# Posting 3

The drafting team (DT) for WECC-0141, Transmission Maintenance thanks everyone who submitted comments on the proposed project.

## Posting

The project was posted for comment from February 25 through March 25, 2021.

WECC distributed notice for the posting on February 24, 2021.

The DT asked stakeholders to provide feedback on the proposed project through a standardized electronic template.

Three comments were received.

## Location of Comments

All comments received on the project can be viewed in their original format on the WECC-0141 project page under the “Submit and Review Comments” accordion.

**Overview**

After consideration of all comments received, the drafting team agreed to modify the Purpose statement and add a Facilities section to better align those two sections and better identify the Facilities for inclusion on Attachment B. The language of the proposed Facilities section aligns with the standard’s existing Reliability Standard Audit Worksheet (RSAW) and uses NERC defined terms.

Although NERC may choose to remove the proposed Background section from the proposed standard, the Background section was updated clarifying: 1) the proposed Attachment C is a *process* baseline and does not establish a baseline for the equipment listed on Attachment B, and 2) the primary purpose of FAC-501-WECC is not vegetation management.

The language of Attachment A, Transmission Maintenance Inspection Plan, Section 1, Facilities, was updated to reflect the newly proposed Facilities section that would immediately follow the Applicability section.

To break the incorporation by reference between this standard and FAC-003-4 Vegetation Management and PRC-023-4 Transmission Loadability, the title of Attachment B was changed to, “Attachment B, Equipment Identified for Transmission Maintenance and Inspection.”

## The Implementation Plan was updated clarifying that two other NERC Standards should be reviewed by NERC and a coordinated implementation plan should be considered by NERC. The other two NERC Standards are outside of the scope of this project.

## Minority View

The United States Bureau of Reclamation (USBR) and the Bonneville Power Administration (BPA) raised concerns that the Attachment C process could result in too much detail being included on Attachment B. Although this is a possibility, it would be the Transmission Owners that would dictate the detail and quantity of any equipment added to Attachment B. In that sense, the amount of detail added to Attachment B is self-moderated by those subject to the standard.

Although the DT agreed with USBR’s suggestion that the details of Attachment A should be developed in a manner similar to the PRC-005 Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance, the DT concluded with USBR that such an approach is better served at the continent level and not solely on a regional basis.

USBR and BPA argued that the use of the word “path” should be retained throughout and used as it is in the WECC Path Rating Catalog (Catalog). The DT disagreed with that approach as the catalog has no definitive due process thereby exposing Applicable entities to capricious change in the standard and ambiguity as to its application.

USBR and BPA argued for retention of the as-approved Attachment B title. The DT disagreed noting that to do so would thwart the effort to disaggregate the three standards referencing the table (incorporation by reference).

USBR argued that Attachment C would result in multiple processes to change the same content listed in three separate standards. The DT agreed that Attachment C would create a new process but disagreed that the equipment listed in Attachment B should always be the same equipment identified for transmission maintenance (FAC-501-WECC-2), transmission loadability (PRC-023-4) and vegetation management (FAC-003-4).

The DT disagreed that changes to Attachment B were outside the scope of the Standard Authorization Request. The DT referred USBR to the Proposed remedy section of the SAR.

Finally, there was no consensus from posting to posting or even within the same organization as to whether “by” or “from” was more appropriate in Attachment C Notice/Comment/Response.

## Changes in Response to Comment

The following specific changes were made after consideration of all comments received.

*Purpose Statement*

“To ensure the Transmission Owner of equipment identified on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Equipment) has a Transmission Maintenance and Inspection Plan (TMIP) for that Equipment, annually updates the Equipment’s TMIP, and adheres to that TMIP.”

*Facilities*

Those Bulk Electric System *Facilities, Elements, Transmission Lines*, and other equipment listed on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Hereafter: Equipment.) (Emphasis added.)

*Background*

The DT proposes to change the focus of the last paragraph clarifying that Attachment C establishes a process, not a baseline for what is included in Attachment B. The proposed language is as follows:

“The addition of Attachment C, Revision Process in FAC-501-WECC-3 is intended to provide a new baseline *process* for adding and removing equipment from Attachment B while using a defined and streamlined development process.”

The DT proposes to reword the first paragraph of the Background section as follows:

“In July and August of 1996, the Western Interconnection experienced two widespread outages resulting from inadequate vegetation management. To address these outages, in March 1997, the WSCC trustees created the WSCC Reliability Management System (RMS) Policy Group, that established a remedial contract-based operational agreement known as the RMS. Although the RMS was established in response to the 1996 vegetation-related outages, unlike the FAC-003-X Transmission Vegetation Management standard, neither the RMS nor those standards evolving from it had vegetation management as their primary purpose. Rather WECC’s Version Zero standards were designed to address the outages collectively by continuing operational practices addressed in the RMS.”

*Attachment A*

The DT proposed changing Attachment A, Section one to mirror the proposed Facilities section and the existing RSAW. The language would read as follows:

“The TMIP shall include, at a minimum, each of the following:

1. Equipment

A list of Facilities, Elements, Transmission Lines, and other equipment listed on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Hereafter: Equipment.)

The DT proposes correcting the “OEM” language in Attachment A as follows:

* Original Equipment Manufacturer
	+ This approach is based on the recommendations of the equipment manufacturer.

