

Individual or group. (63 Responses)

Name (35 Responses)

Organization (35 Responses)

Group Name (28 Responses)

Lead Contact (28 Responses)

IF YOU WISH TO EXPRESS SUPPORT FOR ANOTHER ENTITY'S COMMENTS WITHOUT ENTERING ANY ADDITIONAL COMMENTS, YOU MAY DO SO HERE. (10 Responses)

Comments (63 Responses)

Question 1 (43 Responses)

Question 1 Comments (53 Responses)

Question 2 (52 Responses)

Question 2 Comments (53 Responses)

Individual
dd
ddd
Agree
sdaDd
Individual
Martyn Turner
LCRA Transmission Services Corporation
No
The definition of "Operations Support Personnel" is too vague. Specifically, the portion of the definition containing "in direct support" is critical to the determination of exactly what positions fall under this new definition. Especially critical is the context in which term "direct" is to be employed. Nowhere in the standard is this critical terminology defined. From dictionary.com the definition of direct is: 1) to manage or guide by advice, helpful information, instruction, etc. 2) to regulate the course of ; control 3) to administer; manage; supervise 4) to give authoritative instructions to; command; order or ordain 5) to serve as a director in the production or performance of (a musical work, play, motion picture, etc.). Obviously the intent of the Standard is not address musical or theatre productions so #5 is easily dismissed. But what of the other four possibilities? Does someone who orders an operator to perform an action included under this new requirement? What about an individual that provides advice? What about someone that writes a procedure pertaining to load shedding? Are procedure writers and all possible contributors and/or reviewers to be

included under the umbrella of “Operations Support Personnel”? If an individual not in a real-time position volunteers to write a procedure or provides input on one that affects real-time operations, do they instantly fall under the auspices of this standard? Do managers of System Operators fall under this standard? These are but a tiny fraction of the possibilities created by not succinctly and clearly defining the phrase “in direct support”. Vague or interpretive guidance creates a situation where Transmission Operators and auditors alike are left to apply subjective metrics in order to determine compliance. Unfortunately, those metrics may not be the same leading to confusion and possible noncompliance or even failure to recognize noncompliance. Consider changing the language to read: Operations Support Personnel: Individuals, as identified by the Reliability Coordinators, Balancing Authorities, Transmission Operators, or Transmission Owners, who perform outage coordination or assessments, or who determine SOLs, IROLs, or operating nomograms, in direct support of Real-time, reliability-related tasks performed by System Operators. Individuals that directly support Real-Time, reliability-related tasks performed by System Operators shall be defined with respect to this standard, as those individuals that provide information, data, assessments, or outage coordination that are impactful at the point of execution by operating personnel. Support functions that do no more than to review proposed changes to procedures, provide advice on processes, or are tangentially involved in outage coordination do not fall under the definition of Operations Support Personnel with respect to this standard. For outage coordination, only those positions that serve to create finished schedules that direct the removal of equipment from service and coordinate those schedules with a Reliability Coordinator shall be considered as applicable to this definition. Individuals that serve as the point-of-contact between a Reliability Coordinator and real-time operations shall be considered as Operations Support Personnel. Persons in administrative roles or that serve to coordinate activities between work groups and the personnel that complete and submit outage schedules shall not be considered as Operations Support Personnel.

No

The negative response is due to several factors: 1) The 24 month time frame required in 5.1 is insufficient. Training personnel in the organizations affected by this proposed standard typically have multiple duties. Speaking from personal experience much can happen in 24 months that affect the amount of time and effort that can be applied towards meeting this standard: retirements and terminations require new operators to be hired and trained, existing continual training, administrative duties, personal/family constraints, etc. In addition, most training personnel were very familiar with the tasks performed by system operators and already had training programs and content in place that addressed them when PER-005-1 was introduced. That information facilitated the transition to PER-005-1 simplifying it to a great extent. The new positions that would fall under this standard are largely outside existing

training programs requiring a great deal more research, content production, and training delivery. Limiting the time to implement all of that to 24 months threatens quality as trainers potentially would cut corners in order to ensure completion. A 24 month time limit in no way assures that all 24 months would be available to implement this standard. Expand the time limit to 36 months at a minimum. 2) R4 is ill-defined and vague. The requirement dictates the use of a Systematic Approach to Training (SAT) with respect to Operations Support Personnel within the limits of the R-R tasks they impact previously identified for system personnel. But to limit the scope of an SAT to just those connections defies the very definition of “systematic” and the use of an SAT itself for that matter since that process is used to find ALL tasks associated with a given position not those predetermined by a very limited scope of some sort. For example, job analysis surveys are often used to determine which tasks operating personnel themselves consider to be important by employing simple ratings scales. But limiting such surveys, and thus the SAT itself, to tasks only associated with tasks performed by others predetermines the outcome to a significant extent. The resulting job task analysis (essential to the successful implementation of an SAT) would be incomplete. Furthermore, requiring an SAT for Operations Support Personnel goes far beyond what is really necessary-training support personnel on how they impact R-R tasks, especially how the information they use, data they provide, or coordination impacts real-time operating personnel R-R tasks. An application of SAT would require identification of ALL tasks that a given individual performs that could impact an R-R task. Not how they impact tasks. That is a substantive difference with respect to content development. Potentially, the results would be voluminous. Proposed change: Do away with the requirement of the SAT in R4 and require the organization to identify the tasks impacted and train Support Personnel on how their role impacts those tasks. That would make R4 straight forward and easy to manage.

