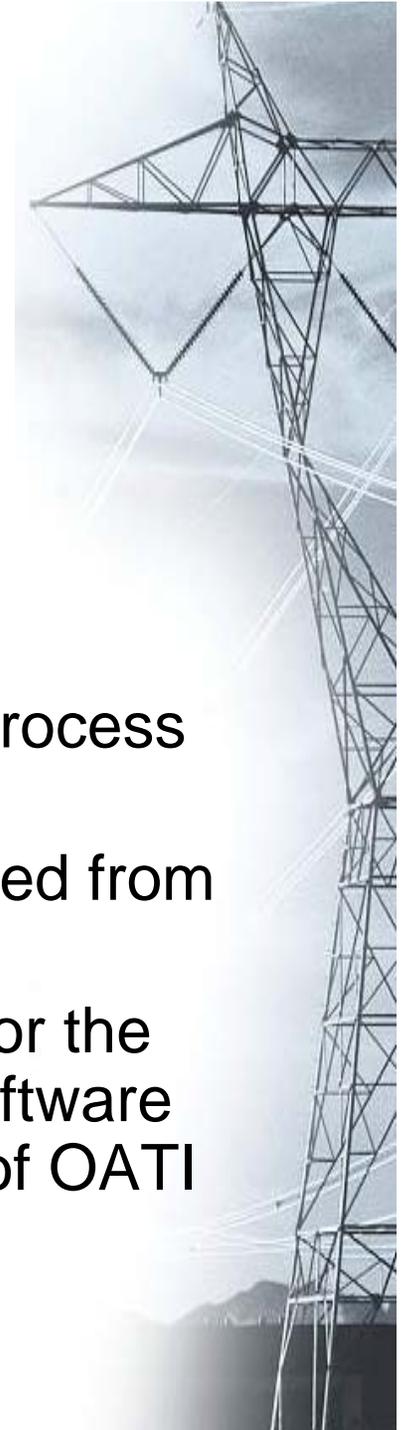
# NTTIWG Update

- **External Control Area Dispatch/Net Interchange**
  - Determined best option was the coordination of reservation data with the neighboring entities, as well as requesting from that entity a merit order dispatch of their generation.
  - The ICT and Entergy have been in contact with neighboring control areas and are looking at options for including the information in the AFC models



# NTTIWG Update

- DNR Task Force
- AFC Business Practices
  - The draft BP's have been circulated to the stakeholders
  - The majority are details of how the current process works today
  - The Study Horizon counterflow will be reduced from 100% to 49% per analysis completed
  - Counterflow adjustments will be discussed for the operating and planning horizons after the software can be tested following the implementation of OATI



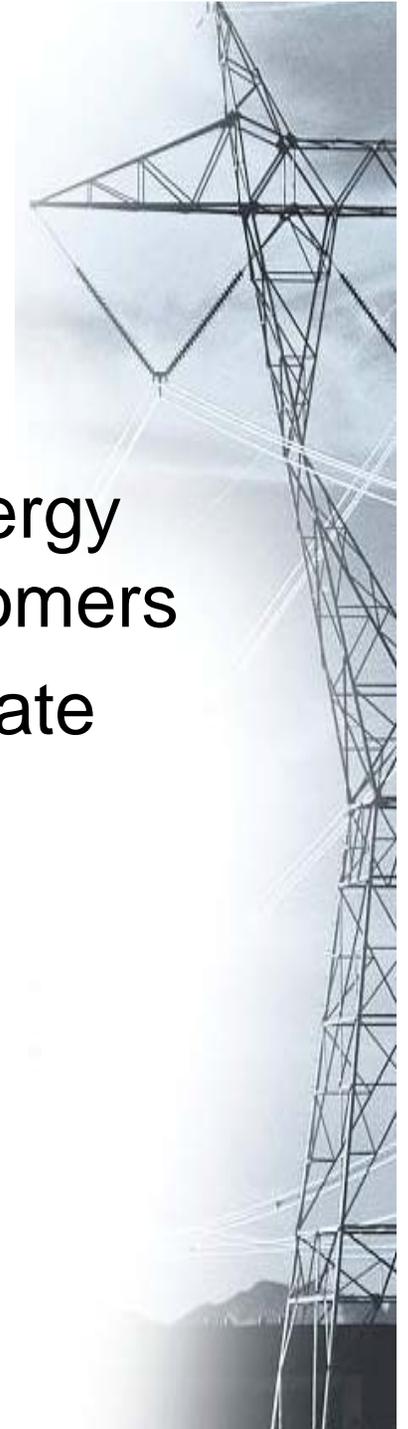
# NTTIWG Update

- Suspension of Non-Firm Sales During a TLR
  - After implementation of OATI, finalize the process for the suspension of Non-Firm sales during a TLR
  - This allows the override of AFC values to 0MW for non-firm service while in a TLR if that service impacts the limiting flowgate
    - Applies to Non-Firm service only
    - Transaction must have 3% or greater response
    - Applies once a flowgate is determined to be in a Level 3a –or greater
    - Override would be done for the next 6 hours of the non-Firm (Operating) AFC Horizon



