

PROJECT NO. 45927

**RULEMAKING REGARDING § PUBLIC UTILITY COMMISSION
EMERGENCY RESPONSE SERVICE §
§ OF TEXAS**

**ORDER ADOPTING AMENDMENT TO §25.507
AS APPROVED AT THE MARCH 30, 2017 OPEN MEETING**

The Public Utility Commission of Texas (commission) adopts an amendment to §25.507, relating to Electric Reliability Council of Texas (ERCOT) emergency response service (ERS), with changes to the proposed text as published in the October 21, 2016 issue of the *Texas Register* (41 TexReg 8235). The amendment will permit ERS resources to participate in Must-Run Alternative (MRA) arrangements to replace the need for Reliability Must-Run (RMR) generation resources. This amendment is adopted under Project Number 45927.

The commission received comments on the proposed amendment from the Lone Star Chapter of the Sierra Club, Gerdau Long Steel North America, Nucor Steel - Texas, and CMC Steel Texas (ERCOT Steel Mills), the Texas Advanced Energy Business Alliance (TAEBA), ERCOT, Texas Industrial Energy Consumers (TIEC), Luminant Energy Company LLC and Luminant Generation Company LLC (Luminant), South Texas Electric Cooperative, Inc. (STEC), the Lower Colorado River Authority (LCRA), NRG Companies (NRG), Shell Energy North America (Shell Energy), the Advanced Energy Management Alliance (AEMA), and the Environmental Defense Fund, Inc. (EDF). Reply comments were received from the ERCOT Steel Mills, Potomac Economics, ERCOT, Shell Energy, TIEC, Luminant, and AEMA.

Comments relating to the use of ERS resources to forestall firm load shed in the event of local transmission congestion:

ERCOT Steel Mills suggested that the proposed rule could be improved by modifying the language in subsection (b) to change the phrase “local transmission congestion” to “local transmission emergency.” According to the Steel Mills, the rule as proposed is ambiguous, and might be interpreted to allow use of ERS resources to manage local congestion, and that the use of the term “transmission emergency” would more accurately capture the intent of the proposed rule.

TAEBA also cautioned against a misinterpretation of the proposed rule that could enable the deployment of ERS to manage local congestion, rather than to respond to grid emergencies. TAEBA recommended that the phrase “the event of actual or anticipated localized transmission congestion” be replaced by “or to forestall or mitigate involuntary load curtailment in local regions.” TAEBA also requested confirmation that the new local ERS product would be in addition to the existing ERS product, and not a replacement for the current ERS program. TAEBA recommended that the commission convene a workshop to further discuss implementation issues and to determine whether additional rule amendments are required to facilitate implementation. Finally TAEBA argued that the existing \$50 million annual cap on ERS expenditures should be eliminated, allowing ERCOT staff the discretion to determine the quantities of ERS capability that should be procured.

Luminant argued against the proposed rule amendments that would permit deployment of ERS resources to address local congestion emergencies. According to Luminant, it would be difficult to specify criteria for the deployment of these resources, and that the ability of ERS resources to respond quickly enough to effectively prevent firm load shed due to local congestion is dubious. Luminant also expressed concern about the potential effects on the system-wide ERS program if the proposed amendments were adopted, arguing that pricing pressures would either cause some current ERS resources to abandon the program or lead to demands to increase overall expenditures on the program. Finally, Luminant warned that deployment of ERS resources to address local congestion issues could have undesirable impacts on price formation in the area subject to local congestion. While the price effects of ERS deployment during an Energy Emergency Alert (EEA) are currently addressed through the Reliability Deployment Price Adder, deployment of ERS to address local congestion issues would only have the effect of lowering prices within the congested area.

In reply comments, Luminant reiterated its opposition to the implementation of an ERS product to address local congestion, pointing to the adverse effects on local prices that would result from ERS deployment, and arguing that ERS should be deployed for local congestion only if it can qualify to bid into and be dispatched by SCED. If the ERS program is modified as contemplated in the proposed rule amendments, Luminant agreed with other parties that the rule should be modified to make clear that it is to be used only for local transmission emergencies, and not for routine network management.

STEC supported the proposed rule amendments as a first step in recognizing additional value in ERS resources not currently available to ERCOT operators, and suggested that an additional step could be explored through a pilot program to investigating the deployment of ERS through the ancillary services market as part of a service such as Non-Spinning Reserve Service.

