
Electric Reliability Council of Texas, Inc. (ERCOT)

Contract Administration and Procurement



Request for Proposal

For

Secondary Wind Generation Forecast

Date of Release: March 28, 2017

1	GENERAL INFORMATION	4
1.1	RFP Objective	4
1.2	ERCOT Background	4
1.3	Strategic Elements	4
1.4	Basic Philosophy: Contracting for Results	5
1.5	Legal and Regulatory Constraints	5
1.6	ERCOT Point of Contact	6
1.7	Procurement Timeline	6
1.8	Communications Regarding This Procurement	7
1.9	RFP Cancellation/Non-Award	7
1.10	Right to Reject Proposals	7
1.11	No Reimbursement for Costs of Proposals	7
1.10	Acronyms and Abbreviations	7
2	SCOPE AND REQUIREMENTS	8
2.1	Project Scope Overview	8
2.2	General Requirements	10
2.3	Renewal Production Potential Forecast	11
2.4	Technical Specifications and Requirements	17
2.5	Reliability Requirements	16
2.6	Qualifications	17
2.7	Deliverables	17
3	GENERAL INSTRUCTIONS AND RESPONSE REQUIREMENTS	18
3.1	Notice of Intent to Propose	18
3.2	Vendor Questions and Comments	18
3.3	Modification or Withdrawal of Proposal	18
3.4	News Releases	19
3.5	Incomplete Proposals	19
3.6	ERCOT Use of Vendor Ideas	19
3.7	Additional Information	19
3.8	Instructions for Submitting Proposals	19
3.9	Format and Content	20
3.10	Multiple Responses	24
3.11	Joint Proposals	24
4	Evaluation	25

4.1	Evaluation of Proposals	25
4.2	Evaluation Criteria	25
4.3	Oral Presentations and Site Visits	25
4.4	Discussions with Respondents	25

1. GENERAL INFORMATION

1.1 RFP Objective

The objective of ERCOT in this procurement is to identify and contract with a qualified vendor to provide a secondary service to forecast the wind generation potential of Wind Generation Resources (WGRs) in order to provide ERCOT with a look-ahead capability to maintain a satisfactory level of reliability. This service will not only provide a forecast of the expected wind generation but also the potential wind output extremes around that forecast in order to allow ERCOT to assess whether it has sufficient ancillary services and other resources available to cover the more extreme output levels and changes.

1.2 ERCOT Background

1.2.1 Overview of Electric Reliability Council of Texas, Inc.

The Electric Reliability Council of Texas (ERCOT) manages the flow of electric power to 24 million Texas customers, representing approximately 90 percent of the state's electric load. As the Independent System Operator for the region, ERCOT schedules power on an electric grid that connects more than 43,000 miles of transmission lines and 550 generation units. ERCOT also performs financial settlement for the competitive wholesale bulk-power market and administers retail switching for 7 million premises in competitive choice areas. ERCOT is a membership-based 501(c)(4) nonprofit corporation governed by a board of directors and subject to oversight by the Public Utility Commission of Texas and the Texas Legislature. Additional information about ERCOT can be found at <http://www.ercot.com/>.

1.3 Strategic Elements

1.3.1 Contract Term

ERCOT intends to award a contract resulting from this solicitation for an initial term as necessary to fulfill the goals of this RFP.

Any contract issued as a result of this solicitation is subject to cancellation, without penalty, either in whole or in part, for breach of contract. Such a contract may also be canceled by ERCOT for convenience upon a thirty (30) day written notice.

1.3.2 Contract Elements

The term “contract” means the contract was awarded as a result of this RFP and all exhibits attached hereto. At a minimum, the following documents will be incorporated into the contract: this RFP and all attachments and exhibits; any modifications, addendum, or amendments issued in conjunction with this RFP; and the successful Respondent’s proposal. Respondent, if selected, must execute ERCOT’s Master Agreement. The actual work to be performed and the compensation for such work will be documented in a Statement of Work. If the Respondent currently has an active Master Agreement with ERCOT, only a new Statement of Work will be required.

1.4 Basic Philosophy: Contracting for Results

ERCOT’S fundamental commitment is to contract for value and successful results. A successful result is denoted as the generation of defined, measurable, and beneficial outcomes that support ERCOT’s missions, objectives, and goals, and satisfies all defined contract requirements.

1.5 Legal and Regulatory Constraints

1.5.1 Conflicts of Interest

ERCOT seeks to ensure a level playing field in the award of the contract. ERCOT has implemented an aggressive policy concerning actual or potential conflicts of interest to ensure fair and open competition, and has included language concerning actual and potential conflicts of interest in Section 8 of the Master Agreement. Respondents must carefully review and understand this language when developing proposals.

1.5.2 Former Employees of ERCOT

The Respondent must disclose any past employment of its employees and agents, or its subcontractors’ employees and agents, by ERCOT, including the individual’s name and the date such individual’s employment at ERCOT ended.

