

Consideration of Comments

Project Name:	2015-07 Internal Communications Capabilities
Comment Period Start Date:	3/23/2016
Comment Period End Date:	5/9/2016
Associated Ballots:	2015-07 Internal Communications Capabilities COM-001-3 AB 2 ST 2015-07 Internal Communications Capabilities COM-001-3 Non-binding Poll AB 2 NB

There were 42 sets of responses, including comments from approximately 101 different people from approximately 77 companies representing 9 of the Industry Segments as shown in the table on the following pages.

All comments submitted can be reviewed in their original format on the [project page](#).

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 Director of Standards, [Howard Gugel](#) (via email) or at (404) 446-9693.

Questions

- 1. Do you agree that the proposed Requirements R12 and R13 in the proposed COM-001-3 address the directive in Order No. 808? If not, please explain why you do not agree and, if possible, provide specific language revisions that would make it acceptable to you.**
- 2. If you have any other comments on the proposed COM-001-3 that you haven't already mentioned above, please provide them here:**

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

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
ACES Power Marketing	Ben Engelby	6		ACES Standards Collaborators - COM-001 Project	Ellen Watkins	Sunflower Electric Power Corporation	1	SPP RE
					Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	1	RF
					Bill Hutchison	Southern Illinois Power Cooperative	1	SERC
					John Shaver	Arizona Electric Power Cooperative, Inc. Southwest Transmission Cooperative, Inc.	1,4,5	WECC
					Shari Heino	Brazos Electric Power Cooperative, Inc.	1,5	Texas RE
					Doug White	North Carolina Electric Membership Corporation	3,4,5	SERC
					Mike Brytowski	Great River Energy	1,3,5,6	MRO
					Ginger Mercier	Prairie Power, Inc.	1,3	SERC
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Amber Skillern	East Kentucky Power Cooperative	1,3	SERC

					Greg Froehling	Rayburn Country Electric Cooperative, Inc.	3	SPP RE
Chris Gowder	Chris Gowder		FRCC	FMMPA	Tim Beyrle	City of New Smyrna Beach	4	FRCC
					Jim Howard	Lakeland Electric	5	FRCC
					Lynne Mila	City of Clewiston	4	FRCC
					Javier Cisneros	Fort Pierce Utility Authority	3	FRCC
					Randy Hahn	Ocala Utility Services	3	FRCC
					Don Cuevas	Beaches Energy Services	1	FRCC
					Stan Rząd	Keys Energy Services	4	FRCC
					Matt Culverhouse	City of Bartow	3	FRCC
					Tom Reedy	Florida Municipal Power Pool	6	FRCC
					Steve Lancaster	Beaches Energy Services	3	FRCC
					Mike Blough	Kissimmee Utility Authority	5	FRCC
					Mark Brown	City of Winter Park	4	FRCC
					Chris Adkins	City of Leesburg	3	FRCC
Ginny Beigel	City of Vero Beach	9	FRCC					
Duke Energy	Colby Bellville	1,3,5,6	FRCC,RF,SERC	Duke Energy	Doug Hils	Duke Energy	1	RF
					Lee Schuster	Duke Energy	3	FRCC
					Dale Goodwine	Duke Energy	5	SERC
					Greg Cecil	Duke Energy	6	RF

Dominion - Dominion Resources, Inc.	Randi Heise	5		Dominion - RCS	Larry Nash	Dominion Virginia Power	1	SERC
					Louis Slade	Dominion Resources, Inc.	6	SERC
					Connie Lowe	Dominion Resources, Inc.	3	RF
					Randi Heise	Dominion Resources, Inc,	5	NPCC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7	NPCC	RSC No IESO Con-Ed and National Grid	Paul Malozewski	Hydro One.	1	NPCC
					Guy Zito	Northeast Power Coordinating Council	NA - Not Applicable	NPCC
					Rob Vance	New Brunswick Power	1	NPCC
					Mark J. Kenny	Eversource Energy	1	NPCC
					Gregory A. Campoli	NY-ISO	2	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Wayne Sipperly	New York Power Authority	4	NPCC
					David Ramkalawan	Ontario Power Generation	4	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Brian Robinson	Utility Services	5	NPCC
					Bruce Metruck	New York Power Authority	6	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC

					Edward Bedder	Orange & Rockland Utilities	1	NPCC
					David Burke	UI	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Kathleen Goodman	ISO-NE	2	NPCC
					Sylvain Clermont	Hydro Quebec	1	NPCC
					Si Truc Phan	Hydro Quebec	2	NPCC
					Sean Bodkin	Dominion Resources Services, Inc	4	NPCC
					Silvia Parada Mitchell	NextEra Energy, LLC	4	NPCC
Southwest Power Pool, Inc. (RTO)	Shannon Mickens	2	SPP RE	SPP Standards Review Group	Shannon Mickens	Southwest Power Pool Inc.	2	SPP RE
					Jason Smith	Southwest Power Pool Inc	2	SPP RE
					James Nail	Independence Power and Light	3,5	SPP RE
					Ron Losh	Southwest Power Pool Inc	2	SPP RE
					Sean Simpson	Board of Public Utilities (City of McPherson)	NA - Not Applicable	NA - Not Applicable
					kevin Giles	Westar Energy	1,3,5,6	SPP RE
					Carl Stelly	Southwest Power Pool Inc	2	SPP RE