Individual

Chris Scanlon

Exelon

Yes

Exelon supports the proposed definitions and is voting Affirmative. We do however remain concerned that “coordination” could be construed to include work done by a wide range of personnel not involved in direct support of Real-time, reliability-related tasks performed by System Operators.

Yes

Group

MRO NERC Standards Review Forum

Russel Mountjoy-Secretary

No

The NSRF does not agree with the definition of System Operator that the SDT is proposing. The NSRF does not agree with having definitions that are only applicable to a single Standard; System Personnel and Operations Support Personnel. Upon review, we have found the Drafting Team Guidelines, dated April 2009. It does give guidance as stated below: The SDT should avoid developing new definitions unless absolutely necessary. There is a glossary of terms that has been approved for use in reliability standards. Before a drafting team adds a new term, the team should check the latest version of the Glossary of Terms for Reliability Standards to determine if the same term, or a term with the same meaning, has already been defined. If a term is used in a standard and the term is defined in a collegiate dictionary, then there is no need to also include the term in the NERC Glossary of Reliability Terms. The addition of an adjective or a prefix to an already defined term should not result in a new defined term. It is very difficult to reach consensus on new terms. If a simple phrase can be used in a standard to replace a new term, then the drafting team should consider using the phrase rather than trying to obtain stakeholder consensus on the new term. Each drafting team is charged with developing a Standard that provides clarity by being properly written for the applicable entity to understand without added guidance, in this case, Standard applicable definitions. Recommend that the SDT either propose to add System Personnel and Operations Support Personnel to the Glossary of Terms or rewrite the Requirements so that Standard applicable definitions are not needed within PER-005-2.

Yes

NSRF does not believe Requirement 4 is appropriate for all listed Applicable Entities all of the time. Requirement 4 implies that ALL Applicable Entities shall develop and implement training for their Operations Support Personnel that is based on the company-specific, real-time reliability-related tasks performed by the System Operators found in Requirement 1.1. However, outage planning functions for BES Facilities for smaller, vertically-integrated utilities would be performed in the long-term horizon and would need the approval of the Reliability Coordinator. The smaller BA's, TO's, and TOP's don't perform the actual outage planning. They rely on the Reliability Coordinator to perform the outage planning because these smaller entities may not have the tools required for this kind of planning. Furthermore, the smaller vertically-integrated utilities are not likely to own or operate any BES Facilities that carry IROL. There seems to be some added confusion with the clean and red-line versions of the Draft Standard. The red-line version has a Requirement 6 for the GOP to use the SAT to develop and deliver training. This corresponds to Requirement 5 in the clean version. The inclusion of the Transmission Owner local transmission control center operator personnel in the Applicability Section 4.1.4.1 needs to be further addressed. On page 21 in the NERC Functional Model, the Transmission Owner owns its transmission facilities and provides for the maintenance of

those facilities. This section on Transmission Owners goes on to state that “the organization serving as Transmission Owner may operate its transmission facilities or arrange for another organization (which may or may not be a Transmission Owner) to operate and/or maintain its transmission facilities. “ Adjacent to this statement in the NERC Functional Model is a reference to see “Transmission Operator,” Section “Bundling with the Reliability Coordinator or Transmission Owner.” On page 17 of the NERC Functional Model, a description is provided of instances when the Transmission Owner and Transmission Operator are “bundled” in an RTO situation. It states that the RTO members would be responsible for complying with all Reliability Standards associated with the Transmission Operator, and would be NERC-certified as such. Therefore, the issue of having Transmission Owner local transmission control center operator personnel included in Applicability Section 4.1.4.1 is unnecessary. These local transmission control center operator personnel are actually un-registered Transmission Operators and should be addressed through the registration process. If they “exercise control over a significant portion of the Bulk-Power System, and implement predefined operating procedures in a timely basis” this is no different than what the NERC Functional Model says about Transmission Operators: “The Transmission Operator operates or directs the operation of transmission facilities, and maintains local-area reliability, that is, the reliability of the system and area for which the Transmission Operator has responsibility.” Operating transmission facilities to maintain reliability is a real-time function of the Transmission Operator. In Order No. 742 at P 62, we agree with the Commission that “omitting the local transmission control center personnel from the PER-005-1 training requirements creates a reliability gap.” However, this reliability gap should be corrected through the proper registration of the personnel performing Transmission Operator functions, not through the undefined “local transmission control center operator personnel” classification. In section 4.1.5.1, under Applicability: Suggest that the word “any” should be struck and replace with the word “independent” or words “independent and specific” to better tie in with the FERC intent from Order 693 and 742 which seemed to be focused on individuals who would receive a general direction and would then have to “understand” those instructions and develop specific dispatch instructions for their plants to maintain system reliability. This seems different than normal internal plant adjustments that might be required to meet a requested MISO dispatch, especially when there are multiple generators at one plant complex.

