

# Appendix D

# *Minimum Requirements For Developmental Resources For*

# 2016 Request For Proposals For Long-Term Renewable Generation Resources For Entergy New Orleans, Inc.

## **DRAFT**

Entergy Services, Inc. May 6July 13, 2016

#### Appendix D

#### MINIMUM REQUIREMENTS FOR DEVELOPMENTAL RESOURCES

This Minimum Requirements for Developmental Resources sets forth certain minimum requirements that Developmental Resources must satisfy in the 2016 Request for Proposals for Long-Term Renewable Resources for Entergy New Orleans, Inc. ("ENOI") (the "RFP") issued by Entergy Services, Inc. ("ESI") on behalf of ENOI (the "**Minimum Requirements**"). The proposed Minimum Requirements are specified in the chart below, and are in addition to other RFP requirements that a Bidder in the RFP must satisfy. The Minimum Requirements are being created to ensure that a Developmental Resource offered in any proposal submitted in response to 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 will seek a substantial amount of information about any Developmental Resource proposed by a Bidder, not just the information necessary for a Bidder to meet the Minimum Requirements, and that satisfaction of the Minimum Requirements, standing alone, does not ensure a proposal's eligibility for participation in the RFP; other RFP eligibility requirements specified in the RFP must also be met.

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum Requirements
Project Overview	Complete description of the Developmental Resource project.	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) (if applicable), plan for engineering, procurement, and construction, environmental compliance, and permitting, status of interconnection and non- standard project components/considerations, as well as a summary of the work 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.

Form

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Appendix D
Minimum Requirements for Developmental Resources

	Requirements
Bidder (or the Person that will be the seller under Bidder's proposal or a parent of either) must have completed at least one utility-scale project with the proposed technology and have project team members with a combined direct responsibility for at least three (3) completed utility-scale projects, regardless of technology.	Bidder must provide a summary that includes the key project team members, their relationship to Bidder ( <i>e.g.</i> , employee of Bidder or Bidder parent), their backgrounds, current title/position, and development experience, a description or list of relevant projects they and Bidder or Seller have completed, including project size and location.
Bidder must provide evidence that project development for the proposed resource is beyond the conceptual phase for design, engineering, and plan for execution.	• <i>Engineering</i> : Bidder must provide evidence that the project has been translated from the screening and planning phase of development into a project definition of sufficient detail and quality to allow the efficient progression of detailed engineering and procurement if the Developmental Resource is selected.
	<ul> <li><i>Cost Estimate</i>: Bidder must provide 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%). (Bidders should not read the cost estimate allowance incorporated in this minimum requirement as indicating that Bidders may offer contingent pricing in their RFP proposals, except to the extent the contingency is solely the result of discrete, separately priced options offered to ENOI in Bidder's proposal and that are permitted by the RFP.) At a minimum, the cost estimate should account for the following: <ol> <li>generation equipment (<i>e.g.</i>, wind turbines, solar panels, hydro turbines, etc.) and technology;</li> </ol> </li> </ul>
	parent of either) must have completed at least one utility-scale project with the proposed technology and have project team members with a combined direct responsibility for at least three (3) completed utility-scale projects, regardless of technology. Bidder must provide evidence that project development for the proposed resource is beyond the conceptual phase for design, engineering, and plan for

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		Requirements
		iii) instrumentation and controls;
		iv) piping;
		v) miscellaneous buildings;
		vi) utilities and major commodities ( <i>e.g.</i> , steel, copper, etc.);
		vii) structural steel;
		viii) site work and foundations;
		ix) retrofit allowance (if applicable);
		x) sales and other applicable taxes;
		xi) engineering costs;
		xii) labor costs;
		xiii) interconnection costs;
		xiv) deliverability costs;
		xv) indirect costs;
		xvi) spare parts;
		xvii) escalation;
		xviii) licenses and permits;
		xix) construction financing costs;
		xx) taxes, including tax benefits (but excluding, for acquisition proposals, tax benefits unavailable to ENOI after the closing);
		xxi) project site and related real property costs; and
		xxii) insurance; and
		xxiii) any other category not listed here and reasonably expected to be
		included for or applicable to the proposed technology.
		• 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,

