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Minimum Requirements

For

2020 Request For Proposals For Combined-Cycle Gas Turbine Capacity and Energy Resources For Entergy Texas, Inc.

Entergy Services, LLC

February 07, 2020

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MINIMUM REQUIREMENTS FOR DEVELOPMENTAL RESOURCES

This Minimum Requirements for Developmental Resources sets forth certain minimum requirements that a Developmental Resource[1] must satisfy in the 2020 Request for Proposals for Combined-Cycle Gas Turbine Capacity and Energy Resources for Entergy Texas, Inc. (the "RFP") issued by Entergy Services, LLC ("ESL") on behalf of ETI (the "Minimum Requirements"). The proposed Minimum Requirements are specified in the chart below, are in addition to other RFP requirements that a bidder in the RFP ("Bidder") must satisfy, and apply to Developmental Resources offered in proposals submitted in the RFP. The Minimum Requirements are designed to ensure that a Developmental Resource proposed in the RFP is developed to a degree meriting detailed, full-scale evaluation by the appropriate RFP evaluation teams and potential selection. Bidders are advised that the RFP seeks information from each Bidder related to the Developmental Resource(s) included in its proposal(s) that significantly exceeds the information necessary for its proposal(s) to meet the Minimum Requirements. Bidders are further advised that satisfaction of the Minimum Requirements does not ensure that a proposal will be eligible for participation in the RFP; other RFP eligibility requirements, specified in the RFP, must also be met.

Criterion	**Minimum Requirement**	**Information Required to Evaluate Proposals against the Minimum Requirements**
Project Overview	Complete project description.	Bidder must provide a reasonably thorough and accurate summary description of the project, including, but not limited to, the proposed location, site description, generation technology, major equipment, design basis, water source(s), fuel supply and transportation source(s), plan for engineering, procurement, and construction, environmental compliance, and permitting, status of electric and other utility interconnection and non-standard project components/considerations, as well as a summary of the work

[1] ["Developmental Resource" means a generation facility that, as of the date of Bidder's proposal with respect to such facility and the execution of a definitive agreement (if any) in respect of such proposal, (i) (a) has never been placed into commercial service and has not been accepted by its owner as having achieved (or been deemed to have achieved) the requirements for commercial operation (or analogous term) under the applicable project construction contracts or (b) has been and remains removed from commercial service and (ii) will make available and generate the power to be provided to Buyer under a definitive agreement from new power generation equipment that meets the requirements of this RFP.]

		completed on each of the Minimum Requirements. The provision of information in the summary description does not limit the requirement for Bidder to provide the information sought below.
Bidder Experience	Bidder (or the person that will be the seller under Bidder's proposal ("Seller")) must have completed at least one (1) utility-scale project with the generation technology to be offered in Bidder's proposal (*e.g.*, one utility-scale combined-cycle gas turbine ("CCGT") project) and have key project team members who, in the aggregate, have had direct responsibility for the development of at least three (3) completed utility-scale projects, regardless of generation technology.	Bidder must provide a summary that includes the key project team members and for each provides the member's relationship to Bidder (*e.g.*, employee of Bidder or Bidder parent), background, current title/position, and development experience. The summary must also include a description or list of relevant projects that Bidder or Seller has completed.
Project Development	Bidder must provide reasonable evidence that project development for the proposed resource is beyond the conceptual phase for design, engineering, and plan for execution.	○ *Engineering*: Bidder must provide reasonable evidence that the project has been translated from the screening and planning phase of development into a project definition of sufficient detail (10% to 50% complete) and quality to ensure the efficient progression of detailed engineering and procurement if the project is selected. ○ *Cost Estimate*: Bidder must provide reasonable evidence that its project cost estimate is based on front-end engineering from a qualified external and/or internal source that supports a Class 3 (as defined by AACE standards) cost estimate (-20% to +30%). At a minimum, the cost estimate should account for the following: i) mechanical and electrical equipment; ii) instrumentation and controls; iii) piping; iv) miscellaneous buildings; v) structural steel;

