

**ERCOT Annual Report to the Technical Advisory Committee
Regarding Emergency Interruptible Load Service (EILS) for the
Program Year of February 1, 2010, through January 31, 2011**

ERCOT hereby provides the annual report for the 2010 program year on the effectiveness and benefits of Emergency Interruptible Load Service (EILS), pursuant to ERCOT Nodal Protocols Section 3.14.3 (20), which states: “ERCOT will review the effectiveness and benefits of EILS every 12 months from the start of the program and report its findings to TAC.”

EILS History

On March 20, 2007, the Public Utility Commission of Texas approved P.U.C. SUBST. R. §25.507, *Electric Reliability Council of Texas (ERCOT) Emergency Interruptible Load Service (EILS)*,¹ requiring ERCOT to develop and administer EILS. The Commission later approved amendments to P.U.C. SUBST. R. §25.507 on November 1, 2007.²

ERCOT stakeholders have recommended and the ERCOT Board has approved the following Protocol Revision Requests (PRRs) related to EILS:

- PRR705 EILS (approved 4/18/07)
- PRR716 Self-Provision of EILS (approved 5/16/07)
- PRR717 EILS Disputes and Resettlements (approved 12/11/07)
- PRR723 Conform 5.6.6.1 EECF (approved 06/19/07)
- PRR725 EILS Formula & Standard Form Correction (approved 09/18/07)
- PRR746 Revisions to EILS Provisions to Conform to Amended P.U.C. SUBST. R. 25.507 (approved 12/11/07)
- PRR757 EILS Formula Correction (approved 7/15/08)
- PRR760 EILS Availability Factor Clarification (approved 7/15/08)
- NPRR 107 Nodal EILS (approved 7/15/08)
- PRR 781 EILS Self-Provision Formula Correction and Clarifications (approved 1/20/09)
- PRR 786 Modifications to EILS Settlement (approved 3/17/09)
- NPRR 278 EILS Modifications to Correct Self-Provision Settlement Equations, to Accommodate Advanced Metering Infrastructure, and other Clarifications (approved 11/16/10; effective date 2/1/11)

¹ PUC Rulemaking Concerning a Demand-Response Program for ERCOT Emergency Conditions, Project No. 33457.

² PUC Rulemaking to Amend ERCOT Emergency Interruptible Load Service, Project No. 34706. (The Commission adopted amendments that eliminated the 500 MW procurement floor and increased the annual EILS cost cap from \$20 million to \$50 million).

Procurement History

ERCOT procures EILS three times annually, for four-month Contract Periods. Through the end of the 2010 program year, ERCOT had solicited bids to provide EILS for 13 Contract Periods, as follows:

1. April 19, 2007 - May 31, 2007
2. June 1, 2007 - September 30, 2007
3. October 1, 2007 - January 31, 2008
4. February 1, 2008 - May 31, 2008.
5. June 1, 2008 – September 30, 2008.
6. October 1, 2008 – January 1, 2009
7. February 1, 2009 – May 31, 2009
8. June 1, 2009 – September 30, 2009
9. October 1, 2009 – January 31, 2010
10. February 1, 2010 – May 31, 2010
11. June 1, 2010 – September 30, 2010
12. October 1, 2010 – January 31, 2011
13. February 1, 2011 – May 31, 2011

Attachment A to this report provides detailed results of ERCOT's procurements of EILS through the program's history by Contract Period, including:

- Descriptions of Contract Periods and Time Periods
- Capacity procurements by Time Period and by Contract Period, including the number of Megawatts (MW) procured and the total number of MW offered
- Number of procured EILS Resources
- Average size of procured EILS Resources
- Number of individual Loads submitted to ERCOT for resource identification
- Cumulative number of individual Loads offered into EILS
- Summary of final settlement costs of EILS, adjusted to account for EILS Resources that achieved availability factors of less than 95%,³ and settlement costs as a percentage of the originally contracted commitments
- Detailed tables with capacity procurements by Time Period and by Contract Period, including average prices paid (in dollars per MW per hour).

Effectiveness & Benefits

Operational Benefits

ERCOT Protocols call for EILS to be deployed in Level 2B or Level 3 of an Energy Emergency Alert (EEA),⁴ and through the last day of the 2010 program year the service had not been

³ See ERCOT Protocol § 6.10.13.3.

⁴ See ERCOT Protocol § 5.6.7.

deployed by ERCOT Operations. ERCOT Operations did not declare an EEA at any time during the EILS 2010 program year, and no EEA events through the end of the program year had progressed to the EILS deployment stage.⁵

ERCOT Staff continues to have confidence in EILS due to the stringent availability and testing requirements associated with the program.