*Attachment B*

The DT proposes to remedy the FERC-identified due process concern by changing the title of Attachment B (and adding Attachment C) as follows:

“Attachment B, Equipment Identified for Transmission Maintenance and Inspection”

*Attachment C*

The DT proposes rewording the Attachment C preamble as follows:

“This Attachment C, Revision Process (Process) is to be used in lieu of the WECC Reliability Standards Development Procedures when adding equipment to or removing equipment from FAC-501-WECC-X, Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Equipment), or its successor.”

Throughout the document, the term “Asset” has been replaced with “equipment.”

## Proposed Effective Date

The proposed effective is the “First day of the second quarter following regulatory approval.”Because changes to FAC-501-WECC Transmission Maintenance may impact other NERC Standards, the drafting team recommendation is that NERC review those other standards and consider a coordinated implementation date if deemed appropriate by NERC.See the Implementation Plan, Posting 4, Impact on Other Standards.

## Action Plan

The following notice was dispatched on April 6, 2021.

“On April 5, 2021, the WECC-0141 FAC-501-WECC-2, Transmission Maintenance Drafting Team agreed by a majority vote to post Posting 4 for a 30-day comment period.

Posting 4 will open on April 7, 2021, and close on May 7, 2021. The drafting team will meet on May 25, 2021, 10:00 a.m. to 12:00 p.m. to consider comments. The Drafting Team will meet each two weeks thereafter, at the same time, unless otherwise noted.

Comments can be submitted by selecting the Submit and Review Comments accordion on the WECC-0141 Home Page. Then, click on Submit Responses to Posting 4.

## Contacts and Appeals

If you feel your comment has been omitted or overlooked, please contact W. Shannon Black, WECC Consultant, at (503) 307-5782. In addition, there is a WECC Reliability Standards appeals process.

| Commenter | Organization |
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| **1** | Toni Orth | United States Bureau of Reclamation (USBR) |
| **2** | Daniela Atanasovski | Arizona Public Service (APS) |
| **3** | Cain Braveheart | Bonneville Power Administration (BPA) |

# Index to Questions, Comments, and Responses

### Question

1. The DT welcomes comments on Attachment A.
2. The DT welcomes comments on Attachment C. Attachment C is NOT proposed as part of the Standard. It is a supporting process.
3. The DT welcomes comments on all other aspects of the proposed standard.

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| Comment Summary. For proposed changes and avenues forward, please see the preamble. *Question 1—Attachment A*The Drafting Team welcomes comments on Attachment A.  |
| **Commenter** | **Comment** |
| USBR | **Attachment A.** Reclamation does not support the use of “Asset” or “Major Asset” in Attachment A. As stated above, the terms “Facility,” “Element,” “path,” or other NERC-defined term should be used. **Attachment A Section 1.** Reclamation recommends the following revisions: A list of Transmission Owner’s line(s), station(s), Facilities, and Elements as listed in Attachment A that comprise are associated with each of the transmission paths listed in Attachment B. **Excessive Bulk in Attachment B**Reclamation discourages the listing of lines, stations, Facilities, and Elements in Attachment B as this would cause Attachment B to become a compilation of every entity’s BES Element subject to the standard. **Attachment A Section 2.** Reclamation recommends the existing language in Attachment A, Section 2 (“Facility, transmission line, or station”) be retained and not replaced with “Assets.” **Clarity** Reclamation supports the clarifying additions to performance-based, time-based, and condition-based. For “Risk-based,” Reclamation recommends the term “assets” be replaced with “components,” “Facilities,” “Elements,” or other defined NERC term that is appropriate. **PRC-005 Method**Reclamation recommends the standard identify the equipment, maintenance tasks, and frequency required (for time-based maintenance), similar to the Tables in PRC-005. **Attachment A Section 2 - OEM**For “Equipment Original Manufacturer,” Reclamation recommends the correct term is “Original Equipment Manufacturer.” Reclamation supports this clarifying addition. **Attachment A Section 3-5.** Reclamation supports the proposed changes. As stated in the comment above for Attachment A Section 2, Reclamation recommends the standard prescribe the desired periodicity for maintaining each component under a time-based program. |
| **Response** |
| **Attachment A. Use of “Asset.”**Please see response to the USBR in Question 3. **Attachment A Section 1.** The Attachment A language would be redrafted to conform to the proposed Facilities section (see response to USBR in Question 3). The Attachment A, Section one would be re-title to Facilities and reflect the language used in the proposed Facilities section and that of the existing RSAW. Attachment A would read as follows: “The TMIP shall include, at a minimum, each of the following: **Equipment**A list of Facilities, Elements, Transmission Lines, and other equipment listed on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Hereafter: Equipment.) **Excessive Bulk in Attachment B and Use of “Assets”**Please see the DT’s response to the USBR in Question 3, regarding FAC-501-WECC-3 Section A. 3. **Clarifying Additions to Attachment A/PRC-005 Method**The DT concurs in the goal of clarity. For consistency within the document, the DT concluded that “Equipment” was the better choice. See Question 3 response regarding the proposed language for “Facilities.” In Posting 1, USBR made the same observation noting that the PRC-005 approach would be the best approach and that the PRC-005 approach might best be served at the continent-wide level. To a limited extent, WECC made the same suggestion. To USBR, the DT responded: (See Posting 1 Response to Comments, page 9.) “The DT appreciates the Bureau’s observation and would like to know if the Bureau would be inclined to author a continent-wide Standard Authorization Request (SAR). To do so is outside of the scope of this project; however, should such a SAR be filed at NERC it may cause reconsideration of this project’s trajectory.” To WECC, the DT responded: “Although modeling a revamped Standard after PRC-005-6, Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance is a viable option, at this stage of the project the DT will only be pursuing deletion of the SAR-specific paths.Although the DT agrees with USBR’s suggestion that the details of Attachment A should be developed in a manner similar to the PRC-005 Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance, the DT concluded with USBR that such an approach is better served at the continent level and not solely on a regional basis.**Attachment A Section 2—OEM**Thank you. The error has been corrected. **Attachment A Section 3-5.** See above response to PRC-005 Method. |
| **Commenter** | **Comment** |
| APS | NA |
| **Response** |
| NA |
| **Commenter** | **Comment** |
| BPA | **Use of the term “Asset”**BPA disagrees with the changes made to Attachment A regarding the use of the term 'Asset'. BPA believes nomenclature used within FAC-501-WECC-3, Attachments, or associated documents should refer to the facilities and elements of a transmission 'Path(s)' as outlined in Attachment A, not 'Asset(s)'. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)​**Facilities**BPA disagrees with the changes made to the facilities section as the redline language is consistent with comments BPA made during previous postings. In order to reduce confusion, the Facilities and Elements applicable in a TMIP are outlined in Attachment A, section 4 (Transmission Line Maintenance and Inspection) and section 5 (Station Maintenance and Inspection).**OEM**BPA believes 'Equipment Original Manufacturer' should be replaced with 'Original Equipment Manufacturer'. |
| **Response** |
| **Use of the term “Asset”**Please see the response to USBR regarding the use of the term “Asset.” It will no longer be used**.** **Facilities**Please see the response to USBR regarding the inclusion of a newly proposed Facilities section and consistent rewording throughout. **OEM**Please see the response provided to USBR. The suggestion was adopted.  |

