

Consideration of Comments

Generator Requirements at the Transmission Interface Project 2010-07 (FAC-003-3 and FAC-003-x)

The Generator Requirements at the Transmission Interface Drafting Team thanks all commenters who submitted comments on the second formal posting of FAC-003-3 and FAC-003-X, as part of Project 2010-07—Generator Requirements at the Transmission Interface. These standards were posted for a 30-day public comment period from March 9, 2012 through April 9, 2012. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 22 sets of comments, including comments from approximately 83 different people from approximately 76 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

The SDT considered all comments submitted and has proposed the following minor changes to FAC-003-X and FAC-003-3:

- **FAC-003-X:**
 - The Applicability section was reformatted to make it clear that the standard applies on a Facility by Facility basis (as in FAC-003-3), not simply to all generator interconnection Facilities owned by a Generator Owner with at least one qualifying generator interconnection Facility.
 - In the Purpose section, Right-of-Way was capitalized because it is an approved NERC glossary term and “North American Electric Reliability Council” was changed to “North American Electric Reliability Corporation.”
 - Regional Entity was added back to the Applicability section of the standard. Requirement R4 is assigned to the Regional Entity, and the Project 2010-07 does not have the authority, based on the scope outlined in its SAR, to modify that requirement. Thus, Regional Entity must remain in the Applicability section. In all cases, Regional Entity has been spelled out rather than referred to as “RE.”
 - New boilerplate language, recently approved by NERC legal staff, was added to the Effective Dates section of the standard and the Implementation Plan.
- **FAC-003-3:**
 - A typo was found in the Severe VSL for R2; the previous reference to “Transmission Owner” was changed to “responsible entity,” as in all other FAC-003-3 VSLs.
 - New boilerplate language, recently approved by NERC legal staff, was added to the Effective Dates section of the standard and the Implementation Plan.

Other minority comments are addressed alongside their specific comments below.

Note that if both FAC-003-X and FAC-003-3 are approved in this recirculation ballot, only FAC-003-3 will be presented to NERC's Board of Trustees. FAC-003-X has been modified so that the generator interconnection Facility gap can be quickly addressed in the event that neither FAC-003-2 nor FAC-003-3 is approved by FERC.

All comments submitted may be reviewed in their original format on the standard's project page:

http://www.nerc.com/filez/standards/Project2010-07_GOTO_Project.html

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President of Standards and Training, Herb Schrayshuen, at 404-446-2560 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

¹ The appeals process is in the Standard Processes Manual:
http://www.nerc.com/files/Appendix_3A_Standard_Processes_Manual_Rev%201_20110825.pdf.

Index to Questions, Comments, and Responses

1. The Project 2010-07 SDT considered Exelon’s appeal in the context of other stakeholder comments submitted in the first successive ballot between October 5 and November 18, 2011, along with advice from NERC staff. The SDT continues to believe that a reference to line of sight is clarifying and makes explicit the SDT’s implicit intent from day one. Thus, it kept the line of sight reference but made a few additional changes for formatting clarity and language consistency. The team also added a footnote to further explain what it means by “line of sight.” Do you agree with these changes? If not, please provide specific alternative language. 8

The Industry Segments are:

- 1 — Transmission Owners
- 2 — RTOs, ISOs
- 3 — Load-serving Entities
- 4 — Transmission-dependent Utilities
- 5 — Electric Generators
- 6 — Electricity Brokers, Aggregators, and Marketers
- 7 — Large Electricity End Users
- 8 — Small Electricity End Users
- 9 — Federal, State, Provincial Regulatory or other Government Entities
- 10 — Regional Reliability Organizations, Regional Entities

| Group/Individual | | Commenter | Organization | Registered Ballot Body Segment | | | | | | | | | |
|-------------------|----------------------|---|--------------------------------------|--------------------------------|---|---|---|---|---|---|---|---|----|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1. | Group | Guy Zito | Northeast Power Coordinating Council | | | | | | | | | | X |
| Additional Member | | Additional Organization | Region | Segment Selection | | | | | | | | | |
| 1. | Alan Adamson | New York State Reliability Council, LLC | NPCC | 10 | | | | | | | | | |
| 2. | Greg Campoli | New York Independent System Operator | NPCC | 2 | | | | | | | | | |
| 3. | Sylvain Clermont | Hydro-Quebec TransEnergie | NPCC | 1 | | | | | | | | | |
| 4. | Chris de Graffenried | Consolidated Edison Co. of New York, Inc. | NPCC | 1 | | | | | | | | | |
| 5. | Gerry Dunbar | Northeast Power Coordinating Council | NPCC | 10 | | | | | | | | | |
| 6. | Mike Garton | Dominion Resources Services, Inc. | NPCC | 5 | | | | | | | | | |
| 7. | Kathleen Goodman | ISO - New England | NPCC | 2 | | | | | | | | | |
| 8. | Chantel Haswell | FPL Group, Inc. | NPCC | 5 | | | | | | | | | |
| 9. | David Kiguel | Hydro One Networks Inc. | NPCC | 1 | | | | | | | | | |
| 10. | Michael R. Lombardi | Northeast Utilities | NPCC | 1 | | | | | | | | | |

| Group/Individual | Commenter | Organization | Registered Ballot Body Segment | | | | | | | | | | | |
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| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 11. Randy MacDonald | New Brunswick Power Transmission | NPCC 9 | | | | | | | | | | | | |
| 12. Bruce Metruck | New York Power Authority | NPCC 6 | | | | | | | | | | | | |
| 13. Lee Pedowicz | Northeast Power Coordinating Council | NPCC 10 | | | | | | | | | | | | |
| 14. Robert Pellegrini | The United Illuminating Company | NPCC 1 | | | | | | | | | | | | |
| 15. Si-Truc Phan | Hydro-Quebec TransEnergie | NPCC 1 | | | | | | | | | | | | |
| 16. David Ramkalawan | Ontario Power Generation, Inc. | NPCC 5 | | | | | | | | | | | | |
| 17. Brian Robinson | Utility Services | NPCC 8 | | | | | | | | | | | | |
| 18. Saurabh Saksena | National Grid | NPCC 1 | | | | | | | | | | | | |
| 19. Michael Schiavone | National Grid | NPCC 1 | | | | | | | | | | | | |
| 20. Wayne Sipperly | New York Power Authority | NPCC 5 | | | | | | | | | | | | |
| 21. Tina Teng | Independent Electricity System Operator | NPCC 2 | | | | | | | | | | | | |
| 22. Donald Weaver | New Brunswick System Operator | NPCC 2 | | | | | | | | | | | | |
| 23. Ben Wu | Orange and Rockland Utilities | NPCC 1 | | | | | | | | | | | | |
| 24. Peter Yost | Consolidated Edison Co. of New York, Inc. | NPCC 3 | | | | | | | | | | | | |
| 2. | Group | Don Jones | Texas Reliability Entity | | | | | | | | | | | X |
| Additional Member Additional Organization Region Segment Selection | | | | | | | | | | | | | | |
| 1. | Curtis Crews | Texas Reliability Entity | ERCOT 10 | | | | | | | | | | | |
| 2. | David Penney | Texas Reliability Entity | ERCOT 10 | | | | | | | | | | | |
| 3. | Group | Jonathan Hayes | Southwest Power Pool Standards Development Team | X | X | X | | X | X | | | | | |
| Additional Member Additional Organization Region Segment Selection | | | | | | | | | | | | | | |
| 1. | Jonathan Hayes | Southwest Power Pool | SPP NA | | | | | | | | | | | |
| 2. | Robert Rhodes | Southwest Power Pool | SPP NA | | | | | | | | | | | |
| 3. | Dan Lusk | Xcel Energy | SPP 1, 3, 5, 6 | | | | | | | | | | | |
| 4. | Julie Lux | Westar | SPP 1, 3, 5, 6 | | | | | | | | | | | |
| 5. | Mahmood Safi | OPPD | MRO 1, 3, 5 | | | | | | | | | | | |
| 6. | Roy Boyer | Xcel Energy | SPP 1, 3, 5, 6 | | | | | | | | | | | |
| 7. | Mitchell Williams | Western Farmers | SPP 1, 3, 5 | | | | | | | | | | | |
| 8. | John Pasierb | East Texas | NA - Not Applicable NA | | | | | | | | | | | |
| 9. | David Kral | Xcel Energy | SPP 1, 3, 5, 6 | | | | | | | | | | | |
| 10. | Tom Hesterman | Westar | SPP 1, 3, 5, 6 | | | | | | | | | | | |