		vi) site work and foundations; vii) retrofit allowance (if applicable); viii) sales tax; ix) engineering costs; x) indirect costs; xi) spare parts; xii) escalation; xiii) construction financing costs; xiv) pipeline(s) interconnection costs; xv) fuel handling and storage equipment; and xvi) any other category not listed here and reasonably expected to be included for the proposed technology**.** o *Project Schedule:* Bidder must provide, at a minimum, a Level 2 (as defined by AACE standards) project schedule that supports all aspects of project execution, including development, design, engineering, financing, procurement, permitting, interconnection, construction, commissioning, and testing, and project support materials that, along with the information provided in response to ESL's due diligence questions in the RFP, demonstrate Bidder's (or Seller's) capability to meet the date by which commercial operation of the Developmental Resource is guaranteed by Bidder to occur

		and related project milestones for the proposed resource (financial closing, partial and full notices to proceed for major project contractors, applications for and receipt of major permits, major equipment deliveries, foundation pours, completion of gas, power, water, wastewater, and other material interconnections, etc.).
Certain Required Project Attributes	**Technology:** Commercially-proven CCGT technology.[2] **Developmental Resource:** Single integrated plant. **Size:** 1,000 to 1,200 MW (~~98~~93° Fahrenheit and ~~75~~57% relative humidity ("Summer Conditions"), at full load, including duct-firing if included as part of the facility). **Net Unit Heat Rate at Summer Conditions:** No greater than 7,000 Btu/kWh (HHV) at full output, without duct-firing (if included as part of the facility). **AGC:** Required.	Bidder must identify the original equipment manufacturers of the major equipment being proposed and detail the (technology-based) operating parameters of each generating unit in the Developmental Resource (*e.g.*, net electrical generating capacity, net heat rate, and operating ranges at Summer Conditions, maximum ramp rates, start times (cold, warm, and hot), start restrictions (if any), minimum dispatch levels, and minimum down times) and the Developmental Resource as a whole. Additional resource design and operating requirements will be set forth in the RFP. Note: For any power purchase or tolling agreement arising out of the RFP, ETI intends to have the flexibility to schedule and dispatch the Developmental Resource as if the resource were its own generation resource having the same or a similar type of generation technology. To ensure clarity, the RFP will not permit

[2] For the RFP, commercially-proven technology is technology that ESL determines has, as of August 2020 [the time of Proposal Submission], a sufficient amount of operational, maintenance and performance data and information demonstrating, to ESL's satisfaction, (i) the ability to provide sustained, reliable, and otherwise acceptable performance in the CCGT configuration proposed and (ii) the CCGT technology's suitability for service in the resource's intended roles as an ETI resource [(e.g., meeting local voltage support and load-serving responsibilities in a load pocket)]. If a Bidder is unclear whether a CCGT generation technology that Bidder intends to or may propose in the RFP is commercially-proven technology for purposes of the RFP, Bidder may submit a request to ESL and the Independent Monitor seeking the desired clarification and ESL will answer the request. Please see Section [7.1] of the Main Body (or contact the bid event coordinator specified in the Notice of the RFP) for information regarding the submission of questions about the RFP to ESL and the Independent Monitor. Bidder may be required to supply information concerning the subject CCGT technology and potential Developmental Resource to ESL and the Independent Monitor to assist ESL in the development of its response.

	Power Augmentation Systems, including steam / water / air injection, inlet fogging, and wet compression are not permitted. Evaporative cooling is permitted.[3] **Heat Rejection Systems, including (if applicable) the main condenser and mechanical draft** **Cooling Tower:** Must be sufficiently sized to allow continued operation of all combustion turbines in the event of a steam turbine trip. **Joint Ownership (Acquisition Resources Only):** Not permitted. Resources offering maximum operational flexibility are preferred.	a system sale from multiple resources.
Project Location	The resource must be located within and electrically interconnected directly to the Entergy Transmission System within the ETI planning region known as the "Eastern Region" ("Region").[4] The proximity of the resource to existing and anticipated load in the areas of Beaumont, Port Arthur and Orange will be considered in evaluating the suitability of the resource to serve ETI's needs. Please see	○ Bidder must include a map and plat of the project location.

[3] Inlet evaporative cooling is not power augmentation for purposes of the RFP.