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| Comment Summary. For proposed changes and avenues forward, please see the preamble. *Question 2—Attachment C*The Drafting Team welcomes comments on Attachment C. Attachment C is NOT proposed as part of the Standard. It is a supporting process. |
| **Commenter** | **Comment** |
| USBR | **Attachment B-C** As stated above, Reclamation does not support use of the term “Assets.” Reclamation recommends the original title of Attachment B be retained. **Attachment C Purpose and Process Approval** Reclamation recommends the Attachment C Revision Process should only be used for adding or removing Major WECC Transmission Paths from the Attachment B. Reclamation discourages the addition of individual lines, stations, Facilities, or Elements to Attachment B. **Proposed changes to Attachment C Preamble**  USBR recommends: “This Attachment C, Revision Process (hereinafter: Process), is to be used in lieu of the WECC Reliability Standards Development Procedures when adding or removing paths, transmission lines, stations, Facilities, and/or Elements, and/or other assets (hereinafter: Assets) listed on to or from FAC-501-WECCX Attachment B, Major WECC Transfer Paths Assets in the Bulk Electric System Western Interconnection, (Attachment B), or its successor.” **Attachment C Notice/Comment/Response “by” versus “from”**In Posting 3, USBR disagrees with the deletion of “by” in favor of “from.” |
| **Response** |
| **Attachment B-C/Attachment C Purpose and Process Approval** See Question 3 response to the use of “Asset”Attachment C is designed to vet/cull addition/removal from Attachment B. If the industry identifies a critical piece of Equipment in need of the enhanced oversight provided by Attachment A, that Equipment should be eligible to be added to Attachment B and afforded the additional oversight. The granularity of the equipment description would be controlled by the requesting entity. **Elimination of the Relationship between the Catalog and Attachment B** See above responses to Use of “Asset” or “Major Asset,” and FAC-501-WECC-3 Section A. 3. Purpose.The DT concurs that the relationship between the standard and the Catalog should not be severed as it relates to the list of Path Names listed on Attachment B. Like USBR, the DT concurs that entities may currently need to refer to the Catalog “because not all items on the paths are discernible from the path names.” Further, the DT notes that the Catalog itself states it is not intended to serve as a complete list of all path information. When considering the two issues in tantum, an entity may/may not be able to review the Catalog to determine what is addressed as part of an Attachment B Path Name.To remedy these concerns, the DT concluded that shortfalls in the Path Name/content of Attachment B should be remedied using the Attachment C process. No changes to the existing list of Path Names is proposed in this project EXCEPT those initiated by APS. To the extent the Path Names may/may not need to be divorced from the Catalog, that goal can be achieved by using the proposed Attachment C process. Where an entity finds that a listed Path Name should no longer be included on Attachment B, the Attachment C process affords that possibility. In like fashion, where an entity needs to add additional detail to Attachment B—perhaps because it is lacking in the Catalog—the requesting entity may also avail itself of the Attachment C process. Finally, as proposed Attached C would allow for the addition of equipment and technologies not currently considered or even conceived. **Proposed changes to Attachment C Preamble** In light of the DT’s above proposals, the first paragraph of Attachment C is proposed as follows: “This Attachment C, Revision Process (Process) is to be used in lieu of the WECC Reliability Standards Development Procedures when adding equipment to or removing equipment from FAC-501-WECC-X, Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Equipment), or its successor.”Conforming changes will be made throughout the document. The final document will be subject to the WECC Styles Guide. **Attachment C Notice/Comment/Response “by” versus “from”**Please see Response to Comments, posting 2, page 14 where the DT adopted USBR’s suggestion to delete “by” in favor of “from.” **“Attachment C "Notice/Comment/Response**" Reclamation’s suggestion has been adopted. “By” is deleted and replaced with “from.” |
| **Commenter** | **Comment** |
| APS | AZPS supports the addition of Attachment C and has no additional comments.The DT welcomes comments on all other aspects of the proposed standard.AZPS supports the recommended changes to the standard and has no additional comments.  |
| **Response** |
| The DT appreciates APS’s continued support in the standards development process.  |
| **Commenter** | **Comment** |
| BPA | **Attachment C**BPA disagrees with the changes made to Attachment C regarding the use of the term 'Asset'. BPA believes nomenclature used within FAC-501-WECC-3, Attachments, or associated documents should refer to the facilities and elements of a transmission 'Path(s)' as outlined in Attachment A, not 'Asset(s)'. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)***Technical Study and Request***Number 5: After review, BPA agrees that a description of maintenance practices after removal is good practice. |
| **Response** |
| The DT agrees with BPA regarding the use of the term “Asset” and has adopted an approach to better identify the equipment listed on Attachment B. Please see response to BUR regarding: 1) the use of the term “Asset,” 2) continued use of the term “path” as used in the WECC Path Rating Catalog, 3) a proposed Facilities section, and 4) a proposed change to the title of Attachment B.  |

