SPP/Entergy CBA Study Proposed Work Plan

SPP has been directed by the Arkansas Public Service Commission (APSC) to perform, with the assistance of an independent third party, a comprehensive Cost Benefit Analysis Study (“CBA Study”) of two scenarios: (1) full SPP membership by all the Entergy Operating Companies as compared to participation under the existing ICT services arrangement, and (2) full SPP membership by Entergy Arkansas, Inc. (EAI), as a stand-alone entity, compared to continuing under the existing ICT services arrangement. As part of a June 24th Technical Conference in Charleston, SC, the Retail Regulators of the Entergy Operating Companies (collectively “Entergy Retail Regulators”) asked that the CBA Study include an additional evaluation of each of the Entergy Operating Companies (Entergy Gulf States Louisiana, L.L.C. (EGSI), Entergy Louisiana, LLC. (ELL), Entergy Mississippi, Inc. (EMI), Entergy New Orleans, Inc. (ENOI), and Entergy Texas, Inc. (ETI); Entergy Services, Inc. and the Entergy Operating Companies are collectively referred to as the “Entergy System.”) In further discussion during that Conference, stakeholders also asked that the evaluation include the impacts on wholesale customers of the Entergy Operating Companies (e.g., municipals, cooperatives), the Entergy System network transmission customers (LA Gen), and other transmission dependent entities. The Chairman of FERC also offered to contribute funds to offset the costs of this CBA Study.

Following the June 24th meeting, the Chairman of FERC clarified his offer in a letter filed in the Entergy ICT docket that would lay out the process and obligations of their participation (Exhibit A).

Following preliminary discussions to develop the Entergy-Regional State Committee (“E-RSC”), representatives of each of the Entergy retail Regulators, including from the APSC, have agreed that responsibility for overseeing conduct of the CBA would be with the E-RSC (when established). Specific results for any entity, including the state jurisdictions, will be performed as an Addendum to this main study that will determine the costs and impacts to each of the Entergy Operating Companies, as well as affected transmission customers and other stakeholders. To make these addendum analyses efficient and comprehensive, it is recommended that the scope for them be finalized during the analyses performed in this CBA Study. This CBA Study will analyze (1) the continued participation of all Entergy Operating Companies under the existing ICT services arrangement, versus (2) the full membership of all Entergy Operating Companies in SPP under the SPP OATT.

FERC has committed to fund this CBA Study.

The purpose of this proposed work plan is to advance the scope and process for completing the studies.

Studies Assumptions and Purposes
The primary assumptions of the analysis are:

1. The study will use the most up-to-date information available with respect to input parameters such as:
   a. the current transmission and generation topology,
   b. planned transmission upgrades within both the Entergy System and SPP that are required to be in-service by 2022.
   c. heat rates, fuel price forecasts, and merchant bid data publicly available or as-supplied by the operator of resources.
   d. load forecasts, including verifiable demand response and verifiable energy efficiency,
   e. requirements for flexible capability, i.e., responsive reserves,
   f. QF put estimates,
   g. Reliability Must Run (RMR) requirements, operating directives (operating guides), etc.
   h. wind penetration estimates,
   i. new generation projects that will be in-service by 2022 and existing generation that will no longer be in-service, e.g., retired, as of 2022.
   j. the economic value of seams (or barriers) that exist between SPP and Entergy and that will be eliminated if Entergy joins SPP. Seams/barriers include economic, operational and transactional limitations that exist because the Entergy System and SPP are operated separately, e.g., pancaked transmission rates, ramping restrictions, scheduling differences, market differences.
   k. current and estimated SPP tariff charges, e.g., related administrative charges, that will apply to the Entergy Companies,
   l. the Study Period will be 10 years (1/1/2013 through 12/31/2022) with financial/economic analyses extended for another 10-20 year horizon.

2. A single balancing authority is operational in the SPP region by 2013.
3. SPP’s Future Market Design, including a centralized day-ahead market including a single system constrained unit commitment and dispatch process, and centralized ancillary services markets are in place by 2013.
4. All studies and analysis should assume that all pre-day ahead bi-lateral mechanisms remain an option under full RTO membership.
5. All transmission facilities of all Entergy Operating Companies will be placed under the SPP Open Access Transmission Tariff and all existing long term firm (network and point to point) transmission system contracts will be honored.

