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

|  |  |
| --- | --- |
| Date | February 16, 2024 |

|  |  |
| --- | --- |
| Submitter’s Information | |
| Name | Alexandra Miller |
| E-mail Address | Alexandra.Miller@edf-re.com |
| Company | EDF Renewables, Inc. |
| Phone Number | 858-946-3245 |
| Cell Number | 615-420-0471 |
| Market Segment | Independent Generator |

|  |
| --- |
| Comments |

EDF Renewables (EDFR) submits these comments to Nodal Operating Guide Revision Request 258, with some incremental changes to the comments submitted by Oncor on 1/22/2024.

EDFR does not make substantial changes to the following edits proposed by Oncor:

1. To limit NOGRR258’s scope solely to Extended Action Plans (EAPs).  
   * EDFR expects that EAPs show promise for more significant congestion mitigation impacts than Remedial Action Plan (RAP). As such, eliminating congestion-mitigating RAPs from NOGRR258 would simplify the effort by only keeping the most impactful Constraint Management Plans (CMPs) eligible. This concept should be revisited after more experience with EAPs demonstrates benefits and provides evidence to warrant expanding the CMP options.
2. Modifying the “facilitate the market use of” phrase throughout NOGRR258. EDFR further adjusts the suggested language to “address avoidable congestion prior to SCED”, which more accurately describes the intent of EAPs.
3. Relocating paragraph (4) of Section 11.1, Introduction, to Section 11.8.1, Extended Action Plan (EAP) Process, to consolidate all of the process-related provisions for EAP proposals. EDFR agrees that it is reasonable to modify the directly-impacted Transmission Operator (TO) and Resource Entity provisions, relocated to paragraph (1) of Section 11.8.1 in these comments, as follows:
   * Clarify that EAPs are to be submitted initially to ERCOT, and ERCOT will provide the submission to impacted TOs and any Resource Entities that are directly impacted from an operational perspective;
   * Each impacted TO and Resource Entity will provide either a concurrence with, or an objection to, an EAP submission in writing to ERCOT; and
   * A justified objection by either the TO or the Resource Entity will cause the EAP proposal to be denied by ERCOT.
4. The following modifications to Section 11.8, Extended Action Plans (EAPs):
   * Remove “as feasible” from paragraph (1)(a), because “as feasible” is ambiguous, and a clearer independent authority should exist for an affected TO and Resource Entity to provide information to ERCOT to inform the acceptance or rejection of an EAP;
   * Clarify in paragraph (1) that the duration of an EAP will be either the length of time necessary to implement a transmission project to address the congestion, or the length of time that the temporary congestion is expected to exist;
   * A new paragraph (2)(c) to address transmission Outages, so that ERCOT will consider impacts to existing and scheduled transmission Outages during its EAP verification;
   * Correct the reference in paragraph (4); and
   * Modify paragraph (7) to allow a TO to temporarily suspend an EAP for reliability purposes;
5. Language addressing the Network Operations Model Change Request (NOMCR) and Outage scheduling processes, which will be used to implement, modify, and reverse EAPs.
6. An EAP modification or extension proposal should be processed in the same manner as an initially proposed EAP, with review by directly impacted TOs and Resource Entities, and by other Market Participants with access to the Market Information System (MIS) Secure Area.

EDFR does make further edits to some of the changes by Oncor:

1. An EAP threshold consisting of constraints that have incurred more than $5 million in congestion cost over a period of three consecutive months, during the previous 24 months.
   * EDFR does understand Oncor’s concern that there are nearly 400 constraints that meet the originally proposed initial screening criteria, consistent with High Impact Transmission Element qualification, of $1 million in congestion cost in a month within the previous 3 years. EDFR holds the opinion that the vast majority of these constraints will not have reconfiguration options that meet the several other guardrails that are necessary for approval. This screening criteria was intended to limit proposals to addressing constraints that have historically been significant and are not only hypothetical future problems. To find a balance between the original and most recent comments, EDFR proposes removing “consecutive” from the three-month interval for the $5 million of congestion cost, and adding a one month of $2 million to avoid having to wait over 3 months to start the process if there is a simple solution to address extreme high congestion on new constraints.
   * In addition to this screening criteria, Oncor also proposed raising the forecasted economic benefit from $1 million to $5 million in the guardrails for approval. This guardrail is intended to avoid implementing EAPs that do not have significant expected value to the system. But this benefit threshold should not be artificially high, as the cost of implementing these solutions is very low. Requiring an EAP to meet a $5 million threshold for future consumer benefit would be holding it to the same standard as a transmission upgrade which costs $35 million. If actual costs expected to be incurred by the TO are significant in a specific proposal, that could be included in feedback to ERCOT and included in the evaluation of net benefit by ERCOT.
   * To more directly solve the concern that there could be an excessive number of EAPs that TOs are asked to evaluate, EDFR proposes adding language that TOs have the discretion to limit the number of EAPs that they will evaluate. A reasonable justification for rejection is that the number of proposals impacting TO workload at that time (annually or seasonally or at one time) is excessive. This will allow each TO to evaluate as many as they are able to given their staffing levels and other demands such as storm recovery or unusual number of Outage evaluations. This approach will prevent arbitrary economic thresholds from eliminating opportunities to reduce congestion if other guardrails are met and allow each TO to evaluate and approve the ones that are acceptable, appropriate, and workable for them.
2. EDFR appreciates the intent of Oncor’s edit that ERCOT would post EAPs to the MIS Secure Area for broader review once written concurrence has been obtained from the impacted TOs and Resource Entities, which is how it had initially been proposed and was intended to reduce unnecessary work for stakeholders. However, this flow of information did cause transparency concerns for stakeholders, and was reverted to ERCOT posting to the MIS promptly after confirming a complete submission, with the general stakeholder comment period in parallel with impacted TO and Resource Entity review.
3. The time for impacted TO and Resource Entities to provide either a concurrence or an objection to an EAP submission is changed to 30 days but adding the option to extend if needed. The proposed total of over 80 days (45 for concurrence +5 to post +30 for comments +ERCOT’s analysis) is much longer than other current CMP processes: RAS proposals, for example, take up to 30 days total. The original proposal was for a 5 day response/comment period, consistent with other CMPs such as RAPs and Pre-Contingency Action Plans (PCAPs), which was subsequently proposed to change to 45 days, but for better alignment with other timelines a 30 day period with the option to request additional time seems more appropriate.
4. In addition to clarifying that the duration of an EAP will be either the length of time necessary to implement a transmission project to address the congestion, or the length of time that temporary congestion is expected to exist, an additional clarification is included that chronic congestion will be treated as temporary congestion and must have a proposed end date for the EAP if there is no transmission project to remedy. This is consistent with PGRR113, Related to NPRR1198, Congestion Mitigation Using Topology Reconfigurations, which addresses stakeholder concerns that EAPs could interfere with transmission planning and finding needed upgrade solutions by ensuring that EAPs will be removed from planning models.
5. Due to removing RAPs for congestion management, the original timeline of five Business Days for the comment period is restored.

EDFR appreciates Oncor and other stakeholders for their comments and input to improve the proposed language for this NOGRR and the associated NPRR1198, Congestion Mitigation Using Topology Reconfigurations. The implementation of these revision requests will bring significant savings to consumers and allow ERCOT and TOs more freedom to optimally operate the ERCOT System. As topology reconfigurations were standard practice among TOs prior to the establishment of electricity markets, this proposal seeks to empower TOs by re-instating this fundamental and essential capability of the transmission network to maximize the utilization of prior investments to efficiently and reliably reduce avoidable congestion.

|  |
| --- |
| Market Rules Notes |

Please note the baseline Nodal Operating Guide language in the following section(s) has been updated to reflect the incorporation of the following NOGRR(s) into the Nodal Operating Guides:

* NOGRR215, Limit Use of Remedial Action Schemes (incorporated 11/1/23)
  + Section 11.1

|  |
| --- |
| Revised Cover Page Language |

|  |  |
| --- | --- |
| 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) |

|  |
| --- |
| 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.

|  |
| --- |
| ***[NOGRR215: Insert paragraph (3) below upon system implementation and renumber accordingly:***]  (3) Remedial Action Schemes (RASs) and/or AMPs may also be implemented in order to allow Generation Resources described in paragraph (3) of Planning Guide Section 4.1.1.7, Minimum Deliverability Criteria, to meet the minimum deliverability criteria in Planning Guide Section 4.1.1.7, or Transmission Facilities that would otherwise be subject to restrictions to operate without such restrictions. |

(3) EAPs may be utilized to address avoidable congestion prior to Security-Constrained Economic Dispatch (SCED) on the ERCOT Transmission Grid for constraints that have resulted in:

(a) Over $2 million of congestion cost in a given month;

(b) $5 million of congestion cost over three months within the past 36 months; or

(c) Are reasonably expected to result in similar costs under future conditions within the next 12 months as validated by ERCOT.

(4) ERCOT shall provide notification to the market of any approved, amended, or removed CMP or Remedial Action Scheme (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.