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| Comment Summary. For proposed changes and avenues forward, please see the preamble. *Question 3—All Other*The Drafting Team welcomes comments on all other aspects of the proposed standard. |
| **Commenter** | **Comment** |
| USBR | **FAC-501-WECC-3 Section A. 3. Purpose and Use of the term “path”**Reclamation disagrees with the term “major asset.” The terms “asset” and “major asset” are not clear, not defined, and should not be used. The purpose of the standard is to ensure transmission path owners perform transmission maintenance. Reclamation recommends no changes be made to this section. In cases where more specificity is needed, Reclamation recommends that existing NERC-defined terms, such as Facility or Element, adequately describe the equipment to be addressed. In cases where a shortened reference to the “Major WECC Transfer Paths in the Bulk Electric System” is desired, Reclamation recommends the short form “paths.” **Title of Attachment B and Scope – Due Process Concern**Reclamation recommends the title of Attachment B remain “Major WECC Transfer Paths in the Bulk Electric System” raising concerns that to do so is outside of the scope of the project.**More on the Purpose statement and the Catalog**USBR argues that Versions 1 and 2 of FAC-501-WECC contain contradictory statements about applicability in the Purpose and Applicability sections. **Identification of Path Owners**USBR argues that the WECC path rating catalog identifies the path owners. The current Applicability section refers to “Transmission Owners that maintain the transmission paths.”[in Attachment B]. There are more Transmission Owners that own and maintain individual facilities on a path than there are entities listed as owners of entire paths. Reclamation recommends the future standard should be written to eliminate this contradiction and clearly include or exclude Transmission Owners of individual Facilities on paths that are owned by other Transmission Owners. **FAC-501-WECC-3 Section A. 4. Applicability** Reclamation disagrees with replacing “transmission paths” with “assets.”**FAC-501-WECC-3 Section B. Background** Reclamation disagrees with stating the information about vegetation management as a footnote. Reclamation also recommends the background section clarify that FAC-501-WECC and its predecessors do not address vegetation management, to include versions all the way back to PRC-STD-005-1 from 2007.**FAC-501-WECC-3 Section C. Requirements and Measures**Reclamation supports the replacement of “conform” with “adhere.” **FAC-501-WECC-3 Section F. Associated Documents** Reclamation does not support the use of “Assets.” As stated above, the term “paths” should be used.  |
| **Response** |
| **FAC-501-WECC-3 Section A:Purpose Statement, Use of “Assets,” Use of “paths,” Facilities, Volume in Attachment B, and Use of the Attachment B Legacy Title***Purpose Statement, Use of the Term “Asset,” inclusion of Facilities*USBR recommends “no change” noting the Purpose of the standard is to “ensure transmission path owners perform transmission maintenance.” USBR also notes that if a change to the title of Attachment B is needed, simply replace the title with the word “paths.”After due consideration, the DT opted not to use “path;” however, responding to USBR’s counsel the DT has agreed to: 1) replace “asset” with “Equipment” (See proposed Facilities section), 2) modify the Purpose statement and assorted references accordingly, 3) retitle Attachment B to eliminate ambiguity, and 4) adopt NERC defined terms where applicable. *The DT proposes a change to the Purpose statement for Posting 4:*“To ensure the Transmission Owner of equipment identified on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Equipment) has a Transmission Maintenance and Inspection Plan (TMIP) for that Equipment, annually updates the Equipment’s TMIP, and adheres to that TMIP.” *The DT will not default to the use of “path.”*At the threshold, neither the NERC Glossary of Terms Used in Reliability Standards (Glossary) nor the Catalog define “path.” (Although the Glossary includes the phrase “major transfer path” as part of the Bulk-Electric System definition, its inclusion is inadequate as there remains no concrete understanding of what constitutes “major.”) By contrast, the owners of the WECC Path Rating Catalog (Catalog) can change the use of term at will, without benefit of the due process afforded by the Procedures. As stated in the background section, the addition of Attachment C, Revision Process in FAC-501-WECC-3 is intended to provide a new baseline process for adding and removing items from Attachment B while using a defined and streamlined development process. In other words, one of the goals of this project is less inter-reliance between the Catalog and the standard—not more. The primary reason for meeting the goal is to prevent undue surprise and/or burden on the Applicable entities listed in the standard and those standards in which Attachment B is incorporated by reference.Because the Catalog contains no stated procedure for its development or alteration, the document owner controls the content of the Catalog. The document owner of the 2020 Catalog is listed as the Studies Subcommittee (StS) as established by the Reliability Assessment Committee (RAC). Per the StS Charter, the StS performs tasks “assigned to it in the WECC Path Rating Process as needed.” As a result, the StS controls the use of the word “path” as used in the Catalog and can thereby exclude the standard’s Applicable entities from due process currently afforded by the Procedures or as proposed by using Attachment C. Further, the Catalog states it is not intended to: “Serve as a complete list of all path information.” This one statement alone leads to the conclusion that the Catalog should not be used as the locus for what constitutes a “path;” therefore, “path” is not the best choice.*Excessive Bulk in Attachment B vs. Added Clarity*The DT also concurs with USBR’s related comment that adding new equipment details or equipment other than transmission lines could create a voluminous Attachment B. Though unruly, the voluminous approach is neither unprecedented nor should it stand in the way of doing the right thing. (Catalog, Purpose Statement.)[[1]](#footnote-1) Further, as noted elsewhere, the detail of the descriptions moving forward would fall within the purview of the Transmission Owners. In that sense, the volume/bulk of Attachment B would be self-moderating as imposed by the Transmission Owners to which the standard applies.One remedy for USBR’s (and the industry’s) continued reliance on the Catalog to define “what’s a path” would be migration of the more detailed Catalog descriptions out of the Catalog and into Attachment B, thereby making the attachment as freestanding as possible. That said, the descriptions in the Catalog are knowingly incomplete, making the migration approach less than optimal.