1.5.3 Interpretive Conventions

Whenever the terms “shall,” “must,” “or “is required” are used in this RFP in conjunction with a specification or performance requirement, the specification or requirement is mandatory for the potential vendor. ERCOT may, at its sole discretion, reject any proposal that fails to address or meet any mandatory requirement set forth herein/.

Section 1 – General Information

Whenever the terms “can,” “may,” or “should” are used in this RFP in conjunction with a specification or performance requirement, the specification or performance requirement is a desirable, but not mandatory, requirement.

1.6 ERCOT Point of Contact

The sole point of contact for inquiries concerning this RFP is:

Lisa Sanchez
2705 West Lake Drive
Taylor, Texas 76574
(512) 512-248-6544
Fax: (512) 248-3118
Lisa.Sanchez@ercot.com

All communications relating to this RFP must be directed to the specified ERCOT contact person via email. All other communications between a respondent and ERCOT staff concerning this RFP are prohibited. **Failure to comply with this section may result in ERCOT’s disqualification of the proposal.**

1.7 Procurement Timeline

Procurement Timeline	
RFP Release Date	Tuesday, March 28, 2017
Optional Notice of Intent to Propose Due	Tuesday, April 4, 2017
Vendor Questions Due	Thursday, April 13, 2017
Response to Vendor Questions Posted	Thursday, April 27, 2017
Vendor Proposals Due	Thursday, May 4, 2017
Vendor Presentations	Late May/June 2017
Anticipated Contract Award	September/October

Procurement Timeline	
	2017
Anticipated Contract Start Date	January 1, 2018

1.8 Communications Regarding This Procurement

ERCOT reserves the right to amend this RFP at any time prior to the proposal submission deadline. Any changes, amendments, or clarifications will be made in the form of responses to vendor questions, amendments, or addendum issued by ERCOT and sent to the point of contact listed on the Notice of Intent to Propose. Vendors not submitting the Notice of Intent to Propose will not receive changes, amendments, or answers to questions regarding this Request For Proposal.

1.9 RFP Cancellation/Non-Award

ERCOT reserves the right to cancel this RFP or to make no award of a contract pursuant to this RFP.

1.10 Right to Reject Proposals

ERCOT may, in its discretion, reject any and all proposals submitted in response to this RFP.

1.11 No Reimbursement for Costs of Proposals

ERCOT will not reimburse any respondent for costs of developing a proposal in response to this RFP.

1.12 Acronyms and Abbreviations

- DRUC: Day-Ahead Reliability unit Commitment
- ERCOT: Electric Reliability Council of Texas
- HRUC: Hourly Reliability Unit Commitment
- HSL: High Sustainable Limit
- MAPE: Mean Absolute Percentage Error
- QSE: Qualified Scheduling Entity
- RPP: Renewable Production Potential
- STWPF: Short-Term Wind Power Forecast
- WFSP: Wind Forecast Service Provider
- WGR: Wind Generation Resource
- WGRPP: Wind-powered Generation Resource Production Potential
- WPF: Wind Power Forecasting

2 SCOPE AND REQUIREMENTS

2.1 Project Goals & Scope Overview

As part of the Management Activities for the ERCOT System (Nodal Protocol Section 3) ERCOT is required to produce forecasts of Renewable Production Potential (RPP) for Wind Power Generation Resources (WGR) to be used as an input into the DRUC and HRUC.

Renewable Production Potential (RPP) forecasting (defined in the Nodal Protocols in sections 3.12-3.13), is essential to the integration of large amount of renewable generation. ERCOT has acquired a wind forecast service before Nodal market operation, which utilizes the telemetry of necessary site-specific meteorological information to generate Short-Term Wind Power Forecast (STWPF) and Wind-powered Generation Resource Production Potential (WGRPP) for each WGR (Nodal Protocols, Section 4.2.20). This wind forecast helped to maintain a reliable and efficient operation of the ERCOT grid. ERCOT is currently projecting the installed capacity of wind generation to exceed over 25,000 MW by the end of 2017. As the installed capacity of Wind Generation Resources (WGR) at ERCOT continues to grow, the role of wind forecast service in the core function of reliable grid operations is becoming more critical. An enhancement of both the accuracy and reliability of wind forecast service could potentially result in significant cost savings and further improve the reliability and security of ERCOT grid.

The objective of this project is to procure a secondary service to forecast the wind generation potential of WGRs in order to provide ERCOT with a look-ahead capability to maintain a satisfactory level of reliability. This service will not only provide a forecast of the expected wind generation but also the potential wind output extremes around that forecast in order to allow ERCOT to assess whether it has sufficient ancillary services and other resources available to cover the more extreme output levels and changes. This project is focused on the wind generation only; the solar power potential forecast will be not addressed herein.

More specifically, the scope of the secondary wind forecast service includes the following components:

- 2.1.1** The STWPF/WGRPP wind forecast service delivered to ERCOT must provide ERCOT with a very reliable wind energy production forecast for both reliability and market applications for the aggregate

ERCOT level, for the defined wind regions, and for each WGR. The aggregated forecast must be statistical in nature to comply with Section 4.2.2 of the Nodal Protocols, i.e., the wind generation production forecast is to provide a forecast that ERCOT can depend upon with 50% confidence (i.e. production is that level or higher with 50% confidence) for STWPF and 80% confidence for WGRPP. The STWPF/WGRPP wind forecast consists of hourly wind generation potential for the next 168 hours for the aggregated ERCOT level, the defined wind regions, and for each site. The delivered forecast should also include the hourly wind speed, wind direction and temperature for the defined wind regions, and for each site for the next 168 hours.

