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Organization (24 Responses)
Group Name (17 Responses)
Lead Contact (17 Responses)
Question 1 (37 Responses)
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Question 7 Comments (41 Responses)

Group
Bonneville Power Administration
Chris Higgins
Yes
Yes
Yes
No
BPA believes that there needs to be a clear demarcation where Transmission Owner and Generator Owner responsibilities begin and end.
Yes
Yes
No
Group
Notheast Power Coordinating Council
Guy Zito
Yes
Yes
No
See comments in the following questions.
No
The qualifier should be similar to that specified in Part 4.2.4 of FAC-003-3: "This standard applies to overhead transmission lines identified above (4.2.1 through 4.2.3) located outside the fenced area of the switchyard, station or substation and any portion of the span of the transmission line that is

crossing the substation fence. " Vegetation needing attention can exist within a half mile of a switchyard. Vegetation does not discriminate between Generation and Transmission Owners.	
Yes	
Yes	
Regarding the Right-of-Way definitions, the definition in FAC-003-3 is the better of the two. Suggest adding "and maintain" to the first sentence of the definition as follows: The corridor of land under a transmission line(s) needed to operate and maintain the line(s). The width of the corridor is established by engineering or construction standards as documented in either construction documents, pre-2007 vegetation maintenance records, or by the blowout standard in effect when the line was built. The ROW width in no case exceeds the applicable Transmission Owner's or applicable Generator Owner's legal rights but may be less based on the aforementioned criteria. The term Right-of-Way goes beyond Transmission Vegetation Management, and that should be considered in the definition. How does Right-of-Way affect transmission facilities that are routed over bodies of water, or over valleys, highways, etc.? Right-of-Way in relation to underground facilities? The format of FAC-003-X should be made consistent with current NERC guidelines (i.e.--Parts of Requirements should not have R's in their numbering, should be 1.1, 1.2 etc.).	
Individual	
Mike Laney	
Luminant Power	
Yes	
No	
No	
Group	
SERC OC Standards Review Group	
Gerald Beckerle	
Yes	
Consider a better definition of what constitutes an "applicable" generator owner or point to the document that explains the definition.	
No	
We feel that an 18 month implementation plan would be more conducive for generators to meet these new requirements	
Yes	
Yes	
While we agree, we believe that a better explanation of "the fenced area of the switchyard, generating station or generating substation up to the point of interconnection with the Transmission system" should be included. One suggestion is to distinguish between a plant perimeter fence and an internal switchyard fence.	

Yes
No
No
Group
EPSA
Jack Cashin
<p>Background The Electric Power Supply Association (EPSA) endorsed the initial recommendations of the Ad Hoc Group for Generator Requirements at the Transmission Interface, offered informal comments on the March 2011 White Paper Proposal for Project 2010-07 and now appreciates this opportunity to provide comments on the questions posted June 17, 2011. Since NERC's creation of the "GOTO Team" in February of 2009, EPSA has supported the efforts of Ad-Hoc Group and now the Project 2010-07 Standards Drafting Team (SDT). While EPSA members' compliance registration includes several functional entity types, the bulk of competitive suppliers' registrations are as Generator Owners (GOs) and Generator Operators (GOPs). EPSA applauds the SDT's decision to recommend the use the "intent of obligation" as the reason for application of FAC-001 rather than the receipt of request for interconnection and thereby supports the revisions to FAC-001-1. The proposed modification to FAC-001 (a new R2) would require a GO to develop "Facility connection requirements" within "45 days of executing an Agreement to evaluate the reliability impact of interconnecting another Facility to its existing generation Facility..." The use of the agreement execution is a more reasonable triggering mechanism for FAC-001 application and compliance. The SDT's recommendation intentionally excluded specific reference to the form of agreement to avoid commingling commercial and reliability aspects in reliability standards. However, the existing language may still mix commercial and reliability issues. The accompanying project Background Resource Document (p.2) makes it clear that the interconnection to an existing generator facility is contemplated to be the "existing interconnecting Facility that is owned by a generator" – that is, the generator's lead. The generator's leads are considered part of the "existing generator Facility," however, the generator, step-up transformer and other equipment that is within the generator switchyard can also be considered part of the Facility. FERC requires all transmission facilities to be available for "open access." A generator lead would become open access if another customer interconnected to it. Therefore FAC-001-1 could be made clearer by modifying the language regarding the 45-day trigger as follows: within "45 days of executing an Agreement to evaluate the reliability impact of interconnecting another Facility to its the Generator Owner's existing generation interconnecting transmission Facilities..." This modification would make it clear that the requirement does not apply to an entity that wants to, for example, connect a new generator within the fenced-in site of the existing generator, but instead only applies to request to interconnect to the generator lead.</p>
Yes
Yes
<p>EPSA generally supports the SDT's proposed redline changes to FAC-003-X and FAC-003-3 and SDT's diligence in monitoring Project 2007-07. There is one distinction however that EPSA would like to bring to the SDT's attention that could increase clarity. FAC-003-X and FAC-003-3 both have similar "one half mile" language, but the starting point for the one half mile can occur one of three ways. In FAC-003-X, the language in 4.3.1 reads "Generator Owner that owns an overhead Facility that extends greater than one half mile beyond the fenced area of the switchyard, generating station or generating substation up to the point of interconnection with the Transmission system and ..." Therefore, there are three possible starting points for the measurement of the one half mile: beyond the fenced area of (i) the switchyard, (ii) the generating station, or (iii) the generation substation. While it would appear implicit that GO's would determine which of the three was used to make the determination that the GO determines the starting point. Another point for consideration is that a Generator Owner's overhead Facility that is within the fence should explicitly not be applicable to the standard. EPSA believes the language that refers to the "interconnection with the Transmission system" should be changed to "interconnection with a Transmission Owner's Facility. The reason is</p>

that the term "Transmission" which is defined in the NERC Glossary could be construed to include all of a Generator Owner's interconnection leads. Therefore, we suggest that the language in 4.3.1 be modified as follows to make all of these points clear: A Generator Owner that owns an overhead Facility that extends greater than one half mile beyond the fenced area of either the generator switchyard, generating station or generating substation (as specified by the Generation Owner) up to the point of interconnection with the Transmission Owner's Facility and is operated 200 kV and above and any lower voltage lines designated by the RE as critical to the reliability of the electric system within the region is applicable to this standard."

Yes

EPSA appreciates the SDT proposing to use the approach that provides a specific distance for determining which GO Facility lead lines that FAC-003 should apply to. EPSA agrees that the half-mile qualifier provides a discrete parameter that will limit ambiguity in the Standard.

