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| NPRR Number | [937](http://www.ercot.com/mktrules/issues/NPRR937) | NPRR Title | Distribution Voltage Level Block Load Transfer (BLT) Deployment |
| Date Posted | | April 26, 2019 | |
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| Requested Resolution | | Normal | |
| Nodal Protocol Sections Requiring Revision | | 6.5.9.4.2, EEA Levels  6.5.9.5, Block Load Transfers between ERCOT and Non-ERCOT Control Areas  6.5.9.5.2, Scheduling and Operation of BLTs | |
| Related Documents Requiring Revision/Related Revision Requests | | NOGRR190, Related to NPRR937, Distribution Voltage Level Block Load Transfer (BLT) Deployment | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) allows for the Load shed associated with distribution voltage level Block Load Transfers (BLTs) to count toward Energy Emergency Alert (EEA) Level 3 Load shed obligations. | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/news/presentations/2013/ERCOT%20Strat%20Plan%20FINAL%20112213.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain)  *(please select all that apply)* | |
| Business Case | | This NPRR recognizes the contribution of distribution voltage level BLT’s deployment as firm Load shed. Some of these distribution BLTs account for nearly 20% of a distribution cooperative’s 4-Coincident Peak (4CP) Load. This Load is firm Load and should be counted toward the EEA Level 3 Load shed obligation of the distribution cooperative. | |

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| Proposed Protocol Language Revision |

***6.5.9.4.2 EEA Levels***

(1) ERCOT will declare an EEA Level 1 when PRC falls below 2,300 MW and is not projected to be recovered above 2,300 MW within 30 minutes without the use of the following actions that are prescribed for EEA Level 1:

(a) ERCOT shall take the following steps to maintain steady state system frequency near 60 Hz and maintain PRC above 1,750 MW:

(i) Request available Generation Resources that can perform within the expected timeframe of the emergency to come On-Line by initiating manual HRUC or through Dispatch Instructions;

(ii) Use available DC Tie import capacity that is not already being used;

(iii) Issue a Dispatch Instruction for Resources to remain On-Line which, before start of emergency, were scheduled to come Off-Line; and

(iv) At ERCOT’s discretion, deploy available contracted ERS-30 via an XML message followed by a VDI to the all-QSE Hotline. The ERS-30 ramp period shall begin at the completion of the VDI.

(A) If less than 500 MW of ERS-30 is available for deployment, ERCOT shall deploy it as a single block.

(B) If the amount of ERS-30 available for deployment equals or exceeds 500 MW, ERCOT, at its discretion, may deploy ERS-30 as a single block or by group designation. ERCOT shall develop a random selection methodology for determining how to place ERS Resources in ERS-30 into groups, and shall describe the methodology in a document posted to the MIS Public Area. Prior to the start of an ERS Contract Period for ERS-30, ERCOT shall notify QSEs representing ERS Resources in ERS-30 of their ERS Resources’ group assignments.

(C) ERS-30 may be deployed at any time in a Settlement Interval.

(D) Upon deployment, QSEs shall instruct their ERS Resources in ERS-30 to perform at contracted levels consistent with the criteria described in Section 8.1.3.1.4, Event Performance Criteria for Emergency Response Service Resources, until either ERCOT releases the ERS-30 deployment or the ERS-30 Resources have reached their maximum deployment time.

(E) ERCOT shall notify QSEs of the release of ERS-30 via an XML message followed by VDI to the all-QSE Hotline. The VDI shall represent the official notice of ERS-30 release. ERCOT may release ERS-30 as a block or by group designation.

(F) Upon release, an ERS Resource in ERS-30 shall return to a condition such that it is capable of meeting its ERS performance requirements as soon as practical, but no later than ten hours following the release.

(b) QSEs shall:

(i) Ensure COPs and telemetered HSLs are updated and reflect all Resource delays and limitations; and

(ii) Suspend any ongoing ERCOT required Resource performing testing.

(2) ERCOT may declare an EEA Level 2 when the clock-minute average system frequency falls below 59.91 Hz for 15 consecutive minutes. ERCOT will declare an EEA Level 2 when PRC falls below 1,750 MW and is not projected to be recovered above 1,750 MW within 30 minutes without the use of the following actions that are prescribed for EEA Level 2:

(a) In addition to the measures associated with EEA Level 1, ERCOT shall take the following steps to maintain steady state system frequency at a minimum of 59.91 Hz and maintain PRC above 1,375 MW:

(i) Instruct TSPs and DSPs or their agents to reduce Customer Load by using distribution voltage reduction measures, if deemed beneficial by the TSP, DSP, or their agents.