| Group/Individual | Commenter | Organization | Registered Ballot Body Segment | | | | | | | | | | | |
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| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| 11. Tiffani Lake | Westar | SPP | 6, 1, 3, 5 | | | | | | | | | | | |
| 12. Don Taylor | Westar | SPP | 1, 3, 5, 6 | | | | | | | | | | | |
| 4. Group | Chris Higgins | Bonneville Power Administration | X | | X | | X | X | | | | | | |
| Additional Member Additional Organization Region Segment Selection | | | | | | | | | | | | | | |
| 1. Charles | Sheppard | | 1 | | | | | | | | | | | |
| 2. Rebecca | Berdahl | | 3 | | | | | | | | | | | |
| 5. Group | Mike Garton | NERC Compliance Policy | X | | X | | X | X | | | | | | |
| Additional Member Additional Organization Region Segment Selection | | | | | | | | | | | | | | |
| 1. Connie Lowe | NERC Compliance Policy | RFC | 5, 6 | | | | | | | | | | | |
| 2. Michael Crowley | Electric Transmission | SERC | 1, 3 | | | | | | | | | | | |
| 3. Jeff Bailey | Nuclear | MRO | 5 | | | | | | | | | | | |
| 4. Sean Iseminger | F&H | SERC | 5 | | | | | | | | | | | |
| 5. Chip Humphrey | F&H | NPCC | 5 | | | | | | | | | | | |
| 6. Group | WILL SMITH | MRO NSRF | X | X | X | X | X | X | | | | | | |
| Additional Member Additional Organization Region Segment Selection | | | | | | | | | | | | | | |
| 1. MAHMOOD SAFI | OPPD | MRO | 1, 3, 5, 6 | | | | | | | | | | | |
| 2. CHUCK LAWRENCE | ATC | MRO | 1 | | | | | | | | | | | |
| 3. TOM WEBB | WPS | MRO | 3, 4, 5, 6 | | | | | | | | | | | |
| 4. JODI JENSON | WAPA | MRO | 1, 6 | | | | | | | | | | | |
| 5. KEN GOLDSMITH | ALTW | MRO | 4 | | | | | | | | | | | |
| 6. ALICE IRELAND | XCEL(NSP) | MRO | 1, 3, 5, 6 | | | | | | | | | | | |
| 7. DAVE RUDOLPH | BEPC | MRO | 1, 3, 5, 6 | | | | | | | | | | | |
| 8. ERIC RUSKAMP | LES | MRO | 1, 3, 5, 6 | | | | | | | | | | | |
| 9. JOE DEPOORTER | MGE | MRO | 3, 4, 5, 6 | | | | | | | | | | | |
| 10. SCOTT NICKELS | RPU | MRO | 4 | | | | | | | | | | | |
| 11. TERRY HARBOUR | MEC | MRO | 5, 6, 1, 3 | | | | | | | | | | | |
| 12. MARIE KNOX | MISO | MRO | 2 | | | | | | | | | | | |
| 13. LEE KITTLESAN | OTP | MRO | 1, 3, 4, 5 | | | | | | | | | | | |
| 14. TONY EDDLEMAN | NPPD | MRO | 1, 3, 5 | | | | | | | | | | | |
| 15. MIKE BRYTOWSKI | GRE | MRO | 1, 3, 5, 6 | | | | | | | | | | | |
| 16. THERESA ALLARD | MPC | MRO | 1, 3, 5, 6 | | | | | | | | | | | |

| Group/Individual | | Commenter | Organization | Registered Ballot Body Segment | | | | | | | | | |
|------------------|------------|-----------------------|--------------------------------------|--------------------------------|---|---|---|---|---|---|---|---|----|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 7. | Individual | Antonio Grayson | Southern Company | X | | X | | X | X | | | | |
| 8. | Individual | Brenda Frazer | Edison Mission Marketing & Trading | X | | | | X | | | | | |
| 9. | Individual | John Bee | Exelon | X | | X | | X | X | | | | |
| 10. | Individual | Ray Phillips | Alabama Municipal Electric Authority | | | | X | | | | | | |
| 11. | Individual | Joe Petaski | Manitoba Hydro | X | | X | | X | X | | | | |
| 12. | Individual | Dan Roethemeyer | Dynegy | | | | | X | | | | | |
| 13. | Individual | Thad Ness | American Electric Power | X | | X | | X | X | | | | |
| 14. | Individual | John Seelke | Public Service Enterprise Group | X | | X | | X | X | | | | |
| 15. | Individual | Dale Fredrickson | Wisconsin Electric | | | X | X | X | | | | | |
| 16. | Individual | Daniel Duff | Liberty Electric Power LLC | | | | | X | | | | | |
| 17. | Individual | Martin Kaufman | ExxonMobil Research and Engineering | X | | | | X | | | | | |
| 18. | Individual | Brian Murphy | NextEra Energy, Inc. | X | | X | | X | X | | | | |
| 19. | Individual | Jean Nitz | ACES Power Marketing | | | | | | X | | | | |
| 20. | Individual | Patrick Brown | Essential Power, LLC | | | | | X | | | | | |
| 21. | Individual | Russell A. Noble | Cowlitz County PUD | | | X | X | X | | | | | |
| 22. | Individual | Michelle R. D'Antuono | Ingleside Cogeneration LP | | | | | X | | | | | |

- 1. The Project 2010-07 SDT considered Exelon’s appeal in the context of other stakeholder comments submitted in the first successive ballot between October 5 and November 18, 2011, along with advice from NERC staff. The SDT continues to believe that a reference to line of sight is clarifying and makes explicit the SDT’s implicit intent from day one. Thus, it kept the line of sight reference but made a few additional changes for formatting clarity and language consistency. The team also added a footnote to further explain what it means by “line of sight.” Do you agree with these changes? If not, please provide specific alternative language.**

Summary Consideration:

Some commenters still do not support the qualifying language for Generator Owners (GOs) or believe that the qualifying language should be worded differently. The SDT continues to believe that the qualifying criteria for GOs are appropriate; it has explained its rationale in depth in the posted [Technical Justification Document](#). The SDT has considered all relevant stakeholder comments, including many possible language options, and is satisfied that it has determined the appropriate language to address the reliability gap.