Consistent with the intent of the PUC Substantive Rule,⁶ the ERCOT Protocols⁷ require each EILS Resource to achieve an availability factor of at least 95% in each committed Time Period. Availability factors are calculated by ERCOT Staff after the end of the Contract Period through detailed reviews of Load-level interval meter data for each EILS Resource. EILS Resources that achieve availability factors of less than 95% are subject to a six-month suspension from their ability to provide EILS, in addition to reduced payment. EILS Resources with a cumulative total of approximately 54 MW of EILS-capable capacity were suspended during the 2010 program year for failure to meet these availability requirements. The Loads comprising these resources will be able to regain their eligibility to provide EILS only after submitting a corrective action plan to ERCOT and successfully completing a load-shed test administered by ERCOT.

Also consistent with the Rule,⁸ EILS Resources are subject to annual unannounced Load-shed tests, and are subject to suspension for failing two consecutive Load-shed tests.⁹ ERCOT Staff conducts this testing from the ERCOT Control Center by issuing an instruction to each individual Qualified Scheduling Entity (QSE) that simulates the Verbal Dispatch Instruction the QSE would receive in an EEA event. Nine EILS Resources with a combined EILS-capable capacity of approximately 17 MW were suspended during the 2010 program year for failing to meet performance requirements in two consecutive unannounced load-shed tests.

This combination of performance metrics and specific penalties for non-compliance, among the most stringent for any demand response program in North America, provide integrity to the EILS product.

Market Benefits

In approving the amendments to P.U.C. SUBST. R. §25.507, the Commission asserted that a secondary purpose of EILS is to enable additional demand response participation in the ERCOT market:

The commission agrees . . . that one of the important values of this program is to establish the role of demand-response in providing reliability services in ERCOT by enlisting numerous customers as providers of demand-response, particularly customers in classes that have not participated in the LaaRs program. The commission also finds value in having resources that have not participated in demand response programs being enabled

⁵ ERCOT deployed EILS as part of the EEA events of February 2-3, 2011. Reports relating to this deployment will be submitted by ERCOT separately and as part of the Annual Report for the 2011 EILS program year.

⁶ See Subst. Rule 25.507 (e).

⁷ See Protocols § 6.10.13.3 (c) and (d).

⁸ See Subst. Rule 25.507 (c)(4)(D).

⁹ See Protocols § 6.10.13.2.

to do so by this program. The commission encourages ERCOT to make an effort to attract such customers to the program.¹⁰

A number of facts and trends provide evidence that EILS is successfully meeting this Commission goal.

- The number of EILS Resources and individual Loads participating in EILS, as illustrated in Slides 4 through 10 in Attachment A, continues to increase with each EILS Contract Period. The average size of each EILS Resource remains at between 4 and 5 MW.
- Suspensions. A total of 16 EILS Resources were suspended in 2010 for achieving availability factors of less than 95%. This sidelined approximately 54 MW of EILS capacity that could potentially have contributed to a more robust growth rate in the 2010 program year.
- Bidding behavior. ERCOT management, for economic reasons, declined to accept at least some EILS bids in all three EILS Contract Periods in 2010. These decisions are illustrated in Slides 4 through 7 in Attachment A. While ample room remained under the annual \$50 million EILS cost cap,¹¹ ERCOT management made these procurement decisions consistent with the guidelines published in the document entitled “ERCOT Process for Determining Contract Period Cost Limits and Reasonableness of Bids for Emergency Interruptible Load Service.”¹²

In previous year’s reports, ERCOT has tracked participation in EILS on a percentage basis by Loads Acting as a Resource (LaaRs) in EILS. LaaRs continued to participate in EILS during 2010 as both individual EILS Resources and as members of aggregated EILS Resources. Some LaaR offers were accepted by ERCOT management; others were deemed not to meet the “reasonableness of bids” standard described above. Also in 2010, LaaRs were used by multiple QSEs as substitution EILS Resources in cases where the originally committed EILS Resources were unable to provide the service due to unplanned unavailability. Accordingly, ERCOT determined for this report that attempting to track LaaR participation as a percentage of overall EILS participation would produce misleading results.

ERCOT notes however that while EILS procurements throughout the year remained well under the 1,000 MW cap established by PUCT Rule, LaaR participation in Responsive Reserve Service (RRS) continued to be nearly full – with 98.7 percent of all available MW/Hours filled during the calendar year. Thus, EILS can be viewed as providing an alternative market outlet for excess LaaR demand response capacity. LaaRs procured for EILS, or offered as substitute EILS

¹⁰ *PUC Rulemaking to Amend ERCOT Emergency Interruptible Load Service*, Project No. 34706, at. 4-5 (November 8, 2007).

¹¹ See Subst. R. 25.507 (b)(3).

¹² See

http://www.ercot.com/content/services/programs/load/eils/keydocs/ERCOT_EILS_Procurement_Process_Revised021309.pdf

Resources, provide ERCOT with access to demand response that would otherwise be unavailable for operational dispatch.