

# Implementation Plan for FAC-003-3 — Transmission Vegetation Management

## Prerequisite Approvals

There are a number of scenarios that could occur regarding the approval of FAC-003-2 that would affect the implementation of FAC-003-3.

If FAC-003-2 is filed with applicable regulatory authorities and approved before FAC-003-3 is filed with applicable regulatory authorities, then when and if FAC-003-3 is approved by applicable regulatory authorities, the implementation plan and effective dates for Transmission Owners in FAC-003-2 will be transferred into this implementation plan. The “clock” for calculating effective dates for Transmission Owners will still have started at the time specified in FAC-003-2 (based on the approval date of that standard). Generator Owners will be required to comply with the implementation plan as outlined below.

If applicable regulatory authorities elect to approve only FAC-003-3 and not FAC-003-2, the original implementation plan for Transmission Owners as outlined in FAC-003-2 will be transferred into this implementation plan. Generator Owners will be required to comply with the implementation plan as outlined below. The “clocks” for calculating the effective dates for both Transmission Owners and Generator Owners will begin at the same time.

If applicable regulatory authorities approve FAC-003-2 and FAC-003-3 at the same time, the implementation plan and effective dates for Transmission Owners in FAC-003-2 will be transferred into this implementation plan and FAC-003-2 will be immediately retired. Generator Owners will be required to comply with the implementation plan as outlined below. The “clocks” for calculating the effective dates for both Transmission Owners and Generator Owners will begin at the same time.

## Revision to Sections of Approved Standards and Definitions

There are no proposed revisions to requirements in other already approved standards. All requirements and the two revised definitions in the proposed standard FAC-003-2 will be retired at midnight the day before FAC-003-3 becomes effective.

There are two revised definitions in the proposed standard:

### Right-of-Way (ROW)

The corridor of land under a transmission line(s) needed to operate the line(s). The width of the corridor is established by engineering or construction standards as documented in either

construction documents, pre-2007 vegetation maintenance records, or by the blowout standard in effect when the line was built. The ROW width in no case exceeds the applicable Transmission Owner's or applicable Generator Owner's legal rights but may be less based on the aforementioned criteria.

### **Vegetation Inspection**

The systematic examination of vegetation conditions on a Right-of-Way and those vegetation conditions under the Transmission Owner's or applicable Generator Owner's control that are likely to pose a hazard to the line(s) prior to the next planned maintenance or inspection. This may be combined with a general line inspection.

There is one new definition in the proposed standard:

### **Minimum Vegetation Clearance Distance (MVCD)**

The calculated minimum distance stated in feet (meters) to prevent flash-over between conductors and vegetation, for various altitudes and operating voltages.

The current glossary definitions of Right-of-Way and Vegetation Inspection, or the glossary definitions of Right-of-Way and Vegetation Inspection in FAC-003-2, if that standard has been approved, will be retired at midnight the day before FAC-003-3 (and with it, the above definitions of Right-of-Way and Vegetation Inspection) becomes effective. The above definition of Minimum Vegetation Clearance Distance will be added to the NERC glossary upon approval of FAC-003-3, or the above definition of Minimum Vegetation Clearance Distance will replace (and thus force the retirement, at midnight the day before FAC-003-3 is approved) of the same definition in FAC-003-2, if FAC-003-2 has been approved.

### **Compliance with Standard**

As outlined above under "Prerequisite Approvals," the inclusion of Transmission Owners in this implementation plan will depend on order in which regulatory authorities approved FAC-003-2 and FAC-003-3. Therefore, this implementation plan only identifies a compliance timeframe for Generator Owners to which this standard will apply.

To reach compliance with the standard, a Generator Owner will have to perform a full review of as-built drawings and determine which generation interconnection Facilities require a Transmission Vegetation Management Plan (TVMP) and inspection as specified by NERC Reliability Standard FAC-003-3. In general, Generator Owners do not have staff that are qualified and experienced to create a TVMP, perform Right-of-Way inspections, and perform any required tree trimming (as is required by FAC-003-3 Requirement 1.3). Once a complete inventory is created, the Generator Owner will begin the process of gathering information for the TVMP. In instances where the generation interconnection Facilities are owned by a partnership, a majority or operating partner will need to obtain partnership approval to proceed with procurement of a TVMP expert, and later a tree trimming crew. Typically, a

request for proposal to hire TVMP consultant is initiated which could take several weeks in order to obtain sufficient bids (and also satisfy Sarbanes Oxley requirements). Once all bids have been received, a contract with a TVMP consultant is signed. At this point, the TVMP consultant and Generator Owner staff will develop the TVMP, which needs to take into account local growth conditions, types of vegetation and other aspects required by FAC-003. Once the TVMP is developed, Generator Owner staff and the TVMP consultant will need to perform a Right-of-Way inspection (as required in FAC-003-3 Requirement 1), usually done using GPS, LIDAR and other tools by experienced and qualified staff.

