**Unofficial Comment Form**

**Project 2015-07 Internal Communications Capabilities COM-001-3**

**Background Information**

This posting is soliciting formal comment.

The project will address the directive from FERC Order No. 808 to modify the COM-001-2 standard or develop a new standard to address “internal communications capabilities that could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.” Order No. 808, at P 1.

In Order No. 808, FERC directed “NERC to develop modifications to COM-001-2, or to develop a new standard, to address our concerns regarding ensuring the adequacy of internal communications capability whenever internal communications could directly affect the reliable operation of the Bulk-Power System.” Order No. 808, at P 41. In the same paragraph, FERC clarified that this intended to include a directive that the modified or new standard would “address the adequacy of internal telecommunications (or other internal communication systems) that may have an adverse effect on reliability, even within a single functional entity, including: (1) communications between geographically separate control centers within the same functional entity; and (2) communications between a control center and field personnel.” *Id.*

The SDT reviewed the FERC directives and developed proposed Requirements R12 and R13 for a proposed COM-001-3. The proposed Requirements address internal Interpersonal Communication capabilities as directed by FERC for Reliability Coordinators, Balancing Authorities, and Transmission Operators in Requirement R12 and for Distribution Providers and Generator Operators in Requirement R13. Two separate Requirements were developed to maintain VRF consistency with the existing Requirements from COM-001-2.

DO NOT use this form for submitting comments. Use the electronic form to submit comments on the proposed COM-001-3 – Communications standard. The electronic comment form must be completed and submitted by **8:00 p.m. Eastern, Monday, and November 16, 2015**.

If you have questions, contact **Jordan Mallory** (via email) or at (404) 446-9733 or **Sean Bodkin** (via email) or at (202) 400-3022.

The project page can be accessed by clicking [here](#).
Questions

The scope of this project includes:

- Internal telecommunications or other internal communication systems “between geographically separate control centers within the same functional entity.” Order No. 808, at P 41.
- Internal telecommunications or other internal communication systems “between a control center and field personnel.” Id.
- “[T]he adequacy of internal communications capability whenever internal communications could directly affect the reliable operation of the Bulk-Power System.” Id.
- “[I]nternal communications capabilities that could involve the issuance or receipt of Operating Instructions or other communications that could have an impact on reliability.” Order No. 808, at P 1.

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.

☐ Yes
☒ No

Comments: All the functional entities should have Interpersonal Communication capabilities, and it can be addressed in one requirement. Add Distribution Provider to R12 and delete R13.

Communication with field personnel may be done via cellphones. The Standard should explain that it is sufficient to simply designate cellphone communications as the means to communicate and not require phone lists to be provided.

Does the Standard create an obligation for field personnel to be able to communicate immediately with the control center? For example, a vegetation inspector may see a potential encroachment into a transmission line, but is in a cellphone dead zone. Is being in a dead zone a violation of R13 since the internal Interpersonal Communication Capability was not capable of communicating? There needs to be guidance that dead zones are allowed for field personnel. The Requirement should recognize non-functioning capability.

What constitutes being “geographically separate”? How many miles? Who determines this distance?
We agree with adding these two requirements to address the FERC directive, but we do not support the proposed wording for these requirements.

Requirements R12 and R13 mandate the provision of internal interpersonal communication capabilities within the same entity when performing its reliability function. Without specific wording that such capabilities are only required for communication between geographically separate control centers within the same functional entity, or between a control center and field switching personnel, these requirements can and will result in entities not having physically separated control centers or staff perform its tasks to be non-compliant. The IESO and most of ISOs and RTOs in North America fall into this category.

The Measures for these two requirements do make reference to physically separate control centers or staff in an example for evidence of compliance. However, the specific example only illustrates a way to comply with the requirement. Those entities that do not have physically separated control centers or deploy field staff will not be able to provide such evidence, and hence will fail the two requirements unless they incur in unnecessary expense to install internal interpersonal communication capabilities for communication within the control room, which serves no purpose and adds no value at all.

To address the intent of the FERC directive, which we interpret to be requiring internal interpersonal communication capabilities for physically separated control centers or between control center and field personnel within the same entity, we propose the following revisions to R12 and R13:

“R12. Each Reliability Coordinator, Transmission Operator, Generator Operator, and Balancing Authority shall have internal Interpersonal Communication capabilities for the exchange of information between geographically separate control centers within the same functional entity, or between a control center and field switching personnel, that is necessary for the Reliable Operation of the BES.”

“R13. Each Distribution Provider shall have internal Interpersonal Communication capabilities for the exchange of information between geographically separate control centers within the same functional entity, or between a control center and field switching personnel, that is necessary for the Reliable Operation of the BES.”

Alternatively, these requirements can be rearranged as follows:

“R12. Each Reliability Coordinator, Transmission Operator, Generator Operator, and Balancing Authority shall have internal Interpersonal Communication capabilities between geographically separate control centers within the same functional entity, or between a control center and field switching personnel, for the exchange of information that is necessary for the Reliable Operation of the BES.”
Similar rearrangement for the proposed R13.