[4] If a Bidder is unclear whether a Developmental Resource that Bidder intends to or may propose in the RFP would be located within the [Eastern Region], Bidder may request that ESL advise Bidder whether the Developmental Resource is within the [Eastern Region] and ESL will answer the request. Please see Section [7.1] of the Main Body for information regarding the submission of questions about the RFP to ESL and the Independent Monitor. Bidder may be required to provide information concerning the location and planned interconnections of the Development Resource and other relevant information to assist ESL in the development of its answer.

	Attachment 1 below for a map of the Region.	
Site Control	Bidder must show that Seller (or an affiliate under Seller's control) has actual control of the site on which the project would be located or has a valid, binding, and enforceable contract to obtain control of the project site for the full delivery term proposed by Bidder or the expected useful life of the resource. A letter of intent, memorandum of understanding, or other similar document or agreement contemplating the subsequent negotiation of a definitive agreement, in each case regarding Seller's (or an affiliate's) control of the project site, will not satisfy the foregoing site control requirement.	o Bidder should provide an appropriately redacted copy of the definitive agreements or documents establishing the requisite control. o Bidder must provide its own project site. ETI will not offer to third-party bidders the use or control of any potential project site that ETI owns or controls.
Fuel Supply & Transportation	Bidder must have a viable plan for fuel supply and transportation capable of meeting the RFP's requirements for the resource, and provide reasonable support for the viability of the plan.	The fuel supply and transportation plan should include (and provide reasonable support for the viability of) the project's fuel supply, source(s), transportation, storage (if applicable), and infrastructure for the delivery and processing of fuel for the resource. o Bidder must identify all available natural gas pipelines that would reasonably be considered candidates for interconnection with the project. o Bidder must separately identify the cost estimate to interconnect the resource with each natural gas pipeline that would be directly interconnected to the project. o Bidder must identify the natural gas pipeline interconnection(s) covered in and supported by the project cost estimate. Bidder should also include the pipeline operating pressure(s), the pipeline's ability to maintain the

		pressure necessary to serve the project, any necessary compression equipment (including capacity), and new pipeline (including material details such as type, size, length, number/length of river or wetlands crossings) required for any interconnection. o Bidder must provide reasonable evidence that the natural gas pipeline(s) that would serve the project can provide firm capacity as well as necessary flexible flow parameters that would meet the operating design parameters of the unit, such as gas quality, and identify any additional services offered by the pipeline (e.g., imbalance, non-ratable service, swing capability, imbalance provisions) and level of firm deliverability (e.g., primary firm, secondary firm, any access to storage) and any other aspects that could meet the appropriate level of reliability. o Bidder must identify the pipeline easements and rights-of-way necessary for each pipeline interconnection covered in and supported by the project cost estimate.
Environmental Compliance, Assessment & Permitting	Bidder must provide a viable environmental compliance plan, including reasonable descriptions of Bidder's plan to engineer, design, develop, procure, build, test, own/lease, operate, maintain, and repair the project (including the project site) in compliance with all applicable environmental laws, permits, authorizations, and other requirements, and provide reasonable support for the viability of the plan. Bidder must show that due diligence has been completed and action plans established to a level sufficient to support all permitting activities.	o Bidder must provide a reasonable summary of the plan for complying with environmental laws and requirements applicable to the project. o Bidder must show that all permitting due diligence necessary to prepare and submit applications or requests for all required permits has been completed (*e.g.*, a copy of the draft permit application(s) or a summary of the permit application requirements, including descriptions of the plan to meet those requirements and obtain the permit(s)). o Bidder must provide a Phase I environmental site assessment in accordance with ASTM E1527-13 and an accurate summary of such assessment.