LCRA recommended that ERS should be deployed for local transmission emergencies only after Security Constrained Economic Dispatch (SCED) and Reliability Unit Commitment (RUC) processes have failed to resolve the transmission issue, and suggested specific language to accomplish this purpose. LCRA also argued that ERS resources should be paid only for service during local congestion events or for service in an EEA, but not for both.

NRG did not oppose the proposed amendments, but urged the commission to consider broader issues related to locational pricing, including the development of a local reserve product that would support appropriate localized price formation, rather than potentially distort local prices as the deployment of ERS may do. NRG recommended that ERS not be deployed to address local congestion issues unless the effects on local price formation also is addressed, and suggested specific rule language to this effect. NRG also expressed concern about the effects on the system-wide ERS service due to competition for limited funds, and suggested that ERS for local deployment proceed carefully under an initial pilot project with a limited transfer of funding. Finally, NRG offered specific language to ensure that ERS is deployed for local congestion only if needed for a local transmission emergency.

Shell Energy supported the proposed amendments, but offered a proposal that would expand the current ERS program to permit some ERS resources to submit energy offer curves to ERCOT's Security Constrained Economic Dispatch (SCED) algorithm and to be dispatched by SCED when the resource's offer is struck. Under Shell Energy's proposal, an ERS resource participating in this service would continue to be available for dispatch under system-wide EEA conditions, but would also be available for dispatch based on an offer to sell. Shell Energy's proposed service would be limited to those ERS resources that have the capability of telemetering an offer curve to ERCOT and to respond to SCED dispatch within ten minutes. ERS resources would forfeit ERS capacity payments for those intervals in which they are deployed by SCED. Shell Energy argues that this would preserve the existing ERS program, while permitting ERS resources to contribute to localized price formation, avoiding the problem of price suppression when ERS resources are deployed. As evidence that its proposal is feasible, Shell Energy noted that the current market rules impose a 95 percent availability metric on ERS provided by distributed generation (DG), which allows DG resources to self-dispatch in response to the real-time price for a certain number of hours, effectively opting out of the program while fulfilling their ERS obligation. Shell Energy proposed broadening this optionality by allowing certain capable ERS resources to submit offer curves to SCED. Shell Energy offered specific rule language to implement its proposal.

In reply comments, Shell Energy responded to the comments of other parties by reiterating the claimed benefits of its proposal, particularly with regard to the effects of ERS deployment on the formation of local price signals. According to Shell Energy, its proposal largely eliminates the

price suppression effects of ERS deployment by permitting ERS resources to participate in price formation.

EDF supported the proposed amendments, but proposed that the rule amendments be modified to ensure that ERS is not deployed as a part of normal ERCOT operations and that ERS deployment will not undermine wholesale market signals. EDF also recommended eliminating the annual \$50 million expenditure limit for ERS, giving ERCOT staff the flexibility to determine the amount of ERS capacity required.

In reply comments, TIEC agreed with other parties that the rule amendment should be revised to clarify that ERS is to be deployed only in the event of local transmission emergencies and not as a routine management practice. TIEC opposed proposals to increase or eliminate the annual expenditure cap, arguing that because there is no required or optimal amount of ERS procurement, an annual cost cap is sensible. TIEC opposed STEC's proposal to investigate integration of ERS into NSRS, because ERS resources are not equipped to respond to SCED base points. Finally, TIEC opposed Shell Energy's proposal to integrate ERS resources into SCED dispatch as beyond the scope of this rulemaking and better handled through the ERCOT stakeholder process.

Potomac Economics, the ERCOT Independent Market Monitor (IMM) supported the proposed amendments, but agreed with other parties that the rule may need clarification to ensure that it is used only for transmission emergencies that would require firm load shed. The IMM also expressed concern that the creation of a separate local ERS product would be a complex

expansion of the current program, and recommended instead that the localized deployment of ERS should be accomplished within the existing ERS program, and that any need for a more expansive regional reserve product should be met by a program open to widespread participation by load and generation resources.

ERCOT responded to commenters that suggested that localized deployment of ERS resources should be accomplished within the existing ERS program rather than through creation of a separate product. ERCOT explained that deployment of ERS to resolve local congestion necessarily entails the deployment of specific resources rather than all of the resources in a QSE's portfolio or all resources in an aggregation of resources. Because resources in these groupings may lie physically on both sides of a transmission constraint, deployment of the entire group would do nothing to alleviate congestion in the constraint. ERCOT also argued that, due to the higher risk of deployment in areas subject to transmission congestion, a price differential may be necessary to procure ERS resources to serve these areas. For these reasons ERCOT maintained that a separate local ERS product is preferable to accommodating localized deployment within the existing ERS program. ERCOT took no position on whether a pilot program is necessary nor with regard to the proposals to increase or eliminate the annual expenditure cap on the program. ERCOT responded to LCRA's recommendation that ERS be deployed only after SCED and RUC processes had failed to resolve a local transmission issue by noting that this restriction may not prevent firm load shed in the local area. Finally, ERCOT responded to Shell Energy's proposal to integrate ERS resources into SCED by stating that this would defeat the purpose of ERS, which is to capture the value of demand response or generation that would not otherwise participate in the market.