*The Proposed “Facility” Remedy aligns with the RSAW.*By contrast, clarifying the equipment for inclusion through the proposed Facilities section is in full accord with the FAC-501-WECC-2, Reliability Standards Audit Worksheet (RSAW) at “R1 Supporting Evidence and Documentation” wherein the audit sheet asks the Transmission Owner:“Do you own any of the Facilities or associated Elements in a transmission path identified in Attachment B, Major WECC Transfer Paths in the Bulk Electric System?”Evidence thereof is stated as “A list of Facilities or associated Elements in a transmission path identified in Attachment B, Major WECC Transfer Paths in the Bulk Electrics System.” *Use the Attachment C Revision Process to correct, modify, and moderate the volume/bulk of Attachment B.*Rather than knowingly migrate incomplete descriptions from the Catalog into Attachment B, the DT proposes leaving the Path Name list as a legacy item subject to correction through the Attachment C process. Where an entity finds that a listed Path Name should no longer be included on Attachment B, the Attachment C process affords that possibility. In like fashion, where an entity needs to add additional detail to Attachment B—perhaps because it is lacking in the Catalog—the requesting entity may also avail itself of the Attachment C process. Moving forward, per Attachment C, Technical Study, it will be the Transmission Owner that creates the description of the equipment to be added or removed from Attachment B thereby self-moderating the volume/bulk of Attachment B.This project does not eliminate all of Attachment B’s flaws; however, it does create a remedial process.*In support of USBR’s suggestion, the DT proposes the addition of a Facilities section for Posting 4 as follows:* **(Numbered Item following Applicability)****Facilities**Those Bulk Electric System *Facilities, Elements, Transmission Lines*, and other equipment listed on Attachment B, Equipment Identified for Transmission Maintenance and Inspection (Hereafter: Equipment.) (Emphasis added.)The DT understands USBR’s concerns regarding specification of what equipment is covered by the standard and the concern that equipment other than Transmission Lines may be added to Attachment B; however, the proposed Facilities segment is precisely aligned with the existing RSAW asking the Transmission Owner: “Do you own any of the *Facilities or associated Elements in a transmission path* identified in Attachment B, Major WECC Transfer Paths in the Bulk Electric System?” (Emphasis added.) Further, evidence thereof is stated as “*A list of Facilities or associated Elements in a transmission path identified in Attachment B,* Major WECC Transfer Paths in the Bulk Electrics System.” R1 Supporting Evidence and Documentation. (Emphasis added.)As proposed, this project and/or the adoption of the proposed Facilities section would not automatically add anything to Attachment B.Additions to Attachment B would only come at the request of a Transmission Owner. In that sense, the Transmission Owner controls the depth of detail for inclusion on Attachment B as vetted through Attachment C and thereby self-moderates the volume of Attachment B content. *Use of NERC define terms adds clarity.* Ambiguity as to what equipment is covered by the standard is addressed by using the NERC defined terms *Facilities, Elements, and Transmission Lines.* In the suffix of the Facilities section, the phrase “and other equipment listed on Attachment B” provides the Transmission Owner the ability to include equipment not otherwise meeting those three defined terms. This is already allowed in the RSAW. It also allows the Transmission Owner to include on Attachment B technologies not yet conceived, such as was the case with batteries when the foundational RMS was first drafted, circa 1997.**Title of Attachment B and Scope—Due Process Concern/Legacy***The DT opted to make changes to the title of Attachment B; doing so is within the scope of the Standard Authorization Request.* As proposed in Posting 4, the new title would be Attachment B, Equipment Identified for Transmission Maintenance and Inspection. After consideration of USBR’s comments, the DT does not concur with USBR. If the title to Attachment B is not changed, there remains an incorporation by reference in two other NERC Standards. (Please see the Implementation Plan filed with Posting 3 and 4.) As a result, if APS’ three paths are removed from Attachment B, due process in the two “referencing” standards is muted.Changing the title of Attachment B to break the referencing connection remedies the first-tier due process concern. Doing so is in the scope of the SAR and has been a primary FERC concern since FERC approved Version 1. Conversely, changes to the other two standards are not in the scope of this project and are addressed in the Implementation Plan. Breaking the incorporation chain also remedies existing confusion from the internet wherein an Applicable entity might try to determine its compliance liability by relying on outdated tables such as that found at: <https://www.wecc.org/Reliability/TableMajorPaths4-28-08.pdf> (last revised in 2007).[[2]](#footnote-2) For more detail, please see the above response regarding the Purpose statement and the proposed Facilities section. *The proposed changes are within the scope of the SAR.* As to the scope, the proposed changes fall squarely within the scope of the Standard Authorization Request (SAR). Further, the issue of Attachment B’s impact on other NERC Standards was raised by FERC as early as the first approval of this standard (circa 2007). Please see the Issue Statement and Proposed Remedy included in the SAR as follows: “Proposed Remedy This SAR requests that a drafting team be assigned to review and update the content of FAC501-WECC-2, Attachment B. Additionally, the document***: 1) should be reviewed to ensure proper coordination with existing NERC Standards,*** 2) should be reviewed for potential retirement, and 3) should be updated to NERC’s newest styles, formats and drafting conventions.As approved, Attachment B, Major Transfer Paths in the Bulk Electric System is specifically incorporated by reference into FAC-003-4, Transmission Vegetation Management and implicitly in PRC-023-4, Transmission Relay Loadability, Attachment B. In FAC-003-4 the title is used in its capitalized form thereby precisely incorporating Attachment B and in PRC-023-4, the Attachment B title is used in lower case thereby implicitly incorporating it by reference. For more detail, please see the Implementation Plan posted for comment along with Posting 3. Further, please review the [WECC-0141 Posting 1 FAC-501-WECC Path Delist—Attachment R1A- Response to Comments—Attachment A](https://www.wecc.org/Reliability/WECC-0141%20Posting%201%20FAC-501-WECC%20Path%20Delist%20-%20Attachment%20R1A-%20Response%20to%20Comments%20-%20Attachment%20A.pdf) wherein