# NTTIWG Update

- OATI Update
  - Postings have been made on the Entergy OASIS regarding training for the customers
  - Early to mid-August implementation date





**SPP** Southwest  
Power Pool

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ICT WPP Report

**Stakeholder Policy Committee**

**July 23, 2009**



## Action Items from April SPC Meeting

- **Expand the range of WPP hours:**
  - **During pre-WPP testing offers were simulated with 24-hour availability (i.e., both on-peak and off-peak hours). That testing showed that the inclusion of off-peak offers caused modeling problems and increased infeasible WPP results. Therefore, Entergy and the ICT agreed to remove off-peak offers from the WPP.**
  - **Expanding the on-peak hours to include more of the off-peak hours will increase the risk of the WPP model producing infeasible results and cancellation of the WPP.**
  - **At this time, the ICT and Entergy do not have plans to perform the extensive testing necessary to expand the on-peak period since no SCUC model code changes have been implemented to address the problems encountered during the pre-WPP testing. The ICT, however, will consider revisiting this issue at a future date.**



## Action Items from April SPC Meeting (cont.)

- **More transparency in the WPP rejection process:**
  - **Section 1.3.8 of Attachment V states that “The results of the WPP will be considered confidential and will be made publicly available only in accordance with this Attachment V”. Since the WPP results are considered confidential, the ICT will only provide general statements about the results of the WPP.**



## AGC/Operating Reserves Process

- **Currently third-party suppliers with AGC/Operating Reserves capability must qualify for delivery outside the WPP.**
- **Either the third-party supplier must have Network Resource Interconnection Service (NRIS) or the PNC must obtain transmission service by submitting a TSR on behalf of the third-party supplier into the AFC process.**
- **This requirement is necessary since the load flow used in the WPP only represents the MWs of energy flowing from the unit and does not account for the transmission system impact of providing AGC/Operating Reserves.**
- **Entergy and the ICT are currently working on ways to grant the AGC/Operating Reserves transmission service within the WPP. A specific solution has not been identified at this time.**



## WPP Quarterly Report

- **The ICT filed the first WPP Quarterly Report with FERC on June 15, 2009 for the period March through May 2009.**
- **WPP metrics included in the report were:**
  - **The number of merchant generators participating each week and the corresponding MWs committed in the WPP.**
  - **A historical comparison of Entergy's legacy units pre-WPP and post-WPP.**
  - **Historic "baseline" study of cost savings from Entergy's Weekly RFP.**
  - **A description of the operational adjustments that Entergy and the ICT had to make with respect to soft constraints.**
  - **Estimated WPP savings.**



## WPP Quarterly Report

- **The ICT does not endorse all of the metrics as meaningful measurement tools for assessing the WPP's performance.**
- **The ICT believes that historical comparisons are inherently unreliable because there are numerous factors such as weather, system conditions, fuel prices, plant outages and availability of hourly/daily economy purchases that could account for variations from one period to the next.**
- **The ICT believes that metrics tied directly to the data inputs and results of the WPP model are the most valid for estimating cost savings and other WPP benefits.**



## WPP Quarterly Report

- **The WPP's estimated savings for the first quarter were more than \$2 million.**
- **The ICT believes that the WPP's first quarter of operations shows a reasonable level of savings based on the fact that the WPP is a new and unique process and that the first quarter was during the low-load spring months.**
- **The ICT believes that the level of the WPP's savings will increase in the summer months and as parties gain more experience with the process.**

