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| Black Start ServicesRequest for Proposal |  |
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| **Abstract** |  | Request for Proposal for supply of Black Start Services for the ERCOT System. Contract period is from January 1, 2022 through December 31, 2023. |
| **Document Reference** |  | ERCOT Protocols and Operating Guides |
| **Date of Issue** |  | December 15, 2020 |
| **Response Due Date (email to Blackstart@ercot.com)** |  | February 15, 2021 |
| **Selected Black Start Resources Announced** |  | March 31, 2021 |
| **Reason for Issue** |  | ERCOT Protocol requirements |
| **RFP Contact** |  | Operations Planning |

Background

Applicable Documents

The ERCOT Protocols and Operating Guides are the primary operational documents that form the basis for this Request for Proposal (“RFP”). Terms or phrases with initial capital letters and acronyms are defined in the ERCOT Protocols. Information regarding ERCOT may be found at [www.ercot.com](http://www.ercot.com). The ERCOT Protocols may be found at the following link:

<http://www.ercot.com/mktrules/nprotocols/current>

The Operating Guides may be found at the following link:

<http://www.ercot.com/mktrules/guides/noperating/cur>

See also North American Electric Reliability Corporation (NERC) Reliability Standards

Pursuant to the ERCOT Protocols, Electric Reliability Council of Texas, Inc. (“ERCOT”) periodically determines and reviews the location and number of Black Start Resources required, as well as special transmission needs. Appendix A, attached hereto, provides a list of criteria which ERCOT may consider in evaluating proposals for Black Start Services. Providers of Black Start Services must meet the requirements as specified in the ERCOT Protocols, the Operating Guides and NERC requirements. The general requirements for Black Start providers are discussed in ERCOT Protocols Section 3.

Programmatic Goals

In the event of a widespread electrical blackout in the ERCOT Region, successful bidders will be required to provide Black Start Services pursuant to the ERCOT Protocols and related policies and procedures. Duties of Black Start providers include, but are not limited to, the following:

* Immediately start isolation and startup procedures and attempt to establish communications with the local Transmission Operator (TO) in accordance with Operating Guides 4.6.2(3).
* Load Generation Resources at the direction of ERCOT or the Transmission Service Provider (TSP) and/or Distribution Service Provider (DSP) System controllers in the absence of external power supply.
* Supply documentation of test results as required by the ERCOT Protocols.
* Allow local Transmission and/or Distribution Service Providers (“TDSP”) access to Black Start provider’s transmission voltage switching facilities under Black Start conditions or provide substation-switching services at the direction of the local TDSP.

Proposal Guidelines

Purpose

The purpose of this RFP is to identify Entities that have the capability to provide Black Start Services as described in the ERCOT Protocols and Operating Guides.

Scope of Supply

This RFP is for Black Start Services for the period from January 1, 2022 through December 31, 2023.

Proposal Requirements

**General**

Bids for the provision of a comprehensive service package will be accepted only from QSE’s representing Resource Entities that own or control Generation Resources. A bidder may subcontract or partner if such an arrangement will result in seamless execution of the various services required. ERCOT will only contract with one party for each Black Start Resource; thus, the bidder must arrange and manage any subcontracts to the satisfaction of ERCOT. The Resource Entity to which each selected Black Start Resource is registered with ERCOT must execute a Standard Form Black Start Agreement in the form shown in ERCOT Protocols Section 22, Attachment D.

**Conflict of Interest**

All bidders shall make full disclosure in writing at the time of the proposal of any known ERCOT personnel or family members of any ERCOT personnel who either (i) own any interest in the bidding Entity (or Entities) or (ii) serve as officers or directors for the bidding Entity (or Entities) or may otherwise be reasonably expected to influence the decisions of the bidding Entity (or Entities).

By submission of a proposal, the bidder certifies (and in the case of a joint proposal, each party certifies) that:

* No relationship exists or will exist during the contract period between the bidder and ERCOT that interferes with fair competition or is a conflict of interest.
* The proposal has been developed independently without consultation, communication or agreement with any employee, director or consultant of ERCOT who has worked on the development of this RFP, or with any person serving as an evaluator of the proposal submitted in response to this RFP.

If a bidder fails to disclose an interest, ERCOT reserves the right to terminate or cancel the bidder’s contract.