Yes

No

Yes

EPSA can appreciate the SDT's decision that it not propose new defined terms for the NERC Glossary. The SDT bases the decision on outreach meetings with NERC, regional compliance managers and industry organizations. EPSA supports outreach but still believes that the SDT should propose definitions for the NERC Glossary. The definitions can serve as a basis for the outreach meetings while also further limiting reliability gaps – real or perceived. Much as EPSA expressed in its White Paper comments there is still a need for a definition for generator interconnection facilities. In addition, because integrated transmission facility has also played a big part in the cases that have prompted the need for Project 2010-07 the drafting team should propose a glossary change for that definition as well. A definition for generation interconnection facilities is necessary in Project 2010-07 Standard so that the interface between generators and transmission system can be clearly established and any ambiguities about reliability responsibilities for GOs & GOPs and TO & TOPs can be eliminated. EPSA recommended the definitions from the Ad-Hoc Group Report could be used for incorporating the Generator Interconnection Facility into the standard: Generator Interconnection Facility Sole-use facility for the purpose of connecting the generating unit(s) to the transmission grid. In this regard, the sole-use facility only transmits power associated with the interconnecting generator, whether delivered to the grid or delivered to the generator for station service or auxiliary load, or delivered to meet cogeneration load requirements. Generator Interconnection Operational Interface Location at which operating responsibility for the Generator Interconnection Facility changes between the Transmission Operator and the Generator Operator. These definitions were developed with due consideration for varying configurations, outages, and generators materiality to the BES. The Facility definition defines the purpose of the facility, while the Generator Interconnection Operational Interface definition provides the functional lines of demarcation between the GO and the TO. The definitions were developed based on the purpose of generator interconnection facilities, their usage and how their usage differs from transmission facilities that comprise the interconnected grid. Similar to EPSA's assertions on the White Paper competitive suppliers believe this is a sound basis for distinguishing BES facilities. EPSA also suggests that the SDT include the following proposed definition for Integrated Transmission Facilities for inclusion in the NERC Glossary: Integrated Transmission Facilities (ITF) ITF are the Facilities that are a subpart of Transmission system that are capable of carrying the flows from multiple generator plants at different points of interconnection for delivery to customers, or to other electric systems. This proposed ITF definition builds upon Commission precedent in the Open Access Transmission Tariff (OATT) area. FERC has recognized that facilities that can carry flows from multiple supply points and deliver that power to either customers or other electric systems are proper facilities to include in an OATT and define the "Transmission System" for OATT purposes. The term "Transmission System" is an OATT-defined term that means "The facilities owned, controlled or operated by the Transmission Provider that are used to provide transmission service under Part II [Point-to-Point Transmission Service] and Part III [Network Integrated Transmission Service] of the Tariff." Under Commission precedent, facilities such as generator step-up transformers and generator interconnecting transmission facilities have been excluded from the OATT; i.e., they are not facilities that provide Transmission Service because they cannot carry

flows from multiple supply points for delivery to customers or other electric system – their only use is to the GO and perform two functions: 1. They deliver power from the GO's generators at a site to the OATT-defined Transmission System, and 2. They deliver off-site power from the OATT-defined Transmission System to the generators at a site when the generators at a site are not operating. While building on FERC OATT precedent, the proposed definition of "Integrated Transmission Facilities" does not require an applicable Transmission Service tariff to identify those facilities. Integrated Transmission Facilities are simply defined as those that capable of carrying flows from multiple supply points for delivery to customers or to other electric systems. Using the ITF definition, the definition of Generation Owner could be modified as follows: Generation Owner The Entity that owns and maintains generating units but which does not own or maintain Integrated Transmission Facilities. EPSA encourages the Project 2010-07 SDT to consider fitting the above definitions into the current proposal for inclusion in the NERC Glossary. Therefore, EPSA respectfully requests that the SDT for Project 2010-07 consider the all the recommendations made herein to the seven questions.

Individual

Thad Ness

American Electric Power

No

There are substantial reliability issues, as well as additional regulatory, tariff, coordination, and generator and interconnection facility issues, which need to be dealt with before AEP could agree to such requirements. It is not clear that a generator can receive a request for interconnection. We recommend adding qualifier text which states the standard only applies *if* an entity plans to allow such a requested interconnection. This would allow an entity to document that they do not plan to allow such interconnections.

Yes

Yes

Yes

Yes

No

Individual

Edward Cambridge

APS

No

Do not agree with adding GO to FAC-001-1

No

Leave the GO out of the standard.

No

Leave the GO out of both Standards proposed.

No

Leave GOs out of the standards.

No

Leave GOs out of the standards.

No

Leave GOs and GOPs out of the FAC-001 and FAC-003 standards.

Yes

Leave GOs out of the standards.because it just adds more regulation and reporting requirements not

needed.
Individual
Gretchen Schott
BP Wind Energy North America Inc.
Yes
No
No
Group
PacifiCorp
Sandra Shaffer
Yes
No
Yes
PacifiCorp believes the Standards Drafting Team should clarify the Transmission Owner and/or the Generator Owner are not required to provide evidence, documentation, notification, or inspection of vegetation management for facilities not owned by the Transmission Owner and/or the Generator Owner.
Individual
Katy Mirr
Sempra Generation
Yes
Sempra Generation supports the proposal for the compliance obligations under R2 associated with an interconnection request not to be triggered until an interconnection study agreement has been executed.
Yes
Yes

Yes
Yes
No
<p>No, Sempra Generation believes the Project 2010-07 Team has effectively indentified the Standards and Requirements that should apply to Generator Owners or Generator Operators that own, and are responsible for, the operation of an overhead Facility, that are not already applicable or have been proposed to be applicable.</p>
Yes
<p>When implemented, the recommendations of the Project 2010-07 Team go a long way toward providing the regulatory and compliance certainty needed by generators who own or operate Generator Interconnection Facilities. NERC is encouraged to provide these industry-supported amendments to the NERC Board of Trustees in the near future. Sempra Generation also supports the comments, being concurrently filed, of the Electric Power Supply Association (EPSA).</p>
Individual
Brian Evans-Mongeon
Utility Services, Inc.
Yes
<p>In one of the supporting documents for the upcoming comments, the GO/TO group included the following statement in support for the rationale on FAC-001. In its first posting for informal comment, the drafting team set the "trigger" for the application of FAC-001 as the receipt of a request for interconnection. Many commenters disagreed with this approach and suggested that the "trigger" be based upon "the intent or obligation" to interconnect a new Facility to an existing interconnecting Facility that is owned by a generator. Accordingly, the drafting team has proposed language to addresses this concern. The intent of this modified language is to start the compliance clock at such time as the Generator Owner executes an Agreement to perform the reliability assessment required in FAC-002-1. This step should occur whether the generator voluntarily agrees to the interconnection request or is compelled by a regulatory body to do so. In either case, we expect the Generator Owner and the requestor to execute some form of Agreement. We intentionally excluded a specific reference to the form of Agreement (such as a feasibility study) in deference to comments that we should avoid comingling of commercial and reliability aspects in reliability standards. I wonder about whether or not this can work timing-wise. It says the compliance clock starts with the agreement to perform the reliability assessment for FAC-002. The FAC-001 requirements outline the need for a registered entity to document, maintain, and publish facility connections requirements in order to be compliant. If the clock starts at the agreement for the assessment, does that mean that you then document, maintain, and publish the connection requirements? Don't the connection requirements usually outline the terms for the "agreement for the assessment"? I am not sure that I understand the timing sequence in order to be compliant to the standard. I would think that the agreement needs to be in place at the time of the effective date of the standard, not upon an application.</p>
Individual
Samuel Reed
Tri-State Generation and Transmission, Inc.
Yes
Yes

Yes
Yes
Yes
No
No
Individual
Alice Ireland
Xcel Energy
Yes
We believe it would be helpful to put explanatory wording in that if an entity is already registered as a Transmission Owner and Generator Owner, the Generator Owner portion of that entity would not have to have a separate set of interconnection requirements.
Yes
No
No
Group
Midwest Reliability Organization's NERC Standards Review Forum (NSRF)
Carol Gerou
No
In general, the NSRF supports the changes to FAC-001-1. However the 45 days to execute an agreement would be a significant burden on a Generator Operator that does not have an existing process in place. The NSRF believes an aggressive but realistic time frame is 120 days. This would allow sufficient time to develop the procedure and obtain the necessary technical and legal reviews. Please clarify why "Proception" is capitalized in section 3.1.5. "Protection System" is defined by NERC but "System Protection" is not. Recommend the "half mile" statement be included within the Applicability section of this Standard as it stated in FAC-003-X.
Yes
Yes
Yes
Although the NSRF agrees with the 1/2 mile criteria (see question 1); we believe the drafting team will have to develop additional justification for this criteria given FERC's recent orders, RC11-1 and RC11-2 (see question 6 for full FERC Order details). In these orders FERC "implies" that if the GO/GOP is responsible for a breaker operated at 100kV or higher the entity should be required to register as a TOP/TO. Therefore it appears FERC would not be inclined to provide any leeway based

on distance from the substation. The SDT should note that the FERC Order points to this Project to "address matters involving reliability obligations at the interface of the transmission grid", which is foot note 58.