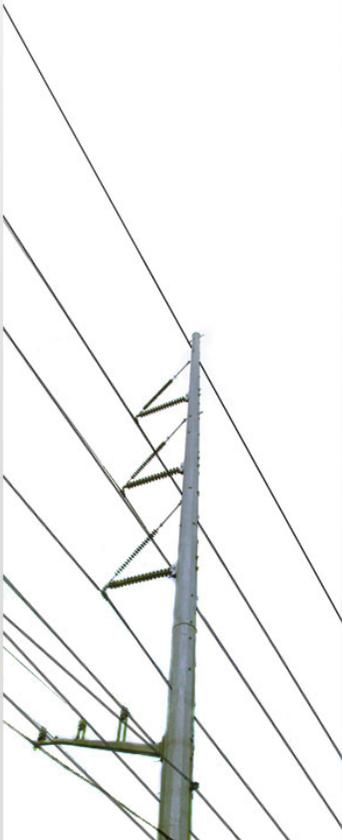


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Entergy Users Group

**Report to the ICT Stakeholders Policy Committee**  
**July 23, 2009**



# AFC Data Backup Assessment





## AFC and WPP-AFC Data Backup

- **Quarterly Assessment performed 5/13/2009**
  - **Sample evidence of backup process**
  - **Sample evidence of test restoration process**
  - **Sample OASIS Automation log check evidence**
- **Findings**
  - **Entergy is 1 month behind on backups.**
  - **No notable exceptions found. Two carryover issues:**
    1. **Recommendation to implement Network Operations Manager not completed**
    2. **Recommendation for additional disk space not completed (disk space is in the process of being order and Entergy staff is ensuring insufficient disk space)**



# FERC Filings





## FERC Filings

- **Two AFC-related Error filings were reported and discussed in the users group meeting.**
  - **March 17, 2009: State Estimator Savecase**
  - **April 15, 2009:**
    - A. **UC Stack File**
    - B. **Incorrect Modeling of UC Long Term Reservations**
- **Two new filings have been made since the last quarterly assessment and meeting.**
  - **June 11, 2009: OA Configuration for Preemption**
  - **June 18, 2009: AFC Impact Log**

Questions?



Ty Mitchell  
Chair, Entergy User Group  
501-614-3340  
[tmitchell@spp.org](mailto:tmitchell@spp.org)

# **Attachment 6**

August 25, 2009

Mr. Jody Holland  
Southwest Power Pool –  
Entergy Independent Coordinator of Transmission  
415 North McKinley, Suite 140  
Little Rock, AR 72205  
*Sent via email: [jholland@spp.org](mailto:jholland@spp.org)*

Re: Request for Entergy Operating Guides Used for 2010 Base Plan and Construction  
Plan for Entergy's Transmission System

Mr. Jody Holland,

Cottonwood Energy ("Cottonwood") is formally requesting a copy of all operating guides utilized by the ICT and/or Entergy to develop the 2010 Base Plan and Construction Plan for the most recent Entergy electrical transmission reliability planning processes.

Cottonwood requires these operating guides to allow it to replicate the transmission planning studies performed by the ICT and Entergy in the above stated processes.

Please respond as to the process in which Cottonwood can receive these operating guides in a timely manner.

Sincerely,



David Baugh  
Cottonwood Energy

# **Attachment 7**



Southwest Power Pool, Inc.

**INDEPENDENT COORDINATOR OF TRANSMISSION (ICT) FOR ENTERGY**

**Report to the Entergy Users Group**

**August 20, 2009**

**Background**

The ICT conducts a quarterly assessment of the Entergy AFC data retention processes. The most recent assessment was performed on August 20, 2009. Conducting the assessment on behalf of the ICT:

Joe Codemo, IT Risk Mitigation Coordinator  
Erin Jester, Internal Auditor  
Ty Mitchell, Chair of the Entergy Users Group

Representing Entergy:

Tim Angel, Supervisor, System Hardware Support  
David Stacks, Sr. Associate System Analyst, System Management  
Vinit Gupta, Supervisor, Supervisor, EMS Applications  
Connie Wells, Sr. Staff Analyst, Transmission Compliance (on phone)  
Ryan Plaisance, Supervisor of Market Systems Support

**Assessment**

The ICT examined both the regular AFC data retention process and the processes surrounding the Weekly Procurement Process (WPP). The ICT investigated the FERC Lost, Inaccurate, or Mishandled Data submissions submitted since the last assessment. The ICT also reviewed the pending recommendations and issues from the May 2009 assessment. A discussion of the assessment follows:

*AFC and WPP-AFC Data Retention Process*

The ICT performed a random sampling of compliance with key process controls to provide a reasonable assurance that the AFC and WPP-AFC data retention processes will prevent further data loss. On August 18, 2009, Entergy was requested to make the following available for inspection:

- Weekly full image backup logs for the dates 5/23-24/2009, 6/13-14/2009, and 7/18-19/2009.
- Daily incremental backup logs for the dates 5/27/2009, 6/8/2009, and 7/8/2009.
- Logs from the restoration testing of the above full and incremental backups.
- Remedy service request for the July 2009 archive cycle.
- Archive backup logs for the July 2009 archive cycle.
- Logs from the restoration testing of the July 2009 archive cycle.
- Evidence that the checksum comparison step of the backup process produced no discrepancies.
- Transmittal documentation demonstrating backup tapes created for the above were sent to offsite storage.
- Evidence that the current plus three months AFC data is stored on the Energy Management System (EMS) and that the previous 13 months AFC data is stored on the online file server.
- Evidence that the daily verification of OASIS Automation process logs was performed for the dates 5/5/2009, 6/19/2009, and 7/30/2009.