**Bidder Profile**

Information submitted by the bidder must provide details sufficient to allow ERCOT to assess the suitability of the organization for the tasks outlined above as well as in the Standard Form Black Start Agreement. A bidder must provide the following information in the attached forms provided by ERCOT:

  

The following information must be included for each bidder and for each sub-contractor proposed as part of a comprehensive bid:

* Name, mailing address, and scope of services proposed by organization,
* Business and technical contact persons, phone numbers, and email addresses,
* Years in business,
* Resource(s) proposed for the bid services including[[1]](#footnote-1):
* County of proposed Black Start Resource
* MW capability of proposed Black Start Resource
* A description of the proposed Black Start Resource detailing how the Resource can meet the ERCOT Protocol requirements to provide Black Start Service
* Interconnection Substation name
* ERCOT base case substation number
* Hourly Standby Price
* A brief description of contracts for primary/alternate sources of fuel supply and transportation.
* Any known weather related fuel curtailments within the last 5 years
* Disclosure form for any - weather–related operating limitations[[2]](#footnote-2)
* Number of employees scheduled at Black Start location on a 24-hour basis, and
* Number of qualified employees (or full time equivalents, who will be on duty and qualified to start the proposed Resource) and their expected work schedule.

**Resources and Project Plan**

The bidder must provide additional Resource information as follows:

* + - * 1. Black Start procedures for the Resource(s) proposed.
				2. Agreement by the bidder to coordinate with the TDSP and develop switching procedures to energize each transmission line interconnected with the Black Start Resource or an explanation of why one or more of these lines cannot be energized.
				3. A clear statement of any and all assumptions that have been made with respect to this RFP.
				4. Description of the Resource operating modes and options for switching modes of control during Black Start restoration to include, Governor Isochronous and droop controls, load/ramp restrictions, most recent Voltage regulator test results, frequency voltage sources for these controls.
				5. If the Resource is intended to become a Switchable Generation Resource (SWGR) during the contract period, a declaration of such intent and the time taken by the Resource to switch between interconnections in an emergency or an ERCOT Black Start scenario. The Resource must also disclose any potential limitation on its ability to be available whenever needed by ERCOT due to its switchable status.
				6. Agreement by the bidder to test Resource(s) prior to the contract period in accordance with ERCOT Protocol Section 8.1.1.2.1.5, System Black Start Capability Qualification. Resources need not be tested prior to being awarded a Black Start contract. Resources must notify ERCOT of any scheduled outages taking place during Black Start testing. **NOTE: ERCOT does not reimburse for the cost of Black Start testing.**
				7. Time needed for normal start-up, and maximum and minimum time needed for start-up. **NOTE: The maximum normal and warm start-up time must be less than 6 hours.**
				8. Black Start Resource’s time to reach 50% MW full load.
				9. Demonstration of the initiation of Resources which can be started with a minimum of pre-coordinates switching operations using ERCOT transmission equipment within the ERCOT System, so that switching may be accomplished within one (1) hour.
				10. A proposed Next Start Resource that the bidder believes can be energized from the Black Start Resource, and an alternative Next Start Resource, preferably at a different location. If the Next Start Resource is mothballed during the contract period, the bidder must provide the alternative Next Start Resource and finish the test for the alternative Next Start Resource before the original Next Start Resource is out of service. The Next Start Resource proposal is required for the Black Start testing process to help ERCOT determine a Resource’s capability to provide Black Start Services. The bidder’s proposed Next Start Resource may or may not be the assigned Next Start Resource by ERCOT in the Black Start Plan.
				11. Physical or simulated demonstration that the Black Start Resource is capable of starting the Next Start Resource’s largest required motor (pursuant to ERCOT Protocol Section 8.1.1.2.1.5(3)(d)). If a physical demonstration is used, only two testing attempts will be allowed per Black Start Resource for any of the tests, including basic start up, line energizing and load carrying tests. Depending on circumstances, additional testing may be granted at the discretion of ERCOT. A bidder must submit test procedures or study results after receiving notice of ERCOT’s initial selection of the bidder’s Black Start Resource. Bidders must submit test procedures at least one week prior to scheduled test date. Any physical demonstration must be scheduled before May 1, 2021, unless ERCOT authorizes additional testing due to extenuating circumstances, including conflicts with scheduled outages or problems with high load. In any event, all physical demonstrations must be completed by June 1, 2021. For a simulated demonstration, the study results must be submitted to ERCOT by May 1, 2021.
				12. Description of primary and emergency communication circuits to be used in a Black Start event.
				13. Agreement by the bidder that its employees/trainers will participate in Black Start training provided by ERCOT; and will communicate information received at this training to all qualified operating personnel.
				14. Certification by the bidder that the proposed Resource will be staffed by qualified operating personnel capable of starting the Resource under Black Start conditions 24 hours per day. If 24-hour staffing is not available, then qualified personnel should be able to reach the Resource within one hour of loss of voltage or other event reasonably indicating that a “system wide blackout” has occurred, as described in ERCOT Operating Guide Section 8, Attachment A, Item (1), under “Determining System Status.”

**Pricing Information**

Please provide the information required by the Standard Form Black Start Agreement.