					John Allen	City Utilities of Springfield	1,4	SPP RE
					J. Scott Williams	City Utilities of Springfield	1,4	SPP RE
Colorado Springs Utilities	Shawna Speer	1		Colorado Springs Utilities	Shawna Speer	Colorado Springs Utilities	1	WECC
					Shannon Fair	Colorado Springs Utilities	6	WECC
					Charles Morgan	Colorado Springs Utilities	3	WECC
					Kaleb Brimhall	Colorado Springs Utilities	5	WECC
Oxy - Occidental Chemical	Venona Greaff	7		Oxy	Venona Greaff	Occidental Chemical Corporation	7	SERC
					Michelle D'Antuono	Ingleside Cogeneration LP.	5	Texas RE

1. Do you agree that the proposed Requirements R12 and R13 in the proposed COM-001-3 address the directive in Order No. 808? If not, please explain why you do not agree and, if possible, provide specific language revisions that would make it acceptable to you.

Bob Thomas - Illinois Municipal Electric Agency - 4

Answer	No
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Comment

The proposed R12 & R13 address the directive in Order No. 808, but are not necessary. Illinois Municipal Electric Agency (IMEA) does not believe proposed R12 and R13 are consistent with NERC's risk-/results-based Reliability Standards or the Paragraph 81 initiative. R12 and R13 would increase demands on Compliance resources (e.g., procedure development/revision, internal controls identification/development, compliance monitoring/demonstration, RSAW development, etc.) with no improvement to the reliability of (no reduced risk to) the BES/BPS. During the most recent COM-001-3 WebEx Q&A session, it was indicated there is no awareness of a system event being caused or exacerbated by a DP or GOP lacking internal Interpersonal Communication capability. The point here is not that DP and GOP internal communication capability is not important; the point is that with current technology such communication capability is already in place. R12 and R13 address a risk (are trying to fix a problem) that doesn't exist. For R12, IMEA defers to entities impacted by the proposed language. For R13, IMEA recommends deletion of this proposed requirement.

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included in COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. See FERC Order No. 808 para 37 and 41. Interpersonal Communications was created as a defined term in Order No. 808. The existing approved language for Interpersonal Communication was used to ensure consistency within the COM-001 standard and succinctly address the FERC directive. The language used allows for differences among individual entities to be addressed at the entity level.

Jay Barnett - Exxon Mobil - 7

Answer	No
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Comment

FERC comments at P. 41 in Order No. 808 mention geographically separate control centers and the standard rationale acknowledges that certain communications in single Control Centers that are ongoing and occur throughout the day as part of day-to-day control center operation are not the focus of COM-001-3. This same rationale should be used as well for personnel at single facilities that are not geographically separated (i.e. personnel within a single generating unit). Information necessary for the Reliable Operation of the BES might be communicated between field operators at a single generating unit; however, this capability is inherent and necessary for the safe and reliable operation of that unit. Requiring an entity to retain, for instance, evidence of having radio communications between field operators is an unnecessary administrative burden. Requirement R12 should be modified as:

"R12. Each RC, TOP, GOP, and BA shall have internal Interpersonal Communication capabilities for the exchange of information necessary for the Reliable Operation of the BES. This includes communication capabilities between Control Centers within the same functional entity, or between a Control Center and field personnel, **and excludes communication capabilities between personnel within an individual Facility.**"

Response

The SDT agrees that evidence should not be an unnecessary burden. The SDT feels that this point is echoed in para. 53 of FERC Order No. 808 which states "...that setting performance criteria for e-mail and telephonic communication at issue here is both impractical and unnecessary." The focus of Requirement R12 is on the requirement to have communication capability rather than performance criteria for that capability. In your example, evidence of having radio communications should not be a burden since demonstrating that the physical asset exists could be enough to show compliance with the requirement.

Scott Berry - Indiana Municipal Power Agency - 4 - RF

Answer

No

Comment

The proposed Requirements R12 and R13 meet the Paragraph 81 initiative criteria and are purely administrative in nature. IMPA is not aware of an electrical industry entity that does not operate or conduct business with some form of Interpersonal Communication

capability. Generally, entities operate with many redundant forms of communication that will prevent them from having a scenario where they have a complete loss of Interpersonal Communication capability.

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included in COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. See FERC Order No. 808 para 37 and 41. Interpersonal Communications was created as a defined term in Order No. 808. The existing approved language for Interpersonal Communication was used to ensure consistency within the COM-001 standard and succinctly address the FERC directive. The language used allows for differences among individual entities to be addressed at the entity level.