Yes

Yes

In FERC order "Denying Appeals of Electric Reliability Organization Registration Determinations" dated June 16, 2011 (RC11-1 and RC11-2) FERC explicitly stated compliance GAPs existed with the following standards at a minimum:

- FAC-011, Requirements R2, R2.1, R2.2.
- PRC-001-1, Requirements R2, R2.2, R4;
- PRC-004-1 Requirement R1;
- TOP-004-2, Requirements R6, R6.1, R6.2, R6.3, R6.4;
- PER-003-1, Requirements R1, R1.1, R1.2;
- FAC-003-1, Requirements R1, R2;
- TOP-001, Requirement R1 and
- FAC-014-2, Requirement R2.

When a GO/GOP owns transmission equipment but is not registered as a TO or TOP. The drafting team should explicitly address each of these the above requirements.

No

Individual

Jody Nelson

Georgia Transmission Corporation

Yes

We commend the drafting team for their efforts to address gaps in Facility Connection Requirements. We believe that the requirements under R3 should be limited to Generator owned equipment to avoid duplication of efforts. A Generator Owner receiving an interconnection request is required to submit an interconnection request to the Transmission Owner which in turn would study the impact of such a request on the Transmission System. Therefore there is no gap as far as the Integrated Transmission System that the third party is interconnecting to through the Generator Owner. However, Generator Owners are responsible for verifying that their equipment is capable of accommodating the interconnection request.

Yes

Yes

Yes

No

No

Individual

Bill Rees

BGE

Yes

This change closes the gap in areas not already covered under FAC-003-1 in a continuous improvement effort to ensure vegetation-related transmission reliability for applicable lines.

Yes

This requirement is consistent with the initial time frame when FAC-003-1 was first implemented.

Yes

As noted in Question-1 above.

Yes

1/2 mile is a distance that can generally be viewed from one location, e.g. the switchyard, and can be

construed to present minimal risk since switchyards have a reasonably frequent personnel presence that could be expected to notice vegetation issues in the <1/2 mile area.

Yes

No comment.

No

No comment.

No

No comment.

Group

Electric Market Policy

Connie Lowe

Yes

Yes

Yes

Yes

Yes

No

No

Group

SERC Planning Standards Subcommittee

Charles W. Long

Yes

Yes

Yes

Yes

However, we are concerned that there may be a reliability gap for locations where there is not a half-mile line-of-sight from the generation switchyard.

Yes

No

No

The comments expressed herein represent a consensus of the views of the above-named members of the SERC EC Planning Standards Subcommittee only and should not be construed as the position of SERC Reliability Corporation, its board, or its officers.

Group

Arizona Public Service Company

Janet Smith, Regulatory Affairs Supervisor

Yes

These comments supersede the previous comments submitted by Arizona Public Service Company on July 7, 2011.

Yes

Yes

No

The generator should be responsible no matter the length from fence area to the point of interconnection.

No

The generator should be able to be in compliance within one year since the distance of line miles is small.

No

No

Individual

John Bee

Exelon

No

Exelon does not agree that this standard should be broadly applied to a GO. GOs who do not own a switchyard and whose point of interconnection is a disconnect switch associated with the generator leads prior to the switchyard should be excluded from this standard. If a group of GOs share a generator tie line, then the associated Interconnect Agreement that each of the GO has with the applicable TO and/or TOP should address how these shared connections will effect the system. GOs may not have the resources or expertise to conduct the required interconnect studies to meet this standard

Yes

Yes

Yes

No

Yes

FAC-001 1. Exelon has generating stations that have the Main Power Transformer (MPT) disconnect as the point of demarcation. The station owns the short leads from the MPT disconnect back to the generator and the applicable TO owns from the MPT disconnect up to and including the switchyard. It is not practical for another entity to request to interconnect to the MPT disconnect nor should it be allowed. The SDT should consider verbiage to the standard that does not allow requests to interconnect to a MPT disconnect. 2. Exelon is having difficulty determining how this standard would apply to GOs and how GOs would implement the standard; suggest that examples be provided in an implementation document specifically showing where and how this standard would apply.

Group

Imperial Irrigation District (IID)

Jesus Sammy Alcaraz

Yes

Yes

Yes
Yes
Yes
No
No
Individual Michelle D'Antuono Ingleside Cogeneration LP
Yes
However, there may need to be a variance for ERCOT because the Power Generating Companies in ERCOT are not allowed to own transmission assets.
No
: As drafted, the document still refers to generation interconnection lines as transmission lines in critical places. We understand that the SDT has taken significant steps to minimize this in both FAC-001 and FAC-003 and has had discussions with NERC about not registering GOs as TOs; however, this lack of distinction between high voltage generation interconnection lines and actual transmission lines still presents a difficult situation for Generations Owners and a source of contention with Reliability Entities. This could be resolved somewhat by using the non-defined term "generation interconnection lines" in place of "transmission lines" in, for example, section 4.3.1. Since the term "transmission line" is also undefined, this would seem to be a reasonable approach.
No
Ingleside Cogeneration LP believes there should be a relaxation in the vegetation management requirements for those interconnections which only serve as a radial link to the BES. Although we fully understand the importance of keeping vegetation away from high voltage lines, the one year period is much too frequent in our generator locations. The added documentation and other expenses simply do not justify the non-existent gain in reliability when vegetation in a locale (e.g.; desert) never reaches five feet above the ground. Consider limiting this exception to units below a certain MVA rating that are not critical to the BES – perhaps coupled with evidence that vegetative intrusions are highly unlikely.
No
The SDT needs to clarify that the one-half mile distance is measured from the property line of the Generation Owner, i.e., an interconnection line that is in a ROW. In addition, the half mile qualifier makes sense only for those interconnections into critical generation facilities. See our response under Question #3.
No
The two year compliance time frame makes sense only for those GOs who own interconnections into critical generation facilities. See our response under Question #3.
No
Yes
There is a fundamental issue related to the interconnection of generation and distribution facilities into the transmission grid. There is a myriad of complex architectures which make the designation of ownership and operational responsibilities unclear in both cases. Both this team's efforts and those by the project team redefining the extent of the BES have run into this issue. Ingleside Cogeneration LP recognizes that the effort to properly assign reliability responsibilities in these gray-area connections is difficult. However, pushing the issue back to the GO/GOP by looking for them to jointly determine

responsibilities with adjacent entities will create every conceivable arrangement possible. It seems like it should be possible to address a handful of common interconnection configurations at the start. As knowledge builds, perhaps other architectures could be added. This seems to be the direction that the project team redefining the extent of the BES is heading. Lastly, we need some assurance that regulators will work with us as we go down this path. Right now, the feeling is that they will continue to use forced registrations as a hammer – which may render moot this team's efforts anyways.