Upon arrival on-site, all requested documentation was available except for the July 2009 archive cycle. Due to current workload Entergy continues to be behind in backups, though all data is stored on disk. In



respect to this, April 2009 was used for testing. An inspection of the backup and restoration logs confirmed that the AFC data files were being properly backed up and test restored. An examination of the checksum process logs determined that all files archived for the month of April 2009 were successfully transferred from the EMS to online file storage. The archive process has been split into two Remedy tickets. The first ticket performs the corporate external review and archive-to-tape process. The second ticket, created three months later, seeks deletion approval and then deletes the archived files from disk to complete the archive process. Remedy tickets 16162 and 18076 document the execution of the proper processes. The ICT was unable to determine that backup tapes were properly sent offsite for storage during the August assessment. The examination of Entergy's internal Information Vaulting Service (IVS) transmittal documentation and an examination of the restoration testing logs was not sufficient to confirm that the second (offsite) copies of the backup tapes were properly sent offsite for storage. Additional information was requested on August 27 from Entergy. Verification of the offsite data storage process will remain as an open item until the additional requested information is received and any recommendations will be made at that time.

**Recommendation:** Entergy should add more resources to the team responsible for the maintenance of this critical data. Current staffing appears to be overloaded given workload related to the CIP and Host Plan projects.

Entergy acknowledged during the November 2008 assessment that certain AFC data is reaching end-of-life (older than five years) and no longer needs to be retained. This data resides on archive tapes that also contain HDR (Historical Data Recorder) data for the same time period with a 25 year retention schedule. Entergy is still evaluating how to resolve this issue and permit the end-of-life AFC data to be expunged. The archived data will likely have to be reloaded to temporary space and then just the HDR data re-archived. This will become an issue in late 2009 when the first AFC data reaches its end of life. Entergy is also evaluating options for separating the AFC and HDR archive data going forward.

During the August 2008 assessment, the ICT recommended that Entergy use the Network Operations Manager software currently being rolled out to track media errors as well as alert support staff in real time when an error occurs. As part of the assessment, the ICT confirmed that tape errors were being tracked as recommended using a combination of Remedy and an Excel spreadsheet. No tapes experienced multiple failures during the review period, thus no tapes were removed from the library. The ICT was also advised that the Network Operations Manager software was still pending installation due to higher priority tasks and is expected to be installed by the end of 2009. In the interim, the migration to Veritas Version 6 provides e-mail notifications of problems encountered during the backup process, resolving the immediate need for the Network Operations Manager software.

**Recommendation:** Complete the installation of the Network Operations Manager software and use it to track media errors as well as alert support staff in real time when an error occurs, as originally recommended August 2008. The ICT recognizes that installing the Network Operations Manager software is lower in priority than other time-critical tasks and recommends the task be completed as soon as practical.

The ICT continues to find that on occasion, the restoration testing will suspend due to lack of available disk space. The suspension continues to be detected properly by the Entergy staff that then frees up space and manually resumes the job. During the August 2008 assessment, the ICT recommended configuration of additional disk space on the restoration test environment. As of this assessment date, the additional disk space is still not in place. The disk space previously ordered that was to be installed by August was needed in another area; additional disk space has been reordered. Entergy has also assigned additional system administration staff to ensure obsolete data is promptly deleted from the restoration test server. This additional staff also ensures that the OASIS posting data older than three months is promptly deleted from the ET.COM web site to prevent OASIS posting failures due to insufficient disk space.



**Action Item:** Verify the disks have been received and installed.

The ICT examination of the OASIS Automation log verification process confirmed that Entergy is properly verifying the presence of the OASIS Automation process log files.

In summary, with the exception of the remaining open item to verify the offsite data storage process is properly performed, the ICT did not find any notable exceptions with the regular AFC or WPP-AFC backup processes. However, the ICT is concerned that Entergy does not appear to have sufficient resources available to complete the required tasks within the timelines defined by Entergy's processes.