- 2.1.2** An extreme weather forecast component should be produced and delivered to ERCOT for the next 168 hours to predict the risk of incoming extreme weather events and the impact of extreme weather events, which include icing conditions high-speed cutout, high temperature limit, and low temperature limit, over the wind generation potential for the aggregate ERCOT level, every Wind Region and each WGR. ERCOT is composed of five Wind Regions, i.e., Coast, South, North, West and Panhandle. The forecast should include a risk of worst scenario with all of wind turbines out of the service at the wind farms that are at significant risk of extreme weather conditions, an expected scenario with 50% of wind turbines impacted offline. A process should be also provided to allow the ERCOT users to manually include or exclude the extreme weather's impact into the STWPF delivered through and external interface like a website or an application.
- 2.1.3** A probabilistic wind forecast must be provided to ERCOT every 15-minute for the next 6 hours for the aggregate ERCOT level and the five Wind Regions. This probabilistic wind forecast should include at least 50th, 85th, 90th, 95th, 98th percentile wind forecast including the extreme risks discussed above. The set of the probabilistic wind forecasts should be expandable at the ERCOT's request.
- 2.1.4** A 5-min intra-hour wind forecast should be produced every 5 minutes for the next 2 hours for each WGRs, the aggregate ERCOT level, and every Wind Region.
- 2.1.5** A website display should be developed to allow ERCOT users to visualize the wind forecast data for the ERCOT level, every Wind Regions and every WGR, which is either streamed in real-time or achieved from the historical database. The display should show weather information (wind speed, wind gradient, temperature), forecast (STWPF/WGRPP, the probabilistic wind forecast, extreme weather forecast and the 5-min short-term wind forecast) and the location of WGRs. This display should also be able to show the effect of including extreme weather forecast into the corresponding STWPF as well as the risk level of incoming extreme weather events. The website should have credential based access management ability.

Section 2 – Scope and Requirements

- 2.1.6** A self-evaluation report should be produced on a monthly basis to provide an assessment of the accuracy of the wind forecast STWPF.
- 2.1.7** The wind forecast data should be reliably transferred to ERCOT system in XML format using a secure web services on a 24/7 basis. The WFSP will be expected to host the forecasting service at both a primary and secondary site to ensure availability. A 24/7 technical support line should be available for the wind forecast service provided to ERCOT.

2.2 General Requirements

- 2.2.1 Reference to Nodal Protocol Sections.** The Bidder's response to this RFP must explain how the Bidder will create the ability for ERCOT to comply with its responsibilities as described in the Nodal Protocols, (<http://www.ercot.com/mktrules/nprotocols/current>), specifically including compliance with the following sections of the Nodal Protocols:

Section 2: Definitions and Acronyms

Section 3: Management Activities for the ERCOT System

Section 4: Day-Ahead Operations

Section 5: Transmission Security Analysis and Reliability Unit Commitment

Section 6: Adjustment Period and Real-Time Operations

In particular, Load Forecasting requirements:

- *Protocol section - 3.2.2 Long-Term Demand Forecasts*
- *Protocol section - 3.12 Load Forecasting*
- *Protocol section – 4.2.2 Wind Powered Generation Resource Production Potential.*
- *Protocol section - 4.2.3 Posting Forecasted ERCOT System Conditions*
- *Protocol section - 5.5.1 Security Sequence*
- *Protocol section - 8.2 ERCOT Performance Monitoring and Compliance*

In particular, RPP Forecast requirements:

- *Protocol section - 3.13 Renewable Production Potential Forecasts*
- *Protocol section - 4.2.2 Wind-Powered Generation Resource Production Potential*
- *Protocol section - 5.5.1 Security Sequence*
- *Protocol section - 6.3.1 Activities for the Adjustment Period*

- 2.2.2** In their responses to this RFP, respondents must meet the Technical requirements described in section 2.4.
- 2.2.3** In their responses to this RFP, respondents must meet the Reliability requirements described in section 2.5.
- 2.2.4** In their responses to this RFP, respondents must describe in detail the methodology and approach to meeting the requirements of this RFP.

- 2.2.5 Respondents must include a Gantt chart or Project schedule for completing each set of deliverables, key milestones, or scope requirement described herein.
- 2.2.6 The awarded supplier must provide a Project Manager or lead who has decision-making authority and will assume responsibility for coordination, control, and performance of this effort.
- 2.2.7 Any changes to key personnel associated with the subsequent contract must be submitted in writing and approved in writing by ERCOT.
- 2.2.8 The awarded supplier must provide an organizational chart and list of the supplier’s corporate chain-of-command, as well as any established procedures for contacting individuals within that chain-of-command.