Some commenters suggested changes to items – including the content of the VSLs and the tables attached to the standard that were outside the scope of the SDT’s work.

Some commenters raised questions about the language differences between FAC-003-X and FAC-003-3 and expressed concern that the language in FAC-003-X could lead to a “null” result whereby the qualifying language is not applied according to the SDT’s intent. The SDT sought to keep the language of 4.3.1 of FAC-003-X consistent with the language in 4.2.1 of FAC-003-X. The SDT does not believe the language in Version X can lead to a “null” result; we believe the language is as clear as possible as written, now that it has been reformatted to better match the formatting in FAC-003-3.

Some commenters questioned whether “clear line of sight” means from a fixed point or from any point along the line. The SDT clarified that it intends for the phrase “from the generating station switchyard fence to the point of interconnection” to mean that there is a clear line of sight from any point along that length of line.

One commenter questioned whether the standard applies to all generator interconnection Facilities that a GO owns if it applies to one of them. The SDT clarified that it intended for the standard to apply on a line by line basis in both FAC-003-X and FAC-003-3. To clarify this, it has reformatted the Applicability section of FAC-003-X to better match the formatting in FAC-003-3.

One commenter asked whether the standard applies to the entirety of an applicable generator interconnection Facility, or just the portion of the line greater than one mile. The SDT clarified that if a GO owns an applicable line, the GO is responsible for the entirety of that line. The SDT believes that this is clear in the standards as written.

One commenter expressed concern that the implementation timeframe is too long. The SDT reminded the commenter that the time frame was based on previous stakeholder comments and the fact that the implementation of Version 0 standards – the transition into which marked the time that TOs needed to begin applying FAC-003 on a mandatory basis – occurred over more than two years. It is therefore reasonable to assume that GOs, having never had to comply with a vegetation management standard, be afforded adequate time to do so.

One commenter continues to find the changes proposed under Project 2010-07 to be unnecessary. As it has in previous consideration of comment reports, the SDT points out that it must act within the scope of the SAR for this project. As mandated by its SAR, the SDT has addressed standards for which there is a reliability gap or possible perception of a gap when it comes to the generator interconnection Facility, as justified in great depth in its [Technical Justification document](#).

The SDT considered all comments received and decided to address typos, improve the formatting of the Applicability section of FAC-003-X, and update the boilerplate language in the Effective Dates sections of the standards and their implementations plans. The SDT has proposed no substantive changes to the standards.

| Organization | Yes or No | Question 1 Comment |
|-----------------|-----------|---|
| Ameren Services | Negative | <p>(a) There is no technical basis for the one mile length exemption. In fact, one could argue that a very short line, 300 feet in length, that experienced a fault from a tree at "the end of the circuit", i.e near the switchyard fence, would have much more of an impact on the BES because the fault would be limited by much less impedance.</p> <p>(b) For the GO that owns several lead lines but only one of the lines is greater than one mile in length, does this standard apply to all the lead lines he owns? A response can be affirmative with the current language of the section 4.2.1. If this is not the intent, it should be clarified.</p> <p>(c) It is also unclear in this version if a GO that owned one line that was 1.2 miles in length would have to comply for the entire length of said line, or just 0.2 miles of said line. If the GO is responsible for 1.2 miles, then that</p> |

| Organization | Yes or No | Question 1 Comment |
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| | | <p>argues that the first mile is important and consequently there is no basis for ignoring the first mile on other lines. If the GO is only responsible for 0.2 miles, what is the technical basis to ignore a mile? And would it be the first mile from the switchyard that is ignored, or is the middle mile, or the last mile where it connects to the TO? Or could the GO decide? Or could the GO pick sections of the line that amount to a mile that they can ignore? This seems like something that should be addressed for compliance.</p> <p>(d) The 2 year compliance time line is far too long. There is significant industry evidence that was developed in the drafting of Version 2 that supports a one year compliance time-line for new lines. This is evidenced in Version 2. Thus there is no basis for the 2 years</p> |
| <p>Response: Thank you for your comment. The SDT continues to believe that the qualifying criteria for GOs are appropriate; it has explained its rationale in depth in the posted Technical Justification Document. The SDT has considered all relevant stakeholder comments and is satisfied that it has determined the appropriate language to address the reliability gap.</p> <p>The SDT intended for the standard to apply on a line by line basis in both FAC-003-X and FAC-003-3. To clarify this, it has reformatted the Applicability section of FAC-003-X to better match the formatting in FAC-003-3.</p> <p>If a GO owns an applicable line, the GO is responsible for the entirety of that line. The SDT believes that this is clear in the standards as written.</p> <p>With respect to the Implementation Plan, the SDT reminds Ameren that the time frame was based on previous stakeholder comments and the fact that the implementation of Version 0 standards – the transition into which marked the time that TOs needed to begin applying FAC-003 on a mandatory basis – occurred over more than two years. It is therefore reasonable to assume that GOs, having never had to comply with a vegetation management standard, be afforded adequate time to do so.</p> | | |
| BC Hydro and Power Authority | Negative | <p>“BC Hydro agrees with the revisions to FAC-003-3 and would vote Affirmative except for the following two items.</p> <p>One: The FAC-003-2 adopted by the NERC Board of Trustees had a significant change to what was voted on in Draft 6 in the Table of Compliance Elements (R1 and R2). In the table on Page 13 of the version</p> |

| Organization | Yes or No | Question 1 Comment |
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| | | <p>adopted by the NERC Board of Trustees on November 3, 2011, the VSLs were changed and the staff proposed violation severity levels were adopted and the review team recommendations were rejected. Therefore, there is no Low or Moderate VSLs for these two violations only High and Severe. This was rejected earlier by a number of utilities including BC Hydro and was not in the version 6 draft that was voted for on the last ballot. This change as adopted is a concern as it expects a level of program perfection that seems unrealistic. It is also at odds with the Rationale for R1 and R2 outlined on Page 32 of the standard “Guideline and Technical Basis” section which gives an explanation for the increasing levels of violation severity. Program failures that were deemed to be “unusual conditions in an otherwise sound program” or “not adequately addressed by the program” formerly rated as Lower or Moderate VSL are now rated as High. It also extends the severity of the violation beyond what is currently in FAC-003-1 although the levels of non-compliance are not strictly comparable between versions. This change is carried on in the Draft FAC-003-3.</p> <p>Two: Table 2 (pg. 30 and 31 of FAC-003-3 Draft 3) for Minimum Vegetation Clearance Distances for AC Voltages now includes clearance calculations for 287 kV which is good and was something BC Hydro asked for. However, the calculations don’t seem to be correct as the limits are higher than for 345kV. BC Hydro recommends either providing an explanation as to why these limits seem to be out of sequence to increasing voltage or recalculate them.”</p> |
| <p>Response: Thank you for your comment. The SDT's SAR is very limited in scope (determining which additional standards should apply to a GO/GOP). The SDT made no changes to the VSLs and simply included the FAC-003-2 VSLs that were approved by NERC’s BOT, as those are the VSLs that will be filed with FERC. Similarly, the SDT made no changes to Table 2, as that would also have been outside its scope; the SDT exclusively made changes that would add GOs or GOPs to standard requirements or applicability sections, and changes that would bring the standard up to date according to current NERC templates. No change made.</p> | | |