Emily Rousseau - MRO - 1,2,3,4,5,6 - MRO

Answer

No

Comment

R12 and R13:

(A) Within FERC Order 808, P. 41, (1), FERC directs the adequacy of internal communications that have an adverse effect on reliability, within a single functional entity that is geographically separated. The currently proposed R12 does not address FERC’s directive (1). Recommend R12 to read as: *“This includes communication capabilities between geographically separated Control Centers ...”* be incorporated into this portion of R12. Without this qualifier, CEAs may believe that this is applicable between Primary and Backup Control Centers for BA, TOP, and RC per EOP-008-1. As written in EOP-008-1, R1 and R1.2.3, the BA, TOP and RC have to have an Operating Plan describing voice communications in order to meet their functional obligations and not communications between Primary and Backup Control Centers.

(B) To ensure consistency, recommend R13 also be revised as follows: *“This includes communication capabilities between geographically separated control centers ...”*

(C) Within FERC Order 808, P. 41, (1) and (2) FERC uses the word “and” where the SDT uses the word “or”. These two words have drastically different meanings within the context of a Reliability Standard. Recommend that “or” be changed to “and” in order to fulfill the FERC directive.

Response

The SDT disagrees and believes that Requirement R12 and R13 do address the FERC directive. If internal Interpersonal Communication capabilities are necessary for Reliable Operation of the BES, then they would fall within the scope of Requirement R12 and R13. However, neither the proposed Requirements nor the Standard Drafting Team dictate what qualifies as a necessary internal Interpersonal Communication, in light of unique Registered Entity needs and circumstances. The SDT believes the language in R12 and R13 that states “...this includes communication capability between the same functional entity” captures geographically separate Control Centers which would include primary and backup Control Centers communicating internally.

The SDT has modified Requirements R12 and R13 to replace “or” with “and/or” for clarity (although this is not intended as a substantive change). The rationale for this change is that field personnel may not apply to the RC or BA.

Scott Hoggatt - WEC Energy Group, Inc. - 6

Answer No

Comment

I support the comments provided by Matthew Beilfuss of the WEC Energy Group.

Response

Ben Engelby - ACES Power Marketing - 6, Group Name ACES Standards Collaborators - COM-001 Project

Answer No

Comment

1. The SDT has introduced significant ambiguity to Requirement R13 by categorizing Distribution Provider centers as lowercase “control centers.” This is the opposite approach from most SDTs that provide clarity by referencing a NERC defined term. Including a lowercase glossary term and expecting industry to know the meaning will only create confusion and uncertainty. The requirements for DPs should not be identical to communication requirements imposed RCs, BAs, TOPs, and GOPs because DPs do not have the same impacts and the grid and do not necessarily have control centers. Distribution entities could be second-guessed by auditors, even though their facilities are for the operation of the distribution system, which poses a minimal risk to the Bulk Electric System. Requirement R13 creates unnecessary compliance burdens that are not outweighed by reliability benefits. We strongly suggest that the SDT strike R13.
2. If the SDT chooses not to take our suggestion above to strike R13, we offer an alternative approach for consideration. We recommend the SDT add an exemption to DPs that pose a low risk to the BES. To achieve this, the SDT could revise the applicability section to apply only to DPs that have a role in a TOP’s restoration plan or DPs that are part of a UFLS scheme. This modification would focus on the subset of DPs that pose a risk to reliability of the BES.
3. For requirements R12 and R13, there could be a wide range of auditor interpretations, including treating any failure of a communication system as a violation. We suggest the SDT adopt language similar to what is in place for external communication capabilities requirements to notify affected entities and develop plan to remedy the situation. A failure of external communication capabilities is not a violation in and of itself. The SDT needs to be clear that a simple failure of an internal communication capabilities is not a violation either.
4. While we appreciate the SDT providing additional time to implement the standard, we feel the proposed implementation plan of nine months should be increased to 18 months.
5. The VSLs for R12 and R13 should be revised to be on a graduated scale that includes the amount of time communications were unavailable. The binary nature of the current VSLs result in a severe violation level for any communication failure.

Response

1 & 2 – The SDT believes it is appropriate to include DPs in accordance with FERC Order No. 693 para 475. The SDT has worked to provide clarification on the use of lowercase control center and provide examples of DPs supporting the reliability of the BES in the rationale for Requirement R13.

3 - The SDT feels that this point is echoed in para. 53 of FERC Order No. 808 which states “...that setting performance criteria for e-mail and telephonic communication at issue here is both impractical and unnecessary.” The focus of Requirement R12 is on the requirement to having communication capability and not performance criteria for that capability.

4 – The SDT appreciates your concern regarding 9 months versus 18 months. However, based on industry feedback, the SDT believes that 9 months is sufficient time for an entity to become compliant with this standard.

5 – The SDT believes a graduated scale is not proper for these requirements since they are binary.

Anthony Jankowski - WEC Energy Group, Inc. - 4

Answer	No
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Document Name	
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Comment

Matthew Beilfuss, **On Behalf of:** WEC Energy Group, Inc.

Response

Amy Casuscelli - Amy Casuscelli

Answer	No
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Comment

Xcel Energy supports the comments provided by the MRO NERC Standards Review Forum.

Response

M Lee Thomas - Tennessee Valley Authority - 5

Answer	No
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Comment

While the Requirements R12 and R13 in the proposed COM-001-3 address the directive in Order No. 808 sufficiently, TVA believes the standard is inadequate in that additional clarification is needed. The Rationale for R12 states

“Therefore, the applicable entities must have the capability to exchange information between Control Centers of that functional entity . . . Also, applicable entities must have the capability to exchange information between a Control Center and field personnel.”