2.3 Renewal Production Potential Forecast

The following picture is intended to show the data flow and dependencies relevant to the renewable production potential forecast process.

3

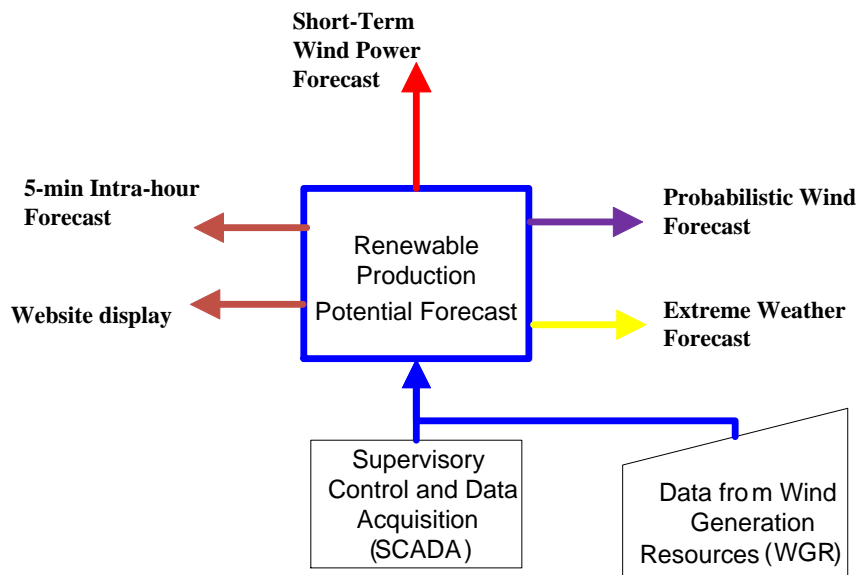


Figure 1: Data Flow and Dependencies of Renewable Production Potential Forecast

2.4 Technical Specifications and Requirements

2.4.1 Short Term Wind Power Forecast (STWPF)/ Wind-powered Generation Resource Production Potential (WGRPP)

A Short-Term Wind Power Forecast (STWPF) provides a rolling 168-hour hourly forecast of wind production potential for each Wind-powered Generation Resource (WGR) or the entire ERCOT system. This forecast is equivalent to the center of the expected power output probability distribution,

hour by hour, for the next 168 hours. In addition, WGRPP and the forecast of temperature and wind speed for the entire ERCOT system and each WGR should be provided to ERCOT for each hour of the next 168 hours.

The whole WPF process is composed of several sub-processes: asset registration¹, real-time data collection, review of wind farm availability schedules, forecasting, and providing the resulting forecasts to the required recipients. Operational (real-time) data from WGR is provided by QSE's through telemetry to the ERCOT Energy Management System (EMS). All the aforementioned data inputs (specification data, operational data and unit availability) are provided by ERCOT to the wind power production forecasting service for utilization along with their additional meteorological information to calculate the STWPF.

2.4.1.1 Inputs

This section provides a summary of inputs to the Wind Power Forecasting (WPF) process.

Table 1 lists all the required input data from ERCOT to the WPF process. The “Source” column of the input table identifies where the data is provided to the WPF process.

Table 1 : WPF Process Inputs

Source	Data
<i>Registration system</i>	<ol style="list-style-type: none"> 1. <i>Resource Parameters</i> <ul style="list-style-type: none"> • Resource Name • Location of wind farm (latitude and longitude or equivalent for the center point of wind farm) • Location of the meteorological tower (latitude and longitude or equivalent) • Type (manufacturer/model) and number of turbines • Turbine hub height(s) above ground level with associated number of turbines • Manufacturer's power curve (capability curve) 2. <i>Resource Commercial Operation Date</i>
<i>Energy Management System (EMS)</i>	<ol style="list-style-type: none"> 1. <i>Most recent Resource (wind farm) status with date/time</i> 2. <i>Most recent MW output of wind farm with date/time</i> 3. <i>Most recent wind speed and direction at hub height from one meteorological tower with date/time</i> 4. <i>Temperature and barometric pressure at 2 m above ground level on the meteorological tower</i>
<i>Telemetry value</i>	<p><i>SCADA telemetry values are sent every 5 minutes from EMS to the wind power forecast service provider (all of these are Unit specific information with their Qualified Scheduling Entities (QSE) mapping)</i></p> <ol style="list-style-type: none"> 1. <i>MW (averaged)</i>

¹ Asset registration is an existing ERCOT business process. The WPF process requires additional registration data from new and existing WGRs. The updated generation asset registration form allows collection of the required additional specification data. Existing WGRs shall update their registration information to ensure all wind generators have provided all required information.