| Organization | Yes or No | Question 1 Comment |
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| ComEd | Negative | Please refer to Exelon's comments submitted in the electronic comment form |
| PECO Energy | Negative | Please refer to Exelon's comments submitted in the electronic comment form |
| Gulf Power Company | Negative | See comments submitted via the electronic comments form by Antonio Grayson. |
| Mississippi Power | Negative | See comments submitted via the electronic comments form by Antonio Grayson. |
| Alabama Power Company | Negative | See comments submitted via the electronic comments form by Antonio Grayson. |
| Utility Services, Inc. | Negative | The applicability language under Version X is not the same as the language in Version 3. We do not believe that applicability language in Version X can ever result in a “True” logical outcome whereas the language in Version 3 can. We understand the intent; however, applying the specific language using the logical "AND" in the applicability portion of the standard will always come out with a null result. We suggest the SDT adopt the applicability language in Version 3 in Version X. |
| <p>Response: Thank you for your comment. The SDT sought to keep the language of 4.3.1 of FAC-003-X consistent with the language in 4.2.1 of FAC-003-X. The SDT does not believe the language in Version X can lead to a “null” result; we believe the language is as clear as possible as written now that it has been reformatted to better match the formatting in FAC-003-3. No change made.</p> | | |
| Xcel Energy, Inc. | Negative | This project is counter-productive to the efforts of the Protection System Maintenance and Testing Standard Drafting Team that concurrently has |

| Organization | Yes or No | Question 1 Comment |
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| | | PRC-005-2 posted for comment and successive ballot. |
| <p>Response: Thank you for your comment. The SDT believes this comment was submitted in response to PRC-005 and will address it with comments received under that standard.</p> | | |
| SERC Reliability Corporation | Negative | <p>We have concern that if this passes there will be BES Elements that will not be covered by the vegetation management standard that are currently included in the standards and that this determination is based solely on ownership and not risk to reliability. SERC supports BES reliability and as vegetation management was identified as a significant contributor to the 2003 Blackout we do not support a revision that would create a gap in the results-based, defense-in-depth approach that has been determined to be necessary for the reliable operation of the interconnected transmission network.</p> |
| <p>Response: Thank you for your comment. GOs are not currently covered under any vegetation management requirements, so the SDT does not understand the comment about removing coverage for BES Elements “that are currently included in standards.” The applicability to TOs, the entity currently subject to vegetation management requirements, is not changing. The SDT recognizes that in many cases, generation Facilities are (1) staffed and the overhead portion is within line of sight or (2) the overhead Facility is over a paved surface. Stakeholders have generally supported the rationale for exempting these Facilities because incorporating them into FAC-003 would offer no reliability benefit. No stakeholder has commented that there are similarly situated transmission facilities.</p> | | |
| Southern Company | No | <p>The requirement as worded implies or could be interpreted to mean one's line of site would have to originate at the generating station switchyard fence. The "clear line of site" should also include that from a roadway that travels in proximity to the line. Such a roadway's purpose would likely include access to the line for inspections, maintenance, travel from the plant to the transmission substation, etc. Since the terrain between the generating station switchyard fence and the point of interconnection could obscure the view from the fence, the clear line of site from such a roadway</p> |

| Organization | Yes or No | Question 1 Comment |
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| | | <p>should be allowed. The requirement should be revised to read, "...or (2) does not have clear line of sight¹ from the generating station switchyard fence or a roadway to the point of interconnection with a Transmission Owner's Facility."</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. The SDT intends for the phrase "from the generating station switchyard fence to the point of interconnection" to mean that there is a clear line of sight from any point along that length of line. The SDT has considered all relevant stakeholder comments and is satisfied that it has determined the appropriate language to address the reliability gap. No change made.</p> | | |
| <p>Southwest Power Pool Standards Development Team</p> | <p>No</p> | <p>Clear line of sight" means the distance that can be seen by the average person "standing at ground level "without special instrumentation (e.g., binoculars, telescope, spyglasses, etc.) on a clear day.</p> |
| <p>Response: Thank you for your comment. The SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap.</p> | | |
| <p>Cowlitz County PUD</p> | <p>No</p> | <p>Cowlitz must agree with Exelon's position inasmuch that the vantage point must be related to the generating station switchyard maintenance or the operation and maintenance of the generation plant itself, and afford a clear perspective of vegetation proximity. Cowlitz also agrees with the SDT's line of sight clarifying verbiage. However, restricting the vantage point to the generating station switchyard fence does not encompass the spirit of the exclusion. A short one-mile transmission interconnection line - from the generating station switchyard to the interconnection point - that is frequently viewed during the operation and maintenance of the generation plant itself should be the crux of the exemption.</p> <p>The exact location, i.e., the generating station switchyard fence, of the vantage point is not the make or break of whether the interconnection line will be routinely inspected by default. As an example, consider a hydro project where the generating station switchyard may be located near the</p> |

| Organization | Yes or No | Question 1 Comment |
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| | | <p>tailrace inside a canyon. From the fence line of this particular switchyard, only the interconnection line traversing up the canyon wall is visible. However, topside of the dam where maintenance and operational personnel must daily traverse under the interconnection line to access the powerhouse and switchyard may afford a clear view of both the generating station switchyard below and the interconnection station which includes the whole interconnecting line in-between.</p> <p>Further, if parts of the interconnecting line is viewable in two or even three vantage points beneath the interconnection line during the normal transit to and from the generating station switchyard, the sum of which comprises the whole line, can this not also meet the spirit of the exclusion?</p> <p>Conversely, Cowlitz does not hold that any vantage point should be acceptable. Any vantage point that must require special effort to access no matter the ease is not acceptable. Also, a perpendicular view of a line (not under or near) complicates perception of the proximity of vegetation to a line. Views parallel down the right-of-way maximizes perception of vegetation proximity.</p> <p>Further, a long line that is fully viewable during transit to and from the generation plant increases the chance of hidden vegetation encroachment. Cowlitz strongly opposes any trivializing of reliability compliance collateral damage. Forcing compliance activities with no reliability return must be avoided wherever possible. As a stakeholder with limited time to invest reviewing all the comments submitted, Cowlitz offers an apology to Exelon for missing their initial comment. Cowlitz commends Exelon’s persistence in this matter.</p> <p>***Suggested language: ...or (2) do not have a clear line of sight (leave the footnote in place) up and/or down from a single vantage point within the transmission right-of-way where both the origin at the generating station switchyard and the termination interconnection point with the Transmission</p> |