This clearly establishes that the required internal Interpersonal Communication Capability consists of, and is sufficiently demonstrated by, communication capability between Control Centers within the same functional entity and between Control Centers and field personnel.

However, Requirement R12 as written uses the phrase

“This includes communication capabilities between Control Centers within the same functional entity, or between a Control Center and field personnel.”

Saying only that the required capabilities “includes” the two aspects listed leaves the possibility that other capabilities, such as between a single generating unit’s control room and its field personnel, should be considered, thus rendering the scope of Requirement R12 indefinite.

The required communication capabilities between the Control Center and field personnel also needs clarification. It is possible that field personnel would be operating in an area where radio and cellular coverage does not exist. When this is the case, the field personnel would normally travel or locate themselves to a point where communication is possible while receiving or reporting the completion of Operating Instructions.

Accordingly, TVA suggests the following rewording for R12 as follows:

“This *consists of* communication capabilities between Control Centers within the same functional entity, or between a Control Center and field personnel. *Interpersonal Communications Capability with field personnel is required only during issuance of Operating Instructions or receipt of condition reports following performance of Operating Instructions, but is not required while Operating Instructions are actually being performed.*”

Although the Rationale for R13 is varies slightly from that of R12, the same argument applies.

Response

The SDT disagrees and believes that Requirement R12 and R13 do address the FERC directive. If internal Interpersonal Communication capabilities are necessary for Reliable Operation of the BES, then they would fall within the scope of Requirement R12 and R13. However, neither the proposed Requirements nor the Standard Drafting Team dictate what qualifies as a necessary internal Interpersonal Communication, in light of unique Registered Entity needs and circumstances.

The focus of Requirement R12 is on the requirement to have communication capability and not performance criteria for that capability, consistent with para. 53 of FERC Order No. 808. In your example, evidence of having radio or cellular communications should not be a burden since demonstrating that the physical asset exists could be enough to show compliance with the requirement.

Andrew Puztai - American Transmission Company, LLC - 1

Answer

No

Comment

ATC supports the comments that were submitted by the MRO NSRF(see below)

R12 and R13:

1. Within FERC Order 808, P. 41, (1), FERC directs the adequacy of internal communications that have an adverse effect on reliability, within a single functional entity that is geographically separated. The currently proposed R12 does not address FERC's directive (1). Recommend R12 to read as: *"This includes communication capabilities between geographically separated Control Centers ..."* be incorporated into this portion of R12. Without this qualifier, CEAs may believe that this is applicable between Primary and Backup Control Centers for BA, TOP, and RC per EOP-008-1. As written in EOP-008-1, R1 and R1.2.3, the BA, TOP and RC have to have an Operating Plan describing voice communications in order to meet their functional obligations and not communications between Primary and Backup Control Centers.

2. To ensure consistency, recommend R13 also be revised as follows: *“This includes communication capabilities between geographically separated control centers ...”*

3. *Within FERC Order 808, P. 41, (1) and (2) FERC uses the word “and” where the SDT uses the word “or”. These two words have drastically different meanings within the context of a Reliability Standard. Recommend that “or” be changed to “and” in order to fulfill the FERC directive.*

Response

The SDT disagrees and believes that Requirement R12 and R13 do address the FERC directive. If internal Interpersonal Communication capabilities are necessary for Reliable Operation of the BES, then they would fall within the scope of Requirement R12 and R13. However, neither the proposed Requirements nor the Standard Drafting Team dictate what qualifies as a necessary internal Interpersonal Communication, in light of unique Registered Entity needs and circumstances. The SDT believes the language in R12 and R13 that states “...this includes communication capability between the same functional entity” captures geographically separate Control Centers which would include primary and backup Control Centers communicating internally.

The SDT has modified Requirements R12 and R13 to replace “or” with “and/or” for clarity (although this is not intended as a substantive change). The rationale for this change is that field personnel may not apply to the RC or BA.

Diana McMahon - Salt River Project - 1,3,5,6 - WECC

Answer	No
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Comment

Thank you for the effort of drafting and addressing Order 808. As drafted the requirements do not account for the intention to address issues “whenever internal communications could directly affect the reliable operation of the Bulk-Power System”. Co-located operational teams would need to provide evidence of compliance when they are within the same room. While the rationale for 12 appears to address this issue, the language of the standard does not exempt these situations. Additionally, the requirement of Interpersonal communication to field personnel and the documentation of such communication is overly burdensome. To ensure that all field personnel have Interpersonal Communications entities will be required to maintain records demonstrating that all personnel have adequate coverage areas and have communication devices at all times. An employee leaving his cell at a remote site could result in an inadvertent violation.

Response

The SDT agrees that evidence should not be an unnecessary burden. The SDT feels that this point is echoed in para. 53 of FERC Order No. 808 which states “...that setting performance criteria for e-mail and telephonic communication at issue here is both impractical and unnecessary.” The focus of Requirement R12 is on the requirement to having communication capability rather than performance criteria for that capability. In your example, evidence of having radio communications should not be a burden since demonstrating that the physical asset exists could be enough to show compliance with the requirement.