The purposes of the studies are to:

1. Assess the cost impacts and potential savings to the Entergy System of joining SPP versus remaining with the existing ICT services arrangement.
2. Identify barriers between the Entergy System and SPP, quantify the costs of those barriers, and estimate costs for eliminating these barriers.
3. Identify the transmission reliability upgrades necessary, if any, for the Entergy system to meet SPP criteria as a condition of putting the Entergy transmission facilities under the SPP OATT.

4. Identify the costs and benefits associated with all transmission upgrades on SPP’s transmission system that could be allocated to the Entergy System in the event of full membership in SPP consistent with the current System Agreement.

5. Estimate savings through reduction in adjusted production costs of the Entergy System due to economic upgrades.

6. List and quantify other costs and benefits of SPP membership that would accrue to the Entergy System versus remaining with the existing ICT services arrangement.

Appropriate confidentiality agreements will be executed to allow access to all data (e.g., system and resource data), operating guides, etc., needed by the independent third party to complete the studies while protecting competitively sensitive data of the Entergy System (including each Operating Company) and of each market participant.

**Work Plan**

Below is a proposed study work plan. A proposed work plan timeline is attached as Exhibit B (Attach SPP ENTERGY CBA STUDY TIMELINE DRAFT.pdf which is under development). The remainder of this section provides a brief discussion of each phase.

**Phase 1 – Request For Proposals**

The E-RSC and FERC, facilitated by SPP, and including input from stakeholders and the Entergy System shall develop a Request For Proposals (“RFP”) for an independent Third Party Consultant (“TPC”) to conduct the CBA Study. After the E-RSC has reviewed and approved the RFP and the list of TPCs to receive the RFP, SPP will issue the RFP consistent with the procedures and protocols required by FERC. The E-RSC and FERC, facilitated by SPP, shall evaluate TPC responses to the RFP and select the TPC to conduct the CBA Study.

**Phase II - Develop Study Scope**

This phase can be thought of as the scoping or design phase. The main objective is to set a clear vision for the analysis to achieve an objective and accurate result. SPP will work with the TPC, representatives of the FERC, Entergy Retail Regulators, the Entergy System, and interested stakeholders to:

1. Understand the SPP OATT and answer questions to clarify the study.
2. To identify any transmission upgrades are necessary to integrate the Entergy System into the SPP transmission system and meet the SPP Criteria requirements for reliability. The projects may be located on SPP or Entergy’s System. The costs of each project will be estimated and SPP
will identify under existing Commission-approved tariffs how the costs for those projects would be recovered.

3. To identify any transmission upgrades that would relieve congestion, to the extent beneficial, within or between both SPP and Entergy. The costs of each project will be estimated and SPP will identify under existing Commission-approved tariffs how the costs of those projects might be recovered.

Assumptions to be discussed and agreed to by the E-RSC and FERC are:

1. Different policy issues or other input parameters (e.g. fuel price forecasts, projected levels of wind generation, renewable standards, carbon taxes/legislation, etc),
2. On-time and delay scenarios for consolidated balancing authority, and
3. On-time and delay scenarios for day-ahead market.
4. Although EAI and EMI have indicated their intent to withdraw from the System Agreement by 2014 and 2016 respectively, whether this is considered in the study and how modeling will be affected by this expressed intent.

Translating the requirements for the study into the specific base cases and change cases will be completed during this phase of the project.

During this phase, the independent TPC working with the E-RSC and FERC will also work with representatives of SPP, the Entergy System and other stakeholders to obtain direction as to how certain policy issues, which may impact the results, should be addressed. For instance, if and how assumptions are to be made regarding renewable portfolio standards, emissions policy, energy efficiency, and demand response and how all of these should be modeled in the studies. The independent TPC working with the E-RSC and FERC will seek input from representatives of SPP, the Entergy System and other stakeholders to make sure these items are addressed appropriately.