Section 2 – Scope and Requirements

Source	Data
	2. Wind Speed (averaged) 3. Wind Direction (averaged) 4. Temperature (averaged) 5. Barometric Pressure (averaged) 6. HSL (averaged) ² 7. Num of Wind Turbines ON 8. Num of Wind Turbines Off 9. Num of Wind Turbines Unknown 10. Curtailment Flag
<i>Scheduled outage</i>	<i>Planned outage for WGRs</i>

2.4.1.2 Historical Data for Performance Tuning

The historical data in 5-minute time resolution will be available upon the request to facilitate the performance tuning of the wind forecast algorithm(s). The historical data in the Excel files contains MW Average, HSL Average, Wind Speed, Wind Direction, Number of Turbines ON, Number of Turbines Off, and Number of Turbines Unknown for each wind farm³.

2.4.1.3 Delivery Time of STWPF

STWPF will be delivered to ERCOT hourly⁴, providing a rolling 168-hour hourly forecast of wind production potential for each WGR and the aggregated wind generation potential in the ERCOT systems.

2.4.2 Extreme Weather Forecast

The wind forecast service should provide both quantitative and qualitative measures for the risk and the estimated impact of the incoming extreme weather events.

The risk for the incoming extreme weather events should be provided with a key differentiator for the magnitude of their impact and the probability of their occurrence. This key differentiator can trigger an early warning sent to ERCOT staff through message or email.

The derating of WGRs resulting from the impact of extreme weather events will be created on an hourly basis for the next 168 hours for the ERCOT aggregation, the wind regions and each site. The delivery time of the icing forecast is synchronized with that of STWPF.

² HSL average is the estimated full potential of wind generation in real-time. If a wind farm is not curtailed, its HSL Average is the same as its MW Average. Otherwise, the HSL Average equals to MW Average plus the estimated curtailment of wind generation.

³ The historical data for wind farm is NULL before its commission date.

⁴ The delivery time is within the first half hour of the delivery hour, between HH:00 and HH:30 where HH is the delivery hour

The data for meteorological measurements and output of WGRs for the past extreme weather events will be available upon the request to facilitate the performance tuning of the extreme weather forecast algorithm(s).

2.4.3 Probabilistic Wind Forecast

A probabilistic wind forecast will be delivered to ERCOT every 15-minute for each 15-minute of the next 6 hours for the aggregated ERCOT level and the wind regions. Upon a mutual agreement between the wind forecast service provider and ERCOT, this probabilistic wind forecast will consist of a set of probabilistic wind forecast in 15-minute time resolution for the next 6 hours.

2.4.4 A 5-min Intra-hour wind forecast

A short-term wind forecast should be produced every 5 minutes for each 5 minutes of the next 2 hours for the aggregated ERCOT level and the wind regions.

2.4.5 Website Display

Wind forecast service provider should be able to provide a website display for the wind forecast service delivered to ERCOT in real-time or the historical data. It should be easy and user-friendly to navigate the website for different wind site, wind regions, and the ERCOT aggregation for the time period selected by users. The website should have credential based user access control to manage the level of access (read-only, read & override, etc.) each user has.

In addition to visualization of the wind forecast data, the website should also provide an overriding capability to allow users to make adjustment to STWPF manually, and show the effect of the forecasted extreme weather events.

2.4.6 Performance Report

A performance report should be provided on a monthly basis or on ad hoc for special weather patterns. The report should include the hourly, daily, monthly performance evaluation of wind forecast service for each site, the wind regions, and the ERCOT aggregation.

2.4.7 Data Exchange between ERCOT and Wind Forecast Service Provider (WFSP)

The mechanism to transfer the data between the wind forecast service provider and ERCOT is described as follows.

Section 2 – Scope and Requirements

First, the data exchange between WFSP and ERCOT is of asynchronous nature, in that when the data is available on either side, it is pushed to the recipient, instantaneously, via the provided Web services on both sides, as well as the deployed Web services listeners awaiting receipt of these messages sent. Second, the external interfaces between WFSP and ERCOT data exchange will use the existing ERCOT WS-Notification based Web services design. This design is a simplified variant of the OASIS WS-Notifications standard for the definition of an ERCOT Notification interface. WFSP using this external interface would be required to provide a listener interface for the receipt of notification messages, compliant with the interface provided by ERCOT. Third, the WFSP shall deliver the STWPF and extreme weather forecast every hour either at the aggregation level or for each wind farm through an inbound XML file. The probabilistic wind forecast will be delivered in the same way but every 15-minute. ERCOT shall transfer the actual generation, meteorological parameters and availability every 5 minutes to the WFSP through an outbound XML file.

The timing of the transfers needs to be arranged to support any processing that needs to occur at ERCOT. The steps are outlined in the figure below.