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7 - NPCC, Group Name RSC No IESO Con-Ed and National Grid

Answer	No
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Comment

The second sentence of R12 should encompass all Control Centers, and all personnel that affect the Real-time operation of the Bulk Electric System. Even though Order No. 808 refers specifically to the Bulk-Power System, the assumption is that FERC is referring to the Bulk Electric System. Suggest revising Requirement R12 to read:

Each Reliability Coordinator, Transmission Operator, Generator Operator, and Balancing Authority shall have internal Interpersonal Communication capabilities for the exchange of information that is necessary for the Reliable Operation of the BES. This includes communication capabilities between Control Centers within the same functional entity, and between Control Centers and all personnel whose responsibilities can impact the Real-time operation of the BES.

Similarly, suggest revising Requirement R13 to read:

Each Distribution Provider shall have internal Interpersonal Communication capabilities for the exchange of information that is necessary for the Reliable Operation of the BES. This includes communication capabilities between Control Centers within the same functional entity, and between Control Centers and all personnel whose responsibilities can impact the Real-time operation of the BES.

Response

The SDT thanks you for your comment. Communication necessary for the Reliable Operation of the BES helps an entity qualify which field personnel require internal Interpersonal Communication capability.

Oshani Pathirane - Hydro One Networks, Inc. - 1,3 - NPCC

Answer

No

Comment

Hydro One Networks Inc. believes that the term “*field personnel*” is subject to interpretation and is an undefined term. For example, site maintenance staff, site security personnel, or site cleaning staff who typically would not have direct contact with BES assets may be subject to the requirement and such an interpretation would be unnecessarily onerous on entities, with no significant improvement to BES reliability. We suggest adding more specificity by adding, “*field personnel authorized to directly control BES assets*”.

We also support the IESO (Ontario) in suggesting that the words “*geographically separate Control Centers*” be added to explicitly state that “*between Control Centers within the same functional entity*” implies geographically separate locations.

While Hydro One Networks Inc. agrees that the intent of the directive in FERC Order 808 is adequately addressed, the requirement verbiage could be more specific by including the term “*Operating Instruction*”.

Therefore, we suggest the following wording which incorporates all our suggestions above:

“Each Reliability Coordinator, Transmission Operator, Generator Operator, and Balancing Authority shall have internal Interpersonal Communication capabilities for the exchange of information involving Operating Instructions that are necessary for the Reliable Operation of the BES. This includes communication capabilities between geographically separate Control Centers within the same functional entity, or between a Control Center and field personnel authorized to directly control BES assets”.

Response

The SDT believes that personnel that do not have “direct contact with BES assets” would not be subject to this requirement. Communication necessary for the Reliable Operation of the BES helps an entity qualify which field personnel require internal Interpersonal Communication capability.

The SDT believes the language in R12 and R13 that states “...this includes communication capability between the same functional entity” captures geographically separate Control Centers which would include primary and backup Control Centers communicating internally.

The focus of Requirement R12 is on the requirement to have communication capability rather than performance criteria for that capability, consistent with para. 53 of FERC Order No. 808..

Shawna Speer - Colorado Springs Utilities - 1, Group Name Colorado Springs Utilities

Answer No

Comment

Colorado Springs Utilities does not see a reliability gap requiring the addition of Requirements R12. and R13. Communication with field personnel is a requirement of conducting business.

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included from COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. See FERC Order No. 808 para 37 and 41.

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Comment

We agree that the proposed Requirements R12 and R13 address the directive in Order 808, although their clarity can be further improved to leave no doubts on the requirement to have the required communication capability between geographically separate control centers within the same functional entity. We suggest the SDT to insert the words “geographically separate” into R12 and R13 as we previously suggested.

Response

Neither the proposed Requirements nor the Standard Drafting Team dictate what qualifies as a necessary internal Interpersonal Communication, in light of unique Registered Entity needs and circumstances. The SDT believes the language in R12 and R13 that states “...this includes communication capability between the same functional entity” captures geographically separate Control Centers.

Matthew Beilfuss - WEC Energy Group, Inc. - 3,4,5,6 - RF

Answer Yes

Response

Chris Gowder - Chris Gowder, Group Name FMPPA	
Answer	Yes
Comment	
See response to question 2.	
Response	
Jared Shakespeare - Peak Reliability - 1	
Answer	Yes
Comment	
Peak Reliability supports this Standard.	
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	Yes
Comment	
We commend the drafting team on their efforts in reference to the proposed changes pertaining to Requirement R12 and Requirement R13. Especially in Requirement R13, the way they captured the Distribution Provider (DP) facilities supporting the reliability of the Bulk Electric System (BES) by using the lower-case form of 'control center'. However, we have a concern that the team didn't capitalize the term 'reliable operation' (third sentence of page 18 of the Supplemental Material-Rationale Section). In the following sentence in that	

paragraph, the term is capitalized there as well as in Requirement R13. We would ask the drafting team to provide some clarity on why the term was not capitalized in the Rationale Section.

Response

The SDT thanks you for your comment and has made the necessary modification to the rationale.