#### *FERC Filings*

Filings made by Entergy to FERC since the May 2009 assessment was discussed in some depth.

June 11, 2009 filing: One issue was reported:

#### **OASIS Automation (OA) Configuration Error**

On May 27, 2009, the ICT reported to Entergy that it appeared that the preemption functionality of Entergy's OA software was displaying an inaccurate defender queue. More specifically, the ICT reported that the queue being displayed to operators did not consistently identify all preemptible, lower priority Transmission Service Requests ("TSRs") and reservations when a higher priority TSR was being evaluated. Based on observation of these anomalies, the ICT briefly suspended implementation of preemption for thermal flowgates on Entergy's transmission system on May 28, 2009.

Upon investigation by Entergy, it was determined that a default configuration setting in OA for the length of the query used to identify reservations and TSRs that were impacted by the constrained flowgate(s) of the preemptor was limiting the query to 32,767 characters or approximately 1,300 paths. The query string in OA is what contained the list of source/sink combinations that were affected by the constrained flowgate(s). If the constrained flowgate(s) impacted more than the approximately 1,300 source/sink combinations, the query string was cut short; therefore, this limitation resulted in some source/sink combinations and associated reservations or TSRs not being included in the query or, subsequently, returned in the associated response, which populates the defender queue. If the constrained flowgate(s) affected less than approximately 1,300 source/sink combinations, then the query worked as expected, returning a complete list of defenders.

The aforementioned configuration setting in OA was increased to 262,143 on June 4, 2009. Even though it is unlikely that a constrained flowgate could impact all source/sink combinations, prior to implementation of the configuration revision, Entergy confirmed that all source/sink combinations could be accommodated in the query of reservations and TSRs by OA and will, therefore, be returned in future responses, which populate the defender queue. Subsequent testing by Entergy and the ICT supports this finding. Accordingly, on June 5, 2009, the ICT reinstated preemption for thermal flowgates on Entergy's transmission system.

June 18, 2009 filing: One issue was reported:

#### **AFC Impact Log**

On June 3, 2009, the ICT notified Entergy that their operators were unable to act on Transmission Service Requests (TSRs) using OASIS Automation (OA). However, during the time period from 12:58 PM until 4:51 PM, ICT operators acted upon TSRs timely and appropriately through Entergy's OASIS. Upon investigation, Entergy determined that the available disk drive space on the servers that host the OA system had been reduced to an inadequate level resulting in OA not functioning properly.

Although the identified issue with OA did not impact the processing of TSRs, the lack of disk drive space prohibited creation of AFC Impact Logs, which logs are a snapshot of the Entergy system created in real-



time. The AFC Impact Logs are files that contain the calculations and data used when evaluating TSRs, which data includes but is not limited to the capacity requested, the impacted flowgates, the pre-existing flows on those flowgates, the sensitivity of the requested path on each flowgate, the impact of the request on each flowgate, etc. Although all required information used when evaluating TSRs was available in real time from 12:58 PM until 4:51 PM on June 3, 2009, some of this information that would have been contained and archived in the AFC Impact Logs was not recorded.

A configuration problem with the monitoring solution caused the F: drive to not be properly monitored. This issue has been resolved by correcting the configuration of the monitoring software and purging data to provide enough space to allow proper execution of OA.

**Recommendation:** Entergy undertake a systematic review of the configuration of their monitoring software on each server that contains critical data. Specifically, ensure that all drives that contain critical data are being properly monitored for space.

July 23, 2009 filing: One issue was reported:

### **OASIS Scenario Analyzer**

On July 11, 2009, the Entergy System Operation Center (SOC) located in Pine Bluff, Arkansas performed its annual back up drill (Drill) for 2009 as required by Reliability Standard EOP-008. The Drill involved the deactivation of all systems and operations at the SOC while simultaneously activating all systems and operations at Entergy's Back up Center located in West Monroe, Louisiana (the Back up Center). From approximately 1:46 AM until 8:22 AM on July 11, all system operations for Entergy normally performed at its SOC were being performed at the Back up Center. During this time period, Entergy determined that its OASIS Scenario Analyzer was not functioning properly. Upon returning operations to the SOC from the Back up Center, Entergy determined that its OASIS Scenario Analyzer functionality was fully restored.

During a backup cutover drill, there was a network issue that caused a disconnect between OASIS (in Seattle) and OASIS Automation (in Arkansas). Neither Areva nor Entergy could determine a root cause. The same problem happened last year and they were unable to find the root cause then either. With the transition of Entergy's OASIS from Areva to OATI, this issue can be considered closed.

