



Date: June 12, 2012
To: Board of Directors
From: Chad V. Seely, ERCOT Assistant General Counsel
Subject: Pilot Project: 30-Minute Emergency Response Service (ERS)

Issue for the ERCOT Board of Directors

ERCOT Board of Directors Meeting Date: June 19, 2012

Agenda Item No.: 09

Issue:

Whether the ERCOT Board of Directors (Board) should approve a pilot project to test an Emergency Response Service (ERS) product with a thirty-minute response time, to be effective immediately.

Background/History:

On May 18, 2012, the Public Utility Commission of Texas (PUC or Commission) adopted amendments to PUC Substantive Rule 25.361 giving ERCOT authority to conduct pilot projects in order “to provide a temporary platform to evaluate resources, technologies, services, and processes that demonstrate the potential to advance the operational and market functions of the ERCOT system.” P.U.C. SUBST. R. 25.361(k)(1). The amended rule recognizes that pilot projects will enable ERCOT to “validate performance claims of alternative technologies, evaluate the extent to which new technologies or processes can provide services that comply with federal and state reliability standards, and review how resources perform in various operational and market scenarios.” The rule gives ERCOT staff the exclusive authority to propose pilot projects, but requires consultation with affected stakeholders and Commission staff in formulating the proposal. P.U.C. SUBST. R. 25.361(k)(2). To be effective, any pilot project proposal must receive Board approval.

Under this new authority, ERCOT staff now proposes that the Board approve a pilot project to study the costs and benefits of an ERS product with a 30-minute ramp period (30-Minute ERS). In particular, ERCOT staff requests Board approval of Exhibit A, Governing Document for 30-Minute Emergency Response Service Pilot Project (Governing Document), which provides the specific terms of the proposed administration of the pilot. The *Governing Document* addresses and meets the requirements of PUC Substantive Rule 25.361(k)(2) for pilot project proposals, specifically:

- (A) The scope and purposes of the pilot project;
- (B) Designation of temporary exceptions from ERCOT rules that ERCOT expects to authorize as part of the pilot project;
- (C) Criteria and reporting mechanisms to determine whether and when ERCOT should propose changes to ERCOT rules based upon results of a pilot project;
- (D) An estimate of costs ERCOT will incur attributable to the pilot project; and
- (E) An estimated date of completion for the pilot project.



As described in the *Governing Document*, the pilot will be governed by the ERCOT Protocols except where the *Governing Document* provides differently for purposes of conducting the pilot project. Accordingly, the rules governing the conventional ERS Program (10-Minute ERS) will generally apply, except as otherwise specified. The *Governing Document* explains that the pilot proposal differs from 10-Minute ERS in a number of key respects, including the following:

- Pilot participants will have thirty minutes to respond to a Dispatch Instruction, instead of the ten minutes required of 10-Minute ERS Resources;
- Only Loads—not generators—will be permitted to participate in 30-Minute ERS;
- ERCOT may deploy 30-Minute ERS as early as Energy Emergency Alert (EEA) Level 1 (10-Minute ERS is deployed only at EEA Level 2);
- 30-Minute ERS will be procured using a clearing price mechanism instead of as-bid pricing used with 10-Minute ERS;
- Pilot participants will be subject to a minimum of one and a maximum of four deployments (whether for purposes of testing or actual deployment) per Contract Period;
- Pilot participants will be subject to a maximum of eight cumulative hours of deployment during the period of obligation, and will not be obligated to remain deployed beyond eight hours, even if ERCOT does not issue a recall instruction;
- Pilot participants may not opt for automatic renewal of obligations for additional Contract Periods; and
- Failure to meet available or performance standards will subject Qualified Scheduling Entities (QSEs) representing Pilot participants to a disproportionate reduction in payment, rather than suspension from participation.

The *Governing Document* also limits the pilot to a maximum of 150 megawatts (MW), while reserving ERCOT's right to reject unreasonable bids even if the maximum is not reached.