The development and implementation of appropriate Confidentiality Agreements will be critical during this phase to protect the proprietary/commercially sensitive nature of system parameters and key study assumptions that affect SPP, Entergy, transmission customers and affected stakeholder groups, as well as enable replication of study results to validate conclusions and enable support of subsequent recommendations.

**Phase III – Setup**
Tasks in this phase are all related to getting the basic data and models organized to support the technical studies conducted in Phase 3. This work can begin as soon as specific resources are assigned to the project.

Upon completion of the Setup Phase, the TPC, facilitated by SPP, will provide a written report followed by a presentation to the E-RSC, FERC, and the stakeholders explaining the data used (including the source of the data) to develop the models and all underlying major assumptions used. The purpose of this presentation is to insure all parties understand and have confidence in the CBA Study.

**Phase IV – Technical Studies**

The bulk of the analysis to integrate the Entergy System into the SPP transmission system is conducted in this phase. The transmission project assessment studies described above are performed in this phase. The TPC will categorize economic projects into: (1) those projects necessary to integrate SPP and Entergy (“Group 1”), and (2) those projects that would produce cost-justified benefits but that are not required to integrate SPP and Entergy (“Group 2”).

The TPC, with SPP’s input, with the required Group 1 reliability projects and the Group 2 economic projects will complete the production costs savings portion of the study.

The TPC will assume a Study Period of 10 years, beginning on 1/1/2013 through 12/31/2022 with financial/economic analyses extended for another 10-20 year horizon.

Similarly, based on the decisions during the scenario analysis phase of the E-RSC and FERC, with input from the other stakeholders, there may also need to be various sensitivity analyses related to different policy issues or other input parameters (e.g. fuel price forecasts, projected levels of wind generation, renewable standards, transmission cost allocation methodologies, etc).

For each major scenario, the analysis will assess whether any net benefits are achievable only through the RTO structure or could also be achieved in whole or part under the existing ICT services arrangement.

**Phase V – Cost Benefit Analysis**

The tasks in this phase focus on assessing all the costs and benefits for integrating the Entergy System into the SPP region. These costs include systems and personnel support costs, as well as SPP or FERC fees and schedules under its OATT. Also, the additional costs and benefits that accrue from individual Entergy Operating Company and/or the Entergy System participation in the SPP OATT will be assessed including changes in systems, personnel, etc. Costs of the reliability and economic upgrades on the Entergy System and on SPP’s system will also be determined using the same methodology used by SPP to assess its member or to integrate other members based on guidance of the E-
RSC. The TPC will determine the costs and benefits of Entergy fully participating in the SPP markets and will also compare to the costs and benefits of maintaining an ICT services arrangement. In addition, SPP working with the TPC will identify how these transmission upgrade costs will be allocated between the existing SPP footprint and the Entergy System. Similarly, the TPC will assess the production cost savings determined in the technical studies and any other costs and benefits identified during the analysis. The final outcome of this phase will be the overall assessment of the net benefits or costs of the proposal for the Entergy System and SPP.

Phase VI – Report & Recommendations

The TPC will prepare a comprehensive report that (1) identifies each major study assumption and the basis for that assumption using the previous written report; (2) identifies all data and other information, to the extent it is not proprietary/commercially sensitive, used to conduct the CBA and the sources for that data; (3) quantifies the benefits and costs associated with Study 1, as well as the estimated benefits and costs to the typical Entergy customer; (4) identifies how changes to the major assumptions would affect the costs and benefits; and (5) offers a recommendation whether membership by the Entergy System in SPP is cost beneficial.

The TPC with SPP will present the report to the E-RSC, FERC, and interested stakeholders.

Stakeholder Participation

- For all interested stakeholders, including Entergy, the TPC will conduct a regular bi-monthly review session to update attendees on progress, obtain feedback and input on key studies assumptions and alternatives being considered and answer questions stakeholders may have at that time.
- For the E-RSC and FERC, the TPC will provide bi-monthly progress reports and additional updates as requested.
ADDENDUM

TO BE DETERMINED