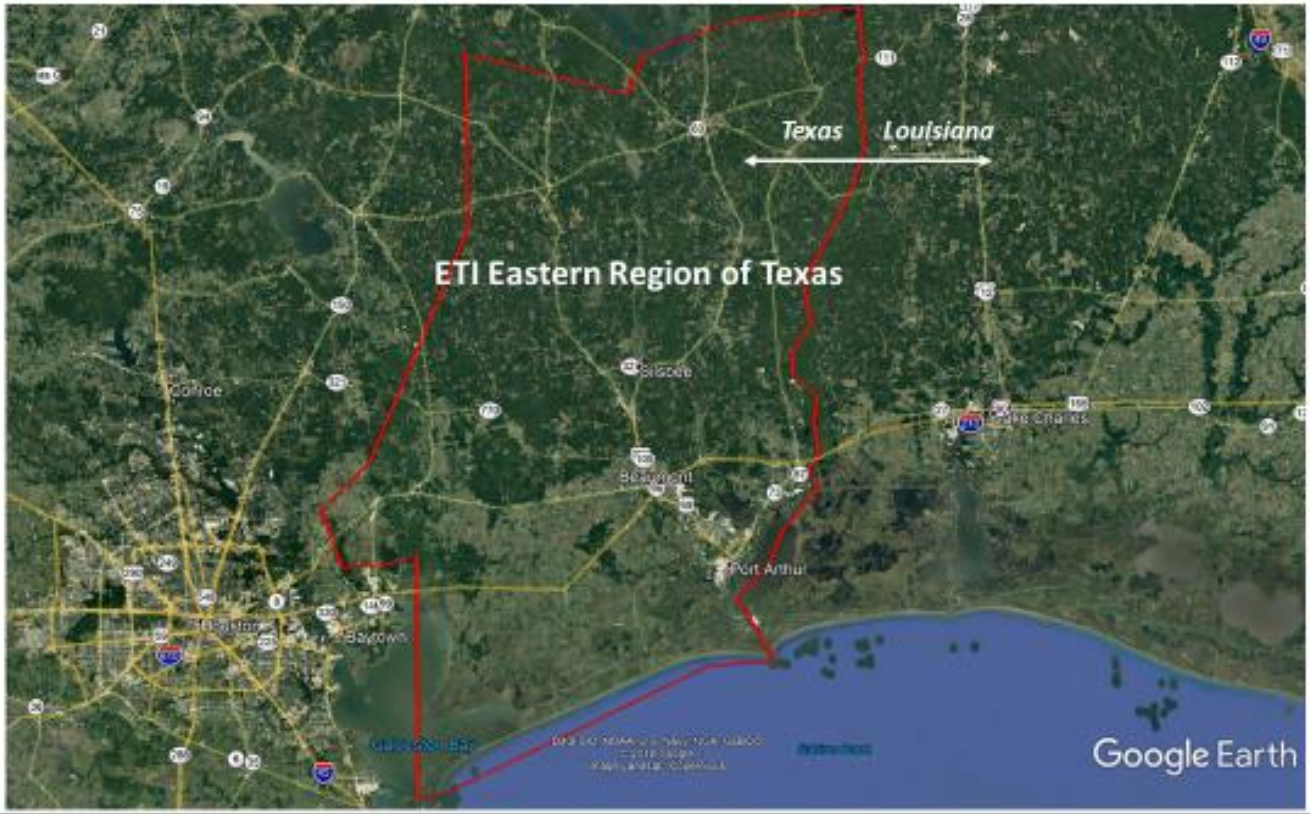
		○ Bidder must disclose any reasonably anticipated material permitting obstacles and any pending claim, action, or dispute related to permitting activities related to the resource. ○ Bidder must submit its reasonably detailed local community engagement and action plans related to permitting activities related to the resource. ○ Bidder must provide a detailed flood mitigation plan if location is within a 100-year floodplain or a flood prone area. ○ Bidder must address known or anticipated permitting obstacles if the resource location is within a non-attainment area for one or more criteria pollutants.
Electric Interconnection/ Transmission Service	Bidder must have submitted a complete generator interconnection application ("IA") for the proposed resource in accordance with the MISO generator interconnection process. The resource must be able to be qualified as a designated network resource and fully deliverable and to obtain a pricing node in MISO dedicated exclusively to the resource. Information regarding the MISO generator interconnection process can be found on the MISO website: https://www.misoenergy.org/planning/generator-interconnection/	○ Bidder must provide to bid event coordinator a copy of the IA application submitted to MISO and MISO queue number within 5 business days after such application to MISO. ○ Bidder's IA application must have sought from MISO (i) a quantity of energy resource interconnection service ("ERIS") that equals or exceeds the winter rating[5] of the resource, and (ii) a quantity of network resource interconnection service ("NRIS") that equals or exceeds the summer rating of the resource. ○ Bidder must identify the substation(s) and applicable voltage bus to which the project would be directly electrically interconnected. Note: Electrical interconnection and deliverability costs and risks associated with a resource may be an important part of the evaluation of proposals in the RFP. Bidders should be prepared to develop and provide detailed information about the electrical interconnection and deliverability costs and risks associated with