Appendix D Minimum Requirements for Developmental Resources

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Form

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		Requirements
		procurement, permitting, interconnection, construction, and testing, and project support materials that, along with the information provided in response to ESI'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 have occurred and related project milestones for the proposed resource (financial closing, partial and full notices to proceed for major project contractors, completion of material environmental studies, applications for and receipt of major permits and environmental attribute accreditation, major equipment deliveries, foundation pours, completion of power and other material interconnections, etc.).
Project	ENOI prefers, but does not require, that	Power from External Resources must be proposed to be physically delivered
Location	resources other than Aggregated Solar PV Resources be located in or near the ENOI Load Zone. Aggregated Solar PV Resources must be located entirely within the ENOI Load Zone. Resources interconnecting at a distribution voltage level (less than 69 kV) must be located within specified portions of the ENOI Load Zone (as shown in the map in Section 2.4 of the Main Body).	to a specified Physical Delivery Point on the MISO South transmission system.portion of the MISO System. Bidders proposing resources other than an Aggregated Solar PV Resource must include a map and plat of the project location. Bidders proposing an Aggregated Solar PV Resource must provide the location of each host site or, if providing a site procurement plan pursuant to the "site control" Minimum Requirement, the information described in clauses (i) and (ii) below in such Minimum Requirement.
Site Control	For resources other than an Aggregated Solar PV Resource, Bidder must show that Seller (or an affiliate under Seller's control) has control of the site on which the project would be located or has a	<ul> <li>Bidder should provide a redacted copy of the definitive agreements or documents establishing the requisite control.</li> <li>Bidder must provide its own project site. ENOI will not offer to third-party bidders the use or control of any potential project site that ENOI owns or controls.</li> </ul>

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Appendix D
Minimum Requirements for Developmental Resources

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		Requirements
	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 contemplating the	
	subsequent negotiation of a definitive	
	agreement, in each case regarding	
	Bidder's control of the project site, will	
	not satisfy the foregoing site control	
	requirement.	
	If a Bidder of an Aggregated Solar PV	For an Aggregated Solar PV Resource, any site procurement plan relied upor
	Resource (or Seller or an affiliate under	by a Bidder that has not obtained the requisite site control as of proposal
	Seller's control) has not obtained site	submission must identify and describe, in reasonable detail, (i) the sites that
	control over each of the sites upon	Bidder/Seller intends to utilize to locate such facilities, (ii) any back-up sites
	which its individual Solar PV generating	that Bidder/Seller intends to utilize if it is unable to obtain the requisite
	facilities will be located, such Bidder	control of the sites identified in clause (i) above, (iiii) the actions taken to
	must have in place at the time of	date to obtain the requisite site control, (iiiiv) the future actions Bidder/Seller
	proposal submission (and provide to ESI	intends to take to obtain the requisite site control, and (ivv) the timeline for
	upon request) a reasonable written site	establishing the requisite site control. In addition, the site procurement plan
	procurement plan to gain site control by	must assess in reasonable detail the risk that Bidder/Seller would be unable t
	a time that will support the project	obtain the requisite site control consistent with the schedule set forth in the
	schedule (including the in-service date)	timeline, including, without limitation, the material impediments to obtaining
	for the proposed resource.	site control.

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Category	Minimum Requirement		formation Required to Evaluate Proposals against the Minimum equirements
Energy Source and Waste Disposal Plans	Bidder must have a viable plan for both the source of energy for and the disposal of waste from the project that is viable and, if implemented, would meet the requirements of the RFP applicable to Bidder's proposal, and provide reasonable support for the viability of the plan.	<u>о</u>	<ul> <li>Bidder must provide reasonably verifiable profile data for at least two (2) recent years, using established and accurate data measurement equipment at or near the site of the resource, to substantiate the resource's expected production levels.</li> <li>Bidder must provide expected hourly generation profiles and the methodology and supporting documentation for the determination of such generation. If available, Bidder should include supporting meteorological data from satellite, onsite, or nearby ground-mounted data measurement devices and/or a third-party resource assessment study. Preferably, the profiles should be based upon two (2) or more recent years of onsite meteorological data, to the extent available.</li> </ul>
		0	Bidder must provide P50, P75, P90, and P99 annual generation levels and the methodology and supporting documentation for the determination of such generation levels.
		0	Include degradation rates over the term of the contract.
		0	For wind resources, Bidder must describe any expected sector management requirements.
		0	For resources that have a <u>commercial</u> waste component (including solid waste), Bidder must provide its waste disposal plan, which should include reasonable descriptions of the types of waste to be disposed of, the means and manner of disposal, and any material environmental issues associated with disposal known to or reasonably foreseeable by Bidder, and provide reasonable support for the viability of the plan.