(ii) Instruct TSPs and DSPs to implement any available Load management plans to reduce Customer Load.

(iii) Instruct QSEs to deploy available contracted ERS-10 Resources, undeployed ERS-30 and/or deploy RRS supplied from Load Resources (controlled by high-set under-frequency relays). ERCOT may deploy ERS-10, ERS-30, or RRS simultaneously or separately, and in any order. ERCOT shall issue such Dispatch Instructions in accordance with the deployment methodologies described in paragraphs (iv) and (v) below and, if deploying ERS-30, the methodologies described in paragraph (1)(a)(iv) above.

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| ***[NPRR863: Replace item (iii) above with the following upon system implementation:]***  (iii) Instruct QSEs to deploy available contracted ERS-10 Resources, undeployed ERS-30, and/or deploy ECRS or RRS (controlled by high-set under-frequency relays) supplied from Load Resources. ERCOT may deploy ERS-10, ERS-30, ECRS, or RRS simultaneously or separately, and in any order. ERCOT shall issue such Dispatch Instructions in accordance with the deployment methodologies described in paragraphs (iv) and (v) below and, if deploying ERS-30, the methodologies described in paragraph (1)(a)(iv) above. |

(iv) ERCOT shall deploy ERS-10 via an XML message followed by a VDI to the all-QSE Hotline. The ERS-10 ramp period shall begin at the completion of the VDI.

(A) If less than 500 MW of ERS-10 is available for deployment, ERCOT shall deploy all ERS-10 Resources as a single block.

(B) If the amount of ERS-10 available for deployment equals or exceeds 500 MW, ERCOT, at its discretion, may deploy ERS-10 Resources as a single block or by group designation. ERCOT shall develop a random selection methodology for determining how to place ERS-10 Resources into groups, and shall describe the methodology in a document posted to the MIS Public Area. Prior to the start of an ERS-10 Contract Period, ERCOT shall notify QSEs representing ERS-10 Resources of their ERS-10 Resources’ group assignments.

(C) ERS-10 may be deployed at any time in a Settlement Interval.

(D) Upon deployment, QSEs shall instruct ERS-10 Resources to perform at contracted levels consistent with the criteria described in Section 8.1.3.1.4 until ERCOT releases the ERS-10 deployment or the ERS-10 Resources have reached their maximum deployment times.

(E) ERCOT shall notify QSEs of the release of ERS-10 via an XML message followed by VDI to the all-QSE Hotline. The VDI shall represent the official notice of ERS-10 release. ERCOT may release ERS-10 as a block or by group designation.

(F) Upon release, an ERS-10 Resource shall return to a condition such that it is capable of meeting its ERS performance requirements as soon as practical, but no later than ten hours following the release.

(v) ERCOT shall deploy RRS capacity supplied by Load Resources (controlled by high-set under-frequency relays) in accordance with the following:

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| ***[NPRR863: Replace paragraph (v) above with the following upon system implementation:]***  (v) Load Resources providing ECRS that are not controlled by high set under-frequency relays shall be deployed prior to Group 1 deployment. ERCOT shall deploy ECRS and RRS capacity supplied by Load Resources (controlled by high set under-frequency relays) in accordance with the following: |

(A) Instruct QSEs to deploy half of the RRS that is supplied from Load Resources (controlled by high-set under-frequency relays) by instructing the QSE representing the specific Load Resource to interrupt Group 1 Load Resources providing RRS. QSEs shall deploy Load Resources according to the group designation and will be given some discretion to deploy additional Load Resources from Group 2 if Load Resource operational considerations require such. ERCOT shall issue notification of the deployment via XML message. ERCOT shall follow this XML notification with a Hotline VDI, which shall initiate the ten-minute deployment period;

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| ***[NPRR863: Replace paragraph (A) above with the following upon system implementation:]***  (A) Instruct QSEs to deploy half of the RRS and all of the ECRS that is supplied from Load Resources (controlled by high-set under-frequency relays) by instructing the QSE representing the specific Load Resources to interrupt Group 1 Load Resources providing ECRS and RRS. QSEs shall deploy Load Resources according to the group designation and will be given some discretion to deploy additional Load Resources from Group 2 if Load Resource operational considerations require such. ERCOT shall issue notification of the deployment via XML message. ERCOT shall follow this XML notification with a Hotline VDI, which shall initiate the ten-minute deployment period; |