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| | | Owner’s Facility can be seen, and where operations or maintenance personnel frequent on foot during normal generation plant or generating station switchyard access is made... |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. The SDT intends for the phrase “from the generating station switchyard fence to the point of interconnection” to mean that there is a clear line of sight from any point along that length of line. We do not believe that adding the language you suggest necessarily adds clarity, and we’re concerned that it may raise additional questions. In sum, the SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap. No change made.</p> | | |
| Exelon | No | <p>Exelon disagrees with the current proposed draft of FAC-003-3/X because the reference to a “clear line of sight from the generating station switchyard fence to the point of interconnection” does not clarify the Standard and is unsupported by any technical basis. Furthermore, the definition of “clear line of sight” added by the SDT does not address or remedy the substantive concerns raised in Exelon’s appeal.</p> <p>Exelon reiterates that the SDT should base the applicability of the Standard on the length of the transmission line, a measurable component of the bulk electric system, and remove all references to a “clear line of sight.” This approach is consistent with previous draft versions of FAC-003 proposed by the SDT and the Ad Hoc Group and the recent recommendation of the NERC Vice President of Standards and Training in response to Exelon’s appeal.</p> <p>Alternatively, if the “clear line of sight” verbiage remains, the Standards should be clarified to remove the requirement that the line of sight be established from “the generating station switchyard fence to the point of interconnection” and to add a requirement or clarify that “clear line of sight” for lines of one mile or less can include observation of the length of the transmission lines from various vantage points within the owner controlled property. The SDT states in the “Background” section of the</p> |

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| | | <p>Unofficial Comment Form that “a reference to the line of sight is clarifying and makes explicit the SDT’s implicit intent from day one.”</p> <p>Yet, the SDT offers no support for its “implicit intent from day one,” and a review of the history for these Standards certainly does not support an “implicit intent from day one” to require a clear line of sight from a fixed location, let alone the generating station switchyard fence, to the point of interconnection. The Technical Justification document posted in September 2011 (p. 3) refers to the Ad Hoc Group’s original thought to exclude from the Standards any transmission lines that were “less than two spans [long] (generally one half mile from the generator property line).” In agreeing “with that intended exclusion in principle,” the SDT explained (p. 3) that, “[a]fter reviewing formal comments, the SDT agreed to revise the exclusion so that it applies to a Facility [transmission line] if its length is ‘one mile or 1.609 kilometers beyond the fenced area of the generating station switchyard’ to approximate line of sign [sic] from a fixed point,” (the fixed point being the fenced area of the generating station switchyard). From the start, the Ad Hoc Group and SDT focused on the length of the transmission line (either a half mile as proposed by the Ad Hoc Group or a mile as proposed by the SDT) as the proxy for line of sight, the presumption being that up to a certain distance, the overhead line is in the line of sight at various locations throughout the Generator Owner’s property and reasonably subject to being managed through normal day-to-day plant activities.</p> <p>The SDT has not, until the most recent iteration of the Standards, focused on requiring a “clear line of sight from the generating station switchyard fence to the point of interconnection.” As support for adding the “clear line of sight” requirement to the FAC-003-3/X Standards in December 2011, the SDT noted as follows: “We believe that the one mile length is a reasonable approximation of line of sight, and that using a fixed starting point (at the fenced area of the generation station switchyard) eliminates confusion and</p> |

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| | | <p>any discretion on the part of a Generator Owner or an auditor.” With the addition of an explicit line of sight reference here, the SDT believes it has clarified its original intent. (Side bar comments to FAC-003-3, Section 4.3.1 (December 1, 2011); FAC-003-X, Section 4.3.1 (December 1, 2011)).</p> <p>This explanation does nothing more than (1) reiterate the point the SDT has maintained throughout the entire drafting process, namely that “the one mile length” of a transmission line “is a reasonable approximation of line of sight,” and (2) explain that the SDT included a “fixed starting point” (the fenced area of the generation station switchyard) from which to measure the length of the transmission line to address stakeholder concerns about excessive Generator Owner discretion with respect to the location from which to take a measurement and inconsistent application of the Standards.</p> <p>Again, the SDT’s “intent” (implicit or otherwise) “from day one” has nothing to do with establishing a “clear line of sight from the generating switchyard fence to the point of interconnection.” In addition, requiring a “clear line of sight from the generating station switchyard fence to the point of interconnection” is technically unsupported. The SDT just added the requirement for a “clear line of sight to the point of interconnection” language without considering the implications of why such a change was required or reasonable. While a specific fixed starting point (the generating station switchyard fence) and end point (the point of interconnection) may make sense for establishing a starting and ending point from which to measure the length of the transmission line (the one-mile limitation), it does not make sense when considering a clear line of sight, especially in light of stakeholder comments and the SDT’s repeated acknowledgment that in many cases, generation Facilities are either (1) staffed and the overhead portion is within the line of sight or (2) the overhead Facility is over a paved surface. Stakeholders have generally supported the rationale exempting these Facilities because incorporating them into FAC-003 would offer no reliability benefit. The SDT and industry comments support the position that</p> |

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| | | <p>these qualifiers represent a reasonable and appropriate risk prevention approach.(Consideration of Comments, Generator Requirements at the Transmission Interface, Project 2010-07 (for November 9, 2011 successive ballot), p. 1; Technical Justification Resource Document (posted March 2012), p. 3.)</p> <p>By inserting the “clear line of sight” requirement now without modifying the fixed starting point, the SDT completely ignores its unequivocal acknowledgment that generation Facilities are unique in the sense that personnel can see the line from various locations within the owner controlled area and many generation Facilities are over paved surfaces. The absence of a technical justification for imposing a “clear line of sight” is illustrated by the following example.</p> <p>A Generator Owner transmission line leaving the generating station could take a “dog leg” turn (the line turns at one of the towers). Standing at the tower in this example, an individual would have a clear line of sight of the entire line to either end of the short-distance line (to the end leaving the station and to the end terminating at the point of interconnection). Since the generating Facility is within the Generator Owner’s property line or controlled area and consistently staffed by personnel who patrol the owner controlled area, the line can be observed and maintained by staff in the same manner as any other short distance line with a “clear” line of sight from the “generating station switchyard fence to the point of interconnection.” Moreover, to the extent a portion or the entire length of the line travels over paved surfaces or structures, any barriers or obstacles to a clear line of sight will not be caused by vegetation, as discussed in FAC-003-3/X but, rather, by equipment, components, or structures. Clearance between generator lines and structures is already covered in other NERC Standards. For those lines that do travel over areas of vegetation, the regular personnel monitoring and surveillance of the areas over which the lines travel provides reasonable assurance of protection from vegetation</p> |

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| | | <p>related events.</p> <p>Rather than clarifying the Standards, the SDT has introduced more ambiguity into the Standards. The addition of the “generating station switchyard fence” as the point of reference for a clear line of sight adds more confusion than it solves by introducing a variable that will be left to the discretion of generator owner and an auditor. What is the definition of a “generating station switchyard fence?” As Exelon noted in its Appeal and at least one other Registered Entity noted in its Comments for the first successive ballot (Consideration of Comments posted March 2012, p. 38), some generation facilities do not have generating switchyards or generating switchyard fences. A requirement that there be a clear line of sight from the “generating switchyard fence” is meaningless in cases where no such switchyard or fence exists. Is it the fence surrounding the generating unit or is it meant to refer to the fence surrounding the Transmission Owner’s associated switchyard and relay house? What if there are multiple physical fence lines between the generating unit and the point of interconnection? In addition, by introducing a point of reference that is not a physical component or measurable reference of the bulk electric system, what precludes the Generator Owner from arbitrarily moving the fence line to avoid applicability? Also lacking in clarity is the addition of a footnote defining “clear line of sight” to mean “the distance that can be seen by the average person without special instrumentation (e.g., binoculars, telescope, spyglasses, etc.) on a clear day.” Generation Owners will be left to determine what constitutes an “average person,” a “clear day,” and “special instrumentation.”</p> <p>For all these reasons, Exelon requests that the SDT base the applicability of the Standard on the length of the transmission line, a measurable component of the bulk electric system, and remove all references to a “clear line of sight.” Alternatively, if the “clear line of sight” verbiage remains, the Standards should be clarified to remove the requirement that</p> |

