Winter 2008 Western Region Request for Proposals for Long-Term Supply Side Resources

As part of its notice of intent to issue the Winter 2008 Western Region RFP, ESI has developed the following preliminary set of uniform questions for the benefit of and directed to all Bidders of proposals for development CCGT resources located within the Western Region of the Entergy System. ESI intends to post a list of questions substantially equivalent to this preliminary list as part of the Winter 2008 Western Region Request for Proposals for Long-Term Supply Side Resources, and will require that Bidders who intend to submit a proposal(s) originating from a CCGT resource currently under development, develop a response to each question accordingly.

I. <u>Proposal Information</u>

- 1. Please prepare to provide the following information *as applicable*, during the proposal submission process:
 - a. Economic and Operational information including but not limited to:
 - i) Capacity Quantity (Summer and Winter Dependable)
 - ii) Option Premium (\$/kW-year) or Acquisition Purchase Price
 - iii) Summer and Winter Guaranteed Heat Rate Curves (HHV--Btu/kWh)
 - iv) Variable Operation & Maintenance ("VOM") Payment (\$/MWh)
 - v) Start-up Payment (\$/CT per Start)
 - vi) Existing power sales commitments
 - vii) Anticipated Commercial Operation Date
 - viii) Identification of equipment make, model, and supplier
 - b. Fuel Supply and Transportation information including but not limited to;
 - i) Transferability of existing supply/transportation contracts
 - ii) Access to storage
 - iii) Existing/Planned interconnected pipelines
 - iv) Supply sources and primary receipt points
 - c. Transmission Service/Interconnection information including but not limited to;
 - i) Have any transmission constraints or limitations been identified for the proposal resource?
 - ii) Has a long-term transmission service request been submitted for the proposal resource?
 - iii) Has an application for an interconnection study, interconnection agreement, or operating agreement been filed for the proposal resource? If an application has been filed, has a confirmation been received from Entergy's Independent Coordinator of Transmission?
 - iv) What is the approximate distance to the nearest substation location and voltage level of the development resource?

II. Project Status

A. Construction Cost

- 1. Has a preliminary engineering, order of magnitude construction cost estimate been developed for the facility? If not, when is this activity expected to be completed?
- 2. Has a detailed engineering +/- 25% construction cost estimate or better been developed for the facility? If not, when is this activity expected to be completed?

B. Construction Status

- 1. Has a preliminary design study been performed for the facility? If not, when is this activity expected to be completed?
- 2. Has a detailed engineering study been performed for the facility? If not, when is this activity expected to be completed?
- 3. Has a detailed construction schedule been developed? If so, please provide the schedule. If not, please answer the following questions:
 - a. When is this activity expected to be completed?
 - b. Has a summary level construction schedule been developed? If so, please provide the schedule. If not, when is this activity expected to be completed?
 - c. Has a project master schedule been developed that includes construction milestone dates for each of the following:
 - i. Receipt of Air Permit
 - ii. Financial Close
 - iii. Full Notice to Proceed
 - iv. Site Mobilization
 - v. Delivery of Major Equipment
 - vi. Mechanical Completion
 - vii. Substantial Completion
 - viii. Commercial Operation

If not, when are these activities expected to be completed?

- 4. How much time has been allowed for resolving unforeseen start-up and operations problems?
- 5. Have permits for construction been obtained? If not, when is this activity expected to be completed?

- 6. Has a construction project team been assembled? If not, when is this activity expected to be completed?
- 7. Has an overall schedule been developed for the duration of construction activities? If not, when is this activity expected to be completed?

C. <u>Contract Status</u>

- 1. Is there an EPC contract in place for the facility? If not, please answer the following questions:
 - a. When is an EPC contract expected to be executed?
 - b. Is there a Letter of Intent in place with an EPC provider?
 - c. If no LOI is in place, have proposals been requested from possible EPC providers?
- 2. If Bidder does not intend to use a traditional EPC for the facility, please answer the following questions:
 - a. Are contracts in place for construction management?
 - (i) If not, when is this activity expected to be completed?
 - (ii) Are there Letters of Intent in place with such providers?
 - (iii) If no Letters of Intent are in place, have proposals been requested from providers of construction management services?
 - b. Are contracts in place for cost and schedule control? If not, when is this activity expected to be completed?
- 3. Are contracts in place for the following matters:
 - a. Project scoping?
 - b. Design engineering?
 - c. Support of permitting?
 - d. Project management?

If not, when are these activities expected to be completed?

D. <u>Site Assessment</u>

- 1. Has a risk assessment been completed on the use of existing and shared facilities at the site? If not, when is this activity expected to be completed?
- 2. Has a thorough examination of the construction site area been conducted? If not, when is this activity expected to be completed?
- 3. Has soil sampling and other subsurface investigations of the site been conducted? If not, when is this activity expected to be completed?

4. Have transportation issues been identified and mitigation strategies developed for the construction areas? If not, when are these activities expected to be completed?

E. Engineering

- 1. Have operation and maintenance budget estimates been established for the facility under each of the following categories:
 - a. Variable O&M costs fuel, disposal, make up water, other.
 - b. Fixed O&M costs labor, maintenance materials, overhead burden, insurance, extraordinary maintenance, property taxes.

If not, when are these activities expected to be completed?

- 2. Have heat balance, material balance, process flow diagrams been developed? If not, when is this activity expected to be completed?
- 3. Have auxiliary power requirements been established? If not, when is this activity expected to be completed?
- 4. Have design codes and standards for the facility been developed for the following:
 - a. Architectural?
 - b. Civil Structural?
 - c. Controls and Instrumentation?
 - d. Electrical?
 - e. Mechanical?