# **Attachment 8**



**Entergy Services, Inc.**  
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639 Loyola Avenue  
New Orleans, LA 70113  
Tel 504-576-4993  
Fax 504-576-5123  
e-Mail gpierc2@entergy.com

**Greg Pierce**  
Director Transmission Compliance

June 11, 2009

## **VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Entergy Services, Inc.; Docket No. ER05-1065-000  
Report of AFC-Related Errors

Dear Secretary Bose:

Pursuant to the Federal Energy Regulatory Commission's ("Commission") April 24, 2006 Order in *Entergy Services, Inc.*, 115 FERC ¶ 61,095 (2006) ("April 24 Order"), Entergy Services, Inc., acting as agent for the Entergy Operating Companies,<sup>1</sup> hereby notifies the Commission it has recently become aware of the following AFC-related error.

In the April 24 Order, the Commission conditionally accepted Entergy's proposal to establish an Independent Coordinator of Transmission ("ICT") for the Entergy System. As the Commission is aware, the Southwest Power Pool, Inc. acts as Entergy's ICT. In the April 24 Order, the Commission imposed an obligation for Entergy to "notify the Commission, the ICT and the Users Group within 15 days if Entergy discovers that it has lost data, or reported inaccurate data, or otherwise believes that it has mismanaged data." See April 24 Order at P 110. Accordingly, Entergy submits the following explanation of recently discovered issues involving mismanagement of AFC related data.

### **OASIS Automation (OA) Configuration Error**

On May 27, 2009, the ICT reported to Entergy that it appeared that the preemption functionality of Entergy's OA software was displaying an inaccurate defender queue. More specifically, the ICT reported that the queue being displayed to operators did not consistently identify all preemptible, lower

---

<sup>1</sup> The Entergy Operating Companies include: Entergy Arkansas, Inc., Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. The Entergy Operating Companies and Entergy Services, Inc. are referred to collectively herein as "Entergy."

Kimberly D. Bose, Secretary  
June 11, 2009  
Page 2

priority Transmission Service Requests (“TSRs”) and reservations when a higher priority TSR was being evaluated. Based on observation of these anomalies, the ICT briefly suspended implementation of preemption for thermal flowgates on Entergy’s transmission system on May 28, 2009. The posted notice of this suspension of preemption can be viewed at [https://oasis.e-terrasolutions.com/documents/EES/OASIS\\_NoticePreemption.pdf](https://oasis.e-terrasolutions.com/documents/EES/OASIS_NoticePreemption.pdf).

Upon investigation by Entergy, it was determined that a default configuration setting in OA for the length of the query used to identify reservations and TSRs that were impacted by the constrained flowgate(s) of the preemptor was limiting the query to 32,767 characters or approximately 1,300 paths. The query string in OA is what contained the list of source/sink combinations that were affected by the constrained flowgate(s). If the constrained flowgate(s) impacted more than the approximately 1,300 source/sink combinations, the query string was cut short; therefore, this limitation resulted in some source/sink combinations and associated reservations or TSRs not being included in the query or, subsequently, returned in the associated response, which populates the defender queue. If the constrained flowgate(s) affected less than approximately 1,300 source/sink combinations, then the query worked as expected, returning a complete list of defenders.

The aforementioned configuration setting in OA was increased to 262,143 on June 4, 2009. Even though it is unlikely that a constrained flowgate could impact all source/sink combinations, prior to implementation of the configuration revision, Entergy confirmed that all source/sink combinations could be accommodated in the query of reservations and TSRs by OA and will, therefore, be returned in future responses, which populate the defender queue. Subsequent testing by Entergy and the ICT supports this finding. Accordingly, on June 5, 2009, the ICT reinstated preemption for thermal flowgates on Entergy’s transmission system. The posted notice can be viewed at <https://oasis.e-terrasolutions.com/documents/EES/OASISNoticepreemptionReinstated.pdf>.

Entergy’s investigations of the May 27, 2009 issue indicate that the impact of the limitation on the population of the defender queue was dependent on each TSR, the number of source/sink combinations impacted by the constrained flowgate(s) at the time of evaluation, the loading on the Entergy system at the time of evaluation, and the actions of the evaluating operator. As the exact conditions of each evaluation cannot be re-created, the impact of the May 27, 2009 issue cannot be ascertained.

In the event that further information is needed, please do not hesitate to contact the undersigned.