Group

LG&E and KU Energy

Brent Ingebrigtsen

Yes

Although the "one half mile" is much clearer than "two spans", what is the rationale for choosing $\frac{1}{2}$ mile as opposed to another length such as 1 or 2 miles?

Individual

Dale Fredrickson

Wisconsin Electric

No

In addition to the "greater than one-half mile" criteria, we maintain there should also be an exclusion for lines up to one mile in length which are entirely on the Generator Owner's property.

Yes

No

No

Individual

Keith Morisette

Tacoma Power

Yes

Yes

Yes

Tacoma Power suggests that three standards be reconsidered for inclusion in this Project, to include the Generator Owner and/or Operator: EOP-005, more directly responsible for participation in restoration plans; PER-002, responsible for training; and VAR-001.

Individual

Joe Petaski

Manitoba Hydro
No
<p>The Applicable Entities now include a Generator Owner that meets the following condition: 'Generator Owner with an executed Agreement to evaluate the reliability impact of interconnecting another Facility to its existing generation Facility' A Generator Owner should not have such power. In many instances Generator Owners do not have the models or expertise to perform interconnection studies to determine if there is an impact on the Transmission Network. All interconnection requests should be implemented by the Transmission Owner (TO) regardless if the interconnection point is within a Generation Owner facility or End-User facility. The TO is in the best position to set unbiased connection requirements to ensure the reliability of the BES is maintained. If a mechanism is created to allow interconnection to a BES line owned by Generator Owner, then it is essential for this Generator Owner providing this interconnection service to be a TO to ensure all reliability standards, including the protection standards, are met so the reliability of the BES is maintained. The drafting team should demonstrate where this situation is occurring. If the redline changes are implemented, could Generator Owner #1 permit Generator Owner #2 to interconnect one of their generators within Generator Owner #1's Facility? Would Generator Owner #2 then need to have an executed Agreement to permit further generator interconnection? From a Transmission Owner viewpoint, it is tough enough to coordinate generator connection queues among adjacent TOs. Having to coordinate with Generator Owners as well would greatly increase the complexity of coordination.</p>
No
<p>See question #1 comments. We do not support changing the applicability of FAC-001-1 to include Generator Owners 'with an executed Agreement' or Generator Owners that own BES transmission.</p>
No
<p>The direction of the background resource document gives special treatment to the Generator Owner in that it allows the Generator Owner TO status for a couple of standards (FAC-001 and FAC-003), but exempts the Generator Owner from many of the standards applicable to a TO. The NERC Functional Model defines the various functional entities. If a Generator Owner wants to be 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.</p>
Yes
<p>The direction of the background resource document gives special treatment to the Generator Owner in that it allows the Generator Owner TO status for a couple of standards (FAC-001 and FAC-003), but exempts the Generator Owner from many of the standards applicable to a TO. A Generator Owner that owns BES transmission should be held accountable for the specific Requirements and Reliability Standards applicable to the TO and Transmission Operator functions. If no other entity assumes accountability for these specific Requirements and Reliability Standards on the Generator Owner BES transmission (for example system operation, protection and communication), there will be a reliability gap. Improper operation, coordination and protection of the Generator Owner BES transmission could have an impact on reliability.</p>
Individual
Greg Rowland
Duke Energy
Yes
Yes
Yes
Yes

Yes
No
No
Group
Public Service Enterprise Group
John Seelke
No
<p>The language in R2 needs to be clarified with regards to the term "its existing generation Facility." The interconnection leads are considered part of the "existing generation Facility," but so are the generator, generator step-up transformer and other equipment associated with the generator. The project Background Resource Document (p.2) makes it clear that the interconnection to an existing generator facility is contemplated to be to the "existing interconnecting Facility that is owned by a generator" – i.e., the generator's interconnection leads. We propose that the term "its existing generation Facility" be replaced with "the Generator Owner's existing interconnecting transmission Facility."</p>
Yes
No
<p>FAC-003-X and FAC-003-3 both have similar "one half mile" language, the starting point for the one half mile is vague. In FAC-003-X, the language in 4.3.1 reads "Generator Owner that owns an overhead Facility that extends greater than one half mile beyond the fenced area of the switchyard, generating station or generating substation up to the point of interconnection with the Transmission system and ..." While we support the one half mile language, there are three possible starting points for the measurement of the one half mile: beyond the fenced area of (i) the switchyard, (ii) the generating station, or (iii) the generation substation. While a GO's fencing policy may differ between generation stations, the requirement to implement vegetation management should be clear. For clarity, while we believe that the language should retain flexibility with regards to "fencing" by the Generator Owner, it should be clear that the Generation Owner determines the starting point. Second, a Generator Owner's overhead Facility that is within the fence should explicitly not be applicable to the standard. Finally, we believe the language that refers to the "interconnection with the Transmission system" should be changed to "interconnection with a Transmission Owner's Facility. The reason is that the term "Transmission" which is defined in the NERC Glossary could be construed to include all of a Generator Owner's interconnection leads. (The definition is excerpted from the Glossary in our response to question 7) Therefore, we suggest that the language in 4.3.1 be modified as follows to make all of these points clear: A Generator Owner that owns an overhead Facility that extends greater than one half mile beyond the fenced area of either the generator switchyard, generating station or generating substation (as specified by the Generation Owner) up to the point of interconnection with a Transmission Owner's Facility and is operated 200 kV and above and any lower voltage lines designated by the RE as critical to the reliability of the electric system within the region is applicable to this standard."</p>
Yes
Yes
Yes
<p>FERC's Cedar Creek and Milford order (issued on June 16, 2011 and that is posted at http://www.nerc.com/files/Order_Denying_Appeals_RC11-1_RC11-2_20110616.pdf) listed several standards (in Paragraphs 71 and 87) that should be applicable to Cedar Creek and Milford, respectively. Because of this order, the drafting team should examine the listed standards and determine whether they are or are not applicable to Generator Owners or Generator Operators that own and are responsible for the operation of an overhead Facility. We emphasize that our</p>

recommendation takes no position on any legal issues regarding the referenced order.

Yes

While we generally agree with the drafting team's modifications to these standards, the team's approach may not directly resolve the fundamental registration issue regarding a Generation Owner that only owns non-integrated interconnection transmission facilities. The non-integrated interconnection transmission facilities owned by a GO are part of the Bulk Electric System (BES) because they are part of BES generation facilities. The ownership of these non-integrated facilities should not require a GO to also register as a Transmission Owner. The draft team has proposed modifying two FAC standards that would apply to such GO-owned interconnection transmission facilities. These GO-owned interconnection transmission facilities are not, however, "integrated" transmission facilities, as the drafting team correctly points out in its background resource document. A proposed solution to the Generation Owner registration issue is discussed below. NERC's Rules of Procedure (ROP) require entities to be registered in accordance with the definitions in the NERC Glossary of Terms Used in Reliability Standards (Glossary) and in accordance with the NERC Statement of Compliance Registry Criteria document. The Glossary has these definitions:

- Generation Owner – Entity that owns and maintains generating units.
- Transmission Owner – The entity that owns and maintains transmission facilities.
- Facility – A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)
- Transmission – An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.
- Transmission Service – Services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery

The drafting team should create a new definition for the term "integrated transmission facilities" and include this new definition in the Glossary. This definition should then be used to modify the definition of Generation Owner so that registration will be clear. While the team chose not to create any new definitions, we believe the registration issue cannot be resolved without modifying the definition of "Generation Owner". The following definition is proposed for Integrated Transmission Facilities in the NERC Glossary:

- Integrated Transmission Facilities (ITF) – ITF are the facilities that are a subpart of Transmission system that are capable of carrying the flows from multiple generator plants at different points of interconnection for delivery to customers or to other electric systems. This proposed ITF definition builds upon FERC precedent in the Open Access Transmission Tariff (OATT) area. FERC has recognized that facilities that can carry flows from multiple supply points and deliver that power to either customers or other electric systems are proper facilities to include in an OATT and define the "Transmission System" for OATT purposes. The term "Transmission System" is an OATT-defined term that means "The facilities owned, controlled or operated by the Transmission Provider that are used to provide transmission service under Part II [Point-to-Point Transmission Service] and Part III [Network Integrated Transmission Service] of the Tariff." Under FERC's precedent, facilities such as generator step-up transformers and generator interconnecting transmission facilities have been excluded from the OATT; i.e., they are not facilities that provide Transmission Service because they cannot carry the flows from multiple supply points for delivery to customers or other electric system – their only use is to the Generation Owner. They perform two functions for a GO: 1. They deliver power from the GO's generators at a site to the OATT-defined Transmission System, and 2. They deliver off-site power from the OATT-defined Transmission System to the generators at a site when the generators at a site are not operating. While building on FERC OATT precedent, the proposed definition of "Integrated Transmission Facilities" does not require an applicable Transmission Service tariff to identify those facilities. Integrated Transmission Facilities are simply defined as those that capable of carrying flows from multiple supply points for delivery to customers or to other electric systems. Using the ITF definition, the definition of Generation Owner could be modified as follows:

- Generation Owner – Entity that owns and maintains generating units but which does not own or maintain Integrated Transmission Facilities.

Group

SPP Reliability Standards Development Team

Jonathan Hayes

No

We are concerned that some of the language is ambiguous. We would like to be clear that placing new requirements on Generator Owners that are already in place and have been in place under FERC

policy is inaccurate. We want to make sure that regardless of what the generator tie line is classified as, that a valid interconnection would go through the Generator Interconnection process under its applicable tariff. Format error in 2.4.1 should read 4.2.1 in applicability. We would like to see more definition in applicability section 4.2. How does the Generator Owner get involved in this process? The VRF for R4 is listed as a medium and appears to us as an administrative requirement. We would recommend that the VRF be changed to low. The moderate and high VSL for R1 seems to be duplicative. We would recommend taking a second look and would recommend that the high should be that "if you failed to do two of the following". We would recommend that the VSL on R4 read: "The responsible entity failed to make the requirements available within 30 business days after a request."

Yes

No

In both FAC003-3 and FAC003-X it lists "greater than one half mile cutoff". We would recommend that the distance cutoff be removed. We feel that overhead Facilities shouldn't be treated any differently than any other. Also we would like to see these two sections in both standard proposals reflect similar language for 4.3.1.

No

See comment above. We feel like there is no need for using a distance exclusion.

Yes

No

No

Individual

Amir Hammad

Constellation Power Generation

Yes

Yes

Yes

Yes

No

Yes

Constellation appreciates and supports the work of the standard drafting team. We recognize the significant time invested by technical experts from industry to consider the appropriate application of reliability standards to address concerns raised about coverage of transmission at the generator interface. The recent FERC Order concerning Cedar Creek and Milford wind suggested that the list of applicable standards needing revision should go beyond FAC-001 and FAC-003. We appreciate the discussion and concerns raised by FERC in the order; however, the discussion is limited by failing to consider these issues in light of the full package of existing standards. Below is a look at the FERC suggested standards and how they intersect with other standards:

- PRC-001-1, Requirements R2, R2.2, R4 FERC expressed concern that certain protection system components may not be well coordinated with the RC. However, the same standard (PRC-1) addresses this issue by requiring all GOs to ensure coordination of their protection system with interconnected parties. Further, FAC-002 requires that all new facilities undergo reviews by the TOP, BA, etc.
- PRC-004-1 Requirement R1

FERC expressed concern that certain protection system components may not be analyzed for misoperations. However, the same standard (PRC-4) addresses this issue by requiring all GOs to ensure that they analyze all misoperations on their protection system which would include the protection of the tie line. • TOP-004-2, Requirements R6, R6.1, R6.2, R6.3, R6.4; FERC expressed concern that coordination may be lacking between a GO and a TO with regards to the generator tie line. However, TOP standards applicable to GOs address this issue by requiring all GOs to coordinate all maintenance and emergency outages (both forced and planned) with all applicable interconnected parties. Further, all ISO procedures require the same of GOs. • PER-003-1, Requirements R1, R1.1, R1.2; FERC expressed concern that certain generator operators are responsible for the real time operation of the interconnected BES without being NERC certified operators, potentially causing a reliability gap. Generator Operators do not monitor and control the BES, they control and monitor generators that it operates and relays information to other operating entities. Therefore, NERC certification is not required. • FAC-003-1, Requirements R1, R2; FERC and the drafting team seem aligned in the need to revise this standard and the revision proposal includes such a revision. • TOP-001, Requirement R1 FERC expressed concern that certain tie lines may not be required to operate in such a way as to alleviate operational emergencies. However, IRO and TOP standards applicable to GOs address this issue by requiring all GOs to operate as directed by their TOP, BA, or RC as directed and must render emergency assistance. • FAC-014-2, Requirement R2. FERC expressed concern that certain tie lines may have a rating based on a methodology that may not be consistent with the methodology used by the RC. However, standards FAC-8 and FAC-9 address this issue by requiring all GOs to develop a methodology to rate all equipment, and that the RC has the authority to challenge the GO on that methodology. The onus is on the GO to either change their methodology and rating accordingly, or provide a technical justification as to why they cannot adopt the changes. Further, a generator will never be limited by its tie line, as a generator's profits are directly tied to its output. Therefore no generator would limit its facility to the equipment that is delivering that output.

Group

Westar Energy

Bo Jones

No

We suggest the VRF for R4 be changed from medium to low, as it is administrative in nature. We recommend the high VSL for R1 read, "The Transmission Owner failed to do two of the following."

Yes

No

The language in the applicability section 4.3.1 in both FAC-003-3 and FAC-003-X states "extends greater than one half mile beyond..." We propose that the SDT consider removing the distance exclusion to be consistent with language for Transmission Owner Facilities and treat all overhead facilities the same.