Venona Greaff - Oxy - Occidental Chemical - 7, Group Name Oxy

Answer	Yes
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Michelle D'Antuono - Oxy - Ingleside Cogeneration LP - 5

Answer	Yes
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Robert Coughlin - ISO New England, Inc. - 2 - NPCC

Answer	Yes
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Robert Coughlin - ISO New England, Inc. - 2 - NPCC

Answer	Yes
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Robert Coughlin - ISO New England, Inc. - 2 - NPCC

Answer	Yes
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Randi Heise - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion - RCS

Answer	Yes
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Michael Puscas - ISO New England, Inc. - 2

Answer	Yes
Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Thomas Foltz - AEP - 5	
Answer	Yes
Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy	
Answer	Yes
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Laura Nelson - IDACORP - Idaho Power Company - 1	
Answer	Yes
Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Tom Haire - Rutherford EMC - 3	
Answer	Yes

John Fontenot - Bryan Texas Utilities - 1

Answer Yes

John Fontenot - Bryan Texas Utilities - 1

Answer Yes

Julie Hall - Entergy - 6

Answer Yes

Karie Barczak - DTE Energy - Detroit Edison Company - 3

Answer Yes

Karie Barczak - DTE Energy - Detroit Edison Company - 3

Answer Yes

Karie Barczak - DTE Energy - Detroit Edison Company - 3

Answer Yes

Yvonne McMackin - Public Utility District No. 2 of Grant County, Washington - 1,4,5

Answer Yes

Gerry Adamski - Essential Power, LLC - 5

Answer Yes

Erika Doot - U.S. Bureau of Reclamation - 5**Answer****Comment**

The Bureau of Reclamation appreciates the drafting team's efforts to address the reliability gap discussed in FERC Order No. 808 P 41 (Apr. 16, 2015) that was created when internal communications addressed in Requirement R1.1 of COM-001-1 were not included in COM-001-2. Reclamation believes that the proposed requirements are appropriate for the Reliability Coordinator, Transmission Operator, and Balancing Authority functions.

Reclamation reiterates that the proposed changes in COM-001-3 go beyond the scope of FERC Order No. 808 by adding requirements for internal communications for Generator Operators and Distribution Providers. Reclamation notes that P 41 of Order No. 808 addressed Requirement R1.1, which only applied to Reliability Coordinators, Transmission Operators and Balancing Authorities. Therefore, Reclamation suggests that the Generator Operator and Distribution Provider functions should be removed from requirements R12 and R13.

Reclamation believes that requiring internal communication capabilities between geographically separate Generator Operator control centers that direct the operations of different facilities, under the supervisor of separate Transmission Operators or Balancing Authorities, will not improve BES reliability. Instead, it may have an adverse impact on BES reliability (especially during system disturbances) by introducing communications capability between additional, unnecessary parties who do not have familiarity with local configurations, operations or area-wide system impacts. For example, requiring internal communication capabilities between generation control centers in the Pacific Northwest, Desert Southwest, and/or Rocky Mountain states that coordinate with different Transmission Operators and do not direct operations of any overlapping facilities will not improve BES reliability. However, as proposed, the standard would impose unnecessary additional communication and compliance costs for these Generator Operators. Reclamation does not believe that the R12 caveat regarding "information necessary for the Reliable Operation of the BES" adequately addresses this concern, and opens the door for a wide range of audit interpretations on the issue.

Response

The SDT thanks you for your comment.

The SDT believes it is appropriate to include DPs and GOPs in accordance with FERC Order No. 693 para 475.

Communication necessary for the Reliable Operation of the BES helps an entity qualify which Control Centers require internal Interpersonal Communication capability.

Allie Gavin on Behalf of Michael Montane – International Transmission Company Holdings Corporation - 1

Answer

Comment

Reliable operation of the BES requires that generation, transmission, and load operate in synchronism. Communication between and within entities involved in generation, transmission, and distribution is an important element in ensuring reliability. We agree with the inclusion of the GOP and DP entities in the standard. However, we disagree that the VRF associated with the DP is somehow different than for the GOP or the TOP. Load shed is an integral aspect of maintaining reliability and is preferred to be implemented at the distribution level rather than the transmission level to ensure the maximum level of reliability.

Response

This requirement is assigned a Medium VRF since BES instability, separation, or cascading failures are not likely to occur due to a DP not having internal Interpersonal Communication capability. In addition, this requirement VRF is consistent with Requirement R7 and R11 VRFs.

Albert DiCaprio – PJM Interconnection, L.L.C., - 2 -, NPCC, Group Name ISO/RTO Standards Review Committee

Answer

Yes

2. If you have any other comments on the proposed COM-001-3 that you haven't already mentioned above, please provide them here:

Gerry Adamski - Essential Power, LLC - 5

Answer

Comment

We vote in the affirmative with the understanding that we can demonstrate we have the internal communication systems established between our control room personnel and personnel within the plant as a means to satisfy R12. If this is not the drafting team's intent, then further clarifications are necessary to the language in the standard. Furthermore, we do not believe these requirements are necessary at all but understand that NERC is required to respond to the FERC directive.