Rights Reserved

* + - * + ERCOT may shortlist the bidders based on the RFP responses.
				+ ERCOT is not bound to accept the lowest offer or any offer for these services, and may accept or reject, in part or in whole, any or all proposals.
				+ ERCOT reserves the right to obtain services from more than one bidder.
				+ ERCOT is not bound to the RFP process and reserves the right to negotiate and alter the process during negotiations.
				+ ERCOT reserves the right to modify timelines presented in this document to the extent allowed by the ERCOT Protocols. During the evaluation process, ERCOT will assume that respondents received all amendments and addenda for this RFP.
				+ Documents provided by a bidder and specifically identified as being confidential will be held in confidence and will not be released outside of ERCOT (unless required by law) without prior authorization of the bidder with the exception of material specifically designated as public by the ERCOT Protocols (*See* Section 1.3).
				+ Information and documents submitted by the bidder become the property of ERCOT and will not be returned.
				+ All bids will remain open for acceptance by ERCOT for a period of 60 days after the proposal due date. A bid is binding upon a bidder once accepted by ERCOT.
				+ Any cost incurred by the bidder in the preparation of the proposal will be borne by the bidder and the proposal will become the property of ERCOT.
				+ No oral or written statement made by ERCOT personnel or consultants shall be considered addenda to this RFP unless the statement is confirmed in writing and identified as a written addendum to this RFP. No liability is assumed for errors or omissions in this RFP or any information, correspondence, notices or other documentation related to this RFP.
				+ Once selected, ALL Black Start Resources shall perform quarterly testing according to Section 8.1.1.2.1.5(4) – (11)

Submission Information

**Submission Instructions**

RFP responses, including the attached forms and additional required documents, must be submitted via email to Market Participant Registration (MPRegistration@ercot.com), as well as the ERCOT Black Start Team (Blackstart@ercot.com). The due date for responses under this RFP is **February 15, 2021 by 4:00 P.M. Central Daylight Time (“CDT”)**. Any responses received after this date and time will not be considered. **An acknowledgement will be sent to each bidder to confirm bid receipt by ERCOT evaluators. Please contact the ERCOT Black Start Team (**blackstart@ercot.com) **if you submitted a bid, but have not received an acknowledgement.**

**Inquiries and Inquiry Responses**

If a bidder has a need to contact ERCOT for any reason with regard to this RFP, contact must be made in writing via email to the ERCOT Black Start Team (blackstart@ercot.com). Questions should reference the document, page, section and paragraph to which the questions refer. All inquiries are due by **5:00 P.M. CDT on February 1, 2021**. All responses to inquiries will be distributed to all prospective bidders by **5:00 P.M. CDT on February 8, 2021.**

**Appendix A: RFP Evaluation Criteria**

ERCOT anticipates a need for Black Start Service in several areas in Texas. The proposals for these services will be evaluated based on, at a minimum, the following criteria:

* Meet minimum requirements of a Black Start Resource outlined in the ERCOT Protocols, Operating Guides, NERC requirements and this document.
* Price per hour of initial Black Start Service.
* Time required to start the Black Start Resource(s). The travel time would be included in the Resource start up time.
* Location of the Resource(s) with respect to Load concentration, Next Start Resource(s) and other potential Black Start Resource(s).
* Amount of capacity bid in the proposal, and the approximate capacity the Resource should be able to offer during the first several hours following a Black Start event.
* Fuel source and alternate fuel source of the prime mover, as well as any contracts for supply and transportation of the same, will be considered.
* The extent to which the Resource may be potentially limited in its availability during any period of time, including without limitation any limitation relating to switchable status.
* Any limitations relating to weather-related conditions and/or events on the operation of the Resource
* Preference will be given to Black Start Resources that have back up communications with the following qualities: (ERCOT Operating Guides Section 4.6.5)
	+ Be operational for seventy-two (72) hours immediately following the start of a blackout without external power from the ERCOT Transmission Grid;
	+ Provide direct voice communications between: Black Start Resource and Transmission Operator (TO); TO and appropriate TO; TO and ERCOT;
	+ Have written procedures that address operator training and the testing of the communication system; and
	+ Comply with ERCOT communications standards in the Nodal Operating Guides.
* The proposed Black Start Resource’s ability to start a Next Start Resource. Preference will be given to potential Black Start Resources with an alternate Next Start Resource.

With the information above, ERCOT will use the following criteria to evaluate the group selection and the specific Resource selection:

* Group Selection Criteria
* Price ($/hour)
* Amount of MW pickup (MW)
* Restoration time (hours)
* Specific Resource Selection Criteria
* Black Start MW bid capacity
* Next Start MW capacity
* Black Start and Next Start Resource(s) start up time(s)
* Proximity to nuclear plants
* Proximity to large Load Centers

ERCOT will evaluate the Resources needed in various areas in the region required to restore the electrical system in that area within a reasonable amount of time. Bids will be awarded to bidders whose Resources can accomplish this goal based on these criteria.

1. This is information to be provided in the Black Start Service Proposal Form (embedded above) [↑](#footnote-ref-1)
2. This is provided through the Generation Resource Disclosure form (embedded above) [↑](#footnote-ref-2)