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

(6) 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 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) 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.

(4) 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.

(5) 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 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 five Business 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 five Business 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 approved, 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 (4) 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 price and Dispatch changes due to market clearing processes shall not constitute a direct operational impact under this section. EAPs must:

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

(b) Be restored to normal configuration when either:

1. A transmission project intended to address the congestion is placed in-service, if such a project has been made public and it was identified by either the TO during the initial EAP review, or by a Transmission Service Provider (TSP) during the EAP comment period; or
2. A period of temporary congestion is expected to end, if such temporary congestion and its estimated end date were identified during the initial EAP review. For chronic congestion which does not have an identified transmission project solution or expected end, an end date for the EAP must be proposed as if it is temporary congestion.

(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 address avoidable congestion prior to Security-Constrained Economic Dispatch (SCED) on the ERCOT Transmission Grid, ERCOT must verify that the EAP:

1. Meets all of the criteria in paragraph (1) above;

(b) Does not result in radial Load;

1. Does not impact current or scheduled Transmission Facility Outages;

(d) Does not create new binding thermal constraints or voltage violations, or increase

flow on any existing binding constraint by more than 1%;

(e) Does not negatively impact any Generic Transmission Constraints (GTCs),

decrease Generic Transmission Limits (GTLs), or create new instability situations;

(f) Has not been previously rejected, unless there have been major changes to the

system configuration or EAP proposal;

(g) 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;

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

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

(j) 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 (4) 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 temporarily suspended by the TO or by ERCOT for reliability reasons, or for the duration of a Transmission Facility Outage if the EAP interferes with a TO’s ability to take the outage. The existence of an EAP shall not, in and of itself, prevent a requested Transmission Facility Outage from being approved by ERCOT.

(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 TSP:

(a) The EAP must be submitted to ERCOT for initial review. ERCOT must provide the submission of qualified EAPs to impacted TOs and Resource Entities directly impacted operationally. Impacts resulting from price and Dispatch changes due to market clearing processes shall not constitute a direct operational impact under this paragraph.

(i) Impacted TOs, and Resource Entities directly impacted operationally, will provide either a concurrence with or an objection to the proposed EAP to ERCOT in writing within 30 days of receipt, and may request additional time if necessary while making reasonable efforts to consider proposed EAPs as soon as possible;

(ii) Impacted TOs may limit the quantity of EAPs they have under evaluation, on the basis of undue or excessive work load, and will include this as the reason for objection to an EAP, if applicable; and

(iii) An objection by either an impacted TO or a Resource Entity directly impacted operationally, will result in an initial rejection of the proposed EAP by ERCOT.

(b) EAPs submitted by a Market Participant not registered as a TSP will be posted on the Market Information System (MIS) Secure Area by ERCOT within five Business Days of receipt of a complete submission.

(c) ERCOT will provide a 30 day comment period from the date the proposed EAP is posted to the MIS Secure Area by ERCOT, unless notice of a shorter comment period is provided by ERCOT.

(d) 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.

(e) 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 and end date or associated Transmission Facility change that will determine the end date of the EAP.

(2) The implementation and management of EAPs will be facilitated through the Network Operations Model Change Request (NOMCR) and Outage scheduling processes as follows:

(a) A NOMCR will be submitted by the applicable TO or Resource Entity to implement an approved EAP in the Network Operations Model. This NOMCR will be submitted prior to the EAP’s start date and during the appropriate NOMCR production model load schedule. The EAP start date should align with the NOMCR production model load date, and if these two dates differ, Transmission Facility Outages will be submitted by the applicable TO or Resource Entity to manage interim configuration changes until the submitted NOMCR implements the EAP in the Network Operations Model.

1. If a TO or ERCOT identifies that an approved EAP will create a conflict with a current or scheduled Transmission Facility Outage or other system conditions, the applicable TO or Resource Entity will reverse the EAP configuration by submitting the necessary Transmission Facility Outage(s) and/or by utilizing the NOMCR process to address the timeframe for which the conflict is expected to exist. ERCOT shall also post any such EAP changes to the MIS Secure Area.
2. A NOMCR will be submitted by the applicable TO or Resource Entity to reverse an EAP prior to the scheduled EAP end date and during the appropriate NOMCR production model load schedule. Transmission Facility Outages may also be used to manage interim configuration changes before the NOMCR takes effect, if necessary.

(3) A Market Participant or ERCOT may propose that an existing EAP be modified or extended. ERCOT will process any proposed EAP modifications or extensions as described by paragraphs (1)(a) through (e) above.