Response

Thank you for your affirmative response and clarifying comment. The SDT agrees with your understanding.

Shawna Speer - Colorado Springs Utilities - 1, Group Name Colorado Springs Utilities

Answer

Comment

Internal Interpersonal Communications used solely to communicate within a Facility (i.e. radio communication between operators) are inherent and necessary for the safe and reliable operation of that Facility and should be excluded from COM-001-3 due to the lack of reliability benefit.

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included from COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. Interpersonal Communications was created as a defined term in Order No. 808. See FERC Order No. 808 para 37 and 41. The existing approved language for Interpersonal Communication was used to ensure consistency within

the COM-001 standard and succinctly address the FERC directive. The language used allows for differences among individual entities to be addressed at the entity level.

Karie Barczak - DTE Energy - Detroit Edison Company - 3

Answer

Comment

N/A

Response

John Fontenot - Bryan Texas Utilities - 1

Answer

Comment

na

Tom Haire - Rutherford EMC - 3

Answer

Comment

This standard should be clearly restricted to only BES elements.

Response

Both Requirement R12 and R13 refer to the “Reliable Operation of the BES”.

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Comment

We suggest to the drafting team/review panel to include all the Rationale information from the Standard into the RSAW. We feel including this information will help improve the communication efforts in the auditing process amongst the auditor and the industry.

Response

The SDT will provide your suggestion regarding the RSAW to the Compliance Group. The rationale does stay with the standard in the Supplemental Material Section.

Jared Shakespeare - Peak Reliability - 1

Answer

Comment

Peak Reliability supports this Standard.

Response

Chris Gowder - Chris Gowder, Group Name FMPA

Answer

Comment

The proposed requirements undoubtedly address FERC’s directive in Order No. 808, but they also go beyond “**ensuring the adequacy of internal communications capability**”. As currently drafted, the added requirements are very broad and difficult to measure. There were several concerns from industry stakeholders in the last comment period that the drafting team has not answered.

The drafting team states several times in its response to comments that FERC did not limit its directive to specific functional entities or state any limitation for internal Interpersonal Communications, but has not provided any justification for including entities that do not

operate control centers (capitalized or otherwise). Simply addressing a FERC directive should not be the drafting team's goal. It should be to write a quality, results-based standard with input from industry.

The examples contained in the requirements do not affect the scope of who, under what conditions, shall perform what action, to achieve the desired outcome of the requirement. Who determines what information is "necessary for the Reliable Operation of the BES"? Does the plant operator sitting in front of an HMI need communication capability with the instrument and control technician walking around the plant site? Stated differently, does the GOP need to prove such a capability exists to be found compliant? Does a DP that does not have any BES equipment need to do anything, or can they show through studies that they cannot cause "instability, uncontrolled, separation or cascading failures" (from definition of Reliable Operation)?

Industry agreed with the inclusion of DPs and GOPs as applicable entities for the other requirements in COM-001, but there are many who do not agree with them being included in these requirements. All applicable entities of a standard do not necessarily need to be a part of every requirement of that standard, so the drafting team's reasoning for including the DP and GOP is not convincing.

We appreciate the time and efforts of the drafting team but it is our position that the standard as currently written leaves too many questions unanswered and is too ambiguous to be effective and achieve the goal of increased reliability. We look forward to the drafting team's response to our concerns.

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included from COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. Interpersonal Communications was created as a defined term in Order No. 808. See FERC Order No. 808 para 37 and 41. The existing approved language for Interpersonal Communication was used to ensure consistency within the COM-001 standard and succinctly address the FERC directive. The language used allows for differences among individual entities to be addressed at the entity level.

The focus of Requirement R12 is on the requirement to have communication capability rather than performance criteria for that capability. Communication necessary for the Reliable Operation of the BES helps an entity qualify which Control Centers require internal Interpersonal Communication capability.

The SDT believes it is appropriate to include DPs and GOPs in accordance with FERC Order No. 693 para 475.

Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2**Answer****Comment**

ERCOT recommends that the SDT modify the second sentence in Requirements R12 and R13 to read as follows: “This includes communication capabilities between Control Centers within the same functional entity, or between a functional entity’s Control Center and its field personnel.” Adding these words ensures clarity that the field personnel identified are those associated with the same functional entity that operates the Control Center.

Response

The SDT thanks you for your comment. However, during the course of our discussions we have identified instances where control center personnel and field personnel do not reside under the same functional entity.

M Lee Thomas - Tennessee Valley Authority - 5**Answer****Comment**

While Measures M8, M11, and M12 all imply that the Generator Operator has some discretion regarding what evidence to retain, the language of C.1.2 Evidence Retention could be construed to mean that voice recordings are mandatory evidence:

“ . . . shall retain written documentation for the most recent twelve calendar months and voice recordings for the most recent 90 calendar days.”

While written documentation as described in the respective Measures is a normal expectation for almost every Reliability Standard, the implication that GOp “shall retain” voice recordings could require installation of new equipment, systems, and programs that represent an otherwise unnecessary and significant expenditure. Accordingly, TVA suggests the following rewording of C.1.2 Evidence Retention:

“ . . . shall retain written documentation for the most recent twelve calendar months and, *where the capability exists*, voice recordings for the most recent 90 calendar days.”