In reply comments, AEMA agreed with the comments of TAEBA and EDF that the annual expenditure cap should be eliminated, granting ERCOT the flexibility to determine whether additional expenditures beyond the current cap are warranted. AEMA also argued that Shell Energy's proposal to integrate ERS into the real-time market is better handled through the ERCOT stakeholder process.

Commission response

Upon consideration of the comments filed in response to the Proposal for Publication, the commission has determined that the rule amendment to permit deployment of ERS resources to forestall local transmission emergencies should not be adopted at this time. According to ERCOT, the use of ERS to address local transmission emergencies would require the development of an ERS product separate from the current system-wide ERS product, due to the need to identify resources that are in a position to alleviate congestion, and due to the need for separate pricing for local deployment to reflect the difference in risk of deployment in a local product relative to the statewide product. The commission agrees with the IMM that this would represent a complex expansion of the current ERS program. Such an expansion would likely impose significant costs on ERCOT, and possibly on participants in the ERS program. The commission understands the concern expressed by the IMM that the creation of a separate local deployment product for ERS is a complex undertaking, and agrees with ERCOT that the existing ERS program is not well-suited to local deployment to address transmission emergencies.

Several parties pointed to the potential for localized price suppression when ERS is deployed to address local congestion issues, and argued that this effect would not be addressed through existing mechanisms, such as the Reliability Deployment Price Adder. The commission agrees that the effects of out-of-market reliability actions on local price formation is a concern, and the effects on nodal prices of the deployment of ERS to forestall local transmission emergencies would not be addressed through existing pricing mechanisms.

For these reasons, the commission will not adopt the proposed amendments to permit deployment of ERS resources to forestall local transmission emergencies.

Several parties have suggested that the annual expenditure cap for the ERS program – currently set by commission rule at \$50 million annually – be increased or eliminated in light of the potential increase in program costs due to the need for payments for a new ERS product with potentially higher payments required to attract participation for a product with a possibly higher risk of deployment. Because the proposed expansion of the ERS program to address local transmission emergencies is not adopted, the commission declines to increase or eliminate the annual expenditure cap at this time.

Comments relating to the participation of ERS resources in Must-Run Alternative (MRA) agreements:

The ERCOT Steel Mills proposed changes to subsection (d)(10) of the proposed rule to accomplish two purposes. First, by deleting the phrase “in part or in whole” from the first

sentence of subsection (d)(10), the rule would permit resources to participate in ERS in all time periods for which it is not contracted as part of an MRA agreement. According to the Steel Mills, excluding resources that participate in an MRA agreement from participation in ERS during hours for which it has no MRA obligation would unnecessarily limit the amount of ERS capacity that is available to ERCOT to manage grid emergencies. Second, the Steel Mills also recommended that the last sentence of subsection (d)(10) be deleted. The Steel Mills expressed concern that the language in the last sentence of the sub-paragraph could be construed to require ERCOT to implement ERS for transmission congestion only as a stand-alone service, rather than as a part of the existing service. The Steel Mills were also concerned that the language in the last sentence could disqualify resources that participate in ERS from submitting bids for participation in an MRA agreement.

TIEC generally supported the proposed rule amendments, but argued that the language in proposed subsection (d)(10) is overly detailed and that modifications to that language should be adopted to provide ERCOT staff and stakeholders additional flexibility in implementing the proposed rule. TIEC proposed a specific replacement for the paragraph in question.

While Luminant supported the rule amendments to permit participation by ERS resources in an MRA arrangement, Luminant suggested revisions to the proposed amendments to clarify that an ERS resource could not provide both ERS capacity and participate in an MRA arrangement during both the current ERS contract period and in subsequent contract periods where the MRA arrangement is in effect.

NRG opposed the proposed amendments to subsection (d), arguing that the amendments are unnecessary, because ERS resources have sufficient time to make a decision regarding participation in either ERS or a MRA. Because the ERS procurement schedule is relatively short, according to NRG, ERS resources will be aware of any pending MRA procurement well before a decision of offer into the ERS market is required.