Individual
William H. Chambliss
Virginia State Corporation Commission
Yes
Yes

Individual
Scott Bos
Muscatine Power and Water
Yes
<p>MP&W does not agree with having definitions that are only applicable to a single Standard: System Personnel, System Operator and Operations Support Personnel. In SDT guidelines from April of 2009, it states that "the SDT should avoid developing new definitions unless absolutely necessary. There is a glossary of terms that has been approved for use in reliability standards. Before a drafting team adds a new term, the team should check the latest version of the Glossary of Terms for Reliability Standards to determine if the same term, or a term with the same meaning, has already been defined. If a term is used in a standard and the term is defined in a collegiate dictionary, then there is no need to also include the term in the NERC Glossary of Reliability Terms. The addition of an adjective or a prefix to an already defined term should not result in a new defined term. It is very difficult to reach consensus on new terms. If a simple phrase can be used in a standard to replace a new term, then the drafting team should consider using the phrase rather than trying to obtain stakeholder consensus on the new term."</p>
No
<p>MP&W does not believe Requirement 4 is appropriate for all listed Applicable Entities all of the time. Requirement 4 implies that ALL Applicable Entities shall develop and implement training for their Operations Support Personnel that is based on the company-specific, real-time reliability-related tasks performed by the System Operators found in Requirement 1.1. However, outage planning functions for BES Facilities for smaller, vertically-integrated utilities would be performed in the long-term horizon and would need the approval of the Reliability Coordinator. The smaller BA's, TO's, and TOP's don't perform the actual outage planning. They rely on the Reliability Coordinator to perform the outage planning because these smaller entities may not have the tools required for this kind of planning. And likewise, the smaller, vertically-integrated utilities may not possess the tools or have the staff required to perform their own assessments but participate in assessments performed by their Planning Authority. Furthermore, the smaller vertically-integrated utilities are not likely to own or operate any BES Facilities that carry IROL. The inclusion of the Transmission Owner local transmission control center operator personnel in the Applicability Section 4.1.4.1 needs to be further addressed. On page 21 in the NERC Functional Model, the Transmission Owner owns its transmission facilities and provides for the maintenance of those facilities. This section on Transmission Owners goes on to state that "the organization serving as Transmission Owner may operate its transmission facilities or arrange for another organization (which may or may not be a Transmission Owner) to operate and/or maintain its transmission facilities." Adjacent</p>

to this statement in the NERC Functional Model is a reference to see “Transmission Operator,” Section “Bundling with the Reliability Coordinator or Transmission Owner.” On page 17 of the NERC Functional Model, a description is provided of instances when the Transmission Owner and Transmission Operator are “bundled” in an RTO situation. It states that the RTO members would be responsible for complying with all Reliability Standards associated with the Transmission Operator, and would be NERC-certified as such. Therefore, the issue of having Transmission Owner local transmission control center operator personnel included in Applicability Section 4.1.4.1 is unnecessary. These local transmission control center operator personnel are actually un-registered Transmission Operators and should be addressed through the registration process. If they “exercise control over a significant portion of the Bulk-Power System, and implement predefined operating procedures in a timely basis” this is no different than what the NERC Functional Model says about Transmission Operators: “The Transmission Operator operates or directs the operation of transmission facilities, and maintains local-area reliability, that is, the reliability of the system and area for which the Transmission Operator has responsibility.” Operating transmission facilities to maintain reliability is a real-time function of the Transmission Operator. In Order No. 742 at P 62, we agree with the Commission that “omitting the local transmission control center personnel from the PER-005-1 training requirements creates a reliability gap.” However, this reliability gap should be corrected through the proper registration of the personnel performing Transmission Operator functions, not through the undefined “local transmission control center operator personnel” classification.

Group

SERC OC Review Group

Stuart Goza

Yes

We support the SDT’s clarifications included in these two definitions. The specificity of the wording narrows the applicability of the requirements to only certain, clearly-defined individuals.

Yes

The Standard Drafting Team is to be commended for an excellent job incorporating the diverse and often conflicting comments collected from the first posting. We generally agree with the revised purpose statement and the tightened language of the requirements to mandate a systematic approach to training for all applicable personnel. In the Applicability Section (4.1.4.1) the identification of TO personnel to whom the standard applies still seems ambiguous. “Protecting safety, assets and adhering to regulations” are crucial responsibilities which are not unique to control center operators. And the TO control center personnel may

or may not act independently. To better identify TO personnel who must be trained using systematic approach, we suggest language more consistent with FERC Order 742. Suggested re-write for 4.1.4.1: "Transmission Owner (TO) that has personnel at a facility, excluding field switching personnel, who exercise control over a significant portion of the Bulk Electric System. Such personnel may carry out tasks that require Real-time operation of the BES under the direct supervision of the registered Transmission Operator. This TO personnel may also act independently to implement pre-defined operating procedures." As written R5 states: "Each Generator Operator shall use a systematic approach to develop and deliver training to its personnel described in Applicability Section 4.1.5 of this standard on the impact of their job function(s) as it pertains to reliable operations of the BES during normal and emergency operations. Suggested re-write for R5: Each Generator Operator shall use a systematic approach to develop and deliver training to its personnel described in Applicability Section 4.1.5 of this standard on the impact of their job function(s) as it pertains to reliable operations of the BES. (delete: during normal and emergency operations.) The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Review Group only and should not be construed as the position of the SERC Reliability Corporation, or its board or its officers.

