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| NOGRR Number | [258](https://www.ercot.com/mktrules/issues/NOGRR258) | NOGRR Title | Related to NPRR1198, Congestion Mitigation Using Topology Reconfigurations |

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| Comments |

STEC provides these comments to Nodal Operating Guide Revision Request (NOGRR) 258 to propose language changes discussed by the Operation Working Group (OWG) and Network Data Support Working Group (NDSWG) in October 2023.

STEC’s comments adds a provision requiring ERCOT to verify that a Remedial Action Plan (RAP) does not result in radial generation or increase the risk of dispatchable generation under a N-1 contingency.

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| Revised Cover Page Language |

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| Nodal Operating Guide Sections Requiring Revision | 11.1, Introduction  11.4, Remedial Action Plan  11.4.1, Remedial Action Plan Process  11.6, Pre-Contingency Action Plans  11.8, Extended Action Plans (new)  11.8.1, Extended Action Plan Process (new) |

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| Revised Proposed Guide Language |

**11 CONSTRAINT MANAGEMENT PLANS AND REMEDIAL ACTION SCHEMES**

**11.1 Introduction**

(1) Constraint Management Plans (CMPs) are developed in accordance to the guidelines set forth in the sections below, and are defined in Protocol Section 2.1, Definitions. CMPs include, but are not limited to the following:

(a) Remedial Action Plans (RAPs) which are modeled in Network Security Analysis (NSA) where practicable;

(b) Automatic Mitigation Plans (AMPs) which are modeled in NSA where practicable;

(c) Pre-Contingency Action Plans (PCAPs);

(d) Extended Action Plans (EAPs);

(e) Temporary Outage Action Plans (TOAPs); and

(f) Mitigation Plans.

(2) When developing CMPs, ERCOT shall first attempt to utilize the 15-Minute Rating of the impacted Transmission Facilities, where available, to develop RAPs such that the ERCOT Transmission Grid is utilized to the fullest extent.

(3) RAPs and EAPs may be utilized to facilitate the market use of the ERCOT Transmission Grid for constraints that have resulted in over $1 million of congestion cost in a given month within the past 36 months.

(4) RAPs or EAPs must be submitted to ERCOT for review to facilitate the market use of the ERCOT Transmission Grid. ERCOT must review the design with impacted Transmission Operators (TOs) and directly operationally impacted Resource Entities to verify the feasibility of the submission. Impacts resulting from market clearing processes shall not constitute a direct operational impact under this paragraph.

(5) ERCOT shall provide notification to the market of any approved, amended, or removed CMP or RAS. ERCOT shall provide notification to the market of any RAP, AMP, or RAS that cannot be modeled in the Network Operations Model. ERCOT shall post to the Market Information System (MIS) Secure Area all CMPs and RASs and any unmodeled CMPs or RASs.

(6) ERCOT is not required to provide notification to the market of any proposed TOAPs.

(7) All submittals related to CMPs or RASs must be emailed to [ras\_cmp@ercot.com](mailto:ras_cmp@ercot.com).

**11.4 Remedial Action Plan**

(1) Remedial Action Plans (RAPs) are defined in Protocol Section 2.1, Definitions, and may be relied upon in allowing additional use of the transmission system in Security-Constrained Economic Dispatch (SCED). Normally, it is desirable that a Transmission Service Provider (TSP) constructs Transmission Facilities adequate to eliminate the need for any RAP; however, in some circumstances, such construction may be unachievable in the available time frame.

(2) RAPs for reliability must:

(a) Be coordinated by ERCOT with all Transmission Operators (TOs) and Resource Entities included in the RAP, and approved by ERCOT;

(b) Be limited to the time required to construct replacement Transmission Facilities; however, the RAP will remain in effect if ERCOT has determined the replacement Transmission Facilities to be impractical;

(c) Comply with all applicable requirements in the Protocols and applicable North American Electric Reliability Corporation (NERC) Reliability Standards;

(d) Clearly define and document TOs and Resource Entities included in the RAP actions;

(e) Must be able to resolve the issue for which it was designed over the range of conditions that might reasonably be experienced;

(f) Be executed by the TOs and/or Resource Entities;

(g) Have a 15-minute Rating greater than the Normal and Emergency Ratings for the Transmission Facilities it intends to resolve;

(h) Be defined in the Network Operations Model and considered in the SCED and Reliability Unit Commitment (RUC) processes. RAPs that cannot be modeled using ERCOT’s existing infrastructure shall be rejected unless the Technical Advisory Committee (TAC) approves a plan to work around the infrastructure problem; and

(i) Not include generation re-Dispatch or Load shed.