(B) At the discretion of the ERCOT Operator, instruct QSEs to deploy the remaining RRS that is supplied from Load Resources (controlled by high-set under-frequency relays) by instructing the QSE representing the specific Load Resource to interrupt Group 2 Load Resources providing RRS. ERCOT shall issue notification of the deployment via XML message. ERCOT shall follow this XML notification with a Hotline VDI, which shall initiate the ten-minute deployment period;

(C) The ERCOT Operator may deploy both of the groups of Load Resources providing RRS at the same time. ERCOT shall issue notification of the deployment via XML message. ERCOT shall follow this XML notification with a Hotline VDI, which shall initiate the ten-minute deployment period; and

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| ***[NPRR863: Replace paragraph (C) above with the following upon system implementation:]***  (C) The ERCOT Operator may deploy Load Resources providing only ECRS (not controlled by high-set under-frequency relays) and both of the groups of Load Resources providing RRS and ECRS at the same time. ERCOT shall issue notification of the deployment via XML message. ERCOT shall follow this XML notification with a Hotline VDI, which shall initiate the ten-minute deployment period; and |

(D) ERCOT shall post a list of Load Resources on the MIS Certified Area immediately following the DRUC for each QSE with a Load Resource obligation which may be deployed to interrupt under paragraph (A), Group 1 and paragraph (B), Group 2. ERCOT shall develop a process for determining which individual Load Resource to place in Group 1 and which to place in Group 2. ERCOT procedures shall select Group 1 and Group 2 based on a random sampling of individual Load Resources. At ERCOT’s discretion, ERCOT may deploy all Load Resources at any given time during EEA Level 2.

(vi) Unless a media appeal is already in effect, ERCOT shall issue an appeal through the public news media for voluntary energy conservation; and

(vii) With the approval of the affected non-ERCOT Control Area, TSPs, DSPs, or their agents may implement BLTs, which transfer Load from the ERCOT Control Area to non-ERCOT Control Areas in accordance with BLTs as defined in the Operating Guides. Deployment of distribution voltage level BLTs shall be counted toward the TSP’s or DSP’s satisfaction of the percentage of Level 3 Load shed obligation in Nodal Operating Guides Section 4.5.3.4, Load Shed Obligation.

(b) Confidentiality requirements regarding transmission operations and system capacity information will be lifted, as needed to restore reliability.

(3) ERCOT may declare an EEA Level 3 when the clock-minute average system frequency falls below 59.91 Hz for 20 consecutive minutes. ERCOT will declare an EEA Level 3 when PRC cannot be maintained above 1,375 MW or when the clock-minute average system frequency falls below 59.91 Hz for 25 consecutive minutes. Upon declaration of an EEA Level 3, ERCOT will implement any measures associated with EEA Levels 1 and 2 that have not already been implemented.

(a) When PRC falls below 1,000 MW and is not projected to be recovered above 1,000 MW within 30 minutes, or when the clock-minute average frequency falls below 59.91 Hz for 25 consecutive minutes, ERCOT shall direct all TSPs and DSPs or their agents to shed firm Load, in 100 MW blocks, distributed as documented in the Operating Guides in order to maintain a steady state system frequency at a minimum of 59.91 Hz and to recover 1,000 MW of PRC within 30 minutes.

(b) In addition to measures associated with EEA Levels 1 and 2, TSPs and DSPs or their agents will keep in mind the need to protect the safety and health of the community and the essential human needs of the citizens. Whenever possible, TSPs and DSPs or their agents shall not manually drop Load connected to under-frequency relays during the implementation of the EEA.

**6.5.9.5 Block Load Transfers between ERCOT and Non-ERCOT Control Areas**

(1) BLTs are procedures that transfer Loads normally located in the ERCOT Control Area to a non-ERCOT Control Area. Similarly, when a non-ERCOT Control Area experiences certain transmission contingencies or short-supply conditions, ERCOT may agree to the implementation of BLT procedures that transfer Loads normally located in a non-ERCOT Control Area to the ERCOT Control Area. BLTs are restricted to the following conditions:

(a) BLTs shall occur only with approval from ERCOT for Planned, Forced, or Rescheduled Outages, unless a governmental order is issued requiring the BLT.