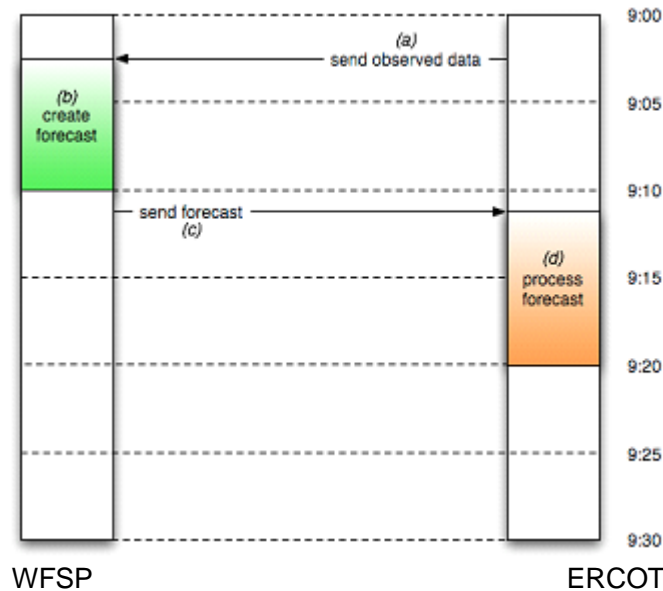


Figure 2 – Service Timing

The delivery process begins with a transfer of the most recent observed data to the WFSP, in this example, data from the period ending 9:00 is transferred to the WFSP, (a). The WFSP then uses this data to prepare the forecast, (b). The WFSP then transfers the forecast values to ERCOT (c). Finally, ERCOT processes the forecast into the Nodal system (d).

2.5 Reliability Requirements

2.5.1 Performance Requirements

This service must be available to ERCOT 24/7.

2.5.2 System Security Requirements

Security architectural guidelines to maintain appropriate access privileges and protections for data collected will conform to ERCOT standards.

System Administration

- One user id and password will be used to access the application vendor(s) develops.
- Multiple users have the ability to log on simultaneously.
- ERCOT shall develop process password change management when employees leave the organization.

2.5.3 Backup and Recovery Requirements

Backup and recovery requirements will conform to corresponding ERCOT standards. If needed, additional backup and recovery characteristics will be defined by PUCT and ERCOT business for each data service.

2.5.4 Availability and Redundancy Requirements

Redundancy characteristics will be defined in the conceptual design in accordance with ERCOT standard disaster recovery plans. The WFSP will be expected to host the forecasting service at both a primary and secondary site to ensure availability.

2.5.5 Maintainability Requirements

The awarded supplier must provide training documentation and user manual describing the functions of wind forecasting solutions. Business processes and procedures will be developed by Operations Planning during the phase of the project.

2.5.6 Training and Documentation Requirements

Business processes and procedures will be developed by Operations Planning during the phase of the project.

2.6 Qualifications

Include at least three (3) references for projects performed within the last five (5) years that demonstrate the respondent's ability to perform the required RFP services. Include contract dates and contact parties, with address, telephone number and e-mail, if available. If the work was performed as a subcontractor, the respondent, describe the scope of subcontracting activities.

2.7 Deliverables

- 2.7.1 Wind Forecasting solution as described herein.
- 2.7.2 Reports as described herein.
- 2.7.3 Website display as described herein.
- 2.7.4 Training material, user manual, as described herein.

3 GENERAL INSTRUCTIONS AND RESPONSE REQUIREMENTS

3.1 Notice of Intent to Propose

A prospective vendor may submit a Notice of Intent to Propose to the ERCOT Point of Contact identified in Section 1.6 no later than 5:00PM Central Time on **the date listed in the Section 1.7 Procurement Timeline**. The Notice of Intent should consist of an email stating that the prospective vendor intends to submit a proposal for this procurement. Only vendors who submit a Notice of Intent to Propose will receive the answers to questions from all vendors, and/or any clarifications, amendments, and addenda to the Request For Proposal. Vendors who provide a Notice of Intent are not obligated to submit proposals after submitting the NOI, but must submit a response to be considered for an award.

3.2 Vendor Questions and Comments

All questions and comments regarding this RFP must be submitted electronically to the email address contained in Section 1.6 (ERCOT Point of Contact). All questions must reference the appropriate RFP page and section number. In order to receive a response, vendor questions and comments must be received no later than the deadline set forth in Section 1.7 (Procurement Timeline). Inquiries received after the due date may be reviewed by ERCOT but will not receive a response. Answers to vendor questions will be emailed to the point of contact listed on the Notice of Intent to Propose. A respondent must inquire in writing as to any ambiguity, conflict, discrepancy, exclusionary specification, omission or other error in this RFP prior to submitting a proposal. If a respondent fails to notify ERCOT of any error, ambiguity, conflict, discrepancy, exclusionary specification, or omission, the respondent shall submit a proposal at its own risk and, if awarded the contract, shall have waived any claim that the RFP and Master Agreement were ambiguous and shall not contest ERCOT's interpretation. If no error or ambiguity is reported by the deadline for submitting written questions, the respondent shall not be entitled to additional compensation, relief, or time by reason of the error or its later correction.

ERCOT reserves the right to amend answers prior to the proposal submission deadline.

3.3 Modification or Withdrawal of Proposal

Proposals may be withdrawn from consideration at any time prior to the award of contract. A written request for withdrawal must be made to the ERCOT Point of Contact (Section 1.6).

A respondent has the right to amend its proposal at any time and to any degree by written amendment delivered to the ERCOT Point of Contact prior to the proposal submission deadline. ERCOT reserves the right to request an amendment to any part of the proposal during negotiations.