(3) Prior to approving a RAP proposal to facilitate the market use of the ERCOT Transmission Grid, ERCOT must verify that the RAP:

(a) Meets all of the criteria established in paragraph (2) above;

(b) Does not result in radial Load;

(c) Does not create new binding constraints or increase flow on any existing binding constraint by more than 1%;

(d) Does not negatively impact any Generic Transmission Constraints (GTCs), decrease Generic Transmission Limits (GTLs) or create new instability situations;

(e) Has not been previously rejected, unless there have been major changes to the system configuration or RAP proposal;

(f) Provides more than $1 million savings to total production cost or congestion cost with the RAP action in place compared to generation re-Dispatch alone. This can be established either by using annual production cost model simulation or other methods acceptable to ERCOT; and

(g) Does not result in radial generation or increase the reliability risk of dispatchable generation under N-1 contingency.

(4) An approved RAP may be executed immediately after a contingency by the TOs and Resource Entities included in the RAP without instruction by ERCOT or shall be executed upon direction by ERCOT.

(5) ERCOT shall conduct a review of each existing RAP annually or as required by changes in system conditions to ensure its continued effectiveness. Each review shall proceed according to a process and timetable documented in ERCOT Procedures.

(6) ERCOT may approve the expiration of a RAP after consultation with the TOs and Resource Entities included in the RAP. ERCOT shall modify its reliability constraints to recognize the unavailability of the RAP.

11.4.1 Remedial Action Plan Process

(1) RAPs, including RAPs to facilitate the market use of the ERCOT Transmission Grid, may be proposed by any Market Participant or may be developed by ERCOT. For RAPs submitted by Market Participants not registered as a TSP:

(a) ERCOT shall post RAPs submitted by a Market Participant not registered as a TSP on the Market Information System (MIS) Secure Area as soon as practicable, but no later than five Business Days of receipt.

(b) ERCOT shall provide a 30 day comment period from the date when the proposed RAP under review is posted by ERCOT unless notice of a shorter comment period is provided.

(c) ERCOT shall consider all comments received within the 30 day comment period on the proposed RAP, along with its own evaluation and those of the Transmission Facility owners, and either approve, modify or reject that proposed RAP.

(d) When a proposed RAP is accepted, modified, or rejected, ERCOT shall post an explanation for the approval or rejection, or a description of the modification. If the RAP is approved the posting shall include the start date of the RAP.

**11.6 Pre-Contingency Action Plans**

(1) Pre-Contingency Action Plans (PCAPs) are defined in Protocol Section 2.1, Definitions, and are implemented in anticipation of a contingency. Normally, it is desirable that a Transmission Service Provider (TSP) construct Transmission Facilities adequate to eliminate the need for any PCAP; however, in some circumstances, such construction may be unachievable in the available time frame.

(2) A PCAP may be proposed by any Market Participant, and be approved by ERCOT and the Transmission Operator (TO) included in the PCAP prior to implementation. PCAPs must:

(a) Be coordinated with the TOs included in the PCAP;

(b) Be limited in use to the time required to construct replacement Transmission Facilities and until such Facilities are placed in-service, or the PCAP is no longer needed; however, the PCAP will remain in effect if ERCOT has determined the replacement Transmission Facilities to be impractical;

(c) Comply with all requirements of the Protocols and applicable North American Electric Reliability Corporation (NERC) Reliability Standards;

(d) Clearly define and document TO actions;

(e) Be executed by TOs; and

(f) Not include generation re-Dispatch or Load shed.