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| | | <p>the line of sight be established from “the generating station switchyard fence to the point of interconnection” and to add a requirement or clarify that “clear line of sight” for lines of one mile or less can include observation of the length of the transmission lines from various vantage points within the owner controlled property.</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. We maintain that the addition of the reference to “clear line of sight” is clarifying and helps support the rationale behind the one mile exemption. A line less than one mile that passes through a dense grove should not be exempt from this standard, but a line that is less than one mile and is either (1) staffed and within line of sight or (2) over a paved surface <i>should</i> be exempt.</p> <p>The SDT intends for the phrase “from the generating station switchyard fence to the point of interconnection” to mean that there is a clear line of sight from any point along that length of line. We do not believe that adding a reference to a fixed vantage point necessarily adds clarity, and we’re concerned that it may raise additional questions. In sum, the SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap. No change made.</p> | | |
| Texas Reliability Entity | No | <p>In FAC-003-X:</p> <ol style="list-style-type: none"> 1. We appreciate that you took Regional Entity out of the Applicability section, but there is still a Requirement (R4) that applies to the Regional Entity. Is that Requirement intended to be enforceable against the Regional Entities? We suggest removing Requirement R4. 2. In Part D.1.1, only the Regional Entity should be listed as Compliance Monitor, since the Regional Entity has been removed as an Applicable entity. 3. In the Purpose section, update the reference to NERC (use “Corporation” instead of “Council”), and capitalize “Rights-of-Way” since it is a defined term. |

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| | | <p>4. We suggest that you spell out “Regional Entity” in Applicability part 4.2.1.</p> <p>5. In the implementation plan, the reference to “R3” should be corrected to “R1” in the following sentence: “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.”</p> <p>In FAC-003-3:</p> <p>6. There is no Compliance Monitor listed on page 17. At least the Regional Entity should be listed here.</p> <p>7. In the Severe VSL for R2, replace “Transmission Owner” with “responsible entity.”</p> <p>8. In the Severe VSL for R1 and R2, remove “active transmission line” before “ROW.” That phrase is confusing in the VSLs because it does not appear in the requirements, and it is not clear whether it is intended to change the requirements.</p> <p>9. In Table 2 (Alternating Current - meters AND Direct Current) the footnote references are wrong. We think they should be 9 and 10, rather than 7 and 8.</p> <p>10. In Table 2 (Direct Current), the column headings are wrong. Only the first column heading should refer to voltage. The rest should refer to MVCD.</p> |
| <p>Response: Thank you for your comment.</p> <ol style="list-style-type: none"> 1. The SDT has reverted back to the original Applicability (which included the Regional Entity) because deleting a requirement is outside the scope of this drafting team. 2. Because the Regional Entity was returned to the Applicability section, the second bullet in section D1.1 must remain. 3. Changes made. 4. Regional Entity has been spelled out in all cases. | | |

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| <p>5. Change made. 6. The Compliance Enforcement Authority section has been updated as suggested. 7. Change made. 8. Modifying the VSLs beyond the change from “Transmission Owner” to “responsible entity” is not within the scope of the SDT, and these VSLs have already been approved by NERC’s BOT. 9. These are 9 and 10 in both the clean version and the redline version. 10. The Project 2010-07 SDT did not modify this table.</p> | | |
| Manitoba Hydro | No | <p>Manitoba Hydro does not support the changes being proposed in Project 2010-07. If a Generator Owner is required to register as a TO, all the Requirements applicable to a TO should apply. There is no need to change specific Reliability Standards to allow the Generator Owner to perform only selected TO functions. For additional information, please see Manitoba Hydro's comments submitted in the comment period ending November 18, 2011. Manitoba Hydro does not believe that the SDT fully addressed our concerns in their responses to our comments in that commenting period.</p> |
| <p>Response: Thank you for your comment. Under the SDT’s changes, GOs are not going to be required to register as TOs, so this comment does not apply.</p> <p>To reiterate our comments in previous comment reports, the intent of the SDT’s SAR is to address all reliability gaps associated with ownership or operation of an interconnection Facility by a generation entity (GO/GOP). The SDT determined that it should first address “low-hanging fruit” and believes these to be sole-use Facilities (see posted examples under “Supporting Materials” posted alongside the December ballot) – that is, a Facility used to connect one or more generators to a Facility owned or operated by a transmission entity (TO/TOP). Through our deliberations, we came to the conclusion that an interconnection Facility owned or operated by a GO or GOP that is more complex would likely require specific analysis and that such analysis would most likely be outside the scope of this SDT.</p> <p>The SDT also refers the commenter to the document titled Project 2010-07: Generator Requirements at the Transmission Interface Background Resource Document.</p> | | |
| Liberty Electric Power LLC | No | The "line of sight" should be removed. It opens up the entity to a finding of |

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| | | non-compliance if a temporary blockage of line of sight should occur. |
| <p>Response: Thank you for your comment. We maintain that the addition of the reference to “clear line of sight” is clarifying and helps support the rationale behind the one mile exemption. A line less than one mile that passes through a dense grove should not be exempt from this standard, but a line that is less than one mile and is either (1) staffed and within line of sight or (2) over a paved surface <i>should</i> be exempt. Nothing in the proposed standard prohibits an entity from self-imposing the requirements contained within in order to mitigate any perceived risk of potential non-compliance. No change made.</p> | | |
| Northeast Power Coordinating Council | No | <p>The Applicability language used in FAC-003-X is different from that used in FAC-003-3. The language used in FAC-003-X uses “and” in several places which leads to confusion and a probable “null” result, whereas the language in FAC-003-3 is more straightforward and makes use of “or”. The FAC-003-3 applicability language should be used in FAC-003-X. The explanation of what is meant by line of sight should be incorporated in the Applicability Section wording as standards, at NERC’s direction, are supposed to be getting away from the use of footnotes.</p> |
| <p>Response: Thank you for your comment. The SDT sought to keep the language of 4.3.1 of FAC-003-X consistent with the formatting in 4.2.1 of FAC-003-X. The SDT does not believe the language in Version X can lead to a “null” result; we believe the language is as clear as possible as written now that the formatting has been updated to better reflect the formatting in FAC-003-3. No change made.</p> | | |
| NextEra Energy, Inc. | No | <p>Under the line of sight approach, a generation lead would be exempt from the requirements of FAC-003-3 if personnel can see the generation lead corridor and the generation lead is less than a mile. The rationale provided to support of this proposal is that “Stakeholders have generally supported the rationale for exempting these Facilities because incorporating them into FAC-003 would offer no reliability benefit.”</p> <p>However, there is no data that supports that generation leads of less than a mile are categorically not subject to vegetation contacts and outages. Further, in practice this approach will unduly discriminate against longer</p> |