3.4 News Releases

A respondent may not issue press releases or provide any information for public consumption regarding its participation in this procurement without specific, prior written approval of ERCOT.

3.5 Incomplete Proposals

ERCOT may reject without further consideration any proposal that is not completely responsive to this RFP.

3.6 ERCOT Use of Vendor Ideas

- ERCOT reserves the right to use any and all ideas presented in any proposal that are not the respondent's proprietary information and so designated in the proposal. The respondent's proprietary materials do not include information that ***is already published or available to the public, or subsequently becomes available;***
- is received from a third party who, to ERCOT's knowledge, is not in breach of ***any obligation of confidentiality; or***
- is independently developed by personnel or agents of ERCOT without reliance on the respondent's proprietary materials;

3.7 Additional Information

By submitting a proposal, the respondent grants ERCOT the right to obtain information from any lawful source regarding: (i) the past business history, practices, conduct and ability of a respondent to supply goods, services, and deliverables; and (ii) the past business history, practices, conduct, and ability of the respondent's directors, officers, and employees. ERCOT may take such information into consideration in evaluating proposals.

3.8 Instructions for Submitting Proposals

3.8.1 Submission

Submit all copies of the proposal to the ERCOT Point of Contact no later than **2:00 p.m. Central Time on the submission deadline** (See Section 1.6 & 1.7). The proposal must be signed by an authorized representative of the respondent and submitted electronically via email—the file must not exceed 20MB. If this size restriction cannot be met, multiple emails may be sent, but respondent must indicate how many emails ERCOT should anticipate (i.e. email 1 of 3). ERCOT reserves the right to disqualify late proposals.

3.8.2 Additional Requirements

All proposals must be:

- Clearly legible;
- Sequentially page-numbered;
- Organized in the sequence outlined in Section 3.9 and 3.9.1;
- Bound in a notebook or cover; Part 1 and Part 2 must be bound separately (see Section 3.9)
- Limited to 50 pages (excluding ERCOT required forms);
- Responsive to the requirements of this RFP;
- Proposals should include the respondent's name at the top of each page, and should not include unrequested materials or pamphlets.

3.9 Format and Content

The proposal must consist of two separate parts and must be sent in two separate attachments:

- (1) Part 1 – Business Proposal; and
- (2) Part 2 – Cost Proposal.

3.9.1 Part 1 -- Business Proposal

The Business Proposal must include:

- Section 1 – Transmittal Letter;
- Section 2 – Executive Summary;
- Section 3 – Corporate Background and Experience;
- Section 4 – Methodology and Services Approach;
- Section 5 – Assumptions;
- Section 6 – Appendices;
- Section 7 – Vendor Information and Other Required Forms.

Section 1 -- Transmittal Letter

Respondents must include a transmittal letter printed on official company letterhead. The letter must be signed by an individual authorized to legally bind the respondent.

The transmittal letter must include:

1. Disclosure of all pending, resolved, or completed litigation, mediation, arbitration, or other alternate dispute resolution procedures involving the respondent (including subcontractors,) and its client(s) within the past 24 months.
2. Disclosure of all affiliations with, or ownership relationships with, any ERCOT Market Participant or its affiliates.
3. A description of any personal or business interest that may present an actual, potential, or apparent conflict of interest with the performance of the contract and an explanation of how the respondent can assure ERCOT that these relationships will not create an actual conflict of interest.
4. A list of key personnel previously employed by ERCOT in accordance with the requirements of Section 1.5.2.
5. A complete list of all exceptions, reservations, and limitations to the terms and conditions of the RFP.
6. Signed copies of the Professional Services Agreement, NDA, IRS W-9, and Vendor Information Form located here: <http://www.ercot.com/about/procurement/index.html>.
7. Additionally, if the nature of this RFP solicitation involves an Information Technology purchase, please review and acknowledge the “Cyber Security Requirements” document, also located here: <http://www.ercot.com/about/procurement/index.html>

Please also address the following Records and Information Management (RIM) RFP Questions:

- 1 Does the solution include an application that will generate electronic information to be saved or stored within such application, whether hosted off-site or within ERCOT’s current IT infrastructure?
If YES, proceed to question 2.
If NO, no further questions are required as this does not pose any RIM Program concerns.
- 2 Does your solution utilize proprietary electronic document formats?
If YES, provide additional detail for RIM evaluation (what format(s) and access requirements).

If NO, provide additional detail for RIM evaluation (what format(s)).

- 3 Can your product meet ERCOT’s RIM program requirements⁵ for Records and information generated or stored by the system including destruction at the end of their lifecycle?

If YES, provide additional detail for RIM evaluation.

If NO, initiate additional discussion.

Section 2 -- Executive Summary

In this section, the respondent should condense and highlight the content of the Business Proposal to provide ERCOT with a broad understanding of the respondent’s approach to meeting ERCOT’s objectives for this procurement.