No

Yes

No

No

Individual

Kirit Shah

Ameren

Yes

Yes

Yes
No
(1) We do not agree there should be a ½ mile exemption. On what legitimate basis could we say the first ½ mile is not important? (2) There may be different usage of the term "point of interconnection" in the industry. We suggest the SDT to consider proposing a formal definition of this term.
Yes
No
No
Individual
Rex Roehl
Indeck Energy Services
Yes
Yes
No
4.3.1.3 is a regional variation. The ROP doesn't permit members of one region to vote on regional requirements for another region. A separate regional standard will be required.
Yes
Yes
No
Individual
Chad Bowman
CHPD
Yes
No
No
Individual
Andrew Z Pusztai
American Transmission Company

No	R1 wording in this draft only requires having published Facility connection requirements, but speaks nothing of specific required content of this published document. (R1) VSLs specifically reference R1. If VSLs continue to include assessment of how many R3 (R2 in present standard) requirements are met, a TO potentially has a redundant obligation under two separate requirements. R1 and R3 do not read in a manner consistent with (R1) VSLs. Since R2 only applies to Generator Owners, the (R2) VSL should use "Generator Owner" in place of "responsible entity."
No	ATC does not support the changes for FAC-003-X, however, ATC does support FAC-003-3. FAC-003-X Concerns The VRF and VSL tables do not correlate to the original FAC-003-1 levels of non-compliance section D.2. ATC believes that section D.2 should be rewritten to align with the already approved FAC-003-1. FAC-003-X Corrections- Applicability Section 4.3.1, sentence 3 – Transmission should not be capitalized. FAC-003-3 - No Concerns
Group	
Southern Company	
Antonio Grayson	
No	<p>Southern does not think that the revision to FAC-001-1 is necessary. A Generator Owner (GO) cannot assess reliability impacts to the Bulk Electric System (BES) and determine acceptability without support and involvement of the applicable owner and operator of the Transmission System. A generator tie-line does not equate to a Transmission System. A GO must already adhere to a TO's Facility connection requirements whether the GO wants to connect additional facilities or a third parties facilities to its own interconnection Facilities. Stated another way, the GO does not need Facility Connection requirements to govern how multiple units are tied to a collector bus so why are they needed for a third party to connect to an existing tie-line? In either case it is the interconnected TO that has connection requirements that must be fulfilled. The GO's Interconnection Agreement would prohibit it from connecting additional facilities without a new application for Interconnection Service with its interconnected Transmission Provider. A GO should not need to develop "connection requirements" unless it is in the business of owning and operating facilities independently of its interconnected Transmission Provider. We do not believe a reliability gap exists in FAC-001-1 because the requestor for interconnecting another Facility to an existing generation Facility must coordinate with the applicable TO, TP, and PA in accordance with FAC-002-0 to ensure they meet all applicable facility connection and performance requirements. If and when there is an agreement in place for a third party to connect to a generator tie-line then the tie-line would become part of the integrated system and its purpose and the owner's function would likely warrant registration as a TO/TOP and FAC-001 would then apply. The following excerpt from the 2010-07 Background Resource Document acknowledges that this may be necessary: "The drafting team also acknowledges that, if another party interconnects to a Facility owned by a Generator Owner, there may be the need to address MOD or TPL standards. However, the drafting team believes that this, too, is best handled through specific evaluation, perhaps accompanied by changes to the compliance registry. Entities that face this kind of scenario may also meet criteria applicable to other registrations such as Transmission Service Provider or Transmission Planner." B. If the Project 2010-07 Drafting Team decides to continue revising FAC-001-1, there are jurisdictional, interconnection policy and open access transmission tariff issues that will need to be considered. (1) Because of (a) jurisdiction under Section 215, (b) FERC's interconnection policy, and (c) the requirements of the pro forma open access transmission tariff (OATT), a GO should not be required to comply with FAC-001-1 until that GO's generating Facility reaches commercial operation. (a) Jurisdiction under FPA Section 215. First, it is not clear that NERC or FERC has jurisdiction under FPA Section 215 to require generation facilities that have not actually reached commercial operation to be subject to reliability standards. Section 215(a)(2) of the FPA defines the "Electric Reliability Organization" as "the organization certified by the Commission ... the</p>

purpose of which is to establish and enforce reliability standards for the bulk-power system, subject to Commission review." Further, (a)(3) provides that "The term 'reliability standard' means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system facilities ... the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation of the bulk-power system" Thus, under Section 215 NERC can develop reliability standards that address requirements for existing bulk-power system facilities (i.e., facilities that have reached "commercial operation") and for the design of planned additions or modifications. It is logical to interpret the phrase "design of new facilities" as meaning that new facilities must be designed to comply with existing reliability standards. However, it is not clear that this provision should be interpreted as requiring that a generating facility that has not yet reached commercial operation should be subject to reliability standards (including audit and penalties). Therefore, the GO with the existing generation facilities should not be required to incorporate the proposed generation facility into its Facility connection requirements before the proposed generation facility is subject to NERC or FERC jurisdiction. (b) FERC's interconnection policy. In addition, the revised FAC-001 would appear to place restrictions on interconnection customers in contravention of Order Nos. 2003 and 2006 (Standard Large and Small Interconnection Procedures and Agreements). FERC was very concerned about the ability of interconnection customers to interconnect their generating facilities and gave them a fair amount of flexibility. However, this revised FAC-001 would appear to restrict some of this flexibility. (i) Order No. 2003 gives the interconnection customer the ability to terminate a proposed interconnection on ninety days notice. Therefore, the interconnection customer is not required to build the facility. However, this revised FAC-001 appears to assume that the interconnection customer does not have this flexibility. What if the interconnection customer (the GO building a new generator on its site or the third party building a new generation facility) decides to terminate the Large Generator Interconnection Agreement (LGIA) or not proceed with the generation facility? In such event, the GO may be required to revert to its previous Facility connection requirements in order to accommodate the original configuration. (ii) The LGIA permits modifications to the proposed interconnection. How would this affect the Facility connection requirements? How long would the GO have to revise its Facility connection requirements? In the event that there is a single modification, or perhaps multiple modifications, how does the GO stay in compliance with this standard? (iii) FAC-001-1, R4 provides that each GO with Facility connection requirements and each TO shall maintain Facility connection requirements and make documentation of these requirements available to users of the Transmission System upon request. However, Large Generator Interconnection Procedures (LGIP), Section 3.4 requires the posting of certain interconnection information but the identity of the interconnection customer is not to be disclosed (unless it is an Affiliate). Requirement R4 would appear to potentially require disclosure of information and (more importantly) of the interconnection customer's identity in contravention of the requirements in Order No. 2003 and the LGIP. (c) OATT requirements. The definition of "applicable Generator Owner" (Section 4.2.1) and Requirement R2 provide that the GO will have an executed Agreement to evaluate the impact of interconnecting a new facility to the GO's existing generation facility. This statement is ambiguous. This statement could be understood to mean that the GO of the existing generation Facility will enter into an Agreement with the GO proposing to interconnect and the existing GO will evaluate the impact of the proposed interconnection. However, requests to interconnect new generation are processed under an OATT. In that case, it would be the Transmission Provider (not the existing GO) that would evaluate the impact of interconnecting the new facility. Thus, the language in FAC-001-1 would need to be revised to clarify that the owner of the new facility will need to interconnect under the OATT of an appropriate Transmission Provider (i.e., the Transmission Provider to which the existing GO is interconnected, not with the existing GO). Therefore, the owner of the new facility will most likely be the entity with the executed Agreement (with the Transmission Provider). Another consideration is that the existing GO could be developing a merchant transmission line. In that case, the existing GO would need to evaluate whether it needs have its own OATT and OASIS. In that case, the new generator owner would be interconnecting to the existing GO. However, the existing GO's line would not be a generator tie-line. This issue is not clear from the draft standard. (2) The following are suggested changes to FAC-001-1. (a) We recommend the Purpose statement be revised to state, "To avoid adverse impacts on BES reliability..." (b) The numbering for "Applicable Generator Owner" should be 4.2.1 instead of 2.4.1. (c) It is not clear who may request to interconnect to the Generator Owners' facility. The Background Resource document states that "[b]ecause Generator Owners may be requested to allow interconnection to their Facilities"