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| | | <p>generator leads, many of which are associated with renewable energy resource, such as wind and solar.</p> <p>NextEra Energy Inc. (NextEra) believes a more technically sound approach is that all generator leads be subject to FAC-003-3, with the opportunity to be exempted from FAC-003-3 regulation upon an affirmative demonstration that no vegetation threat exists.</p> <p>To implement this approach, NextEra proposes that FAC-003-3 applicability 4.3.1 be revised to read as follows: “Overhead transmission lines, including generation leads, beyond the fenced area of the generating station switchyard to the point of interconnection with a Transmission Owner and are:4.3.1.1. Operated at 200kV or higher; or 4.3.1.2. Operated below 200kV identified as an element of an IROL under NERC Standard FAC-014 by the Planning Coordinator; or. 4.3.1.3. Operated below 200 kV identified as an element of a Major WECC Transfer Path in the Bulk Electric System by WECC.”</p> <p>NextEra would also propose to add a new section 4.3.2 that reads as follows:”If a Generator Owner or Transmission Owner can demonstrate that the entire Right-of-Way is paved or otherwise devoid of vegetation, and reasonably expected to remain so, the Generation Owner or Transmission Owner is exempt from FAC-003-3.”</p> <p>In addition, NextEra proposes that the drafting team consider a megawatt (MW) threshold for a generating plant from both a stand-alone and aggregate bases. For example, it is unlikely that vegetation contact tripping a 50 megawatt generator (or a generator of 100 MWs in the aggregate) connected to a robust transmission system with a large amount of load and generation will adversely impact reliability.</p> <p>Thus, NextEra proposes the addition of a provision that exempts a generation lead for stand-alone generators of 50 MWs and below and</p> |

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| | | <p>generators in the aggregate of 100 MWs and below, unless there is an affirmative request for the generator to comply with FAC-003-3 by a Transmission Operator or Reliability Coordinator. Such a provision could read as follows: "Unless a Transmission Operator or Reliability Coordinator requests in writing that a stand-alone generator of 50 Megawatts (MWs) or below (with a 200 kV or above generation lead) or a generator in the aggregate of 100 MWs or below (with a 200 kV or above generation lead) comply with FAC-003-3, these classes of generators and their associated generation leads are exempt from complying with FAC-003-3. In the event a Transmission Operator or Reliability Coordinator requests in writing that a stand-alone generator of 50 Megawatts (MWs) or below (with a 200 kV or above generation lead) or a generator in the aggregate of 100 MWs or below (with a 200 kV or above generation lead) comply with FAC-003-3, the associated registered entity shall have one-year from the date of the written correspondence to come into compliance with FAC-003-3."</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. We maintain that the addition of the reference to "clear line of sight" is clarifying and helps support the rationale behind the one mile exemption. A line less than one mile that passes through a dense grove should not be exempt from this standard, but a line that is less than one mile and is either (1) staffed and within line of sight or (2) over a paved surface <i>should</i> be exempt. And because there are many GOs whose lines would fall into these categories, the SDT believes the exemption is necessary and prevents GOs with little to no reliability risk from incurring undue cost and compliance risk in the development and maintenance of a vegetation management plan. In sum, the SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap. No change made.</p> | | |
| Dynergy | No | <p>Using the switchyard fence is to restrictive. There could be to many different layouts to keep it fair for all GO's. For example, there could be an obstruction if limited to standing at the existing switchyard fence but if one were to move a short distance away (i.e. corner of GO's building) then it could be possible to see both ends of the tie line. This would also meet the intent of the added language since it is now within line of sight. I</p> |

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| | | <p>recommend deleting "switchyard fence". Also, in order to account for a GO not being able to dictate what happens inside a TO's switchyard, I recommend adding "entry or" between "of" and "interconnection".</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. The SDT considered many options for a starting point, and believes that using the fixed starting point of the switchyard fence is best for eliminating confusion and any discretion on the part of a Generator Owner or an auditor. The SDT intends for the phrase “from the generating station switchyard fence to the point of interconnection” to mean that there is a clear line of sight from any point along that length of line. In sum, the SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap. No change made.</p> | | |
| <p>Wisconsin Electric; Wisconsin Electric Power Co.; Wisconsin Electric Power Marketing; Wisconsin Energy Corp.</p> | <p>No</p> | <p>We strongly oppose the addition of the “clear” line of sight criteria to the Applicability. The report of the GOTO Task Force, as well as prior draft revisions to FAC-003, included a test based solely on circuit length, which is sufficient in our view to assure that the BES is not at risk due to vegetation issues on generator tie lines. The expansion to include short tie lines, including those entirely on the Generator Owner’s property which may not meet the line of sight qualifier, has no benefit to reliability. Rather, the expanded applicability and the requirement for a formal vegetation management program in these cases will consume resources for compliance that are better used for actual reliability improvements.</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. We maintain that the addition of the reference to “clear line of sight” is clarifying and helps support the rationale behind the one mile exemption. A line less than one mile that passes through a dense grove should not be exempt from this standard, but a line that is less than one mile and is either (1) staffed and within line of sight or (2) over a paved surface <i>should</i> be exempt. The SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap. No change made.</p> | | |
| <p>ExxonMobil Research and Engineering</p> | <p>No</p> | <p>While it is clear that the SDT is attempting to include those facilities owned by Generator Owners that travel long distances down right-of-ways, the</p> |

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| | | <p>applicability section of FAC-003-X and FAC-003-3, as written, require industrial complexes with cogeneration facilities to develop Transmission Vegetation Management Programs for generator lead lines that are not exposed to vegetation.</p> <p>Industrial cogeneration location is typically chosen based on the availability of fuel, need for steam, or availability of real estate. This can result with the generation facilities (including the GSU transformer substation) being located deep within the plant with long cable routes and multiple substation connections between the GSU transformer substation and utility interconnection facility located near the perimeter of the industrial complex’s fence line. Additionally, the routes of these generator lead lines fundamentally differ in nature from a typical IPP’s generator lead line route. Since they are located within the fence line of an industrial complex, the routes rarely contain vegetation; are frequently travelled by plant personnel; rarely run in straight lines (i.e. no single line of sight); and frequently terminate at a facility located at the fence line of the industrial complex where a transmission company takes ownership of the power lines that leave the industrial complex. Furthermore, the use of the term “generating station switchyard” may result in inconsistent enforcement of the Transmission Vegetation Management Program Reliability Standard as the use of the term implies there is only one substation located within a Generator Owner’s complex. Typically, there are multiple substations that connect an industrial complex’s generator lead-line to the utility interconnection facility located near the perimeter of the industrial complex’s fence line. The two obvious interpretations for the “generating station switchyard” are the substation that is directly connected to the generator’s GSU, and the utility interconnection facility. The concerns raised by NERC and FERC staff related generator owned transmission like assets originate with those conductors that leave the Generator Owner’s complex’s fence line and travel long distances down vacant right-of-ways,</p> |