Once a Right-of-Way inspection is completed and clearances are required, the Generator Owner will need to issue a request for proposal to hire a tree trimming crew that is qualified and experienced to perform required clearance trimming. Once all bids have been received, a contract with a tree trimming crew is signed. When the tree trimming crew is acquired, the crew will need to familiarize themselves with the entity's TVMP and required clearances. The Generator Owner will typically need to schedule any required outages in order for the tree trimming crew to perform the needed clearance trimming. This action would also include the implementation of the work plan as required in FAC-003-3 Requirement 2. During scheduled outages, if required, the tree trimming crew will perform any required clearances and document the activities.

Another typical action is the Generator Owner establishing a system for maintaining TVMP-related activities, including maintenance of inspection and clearance documentation (as required in FAC-003-3 Requirement 1.2). On an ongoing basis, in addition to performing inspections and clearances as required by the entity's TVMP, the Generator Owner will need to ensure that the training and qualification requirements for the standard are met. The entity will also need to maintain documentation of all FAC-003-3 activities for compliance period of one year to meet compliance with the standard.

Again, due to a typical lack of experience and qualifications required by FAC-003-3, compliance with this standard by a Generator Owner may take as long as two years – in part because many entities will have generator interconnection Facilities in various parts of the country which may require several instances of TVMP and numerous Right-of-Way inspections.

### **Effective Date**

There are two effective dates associated with this implementation plan:

The first effective date allows Generator Owners time to develop documented maintenance strategies or procedures or processes or specifications as outlined in Requirement R3.

In those jurisdictions where regulatory approval is required, Requirement R3 applied to the Generator Owner becomes effective on the first calendar day of the first calendar quarter one year after the date of the order approving the standard from applicable regulatory authorities

where such explicit approval for all requirements is required. In those jurisdictions where no regulatory approval is required, Requirement R3 becomes effective on the first day of the first calendar quarter one year following Board of Trustees adoption.

The second effective date allows entities time to comply with Requirements R1, R2, R4, R5, R6, and R7.

In those jurisdictions where regulatory approval is required, Requirements R1, R2, R4, R5, R6, and R7 applied to the Generator Owner become effective on the first calendar day of the first calendar quarter two years after the date of the order approving the standard from applicable regulatory authorities where such explicit approval for all requirements is required. In those jurisdictions where no regulatory approval is required, Requirements R1, R2, R4, R5, R6, and R7 become effective on the first day of the first calendar quarter two years following Board of Trustees adoption.

Effective dates for individual lines when they undergo specific transition cases:

1. A line operated below 200kV, designated by the Planning Coordinator as an element of an Interconnection Reliability Operating Limit (IROL) or designated by the Western Electricity Coordinating Council (WECC) as an element of a Major WECC Transfer Path, becomes subject to this standard the latter of: 1) 12 months after the date the Planning Coordinator or WECC initially designates the line as being an element of an IROL or an element of a Major WECC Transfer Path, or 2) January 1 of the planning year when the line is forecast to become an element of an IROL or an element of a Major WECC Transfer Path.
2. A line operated below 200 kV currently subject to this standard as a designated element of an IROL or a Major WECC Transfer Path which has a specified date for the removal of such designation will no longer be subject to this standard effective on that specified date.
3. A line operated at 200 kV or above, currently subject to this standard which is a designated element of an IROL or a Major WECC Transfer Path and which has a specified date for the removal of such designation will be subject to Requirement R2 and no longer be subject to Requirement R1 effective on that specified date.
4. An existing transmission line operated at 200kV or higher which is newly acquired by an asset owner and which was not previously subject to this standard becomes subject to this standard 12 months after the acquisition date.
5. An existing transmission line operated below 200kV which is newly acquired by an asset owner and which was not previously subject to this standard becomes subject to this standard 12 months after the acquisition date of the line if at the time of acquisition the line is designated by the Planning Coordinator as an element of an IROL or by WECC as an element of a Major WECC Transfer Path.