– this would imply that a third party may request interconnection to the Generator Owner's Facilities. However, draft FAC-001-1 discusses "interconnecting another Facility to its existing generation Facility." This issue needs to be clarified. Is it simply when a Generator Owner proposes to add a new facility to its existing facility or does it also include a third party request to interconnect to the Generator Owner facilities? (d) R4 should be revised to delete the requirement to maintain the Facility connection requirements because this is redundant to language in R1 (and R2, which we believe is not needed). In addition, R4 should be revised to state, "...on requests within five (5) business days" since the time requirement is essential for measurement of non-compliance as indicated by the VSLs. (e) The Severe VSL for R3 should be revised to delete the second portion which states, "The responsible entity does not have Facility connection requirements." This non-compliance would be covered by the first portion of the two-part OR requirement (...four or more...). It is also covered by the Severe VSL of R1. (3) Effect of the proposed revisions to FAC-001-1 on FAC-002-1. (a) As drafted, there are scenarios under which a new GO may attempt to interconnect to an existing GO even though, as explained above, the interconnection should actually be done to the appropriate Transmission Provider. If the appropriate Transmission Provider is not included in the evaluation of the interconnection various types of harm may occur. In such event, the TPs and PAs should be indemnified from any liability with respect to performance of the evaluations required by FAC-002. (b) FAC-001 and FAC-002 should be revised to be clear that the existing GO and any new GOs must coordinate any interconnection with the appropriate Transmission Provider, TP and PA.

Yes

However, we do not believe it is necessary to require a GO to have Facility connection requirements as we discuss in our response to Question 1.

No

(1) We question whether R1 of FAC-003-3 would ever apply to a GO who owns transmission interconnection equipment. Can the SDT provide an example or two in the Guideline and Technical Basis section of the standard? (2) We recommend rearranging the language in R5 of FAC-003-3 to state, "The applicable Transmission Owner or applicable Generator Owner shall take corrective action to ensure continued vegetation management to prevent encroachments when..." This places the "shall" at the beginning of the requirement which is clearer and consistent with the structure of the other requirements. (3) We question why there are no VSLs assigned to R4. Should there be? What are the consequences if a Regional Entity does not comply? (4) There does not appear to be any coordination with the Vegetation Management Standard Drafting Team (VMSDT) concerning proposed modifications to the standard. The VMSDT should be consulted.

No

We agree with a one-half mile line as being "within the Generator Owner's line of sight and could be visually monitored for vegetation conditions on a routine basis." However, we suggest that some generation interconnection Facilities greater than ½ mile in length could also fall within the GO's line of sight or be constructed such that they should be considered for exemption. Thus, the Task Force should consider including exclusions for longer generator tie lines if the GO can provide sufficient justification. Examples of justifications could include (1) a clear line of sight, (2) pavement, gravel, or other non-vegetation covered path, or (3) routine monitoring is performed from a roadway parallel to the line, etc. Do not obviate any other transmission requirements such as the following (which are incorporated into the draft standard): i. Operated at 200kV or higher; or ii. Operated below 200kV and included in IROL; or iii. Operated below 200kV and inclusion in a Major WECC Transfer Path

Yes

Yes

Please see our Comments in response to Question 7.

Yes

(1) The SDT needs to review the June 16, 2011 FERC Order on Cedar Creek and Milford and factor this into the equation. The FERC Order concludes that the Cedar Creek and Milford entities must register as a TO and TOP. In addition to FAC-003, the Cedar Creek and Milford order lists the following standards and requirements that apply to these entities as a TO/TOP: • PER-003-1, R1, R1.1, R1.2 (requiring NERC-certified transmission operators); • PRC-001-1, R2, R2.2, R4, R6 (notification of relay or equipment failures); • PRC-004-1, R1 (analyzing protection system misoperations); • FAC-014-2, R2 (establishment of system operating limits); • TOP-001, R1

(authority to take actions to alleviate operating emergencies); • TOP-004-2, R6, R6.1, R6.2, R6.3, R6.4 (establishment of formal policies to address voltage levels, planned outages, switching, Interconnection Reliability Operating Limits, and System Operating Limits). The SDT needs to address these specific requirements in sufficient detail by either revising the Project 2010-07 Background Resource Document or proposing revisions to these standards to address any reliability gaps. For example, we recommend, as a minimum, that the Background Resource Document discussion under PRC-001-1 be revised to state (underlined text added), "Generator Operators and the scope of protection equipment for generation interconnection Facilities are already appropriately accounted for in this standard in requirements R1, R2, R3, and R5." Please note that this statement, even with our proposed revision, conflicts with the FERC Order on Cedar Creek and Milford, Paragraphs 64, 65, and 78 where FERC states that Cedar Creek and Milford must register as a TO and TOP to ensure the protection system coordination requirements in R2 and R4 of PRC-001 are met. Thus, the discussion for PRC-001-1 in the Project 2010-07 Background Resource Document needs additional language to demonstrate adequacy of the GO requirements in order to prevent GOs that own generation interconnection Facilities from having to register as a TO and TOP. (2) In addition, we believe the SDT should add supporting discussion to the Background Resource Document to explain why the following standards adequately cover GO/GOP requirements at the Transmission Interface: PRC-004-2, PRC-005-1, PRC-023-1. For example, the Background Resource Document could state that PRC-023-1 Section A.4 Applicability already includes, "4.2. Generator Owners with load-responsive phase protection systems as described in Attachment A, applied to facilities defined in 4.1.1 through 4.1.4." (3) Furthermore, FERC's analysis in the Cedar Creek and Milford order suggests that reliability gaps will occur if certain entities are not registered as TO/TOP. The GRTI SAR DT should assess why its findings are different from the Commission's findings. By way of background, the GRTI SAR DT provides that its own assessment of the GOTO Ad Hoc Group Final Report concludes with a belief that there are only two standards requiring modifications to address reliability gaps – FAC-001 and FAC-003 (Background Resource Document, page 3). FERC will most likely require that NERC clearly demonstrate and provide technical support for the position that GO's only need to comply with FAC-001 and FAC-003 and not the other standards noted by FERC. The Background Resource Document does not appear to provide adequate technical support for the GRTI SAR DT position. Therefore, the GRTI SAR DT should develop that technical support in preparation for the filing of these revised standards at FERC.

Individual
Michael Falvo
Independent Electricity System Operator
Yes
Yes
Yes
Yes
We generally agree with the proposed distance. However, we suggest that in Applicability Section 4.3.1 of the two draft standards, an equivalent kilometer value be inserted after the "one half mile".
Yes
No
No
Individual
Doug Hohlbaugh
FirstEnergy Corp
Yes

FirstEnergy (FE) appreciates the drafting team's careful consideration of the comments made by FE during the most recent informal comment period. The changes made to FAC-001 alleviate FE's prior concern related to a Generator Owner needing to maintain and publish a Facility Connection requirements document regarding facilities which are not yet subject to Open Access provisions. FE supports the team's changes to FAC-001-1 and the concept that a connection requirement document would be required upon the initial or 1st time a Generator Owner executes an Agreement to perform the reliability assessment required in FAC-002-1.

Yes

The one year lead time is sufficient lead-time to notice the GOs of new expectations required under FAC-001-1.

