

# Appendix E-2

Deliverability Evaluation Process

Description

for

Summer 2008

Request for Proposals (RFP)

for

Limited Term and Long Term Supply-Side Resources

Entergy Services, Inc. July 28, 2008

#### **SUMMARY**

This Appendix E-2 describes the process, criteria, and methods that ESI intends to use to evaluate the proposals for the Transmission Deliverability Evaluation ("TDE") in this Summer 2008 RFP. The overall TDE methodology seeks to identify transmission constraints that may limit deliveries from resources proposed into the RFP and to evaluate the ability to secure firm transmission service for proposals to prevent transmission flows from exceeding transmission limits, including possible mitigation strategies to alleviate such constraints. The decision regarding whether transmission service will be granted for proposals will be made by the Independent Coordinator of Transmission.

#### **OVERVIEW**

The TDE of the Summer 2008 Limited Term and Long Term RFP evaluation is intended to identify any transmission constraints that may exist for proposals submitted in response to the RFP. As explained in more detail below, the TDE will be used to determine how to proceed with each proposal. The main analysis in the TDE is an "information only" study provided by the Independent Coordinator of Transmission ("ICT"), which identifies potential transmission constraints and assesses the estimated cost of mitigating the constraints.

Upon the receipt of the proposals, the Transmission Analysis Group ("TAG") will identify the specific location and planning region of each proposal. TAG will provide the regional location of each proposal to the Economic Evaluation Team ("EET"). After identifying the location of the resource for each independent proposal, the proposals will be divided into two categories: (1) proposals beginning on June 1, 2009 and (2) proposals beginning June 1, 2010. For each category, proposals originating from the same resource will be grouped together to reflect the longest period of time and the largest capacity quantity proposed without exceeding the maximum capability of the facility. Only one TDE request will be submitted to the ICT per resource, based on the largest quantity and longest time period for each category, to determine if potential deliverability issues exist.

The TDE will be conducted with the assistance of the analysis performed by the ICT. As soon as practicable after the RFP Administrator provides TAG with the redacted proposal information needed for the TDE, TAG will provide the ICT with a list of the resources that were the subject of the proposals received in response to the Summer 2008 RFP. The ICT is the independent entity operating the transmission business of Entergy. The ICT will be requested to conduct a transmission availability study for each resource. Each resource will be submitted to the ICT for the purpose of conducting an "information only" study that will take place outside of the ICT's active transmission reservation queue. The results can be used neither to confirm transmission service nor as the basis to proceed to a facility study if constraints are identified. The evaluation of the studies by TAG of each resource will include the analysis for each proposal originating from a single resource. The results of the "information only" requests relating to proposals that

commence on June 1, 2009 will be received within 60 days of submission, and the results of the requests relating to proposals that commence on June 1, 2010 will be received within 120 days of submission.

The "information only" requests will utilize the same transmission load flow models used in the ICT's active transmission reservation process, namely, the information used in the Available Flowgate Capacity ("AFC") and the seasonal load flow models. Also, any planned transmission facility upgrades identified in Entergy's Construction Plan and the ICT's Base Plan will be included in the study results. Once the requests are formally submitted, the ICT will develop models based on the period of time applicable to the requests. The models used by the ICT will be posted on OASIS. The "information only" studies will be performed independently for each proposal without a portfolio or stacking analysis.

Prior to the submission of the requests, TAG will determine if a potential "undesignation" mitigation option exists for potential constraints that can be identified using the information in the AFC analyzer or seasonal models posted on OASIS. "Undesignation" of a network resource is a term for what has in previous RFPs been referred to as "delist." If an undesignation alternative exists to relieve a transmission constraint for a particular proposed resource that does not involve the undesignation of more than one network resource, TAG will submit an undesignation request along with its incremental request for that resource from the RFP. In the event mitigation strategies, such as undesignation or redispatching, are potential alternatives for obtaining transmission service for a particular proposal, the "information only" results will indicate whether or not these alternatives are potentially viable.