the white paper illustrates that, even though used in the lowercase, FERC reads PRC-023-4 as incorporating Attachment B by reference. What this means is that (currently) each change made to Attachment B’s content specifically carries over to the other two standards. If the content of Attachment B is altered so does the implementation of the other two standards. In the case at hand, if FERC approves removal of APS’s three paths from Attachment B—that directly impacts the other two referenced standards. The concern becomes a self-executing change to the other two standards without due process specifically targeted to those two standards. The incorporation by reference is broken if the title to Attachment B is changed. As stated in the Implementation Plan, the other two standards would need to be adjusted using the full due process accorded those standards. Alternatively, one read of the NERC Rules of Procedure could conclude that importing the full content of Attachment B (such as was done between Version 1 and Version 2 of this FAC) into the other standards and dropping the use of the as-approved Attachment B title could be seen as an errata since the change would not result in how those documents are implemented. If this is correct, the errata change might fall within the purview of the NERC Standards Committee. That decision is outside of WECC’s purview but is highlighted in the Implementation Plan posted as part of Posting 3 and 4. **Identification of Path Owners**For clarity, even though the Catalog names an entity as the owner of an Path Name, the Catalog does not control the standard’s Applicability section. The Applicability section dictates to whom the standard applies. If approved, the proposed Facilities section would establish the bounds of the equipment addressed by the standard. Attachment B, modified through Attachment C could further describe (or eliminate) the equipment based on the self-moderating detail provided by the applicable Transmission Owner.The only legacy connection between Attachment B and the Catalog would be reliance on the Catalog to describe the equipment currently included in the Path Name. As mentioned above, because those descriptions are incomplete, moving forward Attachment C would allow for the addition of greater detail or the removal of a Path Name altogether. **FAC-501-WECC-3 Section A. 4. Applicability/Facilities**Please see above response regarding the proposed Facilities section. See also responses to Use of “Asset” or “Major Asset,” and FAC-501-WECC-3 Section A. 3. Purpose.**FAC-501-WECC-3 Section B. Background** The DT believes USBR’s concerns can be alleviated by relocating the foot note content and elaborating as follows: (Proposed first paragraph for the Background section, Posting 4)“In July and August of 1996, the Western Interconnection experienced two widespread outages resulting from inadequate vegetation management. To address these outages, in March 1997, the WSCC trustees created the WSCC Reliability Management System (RMS) Policy Group, that established a remedial contract-based operational agreement known as the RMS. Although the RMS was established in response to the 1996 vegetation-related outages, unlike the FAC-003-X Transmission Vegetation Management standard, neither the RMS nor those standards evolving from it had vegetation management as their stated purpose. Rather WECC’s Version Zero standards were designed to address the outages collectively by continuing operational practices addressed in the RMS.”Please read WECC-0141 FAC-501-WECC Posting 1 White Paper—Retire or Modify, provided with Posting 1 for more specific detail. At page 9, footnote 22 the white paper states: “The United States Senate record states WECC’s “vegetation management program [is] in its Transmission Maintenance and Inspection Plan (TMIP) [FAC-501, Attachment A, wherein the applicable entity] performs vegetation management in accordance with its TMIP; and [keeps] records of its vegetation maintenance activities.” (Footnote 22[[3]](#footnote-3))Restated, until the FAC-003 Transmission Vegetation Management standard was approved, WECC had no other standard in its toolbox that *directly* addressed vegetation management. To the extent vegetation management was address at all, that risk was to be included in the TMIP; which was broadly bounded by the Applicable entity’s discretionary descriptions.The DT believes the issue is also addressed by the proposed Facilities section. Per USBR’s recommendation the Facilities section adopts NERC defined terms while leaving flexibility for new or overlooked technology. The document will be updated throughout to reflect the change. **FAC-501-WECC-3 Section C. Requirements and Measures**Thank you. **FAC-501-WECC-3 Section F. Associated Documents** See above responses to Use of “Asset” or “Major Asset,” and FAC-501-WECC-3 Section A. 3. Purpose. |
| **Commenter** | **Comment** |
| APS | NA |
| **Response** |
| NA |
| **Commenter** | **Comment** |
| Bonneville Power Administration (BPA) | **General Position*****Purpose*** BPA disagrees with the changes made to the purpose section as the original language is consistent with Attachment B in title and purpose. BPA believes nomenclature used within FAC-501-WECC-3, Attachments, or associated documents should refer to the facilities and elements of a transmission 'Path(s)' as outlined in Attachment A, not 'Asset(s)'. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)**Applicability** BPA disagrees with the changes made to the applicability section as the original language is consistent with Attachment B in title and purpose. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)**Background**Paragraph four. BPA recommends the language "The addition of Attachment C, Revision Process in FAC-501-WECC-3 is intended…" be removed. BPA believes this will add confusion as the language contradicts what is stated in the newly added section F, Associated Documents.**Requirement R3**BPA agrees with the language reverting back to 'adhere' from 'conform'.**Asset** M3 – BPA disagrees with the changes made to part 1.2., 'The Asset'. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)**Attachment F - Implementation Plan/Undue Surprise:**Justification of Effective Date –Second paragraph: BPA disagrees with the statement "Implementation of the requested effective date will have no negative impact on reliability nor will it present any undue surprise to the industry." BPA believes this proposed version fundamentally changes the intent of FAC-501-WECC-3, Attachments, and Associated Documents, and how NERC Reliability Standards engage with the WECC Major Transfer Paths in the Bulk Electric System, Attachment B. Specifically, it creates a situation where there is one Major Transfer Paths List for FAC-501-WECC-3 and a different list(s) for all other Standards that currently reference the WECC Major Transfer Paths List. These separate Major Transfer Path lists would also have different processes to review and revise as needed. Hence, the lists in the various Standards may not align with one another as time goes on and changes to each list are made. Furthermore, having to engage in multiple, separate processes in order to add or remove a path would effectively impose a time and resource burden on entities attempting to track and update two (or more) separate lists.BPA disagrees with the changes made to Attachment C regarding the use of the term 'Asset'. BPA believes nomenclature used within FAC-501-WECC-3, Attachments, or associated documents should refer to the facilities and elements of a transmission 'Path(s)' as outlined in Attachment A, not 'Asset(s)'. (please see BPA's comments below (Overall Specific Comments) for clarity and expansion of our reasoning)*Technical Study and Request –*Number 5: After review, BPA agrees that a description of maintenance practices after removal is good practice. |