(3) An approved PCAP may be executed immediately prior to a contingency by the TO without instruction by ERCOT, or shall be executed upon direction by ERCOT.

(4) All proposed, approved, amended, and removed PCAPs shall be managed in accordance with paragraph (5) of Section 11.1, Introduction.

(5) ERCOT may limit the quantity of PCAPs that are used.

**11.8 Extended Action Plans (EAPs)**

(1) An Extended Action Plan (EAP) may be proposed by any Market Participant or developed by ERCOT, and must be approved prior to implementation by ERCOT, the Transmission Operators (TOs) that operate the affected equipment, and Resource Entities that are directly impacted operationally. Impacts resulting from market clearing processes shall not constitute a direct operational impact under this section. EAPs must:

(a) Be accepted as feasible by the Resource Entities and TOs that are directly impacted operationally by the EAP;

(b) Be limited in use to the time required to evaluate, approve, and construct replacement Transmission Facilities until such Transmission Facilities are placed in-service, or the EAP is no longer needed. In cases where the EAP mitigates temporary congestion, the use of an EAP may be limited to the duration of the temporary congestion, or until the EAP is no longer needed;

(c) Comply with all requirements of the Protocols and applicable North American Electric Reliability Corporation (NERC) Reliability Standards;

(d) Clearly define and document TO actions;

(e) Be executed by TOs; and

(f) Not include generation re-Dispatch or Load shed.

(2) Prior to approving an EAP proposal to facilitate the market use of the ERCOT Transmission Grid, ERCOT must verify that the EAP:

1. Meets all of the criteria in paragraph (1) above;
2. Does not result in radial Load;
3. Does not create new binding thermal constraints or voltage violations, or increase flow on any existing binding constraint by more than 1%;
4. Does not negatively impact any Generic Transmission Constraints (GTCs), decrease Generic Transmission Limits (GTLs), or create new instability situations;
5. Has not been previously rejected, unless there have been major changes to the system configuration or EAP proposal;

(f) Provides more than $1 million savings to total production cost or total congestion cost with the EAP action in place compared to generation re-Dispatch alone. This can be established either by using annual production cost model simulation or other methods acceptable to ERCOT;

(g) Limits the action to changing the normal status of circuit breakers at up to two substations;

(h) If applicable, is limited to a post-contingency generation trip of no more than ERCOT frequency bias; and

(i) Does not impact the ability of a Resource to meet its minimum deliverability criteria described in Planning Guide Section 4.1.1.7, Minimum Deliverability Criteria.

(3) An approved EAP may be executed by the TO in coordination with ERCOT, on the effective date of the EAP.

(4) All proposed, approved, amended, and removed EAPs shall be managed in accordance with paragraph (6) of Section 11.1, Introduction.

(5) ERCOT may limit the quantity of EAPs that are used.

(6) ERCOT may reject proposals that fail to practicably assess impact to operations and reliability.

(7) The implementation of an approved EAP may be suspended for the duration of a transmission outage if the EAP interferes with a TO’s ability to take the outage.

(8) ERCOT shall conduct a review of each existing EAP annually or as required by changes in system conditions to ensure its continued effectiveness. Each review shall proceed according to a process and timetable documented in ERCOT procedures.

***11.8.1 Extended Action Plan (EAP) Process***

(1) EAPs may be proposed by any Market Participant or may be developed by ERCOT. For EAPs submitted by Market Participants not registered as a Transmission Service Provider (TSP):

(a) ERCOT shall post EAPs submitted by a Market Participant not registered as a TSP on the Market Information System (MIS) Secure Area within five Business Days of receipt.

(b) ERCOT will provide a 30 day comment period from the date when the proposed EAP under review is posted by ERCOT unless notice of a shorter comment period is provided by ERCOT.

(c) ERCOT shall consider all comments received within the 30 day comment period on the proposed EAP, along with its own evaluation and those of the Transmission Facility owners, and either approve, modify, or reject the proposed EAP.

(d) When a proposed EAP is approved, modified or rejected, ERCOT shall post an explanation for the approval or rejection, or a description of the modification within five Business Days of its determination. If the EAP is approved, the posting shall include the start date of the EAP.