Form

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		Requirements
Environmental 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 and material environmental attribute accreditation activities.	<ul> <li>Bidder must provide a reasonable summary of the plan for complying with environmental laws and requirements applicable to the project.</li> <li>Bidder must show that all permitting due diligence necessary to prepare to apply for all required permits has been completed (<i>e.g.</i>, 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)).</li> <li>Bidder must provide reasonably detailed plans to complete a Phase I environmental site assessment in accordance with ASTM E1527-13 and evidence and documentation of due diligence specific to the proposed site sufficient to support such an assessment (<i>e.g.</i>, documentation of work necessary to meet the primary components required under a Phase I according to ASTM E1527) or, if completed, an accurate summary of such assessment.</li> <li>Bidder must disclose any reasonably anticipated material permitting obstaclesobstacle and any pending claim, action, or dispute related to its permitting activities related to the resource.</li> <li>Bidder must submit its reasonably detailed local community engagement and action plans related to permitting activities related to the resource.</li> <li>Bidder must have the necessary licenses and other authorizations under applicable laws and regulations to submit a proposal to ENOI in this RFP or offer to construct a Developmental Resource that would provide products to ENOI.</li> </ul>
Electric	For a Developmental Resource to be	Transmission Interconnection:
Interconnection	interconnected at a transmission level	

Form

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Appendix D
Minimum Requirements for Developmental Resources

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum	
	_	Requirements	
/Transmission/ Distribution	directly to the MISO System, Bidder, Seller, or a third party acting on its or their behalf must complete and submit to MISO a complete interconnection application (" <u>IA</u> ") for the proposed resource in accordance with the MISO generator interconnection process <u>- and the paragraph below</u> . The resource must be able to be qualified as a long-term (or have a third party obtain such service or so qualify the resource) network resource and fully deliverable to MISO South.	<ul> <li>Bidder must provide a copy of the IA application submitted to MISO and MISO queue number.</li> <li>Bidder's IA must have sought a quantity of network resource interconnection service ("<u>NRIS</u>") from MISO sufficient to allow the resource to be eligible to receive the maximum capacity credits a resource of its capacity size could receive under applicable MISO rules or allocation and prioritization of NRIS for the resource such that the NRIS level associated with the resource capacity that would be under contract to ENOI could not limit the amount of MISO capacity credits that ENOI would receive for any planning period during the delivery term to be proposed ("<u>Minimum Required NRIS Quantity</u>").</li> </ul>	
	The application must request at least the amount of NRIS necessary for the resource to have the Minimum Required NRIS Quantity. The completed application must identify the location of the proposed resource, the Balancing Authority substation to which the proposed resource would be interconnected, and the Electric Interconnection Point. For External Resources, Bidder, Seller or a third party acting on its or their	<ul> <li>External Resources:</li> <li>For External Resources, Bidder must have initiated the process(es) for receipt of the interconnection, deliverability, and transmission service required under the terms of the RFP for the proposed resource, completed and submitted to the applicable Balancing Authority/transmission owner the appropriate application(s), including the required supporting information, to receive such service, and provided as part of its Proposal Package a complete and accurate copy of each such application.</li> <li>Distribution Interconnection:</li> <li>Bidders selected for negotiation of a Definitive Agreement or so directed by ESI will be required to prepare, complete, and submit to ENOI, in accordance with the applicable application requirements (and, if applicable, ESI's directions), an interconnection service application for the proposed distribution-level resource. Bidder must provide to the RFP</li> </ul>	

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		Requirements
	behalf will be required to obtain both interconnection service and firm deliverability/transmission service to	Administrator complete and accurate copies of any interconnection application submitted to ENOI pursuant to ESI's direction and other documents related to such application required by ESI.
	enable Seller to deliver <u>at least</u> the maximum amount of energy that Seller may deliver to the Physical Delivery Point under a Definitive Agreement.	• Bidder must interconnect the resource to a portion of the distribution system owned by ENOI, and the proposed resource must be compliant with applicable laws, rules, codes, contractual requirements (including, without limitation, those in applicable interconnection contract(s)), and health and safety standards, such as, for example only, IEEE 1547.
	Bidders proposing to interconnect a resource to the ENOI distribution grid may, but are not required to (unless otherwise directed by ESI), complete, execute, and submit (or have Seller or a third party complete, execute, and submit) the Appendix H, Exhibit H-3, Distribution Inter-Connection Process	<ul> <li>Resources proposed to be interconnected at a distribution level should be designed to deliver three-phase alternating current at the required voltage to the distribution grid. Bidders must furnish revenue quality metering equipment and systems (including RTU equipment) with power quality (harmonics, flicker, etc.) monitoring features, all meeting applicable ENOI requirements, and step-up transformers as provided in the Main Body.</li> </ul>
	application. The resource must be able to be qualified as a load modifying resource in MISO and may not require more than 10 MW of distribution interconnection service.	Bidders should note that 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 their resources/proposals. Some
	A proposed resource may not interconnect to the ENOI distribution grid "behind the meter" or be offered to ENOI under or as part of a "net metering" billing arrangement.	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/ <u>distribution</u> service for their proposed resource, including, without limitation, the costs of interconnection upgrades and upgrades necessary for the required amounts of NRIS and other interconnection service