[5] Reference conditions of ~~69.2~~10° Fahrenheit and ~~91.9~~60% relative humidity at full load, including duct-firing (if included as part of the facility).

		their resources/proposals. Some of this information could require significant time and the expertise of one or more third parties to develop and prepare. Bidders will bear exclusive responsibility for obtaining and paying for electrical interconnection and transmission service for their proposed resource, including, without limitation, the costs of interconnection upgrades and upgrades necessary for the resource to be granted the amounts of ERIS and/or NRIS sought and provided for in the IA, and for developing their proposals to include and account for, without limitation, all such upgrades.
Water Source, Treatment, and Disposal	Bidder must have a viable plan for securing and maintaining adequate and sustainable supplies of water capable of meeting the maximum design requirements of the proposed resource at Summer Conditions, the treatment of water for the resource, and disposal of waste water, and provide reasonable support for the viability of the plan.	o Bidder must describe the proposed primary source(s) and quality of the project's raw water supply, the physical and contractual requirements necessary to secure and properly utilize the water supply, the adequacy and availability of the water supply to meet the generating resource requirements at full load during Summer Conditions (instantaneously and over the proposed delivery term or life of the proposed project), the applicable water quality specifications for the resource and chemical or physical treatment requirements, and any reasonable available water supply and treatment alternatives. o Bidder must also describe its wastewater disposal plan, which should include reasonable descriptions of the source(s) and type(s) of wastewater to be disposed of and the means and manner of disposal.
Project Structure & Finance	Bidder must have a viable plan for the project structure and financing the project that is supported by recent experience and/or market intelligence. Bidder may not offer a PPA or Toll that will result in the recognition of a long-term liability by ETI or any of its affiliates on its or any of its	o Bidder must describe the plan to finance the project, including a detailed description of any application for publicly subsidized loans, debt guarantees, tax relief, bonds, or other public funding. o Bidder must describe the projected ownership structure of the Developmental Resource prior to the delivery term commencement date or closing (as applicable) and, if

	affiliates' books.	proposing a power purchase or tolling agreement, after the delivery term commencement date. o Bidder must be able to provide evidence of at least one recent successful project financing completed by Bidder, Seller, or the parent of Seller or that potential lenders have been engaged in initial, bona fide commercial discussions to ascertain interest in financing the project, financing market conditions, and indicative financing terms. o Bidder must describe how it intends to meet the applicable credit/collateral requirements specified in the RFP. o If Bidder offers a PPA or Toll in a proposal submitted in this RFP, Bidder must include with its proposal a certification that, to the best of Bidder's knowledge, the proposed PPA or Toll will not result in, under the accounting standards in effect at the time of the certification or that will be in effect at any time during the contract term of the proposed PPA or Toll, the recognition of a long-term liability by ETI or any of its affiliates on its or any of its affiliates' books. The certification must be prepared under the direction of and signed by the Principal Accounting Officer (under the Securities and Exchange Commission rules) or other officer of Bidder, or a parent thereof, who performs a managerial accounting function, has expertise in the recognition of long-term liabilities by purchasers in PPAs or Tolls, and has been involved in the preparation of the proposal ("Accounting Officer").

Attachment 1
Map of the Region



The red line on the map indicates the approximate geographic border of the ETI Eastern Region of Texas. The border is a function of the following ETI transmission tie-lines:

Doucette – Deer 138 kV	Dayton Bulk – New Long John 138 kV	Hartburg-Rhodes 500kV
Cypress – Honey Island 138 kV	Dayton Bulk – Eastgate 138 kV	Bon Wier-Cooper 138kV
Cypress – Rye 138 kV	Orange-Toomey 138kV	Leach-Fairmount 138kV
Batiste Creek – Jacinto 230 kV	Orange-Hollywood 138kV	Toledo Bend-Vanply 138kV
China – Heights 230 kV	Sabine-Mud Lake 230kV	Toledo Bend-Leesville 138kV
	Hartburg- Layfield 500kV	