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

Comments:
Suggest a Guidelines and Technical Basis Section be added in COM-001-3 to address the following:

A guideline and technical basis or specific Requirement language for Requirements R12 and R13 to explain and incorporate the FERC Directive that the concern is communication between “(1) communications between geographically separate control centers within the same functional entity; and (2) communications between a control center and field personnel.”

This Standard requires that an Entity establishes the capability to exchange information. The Standard intentionally requires the capability for Interpersonal Communication and not the ability for engaging in Interpersonal Communication. Capability represents only a potential to engage in communication. By using the word capability the Standard allows for the communication medium to be non-functioning from time to time.

Interpersonal Communication is defined in the NERC Glossary as “Any medium that allows two or more individuals to interact, consult, or exchange information.” There is no restriction on the types of medium that can be used. Common types are phone system, wireless, radio, written (paper and electronic) and in-person.

For R1 thru R8 the Interpersonal Communication capability is established between functional entities and not based on corporate affiliation. For example if Company A is registered as a TOP and RC. The TOP function and RC function operate from different rooms in the same building. Then Interpersonal Communication capability is required and an alternate Interpersonal Communication capability is designated.

The Standard does not require that Interpersonal Communication capability is functioning 100% of the time. When the primary Interpersonal Communication capability fails the entity switches to the designated alternate Interpersonal Communication capability with recognition that there will be a point in time when no designated capability is available.

This Standard does not require the bailout of a specific type of communication infrastructure.

Communication capabilities are the basic “tools” needed for applicable entities to perform their functions. As such, they are more suited for inclusion in the Organization Certification requirements, not Reliability
standards which are intended to drive the right behavior to mitigate specific risks or achieve specific reliability outcomes. We urge the SDT and NERC to consider moving the proposed additional requirements and/or the entire COM-001 to Organization Certification Requirements.

Please provide a Guidance Section with the following wording and provide the answers to the following questions:

QUESTION: An open question under this proposed standard is whether both alternate technologies AND alternate forms of communications can serve as back-up?

Same Type - That is, can alternate technology substitute voice for voice; i.e., digital phone Voice Over IP (VOIP) is a viable alternative for dedicated analog lane lines or light-pipe lines?

QUESTION: May we assume that an acceptable Alternative Interpersonal Communications capability is not necessarily the same type in the form of an alternate technology?

May a different types of communications serve as back-up; i.e., can cell phone voice be used as a substitute for or be backed-up by internet-based e-mail communications?

We suggest that the SDT, for the sake of clarification, add a Technical and Guidance Section of the Standard. For example, add the following suggested wording:

**Guidance Section**

**Requirement R4:**

*Same Type, Different Technologies* - Alternative Interpersonal Communication capabilities are many and evolving with the changing technology. Current examples of viable Alternative Interpersonal Communication capabilities could include digital phone (Voice Over IP), Satellite phone, and/or a Cell Phone network that could individually or collectively serve as a viable alternate/back-up for a dedicated landline fiber-optics voice connection.

*Different Types, Different Technologies* - A viable Alternative Interpersonal Communication capability for a dedicated direct-digital computer communications protocol might include internet-based e-mail communications. Different types and technologies may be mixed in communicating with different entities. GOP back-up could be cell phone, while the RC back-up could be e-mail.

**Requirement R9** – Each Reliability Coordinator, Transmission Operator, and Balancing Authority must test its Alternative Interpersonal Communication capability at least once each calendar month. If the test is unsuccessful, the responsible entity must initiate action to repair or designate a replacement Alternative Interpersonal Communication capability within **2 hours**.

**QUESTIONS:**

- Is the expectation that the repair be “initiated” within two (2) hours and is this realistic?
- What is “initiate action to repair?” If the system operator sends an e-mail repair request to IT, is that sufficient to “initiate action to repair?”
- If action cannot be initiated within two (2) hours, is this a reportable event?
- What happens if the system operator must take other specific actions to follow an RC or TOP reliability directive, e.g., to protect system reliability, then does the entity get an exception, a free “pass,” on the two (2) hour requirement?
- Would the SDT accept a longer initiation time, e.g., four (4) hours?
Would the SDT accept an exception clause for reliability directives and system emergencies, i.e., add the wording to R9 “...initiate action to repair within 2 hours, except during a declared system emergency or unless required to follow RC, BA or TOP directive(s) to protect, maintain or restore system reliability.”

There is an error in the R9 and R10 VSL table that has been carried over from the COM-001-2 version. In the R9 Lower VSL column, it states “...but failed to initiate action to repair or designate a replacement Alternative Interpersonal Communication in more than 2 hours and less than or equal to 4 hours upon an unsuccessful test”. The RC, TOP, BA did not fail to initiate the action, they did the action, but not within the time required. The VSL should be rephrased to remove the word “failed”. The same comment applies to R9 Moderate, High and Severe VSL.

A similar comment applies to the R10 VSL. The RC, TOP and BA did not fail to notify the entities identified in R1, R3 and R5, they did it, just not in the time required. It should read “...notified the entities in R1, R3 and R5 respectively upon detection of a failure of its Interpersonal Communication capability, but in a delay of more than 60 minutes and less than or equal to 70 minutes). The same comment applies to R10 Moderate, High and Severe VSL.