Form

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

Appendix D
Minimum Requirements for Developmental Resources

Form

Category	Minimum Requirement	Information Required to Evaluate Proposals against the Minimum
		<b>Requirements</b> for the resource, and for developing their proposals to include and account for, without limitation, all such upgrades.
Water Source	Bidder must have a viable plan for access to adequate and sustainable supplies of water capable of meeting the maximum design requirements of the proposed resource, the treatment of water for the resource, and provide reasonable support for the viability of the plan.	For renewable resources that require water for the generation of power or have a significant need for reliable water supply for normal operation and/or maintenance of the resource, Bidder must provide a viable water supply plan, including reasonable descriptions of the proposed primary source and quality of the project's raw water supply and any physical and contractual requirements necessary to secure and utilize the water supply.
Project Structure & Finance	Bidder must have a viable plan for project structure and financing that is supported by recent experience and/or market intelligence.	<ul> <li>Bidder must describe the plan to finance the project, including a detailed description of any application for publicly subsidized loans, debt guarantees, tax relief or incentives, bonds, or other public funding.</li> <li>Bidder must describe the projected ownership structure of the Developmental Resource prior to the delivery term commencement date</li> </ul>
		and after the delivery term commencement date (for PPA proposals) or prior to the closing (for acquisition proposals).
		• 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, market conditions, and indicative terms.
		• Bidder must describe how it intends to meet the applicable credit/ collateral requirements specified in the RFP.

Bidders that fail to meet one or more of the Minimum Requirements may be required, at ESI's election, to provide, or to have Seller provide, supplemental security (i) as a condition to continued participation in the RFP and, if applicable, (ii) to support any letter of intent

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

entered into by Bidder or Seller (or a party acting on its behalf) in connection with the RFP (see Section <u>56</u>.2 of the Main Body and Appendix F). The security would be separate from, and in the case of clause (ii) above, incremental to, any letter of credit required to be posted in connection with clause (ii). The purpose of the enhanced collateral support would be to hedge the risk that Bidder (or Seller) will withdraw the proposal, substantially change the material terms of the proposal, or be unable or choose not to honor the terms of the proposal prior to completing the negotiation of a <u>definitive agreementDefinitive Agreement</u> between Seller and ENOI. The amount of the supplemental security would be determined by ESI on a case-by-case basis and would be dependent upon its assessment of the Minimum Requirements not satisfied by Bidder. ESI's assessment would take into consideration evidence provided by Bidder that it has been using, continues to use, and will continue to use good faith efforts to meet the Minimum Requirements that Bidder has failed to satisfy. The amount of supplemental security a Bidder may be required to post would not exceed \$1 million.

If called upon to post supplemental security, Bidder will have the option either to post (or have Seller post) the required amount of supplemental security or to withdraw the proposal(s) that failed to meet the Minimum Requirements from the RFP. The proposal(s) of any Bidder that posts the required amount of supplemental security according to the terms of the RFP will be allowed to remain in the RFP, subject to the other terms of the RFP.

Supplemental security posted as a condition to continued participation in the RFP may be replaced with other security upon execution of a <u>definitive agreementDefinitive Agreement</u> between Seller and ENOI. If Bidder is required to post supplemental security pursuant to clause (i) above and its proposal (a) is not selected for negotiation or potential negotiation of a <u>definitive agreementDefinitive</u> <u>Agreement</u> with ENOI or (b) is selected but is subsequently released from its proposal(s) as allowed for in the RFP, the supplemental security will be returned to Bidder, subject to and in accordance with the terms of the RFP and the letter of credit. ENOI will have no obligation to return and may retain any and all funds drawn under the letter of credit in accordance with the terms thereof.

The statements contained in this RFP are made subject to the Reservation of Rights set forth in Appendix E of this RFP and the terms and acknowledgements set forth in the Proposal Submission Agreement.

2016 ENOI RENEWABLES RFP-DRAFT

Page D-11