Group

Arizona Public Service Company

Janet Smith, Regulatory Affairs Supervisor

Yes

Yes

Individual

Angela P. Gaines for Tracy North

Portland General Electric Company

No

R.4 is no longer viable as written. The Systematic Approach to Training (SAT) is primarily a PERFORMANCE BASED ISD model. This means that the training developed using this model is intended to ensure that personnel perform their required job tasks correctly. One should not use this system to simply inform personnel of "the impact of their job function". It might be determined through job & task analysis that "knowledge of the impact on Reliability-Related Tasks" is indeed an important element of proper operations support task performance. However, the SAT process is not designed to stop at that point and focus solely on one single knowledge item. This is because the focus of SAT is CORRECT TASK PERFORMANCE. If we feel that "knowledge of the impact" was important enough for us to write a requirement

specifically for it, then we must assume that lack of this knowledge could lead to incorrect performance. But, if we don't expect the performance of the tasks to be negatively impacted, then we mustn't waste our time writing a requirement for it. Neither should we waste our time implementing the SAT process around one single knowledge item. Ultimately we have to ask ourselves what we are trying to accomplish. Does FERC expect that we will train support personnel to properly perform reliability related job functions or to just ensure they are properly informed about their impact. If it's simply to have them understand the impact, then SAT is not the proper tool. If we know that improper performance of support tasks such as SOL and IROL determinations impact reliability, then those personnel should be trained in the same manner as system operators. My suggestion is that R4 wording be returned to the prior version.

Group

Northeast Power Coordinating Council

Guy Zito

No

Suggest revising the proposed definition of System Operator to: System Operator: An individual at a control center of a Balancing Authority, Transmission Operator, or Reliability Coordinator, who monitors and controls and directs the operation of the Bulk Electric System in Real-time. Without more explicit wording, personnel at locations other than an "individual at a control center" who are not system operators may be included under that definition. Distribution related field, substation and satellite location personnel should not be classified as System Operators by an overly broad definition. A System Operator performs two critical functions: monitoring and control (of the status of Bulk Electric System assets). Anyone who does not perform these functions must rely on a System Operator to perform them, and is not operating independently. They are not System Operators.

No

The Applicability section of the standard related to Transmission Owners and Generator Operators requires clarification. In the Applicability section, for the Transmission Owner the list of tasks in 4.1.4.1 do not "define" the applicable Transmission Owner personnel. The protection of Transmission Owner assets and personnel safety should be outside the reach of NERC standards. Propose the following revision to the wording in the Applicability Section 4.1.4: 4.1.4 Transmission Owner that has: 4.1.4.1. Personnel at a facility that acts as a centralized Control Center for the Transmission Owner who interact with their Reliability Coordinator, Balancing Authority or Transmission Operator. Field switching personnel or other personnel who do not act independently of this centralized Transmission Owner Control Center are exempt. The definitions should not be specific to this standard. They should be

included in the NERC Glossary of Terms Used in Reliability Standards. The rigid definitions create confusion as to their application within each entity. It is very difficult to identify which position a requirement would apply to within a specific organization. Suggest that each entity define the applicability of PER-005-2 within its own organization; for example, any position that has a task that has an impact on the operations of the main transmission system.

Pertaining to Section 4.1.5 Generator Operator, suggest changing “may” to “has the authority”. It is possible that the GOP may receive specific dispatch instructions in some instances, but in other instances be allowed the flexibility to develop dispatch instructions based on RC, BA or TOP guidance. Additionally, “plant operators” needs to clarify that it only applies to dispatch instructions for BES generators, and does not include dispatch instructions for non-BES generation plant operators. From Section 4.1.5, “Dispatch personnel at a centrally located dispatch center who receive direction from their Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner and has the authority to develop specific dispatch instructions for BES generator plant operators under their control.” This use of “personnel” does not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions, without making any modifications. Remove footnotes 2 and 3 as they are unnecessary. Repetition of Standard Only Glossary Terms in the footnotes is not necessary. In Part 1.1, the additional phrase “based on a defined and documented methodology” is of concern. The training program for the responsible entity needs to be based on “the list of Bulk Electric System (BES) company specific Real-time reliability-related tasks”. Part 1.1 thus should end at the word “tasks”.

Adding the phrase “based on defined and documented methodology” does not add any value to the requirement, but creates an uncertainty as to “who defines the methodology” and with what criteria is the methodology defined. In the SDT’s Summary Consideration report, there is no mention of any comment made to this part in the previous posting, thus providing no basis for this addition. We suggest removing this phrase from Part 1.1. Requirement R2 requires that each RC, BA, TOP, and TO shall verify, at least once, the capabilities of its System Personnel. The Implementation Plan states that entities that were not previously subject to PER-005-1 must have verified its System Personnel’s capabilities to perform each of its assigned Real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, prior to the effective date of the standard. Requiring entities to perform certain activities prior to the effective date of the standard means in practice advancing its effective date, which is not possible in certain jurisdictions where requirements cannot be legally enforceable prior to the standard's effective date. An entity meeting the requirement before the effective date may constitute good practice but an entity cannot be held non-compliant for not doing it. Suggest changing to: Entities that were not previously subject to PER-005-1 must have verified its System Personnel’s capabilities to perform each of its assigned