As described in the *Governing Document*, ERCOT staff believes the pilot will allow ERCOT to achieve the following objectives:

- Assess the operational benefits and challenges of deploying an ERS product with a 30-minute ramp period;
- Study the optimal means of deploying 30-Minute ERS within an EEA;
- Gather data to analyze the operation and benefits of a clearing price mechanism;
- Gather data to assist ERCOT in determining the appropriate price to pay for 30-Minute ERS;
- Gather data to compare costs and benefits relative to 10-Minute ERS; and
- Determine overall market interest in 30-Minute ERS before making appropriate ERCOT rule changes.

As required by the new rule, ERCOT staff consulted with Commission staff and solicited stakeholder input on this proposal through various measures. ERCOT first discussed the concept of this pilot with the Demand-Side Working Group (DSWG) at its April 27, 2012 meeting. After considering input from this discussion, ERCOT staff published the draft *Governing Document* and QSE Agreement in a Market Notice issued on May 7, 2012. The Market Notice requested written comments on both documents. While waiting for those



comments, ERCOT staff discussed the proposal with the Wholesale Market Subcommittee (WMS) at its May 9, 2012 meeting. Then, after reviewing nine comments received in response to its solicitation, ERCOT staff published an updated version of the *Governing Document*, which also reflected considerable input received at the June 1, 2012 DSWG meeting. During all phases of the stakeholder review process, ERCOT staff kept Commission staff updated of all changes to the *Governing Document*.

In the final step of the stakeholder review process, ERCOT staff presented the updated proposal to the Technical Advisory Committee (TAC) at its June 7, 2012 meeting. TAC spent a considerable amount of time discussing the proposal. Several Market Participants expressed concerns about the project—especially with regard to the size of the project and the potential for the product to suppress prices during scarcity or testing intervals. ERCOT staff attempted to address all concerns. Ultimately, TAC voted to recommend approval of the pilot proposal, with the modification that the project be limited to 30 MW. Specifically, the TAC motion stated the following:

[B]ased on the discussion held at the June 7, 2012 TAC meeting, TAC believes the cost of the 30-Minute ERS Pilot Project will likely exceed any operational or technical benefits that will be gained; therefore to lessen costs, TAC recommends the size of the 30-Minute ERS Pilot Project be limited to no more than 30 MWs.

The motion carried via roll call with five objections (one from the Consumer Market Segment and four from the Cooperative Market Segments) and six abstentions [one each from the Consumer, Independent Generator, Independent Retail Electric Provider (IREP), and Municipal Market Segments and two from the Independent Power Marketer (IPM) Market Segment]. Notably, several of those who voted against the motion to approve the pilot indicated that they voted “no” because they disagreed with the limitation on the scale of the pilot.

ERCOT staff respectfully disagrees with the TAC recommendation to limit the project to 30 MW due to reasons including the need to evaluate general response characteristics, determine interest in the project and evaluate the potential benefits of a clearing price mechanism. First, ERCOT needs a project of sufficient size to evaluate the general response characteristics of a fleet-wide deployment and believes the 150 MW limit provides the best opportunity to test the response characteristics. For example, it is operationally useful to know the deployment levels of Loads within 20 minutes and 30 minutes of the Dispatch Instruction in order to ascertain the optimal time for issuing the instruction. A smaller sample size (such as the 30 MW ultimately recommended by TAC) may not provide an accurate prediction of the deployment characteristics in an EEA event. In addition, a 150 MW maximum creates the possibility for participation by a mixture of larger and smaller Loads, and will provide information of the relative performance and characteristics of different types of Loads.

Second, if the project were limited to 30 MW, ERS QSEs would be expected to spend less time and money marketing the product to new Loads, as the the probability of being selected to participate would be much lower. This lower MW threshold could make it more difficult to determine interest and the overall ability to acquire substantially more MWs for a longer lead



time (30-minutes). This would in turn affect the competitiveness of offer prices that ERCOT might expect to see. While it is quite possible that ERCOT may not receive a total of 150 MW in offers (especially for the first pilot Contract Period), ERCOT staff believes that setting the maximum at this higher level will encourage QSEs to submit offers more reflective of the program constraints that would exist if 30-Minute ERS were ultimately added to the Protocols.

Finally, ERCOT staff believes that having a larger maximum ceiling of 150 MW will allow it to better evaluate the potential benefits of a clearing price mechanism. For these reasons, ERCOT staff cannot agree with the proposed amendment to the pilot provided in the TAC recommendation.

