

Imminent Threat Process

Purpose:

Primary: To document a process for the immediate, without any intentional delay, communication of vegetation or other conditions that may present an imminent threat of a transmission line outage so that appropriate actions may be taken.

Secondary: To formalize the Rocky Mountain Region's (RMR) existing process, consolidate the guidance from various existing documents, and provide documentation to demonstrate compliance with NERC Reliability Standards.

Process:

In accordance with various regional maintenance program requirements, aerial and ground patrols are routinely performed on the RMR's transmission facilities. The RMR line crews in the performance of these inspections are the primary source of information regarding reliability concerns and imminent threats which can include vegetation. Imminent threats can also be identified from other informational sources such as from Vegetation Management, Lands and Environment personnel, other utilities, contract support, law enforcement, the public, etc.

The responsible Field Authority (Linemen, Vegetation Management personnel) will notify their supervisor and the RMR Transmission Switching Operations (TSO) Dispatcher at 970-461-7279 (24-hour manned dispatch center) without any intentional delay, with information regarding Danger trees or other imminent threats to the power system upon discovery.

Danger Trees are defined by WAPA Order 430.1C as: Trees located within or adjacent to the ROW that present a hazard to employees, the public, or power system facilities.

Characteristics used in identifying a danger tree include, but are not limited, to the following:

(1) Encroachment within the safe distance to the conductor as a result of the tree growing into or bending, swinging, or falling toward the conductor.

(2) Deterioration or physical damage to the root system, trunk, stem, or limbs and/or the direction and lean of the tree.

(3) Vertical or horizontal conductor movement and increased sag as a result of thermal, wind, and/or ice loading.

- (4) Exceeding facility design specifications.
- (5) Fire risk.
- (6) Other threats to the electric power system facilities or worker/public safety.

The RMR Transmission Switching Dispatcher shall always be notified immediately, even in the event that communication with the linemen's supervisor is not possible. Upon notification, the RMR TSO Dispatcher shall assist the Field Authority in the collection of additional information required to fully evaluate the situation. The TSO Dispatcher, in consultation with the Field Authority, will ultimately select one of the following courses of action based on an assessment of the risk to public and field personnel safety, system conditions, and the urgency of the situation. Based on the available information at the time of notification, the TSO Dispatcher shall immediately consider turning the associated autoreclosers relaying off by SCADA for the transmission line identified until a full assessment of the situation has been completed and the potential threat to the transmission facility and associated power system is thoroughly understood. If one or more terminals of the transmission line are operated by another entity, the RMR TSO Dispatcher will notify the other entity and request that they disable their respective automatic reclosing.

Assuming the danger posed is not immediate to life, safety, and health, before removing any transmission line from service, the TSO Dispatcher will request that the Real Time Engineer (RTE) run an N-1 study to ensure system reliability prior to removing the transmission line from service. In addition, the TSO Dispatcher shall notify the Reliability Coordinator (RC), the RMR Interchange Desk (INT) Dispatcher (as appropriate) as well as affected neighboring entities prior to removing any transmission line from service, or as soon as possible as conditions dictate.

Note: Typically, the amount of time required for this study and notifications is less than 15 minutes.

Under any scenario, the TSO Dispatcher is the final authority and will make the final decision of whether the transmission line can be removed from service immediately, or at a later time based on system conditions.

Courses of Action:

- <u>Option 1:</u> Remove the transmission line from service as soon as possible and establish a clearance to correct or otherwise mitigate the imminent threat.
- <u>Option 2:</u> The affected line (and/or constrained path) can be temporarily de-rated as determined by the RTE in consultation with the INT Dispatcher to immediately mitigate and allow for the subsequent correction of the imminent threat. The RTE shall notify the RC of any potential reliability concerns and mitigation plans. The

INT Dispatcher shall notify the affected neighboring entities and any TOT stakeholders (if applicable) and post the new rating in OATI as appropriate.

- <u>Option 3:</u> An outage and clearance are scheduled for a later time to address the imminent threat.
- <u>Option 4:</u> Further investigation determines that a clearance is not required, and the imminent threat can be corrected now or later. In addition, subsequent information may lead to a determination that the event was not, or no longer is, an imminent threat.

Maintenance will determine and is the final authority on whether the problem can be corrected under a Clearance or under a Hot Line Order. If the Field Authority determines the issue (e.g. Danger tree) can be corrected immediately by removal, the following documentation will be required:

- 1. Enter issue into IQGeo.
- 2. Collect before and after photographs.
- 3. Document the quantity, species, location on ROW or Off-ROW, landowner coordination (if possible), and other pertinent information.
- 4. Update IQGeo once issue is resolved.

If the threat identification source is from an entity other than the RMR Maintenance staff, Dispatch shall immediately ensure the safety of the equipment and the public near the threat and then contact the appropriate Field Authority to initiate the required verification and consultation.

Documentation of this process will be maintained through the Dispatch Log, the transmission line patrol report, Maximo work order(s), and IQGeo entries.

FAC-003-4 Reporting Requirements and Measures

R1, R2. A vegetation risk shall be categorized as one of the following:

R1.1, R2.1. An encroachment into the MVCD as shown in FAC-003-Table 2, observed in realtime, absent a Sustained Outage,

R1.2, R2.2. An encroachment due to a fall-in from inside the ROW that caused a vegetation-related Sustained Outage,

R1.3, R2.3. An encroachment due to the blowing together of applicable lines and vegetation located inside the ROW that caused a vegetation-related Sustained Outage,

R1.4, R2.4. An encroachment due to vegetation growth into the MVCD that caused a vegetationrelated Sustained Outage.

Department	Printed Name	Signature	Date
Maintenance Manager	Ross Wiitanen		igitally signed by ROSS WIITANEN ate: 2022.12.05 11:24:21 -07'00'
Vegetation Manager	Daniel Borunda	Daniel Borunda	Digitally signed by Daniel Borunda Date: 2022.12.02 14:01:57 -07'00'
Environmental Manager	Jim Wood	James Wood	Digitally signed by James Wood Date: 2022.12.05 12:16:53 •07'00'
Lands Manager	Heidi Miller	Heidi R Miller	Digitally signed by Heidi R Miller Date: 2022.12.08 10:49:19 -07'00'
Operations Manager	Jon Aust		
Safety Manager	Tim Duffy	Timothy J. Duffy	Digitally signed by Timothy J. Duffy Date: 2022.12.20 08:04:40 -07'00'
Compliance Manager	Chris Johnson		

References:

NERC Reliability Standards: FAC-003-4 – Transmission Vegetation Management Program: Requirement R4, M4.

Western Area Power Administration Order: WAPA O 450.3C – Transmission Vegetation Management: Section 11.

Western Area Power Administration Order: WAPA O 430.1C – Transmission Vegetation Management: Section 5a and b.

Rocky Mountain Region Transmission Vegetation Management Program Statement: Regional Specific Practices.

Western Area Power Administration Power System Operations Manual (PSOM) Chapter 1: Power System Switching Procedure.

Western Area Power Administration Power System Maintenance Manual (PSMM) Chapter 11: Trimming and Felling of Trees and Brush Near Power Lines.

Maintenance Employee Position Descriptions.