Once the "information only" results are received, the study results will be used to determine how to proceed with respect to each proposal. For the requests relating to proposals with deliveries that begin on June 1, 2009, if constraints still exist after the inclusion of the ICT's Base Plan and Entergy's Construction Plan projects, and the use of the above described mitigation strategies is not sufficient to alleviate the identified constraints, the proposal will be eliminated from further consideration. If there are not any transmission constraints associated with a particular proposal or the use of the above described mitigation strategies is sufficient to alleviate the identified constraints, then the information in the "information only" study results regarding the unconstrained proposal will be provided to the EET for further evaluation. The replacement capacity cost for any successful undesignation mitigation strategy will be factored into the economic evaluation.

For the requests relating to proposals with deliveries that begin on June 1, 2010 and with a contract period of 3 or 5 years, if constraints still exist after the inclusion of the ICT's Base Plan and Entergy's Construction Plan projects, and the use of the above described mitigation strategies is not sufficient to alleviate the identified constraints, then the proposal will be eliminated from further consideration. If there are not any constraints associated with a particular proposal or the use of the above described mitigation strategies is sufficient to alleviate

the identified constraints, then the information in the "information only" study results regarding the unconstrained proposal will be provided to the EET for further evaluation. The replacement capacity cost for any successful undesignation mitigation strategy will be factored into the economic evaluation.

For the requests relating to proposals with deliveries that begin on June 1, 2010 and with a contract period of 10 years or more, if constraints still exist after the inclusion of the ICT's Base Plan and Entergy's Construction Plan projects, and transmission facility upgrades are required, or the use of the above described mitigation strategies is sufficient to alleviate the identified constraints, then the estimated costs of the upgrades and/or the successful mitigation strategies in the "information only" results will be provided for each of those proposals to the EET for further evaluation. The replacement capacity cost for any successful undesignation mitigation strategy will be factored into the economic evaluation.

After the "information only" analyses are provided to the EET, the EET will evaluate combinations of proposals to identify portfolios that meet the overall supply objectives of the Entergy System at the lowest reasonable cost consistent with the provision of reliable service. The selected portfolios will be provided to the TAG to conduct a transmission portfolio analysis. This analysis determines if the output of any portion of each portfolio is restricted by transmission constraints during the Delivery Term.

The transmission portfolio analysis will evaluate the monthly and seasonal capacity deliverability of each portfolio using the same monthly and seasonal load flow cases used for the individual proposals in the "information only" analysis. The TAG can make further recommendations for additions or deletions of proposals from the portfolios based on constraints identified in the portfolio analysis. After considering the economic impact of any limitation in total monthly and seasonal portfolio capacity deliverability, the EET will review the production cost savings of each portfolio or request the analysis of additional portfolios.

Once the EET has ranked the proposals and identified the primary and secondary award lists for both categories of products -- products starting on June 1, 2009 and products starting on June 1, 2010 -- the primary award list of proposals constituting the candidate portfolio will be submitted to the ICT on OASIS through the active transmission reservation queue to obtain firm network resource status.

The TAG and the EET plan to evaluate whether the electrical location of a proposed resource has the possibility to reduce the flow on a major interface or serve as a substitute for units subject to Reliability Must Run ("RMR") directives issued by the Entergy Transmission Business Unit ("TBU") or the ICT. TBU has provided the Entergy System Planning & Operations organization ("SPO") with a list of RMR guidelines under a given set of System loading conditions and generation assumptions. The TAG will utilize this information to identify the potential constraints that require the units to be committed and designated as RMR units based on the

2009 seasonal load flow model. For evaluation purposes only, the TAG will determine if the proposal has effects similar to the Entergy System's network resources on the identified transmission constraints and provide this information to the EET. The actual verification of the substitution of the resource from the proposal for the designated RMR unit will have to be made by TBU and the ICT. The TAG will determine this equivalency by a shift-factor-based analysis performed using Power System Simulator for Engineering (PSS/E) and Managing and Utilizing System Transmission (MUST<sup>TM</sup>).