Real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, within one year of the standard becoming in force within their respective jurisdiction. The suggested 1 year could be reduced to 6 months if felt appropriate. Regarding R5, these personnel do not need to be trained on the “impact of their job function(s) as it pertains to reliable operations of the BES during normal and emergency operations.” The intent is to train these personnel “on their job function(s) as it (they) pertain(s) to...”. Also regarding Requirement R5, the words “to training” are missing after “systematic approach”. The training in R5 is required regardless of the personnel’s capability since there is no requirement to assess the capabilities of the personnel for the identified tasks. Suggest adding language to allow for a demonstration of capabilities on the required tasks similar to R2. Additionally, a grace period similar to R2.1 should be added to R5 to allow time between a change in the training program to the time training is required to be completed. Requirement R4 should be deleted in its entirety. From page 4 of the White Paper: “The argument for not including EMS personnel in the training standard at this time is based on a report provided by the Event Analysis Subcommittee (EAS). The EAS worked with the NERC Event Analysis (EA) staff to review the events that have been cause-coded since October 2010. The database has over 263 events; ... [and] only two were deemed to be a training issue. Therefore, based on the information, the EAS and PER ad hoc group do not believe it is necessary at this time to require EMS support personnel to receive the level of training required of a BA, Reliability Coordinator (RC), and TOP by NERC standard PER-005.” Requirements R1, R4 and R5 stipulate the use of systematic approach to training to develop and implement training or training program (note the inconsistent wording among them) for their respective group of personnel. While R4 and R5 contain a HIGH VSL for failing to use systematic approach to training to develop and implement the training program, R1 does not have a similar VSL. Suggest adding a HIGH VSL to R1 to address this. From the Compliance Input document: “Question 2: In Requirement R3, does an entity that has one or more IROLs have 12 months to conduct simulation technology training when it obtains another IROL? Compliance Response to Question 2: No, if an entity currently has one or more IROLs, it has the ability to conduct simulation technology. The 12 months applies only to an Entity that did not have any IROLs but obtains an IROL for the first time.” Please clarify that the training is in general response to IROLs and not specific to each individual IROL. Also from the Compliance Input document: “Following final approval of the Reliability Standard, Compliance will develop the final Reliability Standards Auditor Worksheet (RSAW) and associated training. Attachment A represents the version of the proposed standard requirements referenced in this document.” This is inconsistent with both the SPM From Section 3.6 of the SPM: “Collectively, each drafting team: • Drafts proposed language for the Reliability Standards, definitions, Variances, and/or Interpretations and associated implementation plans. • Develops and refines technical

documents that aid in the understanding of Reliability Standards. • Works collaboratively with NERC Compliance Monitoring and Enforcement Staff to develop Reliability Standard Audit Worksheets (“RSAWs”) at the same time Reliability Standards are developed. • etc...”

Group

Quality Training Systems

Stefanie Pressl

No

Comment 1: M1.2 Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall have available for inspection training materials, as specified in Requirement R1 part 1.2. From the Implementation Plan, we understand that training materials are required only for training that has been delivered. That is, entities need not have training materials developed as of the effective date of the standard if they have no personnel being trained at that time. We suggest adding clarifying verbiage to M1.2 as follows: M1.2 Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall have available for inspection training materials, as specified in Requirement R1 part 1.2, for all training that has been delivered. Comment 2: R4. Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall use a systematic approach to training to develop and implement training for its Operations Support Personnel on the impact of their job function(s) to those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1. Suggested Revision: Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall use a systematic approach to training to develop and implement training for its Operations Support Personnel on the tasks they perform that may impact the performance of the Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1. Educating someone on the impact of their job function is quite different from teaching them how to do their jobs. The former can be satisfied by some form of “awareness training” but the latter refers to performance-based training (i.e., SAT). While it may be reasonable to limit this requirement to job tasks that support real-time reliability-related tasks of the system operators, FERC Order 693 states that the training should be on tasks that impact real-time reliability related tasks of the system operators, not simply be about the impact of their job function. FERC Order 693 Paragraph 1375: 1375. Several commenters express concern that the operations planning and operations support staffs will be required to be trained on the transmission operators’ responsibilities. The Commission clarifies that this is not the case. Training programs for operations planning and operations support staff must be tailored to the needs of the function, the tasks performed and personnel involved. The “Rationale for R4” states “It does not require training on the actual Real-time reliability-related tasks conducted by the System Operator.” It later states

“The entity may use the [task] list created from requirement R1 part 1.1 and select the reliability-related tasks that Operations Support Personnel support and therefore should be trained on.” We think this language is contradictory and will cause confusion to the industry. We do not believe NERC is suggesting that the support personnel should be trained on selected tasks from the task list created pursuant to R1.1. Rather, we believe NERC is trying to say (or should be saying) that support personnel should be trained on tasks that they perform that support reliability-related tasks of System Personnel. Comment 3 R5. Each Generator Operator shall use a systematic approach to develop and implement training for its personnel described in Applicability Section 4.1.5 of this standard on the impact of their job function(s) as it pertains to reliable operations of the BES during normal and emergency operations. Suggested Revision: Each Generator Operator shall use a systematic approach to develop and implement training for its personnel described in Applicability Section 4.1.5 of this standard on the tasks they perform that may impact reliable operations of the BES during normal and emergency operations. As explained for R4 above, educating someone on the impact of their job function is quite different from teaching them how to do their jobs. The former can be satisfied by some form of “awareness training” but the latter refers to performance-based training (i.e., SAT). In contrast to our reaction to R4, we do not believe that limiting Generator Operator training to job tasks that support real-time reliability-related tasks of the system operators is sufficient. There may be real-time tasks performed by GOP dispatch personnel that are independent of any system operator tasks but have an impact on the reliability of the bulk electric system nevertheless. In the “Rationale for R5” it states, “This requirement does not necessitate a systematic approach to training process that is as comprehensive as that used for RCs, BAs, and TOPs.” We are rather concerned about this statement. What is a systematic approach to training that is less comprehensive than that required for RCs, BAs, and TOPs? What is okay to leave out of the process? We would argue that the systematic approach should not be less comprehensive, but by applying that approach correctly the results will likely be narrower in scope. FERC Order 693, Paragraph 1363 “...the experience and knowledge required by transmission operators about bulk power system operations goes well beyond what is needed by generator operators; therefore training for generator operators need not be as extensive as that required for transmission operators.” The above passage says nothing about the SAT process not being as comprehensive as what is used for transmission operators; it just suggests that the resulting training will be less comprehensive, with which we agree. Comment 4 Task Qualifications (Re: R4 and R5) There is no explicit requirement that the support personnel or generator operators be qualified on the tasks they perform. However, in the Application Guidelines, it states “Any systematic approach to training will determine.... if the learner can perform the real-time reliability-related tasks acceptably in either a training or on-the-job environment.” So, neither R4 nor R5 (nor any