Respectfully submitted,  
/s/Gregory D. Pierce  
Gregory D. Pierce  
Director, Transmission Compliance

Kimberly D. Bose, Secretary  
June 11, 2009  
Page 3

cc: Southwest Power Pool, Inc.  
ICT Users Group  
Service List; Docket No. ER05-1065-000

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this 11<sup>th</sup> day of June, 2009, served the foregoing document upon the Southwest Power Pool, Inc., the ICT Users Group, and each person designated on the official service list compiled by the Secretary in this proceeding.

*/s/ Nicole A. Livaccari* \_\_\_\_\_

Nicole A. Livaccari  
Mail Unit L-ENT-24A  
New Orleans, LA 70113  
Tel: (504) 576-4296

# **Attachment 9**



**Entergy Services, Inc.**  
Mail Unit L-ENT-24A  
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New Orleans, LA 70113  
Tel 504-576-4993  
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e-Mail gpierc2@entergy.com

**Gregory D. Pierce**  
Director Transmission Compliance

June 18, 2009

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Entergy Services, Inc.; Docket No. ER05-1065-000  
Report of AFC-Related Errors

Dear Secretary Bose:

Pursuant to the Federal Energy Regulatory Commission's ("Commission") April 24, 2006 Order in *Entergy Services, Inc.*, 115 FERC ¶ 61,095 (2006) ("April 24 Order"), Entergy Services, Inc., acting as agent for the Entergy Operating Companies,<sup>1</sup> hereby notifies the Commission it has recently become aware of the following AFC-related error.

In the April 24 Order, the Commission conditionally accepted Entergy's proposal to establish an Independent Coordinator of Transmission ("ICT") for the Entergy System. As the Commission is aware, the Southwest Power Pool, Inc. acts as Entergy's ICT. In the April 24 Order, the Commission imposed an obligation for Entergy to "notify the Commission, the ICT and the Users Group within 15 days if Entergy discovers that it has lost data, or reported inaccurate data, or otherwise believes that it has mismanaged data." See April 24 Order at P 110. Accordingly, Entergy submits the following explanation of recently discovered issues involving mismanagement of AFC related data.

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<sup>1</sup> The Entergy Operating Companies include: Entergy Arkansas, Inc., Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. The Entergy Operating Companies and Entergy Services, Inc. are referred to collectively herein as "Entergy."

Kimberly D. Bose, Secretary  
June 18, 2009  
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### **AFC Impact Log**

On June 3, 2009, the ICT notified Entergy that their operators were unable to act on Transmission Service Requests (TSRs) using OASIS Automation (OA). However, during the time period from 12:58 PM until 4:51 PM, ICT operators acted upon TSRs timely and appropriately through Entergy's OASIS. Upon investigation, Entergy determined that the available disk drive space on the servers that host the OA system had been reduced to an inadequate level resulting in OA not functioning properly.

Although the identified issue with OA did not impact the processing of TSRs, the lack of disk drive space prohibited creation of AFC Impact Logs, which logs are a snapshot of the Entergy system created in real-time. The AFC Impact Logs are files that contain the calculations and data used when evaluating TSRs, which data includes but is not limited to the capacity requested, the impacted flowgates, the pre-existing flows on those flowgates, the sensitivity of the requested path on each flowgate, the impact of the request on each flowgate, etc. Although all required information used when evaluating TSRs was available in real time from 12:58 PM until 4:51 PM on June 3, 2009, some of this information that would have been contained and archived in the AFC Impact Logs was not recorded.

In the event that further information is needed, please do not hesitate to contact the undersigned.

Respectfully submitted,  
/s/Gregory D. Pierce  
Gregory D. Pierce  
Director, Transmission Compliance

cc: Southwest Power Pool, Inc.  
ICT Users Group  
Service List; Docket No. ER05-1065-000

Kimberly D. Bose, Secretary

June 18, 2009

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**CERTIFICATE OF SERVICE**

I hereby certify that I have this 18<sup>th</sup> day of June, 2009, served the foregoing document upon the Southwest Power Pool, Inc., the ICT Users Group, and each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Nicole A. Livaccari

Nicole A. Livaccari

Mail Unit L-ENT-24A

New Orleans, LA 70113

Tel: (504) 576-4296

# **Attachment 10**



**Entergy Services, Inc.**  
Mail Unit L-ENT-24A  
639 Loyola Avenue  
New Orleans, LA 70113  
Tel 504-576-4993  
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e-Mail gpierc2@entergy.com

**Gregory D. Pierce**  
Director Transmission Compliance

July 23, 2009

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Entergy Services, Inc.; Docket No. ER05-1065-000  
Report of AFC-Related Errors

Dear Secretary Bose:

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<sup>1</sup> The Entergy Operating Companies include: Entergy Arkansas, Inc., Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. The Entergy Operating Companies and Entergy Services, Inc. are referred to collectively herein as "Entergy."