| **Response** |
| **Purpose Statement/Assets and Paths**Please see the response provided to USBR regarding the limitations on using the word “path” as contained in extrinsic documents. **Applicability and Consistency with Attachment B Title**Please see response to USBR regarding the newly proposed changes to the Purpose statement, the inclusion of a Facilities section, the change to the title of Attachment B breaking the self-executing due process dilemma in the related two standards, and a consistent rewrite of those elements throughout. **Background**The DT concurs that the paragraph as drafted could cause confusion. To remedy the concern, the paragraph has been redrafted to focus on the “process” not the “baseline.” The proposed paragraph is proposed as follows: “The addition of Attachment C, Revision Process in FAC-501-WECC-3 is intended to provide a new baseline *process* for adding and removing equipment from Attachment B while using a defined and streamlined development process.” Section F will be updated accordingly. **Attachment F—Implementation Plan/Undue Surprise****Justification of Effective Date**The DT concurs as to undue surprise as addressed in Posting 3. This was a boilerplate oversight that has been corrected. Please see the response to USBR regarding changes to the title of Attachment B to eliminate BPA’s concern regarding multiple references.  *Multiple Processes and Effective Dates*BPA is correct that if FAC-501-WECC Attachment B is severed from FAC-003-4 and PRC-023-4 (wherein FAC-501-WECC Attachment B is incorporated by reference), FAC-003-4 and PRC-023-4 will remain subject to the NERC Standards development processes, whereas FAC-501-WECC Attachment B will be subject to FAC-501-WECC Attachment C.The DT cannot mandate that all three impacted standards have the same effective date. But, the DT has made that recommendation in Posting 4, Implementation Plan. Practically speaking, if the proposed changes to the FAC-501-WECC Attachment B and Attachment C are adopted by WECC/NERC/FERC, it is likely the document would not become effective until or unless the other two NERC Standards were remedied. WECC has seen this type of procedural queuing in its attempts to change the Regional Variance for WECC-0113, FAC-010 and FAC-011. Those two projects were approved by the WECC Board of Directors on March 9, 2016 and will not be forwarded by NERC through the standards development process until final disposition occurs on standards development processes that were already in queue and addressing FAC-010 and FAC-011.*Multiple Lists*If the WECC-0141 proposal is adopted, the “Major Path” list contained in each of three impacted standards may or may not eventually have three separate sets of content. Either way, using varying processes to populate those three separate lists is appropriate, as the three standards have diversely different purposes. FAC-501-WECC identifies equipment for transmission maintenance, FAC-003-4 identifies equipment for vegetation management, and PRC-023-4 addresses transmission loadability. Simply because equipment is identified as crucial for any one of those aspects does not mean it should be identified for all three—by default. However, that is what occurs when a self-executing change occurs on FAC-501-WECC, Attachment B—because Attachment B is incorporated by reference into all three documents. One change impacts all three. BPA states the due process issue precisely but inversely. BPA is concerned and correctly states that having multiple processes will consume resources not all entities may have to offer. Rather, BPA contends that the due process afforded in the Catalog is sufficient. As to the consumption of person-hours/resources, BPA’s premise is that if an entity is watching FAC-501-WECC or changes to the Catalog, by default, their interests are covered in the other two standards. The premise presumes that that all Transmission Owners, Generators Owners, Distribution Providers, and Planning Coordinators impacted by the Applicability section of PRC-023-4 are also watching the due process of WECC-0141 FAC-501-WECC and/or changes to the Catalog. Though that is possible, it is unlikely that the GO, DP, and PC to which PRC-023-4 is applicable will actively be monitoring changes to FAC-501-WECC that is only applicable to Transmission Owners. As to sufficiency of the due process included in the Catalog, BPA’s premise is also flawed. First, there is no absolute due process in the Catalog. Some changes to the Catalog are governed by the WECC Project Coordination and Path Rating Processes that is owned by the Planning Coordinating Committee. By contrast, the Catalog itself is owned by the WECC Studies Subcommittee (StS). Per the StS Charter, the StS performs tasks “assigned to it in the WECC Path Rating Process as needed” and tasks assigned to it by the Reliability Assessment Committee (RAC). If the RAC sits at the apex of the decision-making pyramid, then the RAC’s activity can trickle down to the Catalog that, in turn, impacts the Standards. If the TO, GO, DP, and PC of PRC-023-4 are not aware of a titular change at the RAC, a change at the RAC could impact those entities “when they know we’re watching.”[[4]](#footnote-4)In short, the Catalog does not control its own due process. As to adding complexity, it is only Attachment C that is new, and adoption of Attachment C would preclude the unintended due process changes described above. On a secondary note, when comparing the complexity of two FERC-approved processes to the above-described confluence of process, tracking two FERC-approved processes may actually be less arduous. The other two NERC Standards would still be altered via the NERC Standards development processes; however, a change to one would no longer be a change to all. It is the self-executing hazard that this project seeks to remedy while leaving remediation of the other two to NERC. |