subpart thereof) mentions task qualifications, but the Application Guidelines state that task qualifications are a required part of any SAT process. With this information alone, we would be inclined to say that task qualifications are required, but when one considers that R1 specifically mentions task qualifications but R4 and R5 do not, it will likely lead people to believe that task qualifications are not required for R4 and R5. This lack of parallelism within the standard is likely to cause confusion. It is our professional opinion that task qualifications must be required; otherwise, we will have training with no proof of mastery. Therefore we suggest adding, at a minimum, the equivalent of R2 and R2.1 to both R4 and R5. Ideally, the standard should have greater parallelism across functional entities by also including the equivalent of R1.1 through R1.4 to both R4 and R5.

Individual

Thomas Foltz

American Electric Power

No

AEP does not recommend using terms defined only within a standard and not including them in the NERC Glossary of Terms. This is especially troubling given that the “local term” references “global terms” which *are* specified in the NERC glossary. Terms should only be capitalized when they are included in the NERC Glossary. It might be possible to document this well enough in the applicability section without having to create locally defined terms. In addition, if local terms are indeed used, those terms should be referenced within the Applicability section. For the definition of Operations Support Personnel, we recommend removing the word “or” from “outage coordination or assessments” so that it reads “who perform outage coordination assessments...”.

No

R 4.1: The most recently proposed changes appear to be a step back in terms of clarity. The description provided to identify the personnel actually states more clearly who is *not* included rather than exactly who *is*. 4.1.5.1: GOP personnel at a centrally located dispatch center would not normally make modifications to directions issued by the RC, BA, TO or TOP unless such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances, the GOP operator should immediately inform the issuer of the directive/instruction of the inability to perform the directive so that the issuer may implement alternate remedial actions. The exception to this would be instructions, not directives, issued by the market operator where the GOP operator has the authority to follow or not follow instructions based on the GOP operators determination of financial impacts associated with market instructions. Normally instructions from the RC, TOP or TO are reliability issues and the GOP operator would not modify those instructions unless absolutely

necessary due safety or regulatory concerns, and notification would be made to the RC, TOP or TO. This would also be the case with the BA unless market instructions are also issued by the BA operator. In that case, modifications might be necessary and acceptable. Perhaps clarifications on the type of instruction whether reliability or market or both should be considered.

Group

ACES Standards Collaborators

Brian Van Gheem

No

(1) We appreciate the Standard Drafting Team's efforts in attempting to address the applicability issues identified in NERC Standard PER-005-1. However, we disagree with its approach to define Standard-specific terms instead of pursuing the creation of new terms within the NERC Glossary of Terms. As instructed within the NERC Drafting Team Guidelines that were revised in April 2009 and endorsed by the NERC Standards Committee, the Standard Drafting Team should avoid developing new definitions for Standard revisions. We feel that introducing the terms "System Personnel" and "Operations Support Personnel" were not absolutely necessary, but rather done to address a localized variance with "local transmission control centers." Consequentially, this expanded the applicability of this Standard to include Transmission Owners. A better approach to resolving this variance would be to remain in-bounds within the NERC Reliability Functional Model and use the NERC Rules of Procedure to assign the proper NERC Functional Entity and applicable compliance delegation, respectively. This is a registration issue that could be better handled by compliance staff when facts and circumstances arise. This alternative is equally effective and these proposed definitions do not need to be added to the standard. (2) If the Standard Drafting Team had a concern regarding entities that act independently of Reliability Coordinators and Transmission Operators based on specific system conditions, then the error lies within the NERC Reliability Functional Model and should be addressed there accordingly. Our recommendation is to remove all Standard-specific definitions altogether.

No

(1) We appreciate the Standard Drafting Team in attempting to align outstanding FERC Directives and NERC Projects with this revision to NERC Standard PER-005. We also welcome the Standard Drafting Team's reference to the systematic approach to training process by removing the 32 hour requirement for emergency operations training. Likewise, we appreciate the Standard Drafting Team's consideration of expanding the response time for entities that identify or inherit Interconnection Reliability Operating Limits to 12 months. (2) However, we have several concerns with the direction taken in this revision. The title of the