Kimberly D. Bose, Secretary  
July 23, 2009  
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### **OASIS Scenario Analyzer**

On July 11, 2009, the Entergy System Operation Center (SOC) located in Pine Bluff, Arkansas performed its annual back up drill (Drill) for 2009 as required by Reliability Standard EOP-008. The Drill involved the deactivation of all systems and operations at the SOC while simultaneously activating all systems and operations at Entergy's Back up Center located in West Monroe, Louisiana (:the Back up Center). From approximately 1:46 AM until 8:22 AM on July 11, all system operations for Entergy normally performed at its SOC were being performed at the Back up Center. During this time period, Entergy determined that its OASIS Scenario Analyzer was not functioning properly. Upon returning operations to the SOC from the Back up Center, Entergy determined that its OASIS Scenario Analyzer functionality was fully restored.

In the event that further information is needed, please do not hesitate to contact the undersigned.

Respectfully submitted,  
/s/Gregory D. Pierce  
Gregory D. Pierce  
Director, Transmission Compliance

cc: Southwest Power Pool, Inc.  
ICT Users Group  
Service List; Docket No. ER05-1065-000

Kimberly D. Bose, Secretary  
July 23, 2009  
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**CERTIFICATE OF SERVICE**

I hereby certify that I have this 23<sup>rd</sup> day of July, 2009, served the foregoing document upon the Southwest Power Pool, Inc., the ICT Users Group, and each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Nicole A. Livaccari

Nicole A. Livaccari  
Mail Unit L-ENT-24A  
New Orleans, LA 70113  
Tel: (504) 576-4296

# **Attachment 11**



**Entergy Services, Inc.**  
Mail Unit L-ENT-24A  
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Fax 504-576-5123  
e-Mail gpierc2@entergy.com

**Gregory D. Pierce**  
Director Transmission Compliance

August 5, 2009

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Entergy Services, Inc.; Docket No. ER05-1065-000  
Report of AFC-Related Errors

Dear Secretary Bose:

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<sup>1</sup> The Entergy Operating Companies include: Entergy Arkansas, Inc., Entergy Gulf States Louisiana, LLC, Entergy Louisiana, LLC, Entergy Mississippi, Inc., Entergy New Orleans, Inc., and Entergy Texas, Inc. The Entergy Operating Companies and Entergy Services, Inc. are referred to collectively herein as "Entergy."

Kimberly D. Bose, Secretary  
August 5, 2009  
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### **AFC Data File Inputs**

On July 22, 2009, Entergy discovered that certain resyncs of RFCALC used incomplete input data. Certain files are routinely copied from the primary EMS servers, typically at the System Operations Center (SOC), in Pine Bluff, to the secondary EMS servers typically at the Backup SOC (Backup), in West Monroe, to maintain operational readiness. This function is transferable between both center locations, so that when the Pine Bluff center is the primary center, data files are copied to the Backup Center, and vice versa when the West Monroe site is active as the primary center.

On July 21, a copy function erroneously started to copy these files from the secondary EMS servers to the primary EMS servers while simultaneously attempting to copy the same files from the primary EMS servers to the secondary EMS servers. This appears to have resulted in corruption of some of the files utilized by RFCALC to calculate AFC. In particular, RFCALC intermittently utilized incomplete Unit Commitment, Load Forecast and Outage data to resync the Operating and Planning Horizons on July 21 and July 22, 2009. Use of these corrupted files affected RFCALC resyncs for the Operating Horizon from 6:20 PM until 7:20 PM on July 21 and from 9:20 PM to 4:20 AM on July 22. However, the Planning Horizon was only affected from 1:40 AM on July 21 to 4:40 AM on July 22. A temporary work around was implemented at approximately 3:30 AM on July 22 with normal operations commencing by 10:10 AM that day.

In the event that further information is needed, please do not hesitate to contact the undersigned.

Respectfully submitted,  
/s/Gregory D. Pierce  
Gregory D. Pierce  
Director, Transmission Compliance

cc: Southwest Power Pool, Inc.  
ICT Users Group  
Service List; Docket No. ER05-1065-000

Kimberly D. Bose, Secretary  
August 5, 2009  
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**CERTIFICATE OF SERVICE**

I hereby certify that I have this 5th day of August, 2009, served the foregoing document upon the Southwest Power Pool, Inc., the ICT Users Group, and each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Nicole A. Livaccari

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