EDF supported the rule amendments to permit ERS resources to participate in MRA arrangements.

Commission response

The commission agrees with some parties submitting comments that the language proposed in the amendment to subsection (d) is unnecessarily detailed. Accordingly, the language proposed by TIEC is incorporated into the adopted amendment. The commission believes that this language will address the concerns expressed by the ERCOT Steel Mills and Luminant, in that the adopted language, being more general, will permit details regarding ERS contract periods and the relationship between ERS contract obligations and obligations under MRA arrangements to be resolved by the ERCOT stakeholder process or through ERCOT contracting procedures.

The commission does not agree with NRG that the proposed amendment is unnecessary because ERS procurement periods are short enough that potential participants in MRA arrangements will have sufficient notice of the pendency of any such arrangement that they will be able to adjust their ERS participation accordingly. First, the commission notes that the commission rules that pertain to RMR and MRA arrangements are currently under review by the commission in Project

Number 46369. Rule amendments resulting from that project may well alter the timeline for procurement of MRA arrangements, posing difficulties for potential participants in those arrangements that also participate in ERS. Second, the ERS procurement timeline is not specified by commission rule, but by ERCOT protocols and contracting procedures, and may change at any time. Finally, a potential MRA participant, in deciding to bid for the MRA contract, can have no assurance that its bid will be accepted, and may unnecessarily sacrifice its participation in ERS in anticipation of an MRA arrangement that is not accepted by ERCOT.

General comments:

Sierra Club had no specific comments with regard to the published rule, but commented more generally that Reliability Must-Run (RMR) or MRA agreements, including those comprising ERS resources, should be subject to approval by the ERCOT Board of Directors.

AEMA supported the proposed amendments, but raised a number of questions relating to the implementation of the proposed rule amendments, and recommended that the commission conduct a workshop to more fully explore these implementation issues prior to adoption of the proposed amendments.

Commission response

The comments submitted by Sierra Club are beyond the scope of this rulemaking, but this issue currently is being considered as part of Project No. 46369, Rulemaking Relating to Reliability Must-Run Service.

All comments, including any not specifically referenced herein, were fully considered by the commission.

This amendment is adopted under the section 14.002 of the Public Utility Regulatory Act, Tex. Util. Code Ann. §14.002 (West 2016) (PURA) which provides the commission with the authority to make and enforce rules reasonably required in the exercise of its powers and jurisdiction, and specifically, §39.151, which provides the commission with the authority to oversee ERCOT.

Cross reference to statutes: Public Utility Regulatory Act §14.002 and §39.151.

§25.507. Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS).

- (a) **Purpose.** The purpose of this section is to promote reliability during energy emergencies through provisions that provide ERCOT flexibility in the implementation and administration of ERS.
- (b) **ERS procurement.** ERCOT shall procure ERS, a special emergency response service that is intended to be deployed by ERCOT in an Energy Emergency Alert (EEA) event.
- (1) ERCOT shall determine the ERS contract periods during which ERS resources shall be obligated to provide ERS, including any additional ERS contract periods ERCOT deems necessary due to the depletion of available ERS.
- (2) ERCOT may spend a maximum of \$50 million per calendar year on ERS. ERCOT may determine cost limits for each ERS contract period in order to ensure that the ERS cost cap is not exceeded. To minimize the cost of ERS, ERCOT may reject any offer that ERCOT determines to be unreasonable or outside of the parameters of an acceptable offer. ERCOT may also reject any offer placed on behalf of any ERS resource if ERCOT determines that it lacks a sufficient basis to verify whether the ERS resource complied with ERCOT-established performance standards in an ERS deployment event during the preceding ERS contract period.
- (c) **Definitions.**
- (1) ERS contract period -- A period defined by ERCOT for which an ERS resource is obligated to provide ERS.

- (2) ERS resource -- A resource contracted to provide ERS that meets one of the following descriptions:
 - (A) A load or aggregation of loads; or
 - (B) A dispatchable generator that is not registered with ERCOT as a Generation Resource, or an aggregation of such generators.
 - (3) ERS time period -- Sets of hours designated by ERCOT within an ERS contract period.
 - (4) ERCOT -- The staff of the Electric Reliability Council of Texas, Inc.
- (d) **Participation in ERS.** In addition to requirements established by ERCOT, the following requirements shall apply for the provision of ERS:
- (1) An ERS resource must be represented by a qualified scheduling entity (QSE).
 - (2) QSEs shall submit offers to ERCOT on behalf of their ERS resources.
 - (A) Offers may be submitted for one or more ERS time periods within an ERS contract period.
 - (B) QSEs representing ERS resources may aggregate multiple loads to reach the minimum capacity offer requirement established by ERCOT. Such aggregations shall be considered a single ERS resource for purposes of submitting offers.
 - (3) ERCOT shall establish qualifications for QSEs and ERS resources to participate in ERS.
 - (4) A resource shall not commit to provide ERS if it is separately obligated to provide response with the same capacity during any of the same hours.