Standard should simply state that this is a “Personnel Training” standard and avoid references to “System” or “Operations” altogether. It should be up to each registered entity to determine which personnel is applicable and should receive required training based on the job function. (3) The use of systematic approach to training is unclear and industry needs additional guidance on what is expected for compliance purposes. The drafting team should provide additional guidance in the technical justification section of the Standard or provide examples in the PER-005 white paper. (4) The applicability criteria identified for Transmission Owners and Generator Operators in Section A should be identified by the individual entity, as in-line with a systematic approach to training. The current approach of applicable personnel creates confusion and opportunities for inconsistent compliance approaches by regional auditors. (5) The measures identified in this Standard create unnecessary burdens for entities to achieve compliance. The RSAW states that an entity should maintain an organizational chart that identifies which employees are considered “System Personnel” to meet compliance with the standard. This is a zero-defect approach to compliance. We are concerned that auditors would argue that certain personnel should have been included as applicable employees that must receive training and find a possible violation for each instance. The Standard should focus on internal controls and management practices consistent with NERC’s Reliability Assurance Initiative (RAI). This is a subjective measure and the auditor is given too much discretion to determine which personnel are applicable to the Standard. Instead, it should be up to the registered entity to determine the applicable personnel. The Standard Drafting Team should revise the Standard to allow the entity to determine appropriate personnel and clarify what evidence is permissible, by providing examples in the measures and the RSAW that are consistent with the RAI. (6) For Requirements R1 and R4, we recommend modifying the scope of these requirements and their subparts. We believe R1 and R4 are proposing unnecessary requirements for an entity to review its training program each calendar year. This is an administrative task that meets Paragraph 81 criteria. (7) The training standard should focus on certified operators, which are required to take CEH training. The industry already trains its critical personnel through the use of CEH Providers. These Providers are already subject to annual reviews based on NERC’s training and continuing education policies. This does not need to be reinforced in a reliability standard that is subject to enforcement actions. Requiring a separate review of an entity’s training plan, which is subject to compliance, is redundant and unnecessary. We recommend that the SDT consider equally efficient alternatives to this requirement, such as NERC’s policies that are already in place. (8) For Requirement R3, we recommend including “table top” simulated exercises as a method of simulation for applicable personnel. We do not agree that simulation technology is the only way to train for operating the Bulk Electric System. Simulated exercises, such as the NERC-approved GridEx, provide industry with valuable training to adapt and respond to

disturbances. Rather than addressing the issue with the definition of “simulation technology” within Requirement R3, the SDT should add a section for “Definitions of Simulation and Simulators” under the Application Guidelines in this Standard. These guidelines identify specific academic definitions and do not include the industry-adopted definition of “table top” simulated exercises. An entity should be allowed to identify its own combination of “table top” simulated exercises and exercises using simulation technology that adheres to the systematic approach to training process. (9) We do not find the technical support for simulations as relevant or appropriate to be included in a reliability standard. It is out of scope to include who IST is, their mission, or any of the graphics that show outdated technology of simulations. This appears to be a copy-and-paste directly from a web site. We recommend the SDT revise the Applications Guidelines section to only reference appropriate SAT resources. (10) The Violations Severity Levels for Requirement R3 are binary in nature and should be modified to a graduated severity level. The Standard Drafting Team should follow a similar structure of the Requirement R2’s Violations Severity Levels by including percentages of System Personnel that have received simulation technology training. (11) We do not believe the Time Horizons are appropriate for this Standard. Training should not be considered as Long-term planning because training does not occur six to nine months out. Training should be either “Same-day Operations” or “Operations Planning”. In addition, the Violation Risk Factors are rather excessive at Medium for impacts to the BES. We are not convinced that missing a training session has a direct correlation to impacting the BES in a way that would result in cascading, instability, or separation. (12) The Application Guidelines Reference #3 is not clear. These bulleted lists do not provide any rationale or justification for why these topics should be trained upon. Registered entities serve different functions for reliability and are in the best position to determine which tasks should be included in their training program. For example, what do Market Rules and LMPs have to do with an emergency? This section needs to be revised. (13) Thank you for the opportunity to comment.

Individual
Michael Falvo
Independent Electricity System Operator
Yes
No
1. Part 1.1: We do not agree with the additional phrase “based on defined and documented methodology”. The training program for the responsible entity needs to be based on “the list of Bulk Electric System (BES) company specific Real-time reliability-related tasks”. Part 1.1 thus should end at the word “tasks”. Adding the phrase “based on defined and documented methodology” does not add any value to the requirement, but creates an uncertainty as to

“who defines the methodology” and with what criteria is the methodology defined. In the SDT’s Summary Consideration report, there is no mention of any comment made to this part in the previous posting, and hence we have no idea on the basis for this addition. We suggest removing this phrase from Part 1.1. 2. We appreciate the SDT’s effort to revise Requirement R4 to address concerns raised in the last posting regarding the lack of clarity in this requirement. The revised R4 is much improved in terms of providing clarity as to who need to be trained and on which set of tasks. However, the language as presented is still a bit confusing despite we understand the intent. R4 stipulates that: R4. Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall use a systematic approach to training to develop and implement training for its Operations Support Personnel on the impact of their job function(s) to those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1. We do not agree that these personnel need to be trained on the “impact of their job functions to those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1”. Rather, we believe the intent is to train these personnel “on their job functions that have an impact on those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1.” We suggest R4 be revised accordingly. 3. The above comment and suggestion apply to R5. 4. Requirements R5: The words “to training” are missing after “systematic approach”. 5. Requirements R1, R4 and R5 stipulate the use of systematic approach to training to develop and implement training or training program (note the inconsistent wording among them) for their respective group of personnel. While R4 and R5 contain a HIGH VSL for failing to use systematic approach to training to develop and implement the training program, R1 does not have a similar VSL. Suggest to add a HIGH VSL to R1 to address this.

Individual

Russ Schneider

Flathead Electric Cooperative, Inc.

No

I do not like the concept of having definitions just within the standard that entities can hope auditors won't apply to other situations that were not intended. I do not support any changes to the Control Center definition either. The fact that the draft is not consistent with the current definition of Control Center is indicative of the inappropriately expanded scope of the new definitions.

No

The scope should be limited to operations personnel that fall under the existing definition of Control Center or System Operator in the current NERC Glossary.