Section 3 -- Corporate Background and Experience

Respondent Background and Experience

This section details the respondent’s corporate background and experience. If the respondent proposes to use subcontractor(s), it must describe any existing ongoing relationships with such subcontractor(s), including project descriptions. The section should include the following information:

- Respondent’s full organization, company, or corporate name;
- Headquarter address;
- Type of ownership (e.g. partnership, corporation);
- If respondent is a subsidiary or affiliate and the name of the parent organization;
- State where the respondent is incorporated or otherwise organized to do business;
- Federal taxpayer identification;
- Name and title of person who will sign the contract; and
- Name and title of person responsible for responding to questions regarding the proposal, with telephone number, facsimile number, and email address.

Describe the respondent’s corporate background as it relates to projects similar in scope and complexity to the project described in this RFP.

If the proposal includes the use of subcontractors, include a similar description of the subcontractor’s corporate background.

⁵ RIM program requirements include purging records and non-record information based on current business requirements and the retention requirements found in ERCOT’s Records Retention Schedule.

Include at least three (3) references for projects performed within the last five (5) years that demonstrate the respondent's ability to perform the required RFP services. Include contract dates and contact parties, with address, telephone number, and email, if available. If the work was performed as a subcontractor, the respondent must describe the scope of subcontracting activities.

Key Personnel

Identify and describe the respondent's proposed labor skill set and provide resumes of all proposed key personnel (as defined by the respondent). Resumes must demonstrate experience germane to the position proposed. Resumes must list any relevant professional designations for key personnel identified by Respondent. Resumes should include work on projects cited under the respondent's corporate experience, and the specific functions performed on such projects.

Section 4 – Methodology and Services Approach

Describe the respondent's methodology for providing the deliverables identified in Section 2. Include a proposed project schedule, illustrating start and finish dates of the terminal and summary elements identified in Section 2 or proposed by the vendor.

Section 5 – Assumptions

State any business, economic, legal, or practical assumptions that underlie the respondent's Business Proposal.

Section 6 – Appendices

Include any appendices to the respondent's Business Proposal.

Section 7 – Vendor Information and Other Required Forms

Respondents must complete the following required forms:

1. Nondisclosure Statement
2. Vendor information form
3. Except for current ERCOT suppliers who have an active Master Agreement with ERCOT or who have completed the Vendor Information Form (VIF) within the last six months, all Respondents must provide a completed Supplier Vendor Information Form along with the proposal.
4. If the anticipated contract value with ERCOT is equal to or >\$250,000.00, the respondent must include the two (2) most recent two (2) years audited financial statements (include

unaudited statements if supplier is unaudited). Publically-held companies must include or provide a link to the most recent Forms 10-K and 10-Q filings.

3.9.2 Part 2 -- Cost Proposal

The Cost Proposal must be based on the Scope of Work described in Section 2. This section should include any business, economic, legal, or practical assumptions that underlie the Cost Proposal.

Respondents may separately identify cost-saving and cost-avoidance methods and measures and the effect of such methods and measures on the Cost Proposal and Scope of Work.

Respondents must submit cost breakdown structure that supports and identifies all direct and indirect costs used for your cost proposal. Define all fixed and variable costs that may be included in your cost proposal and summarize the cost proposal into a monthly fee and annual fee. Include any price breaks for a long term agreement (i.e. two years, three years, four years, etc.).

3.10 Multiple Responses

A respondent may submit more than one proposal, including a joint proposal with one or more respondents.

3.11 Joint Proposals

Two or more companies may join together and submit a joint proposal in response to this RFP. A joint proposal must completely define the responsibilities each company proposes to undertake. Also, the joint proposal must designate a primary respondent who will be responsible for the delivery of all goods, services, and requirements as specified in the RFP, and a single authorized official from the primary respondent to serve as the sole point of contact between ERCOT and the joint proposers. Any contract resulting from a joint proposal must be signed by an authorized agent or officer of each company. Each company included in the submission of a joint proposal will be jointly and severally liable during the term of the contract.

4 Evaluation

4.1 Evaluation of Proposals

ERCOT will select the successful vendor through an internal evaluation process. ERCOT will consider capabilities or advantages that are clearly described in the proposal, which may be confirmed by oral presentations, site visits, or demonstrations if required, and verified by information from reference sources contacted by ERCOT. ERCOT reserves the right to contact individuals, entities, organizations that have had dealings with the respondent, or staff proposed for this effort, whether or not identified in the proposal.

4.2 Evaluation Criteria

The primary criteria for evaluating the proposals as they relate to this RFP are as follows:

1. The vendor's ability to meet the requirements set forth in Section 2.
2. The vendor's fees or cost structure.

4.3 Oral Presentations and Site Visits

ERCOT may, at its sole discretion, request oral presentations, site visits, and/or demonstrations from one or more respondents. ERCOT will notify selected respondents of the time and location for these activities, and may supply agendas or topics for discussion. ERCOT reserves the right to ask additional questions during oral presentations, site visits, and/or demonstrations to clarify the scope and content of the written proposal, oral presentation, site visit, or demonstration.

4.4 Discussions with Respondents

ERCOT may, but is not required to, conduct discussions and negotiations with all, some, or none of the respondents for the purpose of obtaining the best value for ERCOT.