- (5) ERCOT shall establish performance criteria for QSEs and ERS resources.
 - (6) When dispatched by ERCOT, ERS resources shall deploy consistent with their obligations and shall remain deployed until recalled by ERCOT.
 - (7) ERCOT may deploy ERS resources as necessary, subject to the annual expenditure cap. Deployment of an ERS resource shall be limited to a maximum of eight cumulative hours in an ERS contract period. However, if an instruction causes the cumulative total ERS deployment time to exceed eight hours within a contract period, each ERS resource shall remain deployed until permitted by ERCOT procedures or by ERCOT instructions to return from deployment.
 - (8) Upon exhaustion of an ERS resource's obligation in any contract period, ERCOT shall have the option to renew that obligation, subject to the consent of the ERS resource and its QSE. ERCOT may renew the obligation on each occasion that the resource's obligation is exhausted.
 - (9) ERCOT shall establish procedures for testing of ERS resources.
 - (10) A resource with a pre-existing contract to provide ERS may submit a proposal to serve as an alternative to a resource subject to reliability must-run (RMR) service for the same period. If the resource is selected, ERCOT shall appropriately modify or terminate the resource's pre-existing ERS contract to allow the resource to participate as an RMR alternative.
- (e) **ERS Payment and Charges.**
- (1) ERCOT shall make a payment to each QSE representing an ERS resource on an as-bid basis, a market clearing price mechanism, or such other mechanism as

ERCOT deems appropriate, subject to modifications determined by ERCOT based on the ERS resource's availability during an ERS contract period and the ERS resource's performance in any deployment event.

- (2) ERCOT shall charge each QSE a charge for ERS based upon its load ratio share during the relevant ERS time period and ERS contract period.
 - (3) ERCOT shall settle an ERS contract period within 80 days following the completion of the ERS contract period.
- (f) **Compliance.** A QSE representing ERS resources is subject to administrative penalties for noncompliance, by the QSE or the ERS resources it represents, with this rule or any related ERCOT Protocols, Operating Guides, or other ERCOT standards. ERCOT shall establish criteria for reducing a QSE's payment and/or suspending a QSE from participation in ERS for failure to meet its ERS obligations, and shall also establish criteria for subsequent reinstatement. In addition, ERCOT shall establish criteria under which an ERS resource shall be suspended for non-compliance, and shall also establish criteria for subsequent reinstatement. ERCOT shall notify the commission of all instances of non-compliance with this rule or any related ERCOT Protocols, Operating Guides, or other ERCOT standards. ERCOT shall maintain records relating to the alleged non-compliance.
- (g) **Reporting.** Prior to the start of an ERS contract period, ERCOT shall report publicly the number of megawatts (MW) procured per ERS time period, the number and type of ERS resources providing the service, and the projected total cost of the service for that ERS

contract period. ERCOT shall review the effectiveness and benefits of ERS and report its findings to the commission annually by April 15 of each calendar year. The report shall contain, at a minimum, the number of MW procured in each period, the total dollar amount spent, the number and level of EEA events, and the number and duration of deployments.

- (h) **Implementation.** ERCOT shall develop additional procedures, guides, technical requirements, protocols, and/or other standards that are consistent with this section and that ERCOT finds necessary to implement ERS, including but not limited to developing a standard form ERS Agreement and specific performance guidelines and grace periods for ERS resources.

- (i) **Self Provision.** ERCOT shall establish procedures for self-provision of ERS by any QSE.

This agency certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority. It is therefore ordered by the Public Utility Commission of Texas that §25.507 relating to Electric Reliability Council of Texas (ERCOT) emergency response service (ERS) is hereby adopted with changes to the text as proposed.

Signed at Austin, Texas the _____ day of _____ 2017.

PUBLIC UTILITY COMMISSION OF TEXAS

DONNA L. NELSON, CHAIRMAN

KENNETH W. ANDERSON, JR., COMMISSIONER

BRANDY MARTY MARQUEZ, COMMISSIONER