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| | | <p>and, therefore, the applicability of those Reliability Standards that apply to transmission facilities should start with the fence line.</p> <p>Since the Bulk Electric System is contiguous, reliability concerns related to the facilities between the GSU transformer substation and utility interconnection facility are covered by those Reliability Standards that apply to Generator Owners and Generator Operators. In order to account for the different nature of industrial complex's generation facilities, the SDT should consider re-phrasing the applicability section of FAC-003-X and FAC-003-3 to start counting the length of a generator lead line at the fence line of the Generator Owner's complex and not the generating station switchyard.</p> |
| <p>Response: Thank you for your comment. The SDT appreciates this discussion, and had many similar discussions during its own deliberations. The SDT considered many options for a starting point, and for language in general within this qualifier, and it believes that using the fixed starting point of the switchyard fence is best for eliminating confusion and any discretion on the part of a Generator Owner or an auditor. In sum, the SDT has considered all relevant stakeholder comments and is satisfied that we have determined the appropriate language to address the reliability gap, while exempting the most common lines with little to no reliability risk for a vegetation issue. No change made.</p> | | |
| <p>City of Bartow, Florida; City of Clewiston; Florida Municipal Power Agency; Beaches Energy Services</p> | <p>Affirmative</p> | <p>Although we are supporting the change, the added applicability language for GOs is ambiguous as to whether the qualifier "operated at 200 kV and above and any lower voltage lines designated by the Regional Entity as critical to the reliability of the electric system in the region" applies to both portions of the applicability (e.g., 1) > 1 mile and 2) no clear line of sight), or just to the second no clear line of sight applicability. FMPA assumes that the qualifier applies to both. We recommend re-arranging of the sentence to make this clearer by moving the qualifier to the beginning of the sentence instead of the end of the sentence.</p> |
| <p>Response: Thank you for your comment. The SDT agrees that the qualifier applies to both (1) and (2) in the qualifier language and used that language formatting to keep the formatting of 4.2.1 of FAC-003-X consistent with 4.1.1 of FAC-003-X. No change</p> | | |

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| made. | | |
| American Wind Energy Association | Affirmative | <p>AWEA supports the modifications in this standard, along with the other standards modification under Project 2010-07, as a reasonable approach to addressing the perceived reliability concerns with generator tie lines. We believe a consistent approach for all Generator Owners and Generator Operators that does not require registration as a Transmission Owner or Transmission Operator is the most efficient and effective way to address these concerns.</p> |
| <p>Response: The SDT thanks you for your comment and support.</p> | | |
| BrightSource Energy, Inc. | Affirmative | <p>BrightSource would like to thank the SDT for the effort in developing the standard. Our comment is more on providing more clarification. Depending on the agreements between the TO and the GO, the Point of Interconnection is not necessarily the point of change of ownership of the transmission facilities. For example, the GO may own the portion of the Gen-tie from the generating plant to the last tower outside the TO’s substation and the TO owns the line drop from the last tower to the termination equipment inside the TO substation. So to avoid confusion later we suggest that we modify P4.3.1 by adding “to the point of change of ownership or” as follows: “4.3.1. Generator Owner that owns an overhead transmission line(s) that (1) extends greater than one mile or 1.609 kilometers beyond the fenced area of the generating station switchyard to the point of change of ownership or to the point of interconnection with a Transmission Owner’s Facility or (2) does not have a clear line of sight¹ from the generating station switchyard fence to the point of interconnection with a Transmission Owner’s Facility and is operated at 200 kV and above and any lower voltage lines designated by the Regional Entity as critical to the reliability of the electric system in the region.” Thank you.</p> |

| Organization | Yes or No | Question 1 Comment |
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| <p>Response: The SDT thanks you for your comment and support. The SDT considered many different language choices for its qualifying language, and it believes that “point of interconnection” is a clear phrase that will be understood and appropriately applied. No change made.</p> | | |
| <p>Indiana Municipal Power Agency</p> | <p>Affirmative</p> | <p>IMPA supports the change, but would add the comment that the added applicability language for GOs is ambiguous as to whether the qualifier "operated at 200 kV and above and any lower voltage lines designated by the Regional Entity as critical to the reliability of the electric system in the region" applies to both portions of the applicability which are 1) > 1 mile and 2) no clear line of sight), or just to the second portion for no clear line of sight applicability. IMPA assumes that the qualifier applies to both. We recommend reorganizing the sentence to make this more clear by moving the qualifier to the beginning of the sentence.</p> |
| <p>Response: Thank you for your comment. The SDT agrees that the qualifier applies to both (1) and (2) in the exemption language and used that language formatting to keep the formatting of 4.2.1 of FAC-003-X consistent with the formatting in 4.1.1 of FAC-003-X. No change made.</p> | | |
| <p>Nebraska Public Power District</p> | <p>Affirmative</p> | <p>NPPD joins the comments submitted by the MRO NSRF (Midwest Reliability Organization - NERC Standards Review Forum)</p> |
| <p>Midwest Reliability Organization</p> | <p>Affirmative</p> | <p>Please refer to comments made by MRO NSRF.</p> |
| <p>Muscatine Power & Water</p> | <p>Affirmative</p> | <p>Please see comments submitted by the MRO NERC Standards Review Forum.</p> |
| <p>Lakeland Electric</p> | <p>Affirmative</p> | <p>See FMPA comments</p> |
| <p>Great River Energy</p> | <p>Affirmative</p> | <p>See NSRF comments</p> |
| <p>Bonneville Power Administration</p> | <p>Yes</p> | <p>BPA has no other comments or concerns at this time.</p> |

| Organization | Yes or No | Question 1 Comment |
|--|-----------|---|
| NERC Compliance Policy | Yes | <p>Dominion offers the following comments on the Implementation Plan for FAC-003-3:</p> <ol style="list-style-type: none"> 1. The last paragraph on page 2 refers to FAC-003-3 Requirement 1.3. FAC-003-3 does not appear to contain a Requirement 1.3; therefore, Dominion recommends that the reference in the Implementation Plan be clarified. 2. The 3rd paragraph on page 3 refers to FAC-003-3 Requirement 1.2. FAC-003-3 does not appear to contain a Requirement 1.2; therefore, Dominion recommends that the reference in the Implementation Plan be clarified. |
| <p>Response: Thank you for these suggestions. These references have been removed.</p> | | |
| MRO NSRF | Yes | <p>The NSRF agrees with the clarifying changes related to adding the phrase “.....do not have a clear line of sight from the generating station switchyard fence to the point of interconnection with a Transmission Owner’s Facility.....”, however, have the following comment for SDT consideration:</p> <ul style="list-style-type: none"> o The Evidence Retention in FAC-003-3, Part C, Compliance, and Section 1.2 implies that an entity is required to retain evidence for the time period since the last audit. Since Generator Owners’ audit cycles are six (6) years, and the following paragraph states that to show compliance for R1, R2, R3, R5, R6 and R7 is three calendar years unless directed by the CEA to retain longer as part of an investigation, this section should be clarified to require six years retention for applicable Generator Owners. |
| <p>Response: Thank you for your comment. The SDT believes the data retention section is appropriate as written. No change made.</p> | | |
| Edison Mission Marketing & Trading | Yes | |
| Alabama Municipal Electric Authority | Yes | |

| Organization | Yes or No | Question 1 Comment |
|---------------------------------|-----------|--------------------|
| American Electric Power | Yes | |
| Public Service Enterprise Group | Yes | |
| ACES Power Marketing | Yes | |
| Essential Power, LLC | Yes | |
| Ingleside Cogeneration LP | Yes | |

END OF REPORT