1. The Catalog is not intended to be a comprehension list if the equipment covered. Adding detail to Attachment B helps clarify what equipment is covered as is requested in the FAC-501-WECC-2, RSAW. Where required for clarity and reliability, volume should not be a primary consideration. See CIP-005-6—Cyber Security—Electronic Security Perimeter(s) at 24 pages; FAC-003-4 Transmission Vegetation Management at 32 pages; PRC-005-6—Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance at 41 pages; BAL-001-TRE-1—Primary Frequency Response in the ERCOT Region at 50 pages; and CIP-007-6—Cyber Security—Systems Security Management at 53 pages. [↑](#footnote-ref-1)
2. The DT appreciates the USBR pointing out the address of the outdated table. The document was taken down from the internet and an annotation of “THIS DOCUMENT IS RETIRED” was added above the header in yellow highlight. [↑](#footnote-ref-2)
3. Statement of Louise McCarren, CEO, WECC, Hearing on the Committee of Energy and Natural Resources, United States Senate, One Hundred Eighth Congress, Second Session on the Reliability of the Nation’s Electricity Grid, February 24, 2004, page 17-20. (Hearing)Hearing. Q and A, Domenic and McCarren, page 57, question 4. See also FAC-003-4, Transmission Vegetation Management, Section 4, Applicability, 4.2. Transmission Facilities, 4.2.3 referring to the Major WECC Transfer Path in the Bulk Electric System. [↑](#footnote-ref-3)
4. The DT disagrees with BPA’s observation that any entity subject to one of the three standards would be fully apprised of any changes in all of the standards. The statement presumes that all Generator Owners, Distribution Providers, Planning Coordinators are watching the FAC-501-WECC process in which only Transmission Owners are listed on the Applicability section. [↑](#footnote-ref-4)