Yes

Yes

Yes

No

Yes

The June 16, 2011 FERC Order denying the appeals of two wind generating facilities—Cedar Creek and Milford – of the NERC determinations that Cedar Creek and Milford must each be registered as a transmission owner and transmission operator on the NERC Compliance Registry complicates the GO-TO drafting team's work. However, the issues may be distinct and different in the end. The existing GO-TO team's work product defines new reliability expectations for a generator owner regardless of whether or not the same entity is also being required to have a TO-TOP "light" compliance registration. In the Order, FERC describes what it believes are an appropriate limited set of TO-TOP requirements when a TO-TOP "light" registration is deemed warranted for a traditional generation owner. The drafting team should describe what, if any, impact the FERC June 16 Order is having on its work scope. One minor comment for the background resource document. On page one, the last sentence of the 1st paragraph which currently reads "... appropriate level of reliability for the BES." Consider changing to read "... Adequate Level of Reliability for the BES." And, include a footnote directing the reader to NERC's definition/paper describing ALR. The later references to "adequate level of reliability" within the document (i.e. page 2, 2nd paragraph could then be reduced to the acronym ALR.

Individual

Sandy O'Connor

TransAlta Centralia Generation LLC

Yes

Yes

Yes

Yes

Yes

No

No

TransAlta Centralia Generation LLC (TransAlta) supports the recommendations put forward by the Project 2010-07 drafting team. The implementation of these recommendations will provide for much

needed certainty for owners and operators of generation facilities.	
Group	
PPL Supply Group	
Annette Bannon	
No	A Generator Owner subject to the proposed standard (i.e., with an executed Agreement to evaluate the reliability impact of interconnecting another Facility to its existing generation Facility) should only be responsible for evaluating the impact of such interconnection on its facilities. Generation Owners should have no responsibility for evaluating impacts on interconnected or adjacent Transmission Owner systems. GOs do not have staff trained or tools available to perform the studies necessary to evaluate reliability impacts of such interconnections on Transmission Owner systems which can extend geographically far beyond the POI. The SDT should clarify that Transmission Owners are solely responsible for evaluating and addressing any impacts on their systems.
No	It may take longer since very few (if any) GOs are prepared to perform this type of work.
No	Version 3 (based on V2): Third Effective date appears to contain a typographical error. Version X (based on V1): Same as Version 3 comments. Please consider streamlining the section Background (Version 3).
No	Version 3 (based on V2): Comments: Although the "one half mile" is much clearer than "two spans", what is the rationale for choosing ½ mile as opposed to another length such as 1 or 2 miles? Version X (based on V1): Same as Version 3 comments
Yes	
Yes	
Yes	
Group	
ACES Power Members	
Jason Marshall	
No	We support the concept of modifying FAC-001-1 to include Generation Owners that own transmission lines that interconnect them to the BES for the purpose of eliminating the need to register Generation Owners as Transmission Owners. However, there are serious issues with the implementation of the FAC-001-1. The changes conflict with the tariff process of many established markets as well as the FERC pro forma tariff. Requests to interconnect are generally governed by tariffs. The request will be submitted to the transmission provider established by the tariff. The transmission provider will then perform the necessary studies such as system impact or feasibility studies to determine any necessary upgrades through its long-term planning function. After the completion of these studies or in parallel with them, the Transmission Owner (or Generation Owner that owns transmission) will perform the facility connection study. This may or may not require an additional contract as it may be governed completely under the tariff or may be covered under a blanket agreement in an organized market. The language referring to the executed Agreement in the standard should be dropped as it is confusing and may not cover many situations. Rather, the standard should apply to the Generation Owner that owns Transmission and is not registered as Transmission Owner. R2 should be modified such as the Generation Owner that owns Transmission is required to create facility connection requirements upon request from the Planning Coordinator or Transmission Planner. While the NERC Functional Model is not clear on the function that performs the interconnection study, it likely will be either the Transmission Planner or the Planning Coordinator. Interconnection studies are typically long-term planning studies. Thus, it is the Transmission Planner or Planning Coordinator that will receive the interconnection request and determine on whose equipment will be impacted. R3 is problematic and contradicts the purpose of R2. R3 requires the Generation Owner that owns Transmission to have Facility connection requirements at all times. It appears the drafting team

intended for R3 to simply define what must be included in the facility connection requirements. To do this, we suggest the drafting team remove the Generation Owner that owns Transmission from the requirement and copy the part 3.1 and its sub-parts to R2. The following language should be struck from R2: "to ensure compliance with NERC Reliability Standards and applicable Regional Entity, subregional, Power Pool, and individual Transmission Owner planning criteria and Facility connection requirements". These requirements already exist elsewhere and inclusion here creates the potential for double jeopardy. R4 should be struck. There is no need for the Generator Owner that owns transmission to maintain its facility connection requirements. They should only be required to review and update them when they get a request. Tariff processes will already require them to make the facility connection requirements available to interconnection requesters.

Yes

Yes

Yes

Yes

No

No

American Wind Energy Association
Formal Comments on NERC Project 2010-07
Generator Requirements at the Transmission Interface
July 17, 2011

The American Wind Energy Association (AWEA) appreciates the opportunity to submit these formal comments on the NERC Project 2010-07. AWEA supports the general direction indicated by both the Generator Requirements at the Transmission Interface Ad Hoc Group (GOTO Ad Hoc Group), and the Project 2010-07 Standards Development Team (SDT). We agree with the sentiments from both groups that a Generator Owner (GO) or Generator Operator (GOP) that also owns or operates a generator interconnection facility (GIF), should not be required to register as a Transmission Owner (TO) and/or Transmission Operator (TOP) strictly because they own or operate the GIF. We also agree that requiring these GOs or GOPs to comply with all the TO/TOP standards would have little effect on or benefits to reliability of the Bulk Electric System.

AWEA supports the aim of these groups to address any reliability gap that may exist with regard to GIFs by considering such facilities as part of the generating facility, and therefore also subject to the GO/GOP standards. AWEA also supports the approach of identifying a limited number of TO/TOP standards, such as FAC-001 and FAC-003, which should also apply to GIFs. We would be concerned, however, if additional requirements were added beyond these two, without serious consideration by the SDT and additional industry experts. The recent FERC order on the required registration as TOs and TOPs of two generator interconnection facilities may raise some question about the direction that the GO/TO and the SDT have taken so far on this topic. AWEA urges NERC and the SDT to use caution in considering any additional standards to apply to GIFs as the current approach of the GO/TO and SDT efforts have been generally supported. Consideration of any addition standards with respect to GIFs should be done on a standard-by-standard basis, reviewing the applicability of each standard as well as the impact on the reliability of the Bulk Electric System.

Contacts:

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Comments on Approach of Project 2010-07
Generator Requirements at the Transmission Interface

The resolution of this issue regarding generator interconnection facilities should compel a certain result in determining how to classify and register generator tie-lines. Under the current standards, NERC is compelled to register owners with generator tie-lines as transmission owners. FERC has affirmed this. The changes to the standards should be such that NERC and FERC are compelled to consider the tie-lines as part of the generator facilities. The current proposal from this task force does not achieve that result. While the proposal does make very appropriate changes to certain reliability standards, it does not change the basic definition of the Bulk Electric System or change NERC's *Statement of Compliance Registry Criteria*, to determine how tie-lines are classified. Even though the relevant reliability standards would be changed so that they are also applicable to generator facilities, NERC and the regional entities will continue to apply the same definition and criteria and can continue to classify the tie-lines as Transmission.

The solution is to change the BES definition and NERC *Statement* as well as changing the applicability of the relevant reliability standards. The background resource document from this group suggests that a change in the BES definition was part of the overall solution, but the Project 2010-17 team did not address this in its proposed definition. The concept paper from the 2010-17 group does include "generator interconnection line leads," but the formal definition paper does not.

This project group should include in its formal proposal a change to the definition of BES, including generator interconnection facilities within the definition of generation.