(i) BLTs shall be registered with ERCOT. Such registration shall be subject to ERCOT approval.

(ii) For all BLTs, the TSP in the ERCOT Control Area responsible for implementing the BLT shall coordinate with ERCOT in the implementation and execution of BLTs to ensure the reliability of the ERCOT System is not jeopardized and to ensure sufficient generation capacity is available prior to serving additional Load.

(b) BLTs that are comprised of looped systems may be tied to the non-ERCOT Control Area’s electrical system(s) through multiple interconnection points at the same time. Transfers of looped configurations are permitted only if all interconnection points are registered and netted under a single Electric Service Identifier (ESI ID) and represented by a singled TSP or DSP or netted behind the Non-Opt-In Entity (NOIE) metering points.

(c) BLTs of Load to the ERCOT Control Area are:

(i) Treated as non-competitive wholesale Load in the Load Zone containing the ERCOT breaker or switch that initiated the BLT;

(ii) Registered in accordance with Section 6.5.9.5.1, Registration and Posting of BLT Points, by the TSP in the ERCOT Control Area responsible for implementing the BLT;

(iii) Responsible for Unaccounted For Energy (UFE) allocations and Transmission Losses consistent with similarly situated NOIE metering points; and

(iv) Permitted only if the BLT will not jeopardize the reliability of the ERCOT System. Under an Emergency Notice, BLTs that have been implemented may be curtailed or terminated by ERCOT to maintain the reliability of the ERCOT System.

(d) BLTs of Load from the ERCOT Control Area are:

(i) Treated as Resources in the ERCOT Settlement system and may only be instructed with the permission of the affected non-ERCOT Control Area. Under an Emergency Condition, BLTs that have been implemented may be curtailed or terminated by the non-ERCOT Control Area to maintain the reliability of the non-ERCOT system;

(ii) Registered in accordance with Section 6.5.9.5.1 by the TSP in the ERCOT Control Area responsible for implementing the BLT; and

(iii) Permitted only if the BLT will not jeopardize the reliability of the ERCOT System.

(e) BLTs specifically exclude transfers of Load between ERCOT and non-ERCOT Control Areas that occur behind a retail Settlement Meter.

(f) BLTs may be used in the restoration of service to Customers if the transfers will not jeopardize the reliability of the ERCOT System.

(g) BLT metering points connected to the ERCOT Transmission Grid and registered according to Section 6.5.9.5.1 and used five or more times per year, as monitored by the TSP, must conform to ERCOT-Polled Settlement (EPS) Metering requirements as defined in Section 10, Metering, and the Settlement Metering Operating Guide. All other transmission voltage level BLT metering points must be revenue quality, four channel bi-directional kWh/kVArh, 15-minute Interval Data Recorder (IDR) metering with remote interrogation. ERCOT may impose additional metering requirements it considers necessary to ensure ERCOT System reliability and integrity.

(h) SCADA telemetry on switching devices at BLT points that are deemed necessary by ERCOT to be modeled in the Network Operations Model must be provided by the TSP registering the BLT.

6.5.9.5.2 Scheduling and Operation of BLTs

(1) For BLTs that transfer Load to a non-ERCOT Control Area, a verbal instructed Base Point shall be issued to the QSE for Settlement purposes for any energy associated with BLTs modeled in the Network Operations Model and registered as a Resource in accordance with Section 6.5.9.5.1, Registration and Posting of BLT Points. ERCOT shall confirm the BLT’s availability with the non-ERCOT Control Area before any BLT implementation. For BLTs that are deployed in an emergency and are not modeled in the Network Operations Model, the responsible TSP shall notify ERCOT as soon as practicable after deployment. Deployment of non-modeled, distribution voltage level BLTs that are not included in the Network Operations Model shall be counted toward the TSP’s or DSP’s satisfaction of Level 3 Load shed obligation in Nodal Operating Guides Section 4.5.3.4.

(2) Any energy associated with the non-ERCOT Control Area Load BLT Point is treated as a Load obligation of the QSE representing the LSE with the BLT ESI ID as registered for Settlement purposes in accordance with Section 6.5.9.5.1.

(3) ERCOT shall continue to include the BLT Point Load in the Settlement of the LSE Load obligations.