Response

The comment concerning Measures M8 and M11 is outside the scope of the approved SAR.

The evidence retention for Measures M12 and M13 were developed consistent with the evidence retention periods for the other 11 requirements. The SDT does not believe that this adds any undue burden to an entity.

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer

Comment

Duke Energy requests more clarification from the drafting team regarding the level of detail required for demonstration of compliance with R12 and R13. For example, is it the drafting team’s intent that producing detailed telecommunications diagrams displaying the interpersonal communications capabilities, or would it be satisfactory to demonstrate the actual phone used to perform said communications? Is it the intent of the drafting team to only require an entity to produce or identify the actual medium used to communicate?

Response

Although the SDT is not intending to say that the methods you have identified are the only way to demonstrate compliance with the requirement, we do agree that any of the methods you have stated in your comment could demonstrate compliance with the requirements.

Ben Engelby - ACES Power Marketing - 6, Group Name ACES Standards Collaborators - COM-001 Project

Answer

Comment

Thank you for the opportunity to comment.

Response

Scott Berry - Indiana Municipal Power Agency - 4 - RF**Answer****Comment**

Requirement R11 (and similar requirements) needs clarification. If an entity does have a failure of its Interpersonal Communication capability (loss of all communications), how is it supposed to consult each entity affected by the failure? Therefore, an entity has to use some back up form of communication, so does it really have a failure of Interpersonal Communication capability if it is consulting with entities that are affected by the loss of communication(s)?

Response

The SDT thanks you for your comment but it is outside the scope of the approved SAR.

Matthew Beilfuss - WEC Energy Group, Inc. - 3,4,5,6 - RF**Answer****Comment**

It is difficult to contemplate a scenario where a functional entity would be meeting existing reliability standards and not have an internal Interpersonal Communication capability between control centers or to field personnel necessary for the Reliable Operation of the BES. The measures for Reliable Operation of the BES are the existing standards, not the existence of an internal communications capability.

The Violation Severity Levels (VSLs) associated with R12 / R13 identify a scenario of non-compliance that is not practical. How could a Reliability Coordinator, Transmission Operator, Generator Operator, or Balancing Authority, or Distribution Provider fail to have an internal Interpersonal Communication capability for the exchange of operating information and meet operational obligations under other reliability standards?

R12 and R13 as written do not meet the tenants of a results based standard. Specifically they do not focus on required actions or results (the "what"), but rather focus on the methods by which to accomplish actions or results (the "how"). Results based standards require

“each requirement to identify a clear and measurable expected outcome, such as: a) a stated level of reliability performance, b) a reduction in a specified reliability risk (prevention), or c) a necessary competency.”

R12:

- As a matter of practice RCs and BAs do not have field personnel.
- Is there an example in North American of a Control Center (NERC Glossary term) that does not have some type of Interpersonal Communication capability?
 - If the answer is “yes,” then they likely are in violation of COM-001-2.
 - If the answer is “no,” then a Requirement to have communication capability between Control Centers has no practical impact.
- It is not clear who would be considered “field personnel” related to the GOP functional role?
 - Are field personnel plant site operators or others doing tasks at the facility considered “field personnel?”
- The NERC Glossary “Control Center” definition, includes “4) a Generator Operator for generation Facilities at two or more locations.”
 - A single location with a 1,500 MW Facility may present more risk to the BES than two facilities at multiple locations with a total of 200 MW. However, R12 requires internal communication capability at the less risky location?
- Is it intended that the “or” be an “and?”

This includes communication capabilities between Control Centers within the same functional entity, or between a Control Center and field personnel.

R13:

- Is there an example in North American of a Distribution Provider control center (NERC Glossary term) that does not have some type of Interpersonal Communication capability?
 - If the answer is “yes,” then they likely are in violation of COM-001-2.
 - If the answer is “no,” then a Requirement to have communication capability between control centers has no practical impact.
- Is it intended that the “or” be an “and?”

*This includes communication capabilities between Control Centers within the same functional entity, **or** between a Control Center and field personnel.*

Response

The proposed R12 and R13 explicitly address the reliability objective of internal communications which previously existed in COM-001-1 but was not explicitly included in COM-001-2. The FERC Order directed NERC to address specifically internal communications that are necessary for Reliable Operation of the BES. See FERC Order No. 808 para 37 and 41. Interpersonal Communications was created as a defined term in Order No. 808. The existing approved language for Interpersonal Communication was used to ensure consistency within the COM-001 standard and succinctly address the FERC directive. The language used allows for differences among individual entities to be addressed at the entity level.

The SDT believes that Requirements R12 and R13 do meet the requirement of b) reduction in a specified reliability risk (prevention), by ensuring clarity that internal communications are addressed by Reliability Standards.

Communication necessary for the Reliable Operation of the BES helps an entity qualify which field personnel require internal Interpersonal Communication capability.

The SDT has modified Requirements R12 and R13 to replace “or” with “and/or” for clarity (although this is not intended as a substantive change). The rationale for this change is that field personnel may not apply to the RC or BA.