If not, when are these activities expected to be completed?

- 5. Has the design basis been established for the facility site plan including the following:
 - a. General arrangement?
 - b. Road and rail access?
 - c. Water supply?
 - d. Wastewater?

If not, when are these activities expected to be completed?

- 6. Has the design basis been established for the facility plot plan including the following:
 - a. The power island?
 - b. Fuel systems?

If not, when are these activities expected to be completed?

7. Has the architectural design basis been established? If not, when is this activity expected to be completed?

- 8. Has the civil structural design basis been established for the following:
 - a. Foundations?
 - b. Proposed loads?
 - c. Design codes and materials?
 - d. Structural steel?
 - e. Chimney?
 - f. Solid waste disposal area?
 - g. Roads?
 - h. Drainage?

If not, when are these activities expected to be completed?

- 9. Has the design basis been established for controls and instrumentation, including the distributed control system and functional logic diagrams? If not, when is this activity expected to be completed?
- 10. Have the electrical design basis and specifications been established, including single line diagram and electrical system descriptions? If not, when is this activity expected to be completed?
- 11. Has design basis been established for mechanical design, including the following:
 - a. Gas turbine and steam turbine specifications?
 - b. Fuel feed systems?
 - c. Control systems?
 - d. Heat exchangers?
 - e. Auxiliary equipment?

If not, when are these activities expected to be completed?

12. Has the design basis been established for balance of plant equipment? If not, when is this activity expected to be completed?

III. <u>Fuel</u>

- 1. What pipelines will interconnect to the facility? Have the interconnect agreements been completed? If not, when is this activity expected to be completed?
 - a. Do easement agreements need to be executed?
- 2. What transportation agreements been completed? If not, when is this activity expected to be completed?
- 3. Have the following elements been determined for the facility's fuel supply:
 - a. Pipeline ability to deliver gas at the required pressure

- b. Adequate measurement facilities and ability to access and monitor such equipment
- c. Determination of control of gas flow
- d. Clarification of points of ownership and clarification of maintenance responsibilities
- e. Process required to adjust gas flow

If not completed, when are these activities expected to be completed?

4. Have the following elements of the gas supply contract been completed? Source of supply Price Term of Contract Firmness of Service Counterparty

If not completed, when are these activities expected to be completed?

IV. Environmental

A. Land/Groundwater

- 1. Have the previous land uses for the facility/site been identified?
- 2. Are there any potentially contaminated activities at nearby facilities/sites that have been identified?
- 3. Has an Environmental Impact Study been conducted for the facility/site?
- 4. Provide the number of groundwater monitoring or production wells at the facility/site and provide copies of state registrations for each well.
- 5. Does documentation exist those details the geological and hydro geological nature of the soil and groundwater underneath the facility/site?
- 6. Has a siting certificate been obtained for the facility/site?

B. <u>Permits</u>

- 1. Provide a list of all environmental permits required by the Owner or any of its affiliates.
- 2. Are there any current activities or uses at the facility/site requiring any permit/registrations for which no permit/registrations has been sought or obtained?

C. <u>Air</u>

- 1. Has the site or facility been evaluated to determine air permitting concerns or needs related to construction, modification or a change in operations required for the CCGT project? If so, state any special concerns or limitations and note whether any air permitting activity has been undertaken by the Owner or submitted to any government agency.
- 2. What are the anticipated or current controls for air emissions and noise?
- 3. Have the anticipated hourly maximum and annual emissions of NOx, SOx, CO, VOC, and PM10 been determined?

D. <u>Water/Tanks</u>

- 1. Has a compliance plan been developed to meet Federal 316(b) regulations, if applicable?
- 2. What is the anticipated source and estimated daily usage of water at this facility? Are there any state usage fees or taxes associated with the water source?
- 3. What is the daily wastewater discharge rate in mgd?

E. <u>Waste</u>

- 1. Describe the type and disposal management method for wastes generated or anticipated to be generated at the location.
- **F.** <u>**Compliance**</u> (Applicable to Brownfield development sites or existing facilities except where noted)
 - 1. Where are copies of any facility or site environmental audit reports maintained, including results and corrective actions? This would include audits conducted internally and externally by federal or state agencies.
 - 2. Have there been any compliance actions as a result of prior environmental audit findings?
 - 3. Has the facility/site received any complaints from governmental or citizen groups concerning environmental matters involving the Owner or any of its affiliates? (Greenfield development proposals prepare to respond as well)
 - 4. Does the Owner have (i) an environmental policy or statement of environmental commitment; and (ii) an environmental management system? (Greenfield development proposals prepare to respond as well)

- G. <u>Operations</u> (Applicable to Brownfield sites or existing facilities except where noted)
 - 1. Are there any proposed or pending environmental regulatory changes that would affect the plant operating status? Will facility equipment changes be required?
 - Are there any environmental authorizations that (i) limit production or throughput; or (ii) would render it necessary to increase significantly the volume of production or throughput at the facility? (Greenfield development proposals prepare to respond as well)
 - 3. Have there been any discontinued operations of the Owner and any of its affiliates at the location of the facility/site?
 - 4. Has an assessment been made to determine if any material capital expenditures or material expenses need to be incurred to comply with any existing environmental regulations? (Greenfield development proposals prepare to respond as well)
 - 5. Has an assessment been made to determine if any material capital expenditures or material expenses need to be incurred to comply with any environmental regulations that have been proposed (whether in preliminary or final form) but have not become effective? (Greenfield development proposals prepare to respond as well)