The new PUC rule requires that any pilot project proposal include an estimate of costs ERCOT will incur attributable to the project. ERCOT staff expects that its costs of administration will be 0.7 full-time equivalent (FTE) employees. Although not required by the new PUC rule, ERCOT staff has also estimated the costs that will be uplifted to Load after each pilot Contract Period. For the July 15 to September 30, 2012 Contract Period, ERCOT staff estimates costs of \$2.5 million. For the October 2012 to January 2013 Contract Period and the February to May 2013 Contract Period, ERCOT staff estimates costs of \$3.2 million for each Contract Period. These cost estimates are based on per-MW cost data from the three most recent 10-Minute ERS Contract Periods multiplied by the 150 MW cap. However, ERCOT staff would note that these costs are difficult to predict because it is impossible to know precisely how many participants will submit offers, what those offers will be, how those participants will perform during actual deployments, and whether ERCOT will need to conduct a procurement for a February to May 2013 Contract Period, among other variables. Nevertheless, ERCOT staff does have the ability to control costs through the procurement process so as to ensure that the \$50 million cap imposed by PUC Substantive Rule 25.507 (or any other target maximum it may find appropriate) is not exceeded.

Key Factors Influencing Issue:

The key factors influencing the issue are:

- (1) The benefit of conducting the pilot, which is the ability to evaluate the feasibility of a product with a longer response time without formally integrating the product into the Protocols; and
- (2) The costs of conducting the pilot, as described above.

Conclusion/Recommendation:

ERCOT Legal recommends, for the above-identified reasons, that the Board approve the 30-Minute ERS pilot project, as described in Exhibit A, Governing Document, to be effective immediately.

In its recent order adopting new PUC Substantive Rule 25.507 (concerning 10-Minute ERS), the PUC addressed the need to examine the possibility of ERS with a longer response period, stating that it “encourages ERCOT to expeditiously explore the feasibility and usefulness of implementing this feature. If ERCOT determines that the program should include classes of



ERS participants with differing response times, the commission encourages ERCOT to implement this feature as soon as possible but not later than the summer of 2013.” See Public Util. Comm’n, *Rulemaking to Amend Subst. R. 25.507, Relating to Electric Reliability Council of Texas (ERCOT) Emergency Response Service (EILS)*, Project No. 39948, 17 (Mar. 23, 2012) (Final Order).

ERCOT staff submits that the most appropriate way to “explore the feasibility” of an emergency demand response product with a longer response period is to conduct a pilot project. If the product for any reason proves not to be useful, ERCOT may terminate the pilot by issuing a Market Notice to that effect. ERCOT staff believes that the market cost of conducting this pilot will not be materially higher than the cost of full integration of the product into the Protocols, but should provide similar operational benefits during the testing period, while providing much more useful operational data about this product than would be available in the absence of a pilot with required testing deployments.



ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, pursuant to P.U.C. SUBST. R. 25.361(k), the Public Utility Commission of Texas (PUC) has authorized the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) to approve pilot projects for the purposes of testing new resources, technologies, services and processes;

WHEREAS, the PUC has requested that ERCOT “expeditiously explore the feasibility and usefulness of implementing” demand response with a ramp period of longer than ten minutes;

WHEREAS, the Board finds that ERCOT staff has developed a proposal for the administration of the pilot project in Exhibit A, *Governing Document for 30-Minute Emergency Response Service Pilot Project (Governing Document)*, and such proposal meets the requirements in P.U.C. SUBST. R. 25.361(k)(2); and

WHEREAS, the Board finds that ERCOT staff consulted with PUC Staff and provided an opportunity for adequate stakeholder review and comment on the proposal and such review meets the requirements in P.U.C. SUBST. R. 25.361(k)(2);

THEREFORE, BE IT RESOLVED, that the proposed 30-Minute ERS pilot project, as described in Exhibit A, *Governing Document*, is hereby authorized and approved by the Board to be effective immediately.

CORPORATE SECRETARY’S CERTIFICATE

I, Vickie G. Leady, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its June 19, 2012, meeting, the ERCOT Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of June, 2012.

Vickie G. Leady
Assistant Corporate Secretary