Group
Iberdrola USA
John Allen
No
There are two terms in the definition of System Operator that could cause issues. (1) Using the lower case "control center", i.e., not the NERC Glossary definition, could lead to future confusion. Either the NERC Glossary definition should be used, or another term should be used. In general, we feel that if a term is defined in the NERC Glossary, that same term should not be used in its common or undefined form. (2) The word "operates" in the definition of System Operator is not clear and could cause more personnel to be included as "System Operators" than is intended. We suggest replacing the word "operates" with the term "makes operational decisions" to eliminate those that may only implement System Operator decisions and directions from being classified as a System Operator.
Yes
Individual
Matthew Beilfuss
Wisconsin Electric
Yes
No
Expanding the scope of GOP training to encompass a systematic approach to training (SAT) will likely identify tasks and training that is already identified within existing standards. Requirements for GOP personnel to complete training or be familiar with tasks is explicitly required in the current versions of EOP-005, CIP-004, and PRC-001. Also, the content and rigor of the VAR standards create explicit procedural requirements that address GOP impact on reliable operations of the BES during normal and emergency operations. Given that no individual Generator has a reliability impact on the BES, training requirements to address specific instances where BES reliability is potentially impacted by a GOP has been appropriately addressed within the standards. Additionally, a requirement for a GOP systematic approach to training within PER-005-2 is an odd fit given that the balance of the standard is written to address System Personnel and Real-time reliability-related tasks. If it is viewed as necessary to require a SAT program for GOPs, this can better be addressed by a standalone standard. As PER-005-2 is written, the compliance framework and requirements applicable to managing the System Operator SAT are different than the GOP SAT.
Individual
Brian Reich

Idaho Power Company
Yes
Yes
Group
DTE Electric
Kathleen Black
Yes
We support the definitions in general, but we have some concerns on the support personnel. Our main concern is that we have employees who perform outage coordination or assessments that are economically based and have no impact on reliability. To provide clarification, we suggest the following definition: Individuals, as identified by the Reliability Coordinators, Balancing Authorities, Transmission Operators, or Transmission Owners, who perform reliability-related outage coordination or assessments, or determine SOLs, IROLS, or operating nomograms, in direct support of Real-time, reliability-related tasks performed by System Operators.
Yes
We agree in general, but we have some concerns as noted below: R4 requires "training" to be developed and implemented. R4.1 requires we conduct an evaluation of the "training". Neither R4 or 4.1 requires a training program, however, M4.1 requires the training "program" is evaluated each calendar year. It seems that R4 and R5 should specify that there be a training program as in R1. This same concern is true for R5, 5.1 and M5.1.
Group
PacifiCorp
Ryan Millard
Yes
Yes
Group
Tennessee Valley Authority
Brandy Spraker
Agree
SERC Operating Committee
Individual
Shirley Mayadewi
Manitoba Hydro

Yes

Yes

Although Manitoba Hydro is in general agreement with the standard, we have the following comments: (1) M1 - capitalize the word "Owner" for consistency with other measures in the standard. (2) M1.4 - for consistency with other measures, suggest inserting the words, "this evidence may be documents" prior to "such as". (3) M2 - for clarity, change the word "task" to "tasks". (4) Definition of Terms – it appears as though the definition of System Operator will purposely use a lower case 'control centre' even though there is a defined term Control Centre in the Glossary of Terms. While it is good to differentiate if the defined term in the Glossary is not applicable in this instance, this is prone to confusion as people may well assume the lack of capitalization was inadvertent. (5)4. Applicability (and R3) – same concern as above. We notice that the word 'facility' has been purposely left lower case in order to differentiate from the already defined term 'Facility' in the Glossary of Terms. (6) R1 – unclear what the term 'systematic approach to training' includes, and no explanation or description is given (7) R1 – not sure why footnote 3 (and similarly footnote 4 in R4) are necessary. No other defined term in the standard has an explanation of the definition attached to it. (8) R1, 1.1 – the list of Real-time reliability related tasks are described inconsistently throughout the standard, sometimes described as 'company specific', sometimes also 'BES'. What is the term BES meant to add to the description? - Does it mean BES companies? BES reliability risks? (9) R1, 1.4 and R4, 4.1 – the reference to each calendar year 'of the training program' is unclear. Is it supposed to mean each calendar year that the training program is in effect? It may not be delivered each year. Or each calendar year after the training program is first developed? The Measure just refers to each calendar year. (10) The requirements and measures seem to alternate between the words 'establish' and 'develop' and the words 'implement' and 'deliver' when referring to the same obligation. Consistency would be preferable. Likewise, program should be training program throughout to be consistent. (11) R3 – the words 'according to its training program' would be more appropriate moved to follow the words 'emergency operations training' (12) R4, R5 and M4, M5 – the language of these requirements and measures should more closely track the language of R1 and M1 since the requirements R1 and R4 and R5 are so similar. (13) R6 (which should be R5) – the words 'described in Applicability Section 4.1.5 of this standard' is unnecessary. This type of language is not included for any other group of applicable entities/personnel. The Applicability section covers applicability, it doesn't seem necessary to repeat in the requirement. (14) Compliance 1.3 - The language refers specifically to a process found in the NERC Rules of Procedure. We have not previously seen this reference (generally in draft standards, there is a list of processes that may be used). The reference included in this draft standard is concerning because Manitoba has its own Compliance and Monitoring program and has only adopted

select aspects of the NERC Rules of Procedure. (15) VSLs – R1 – Moderate VSL – the language that references 1.1.1 does not really match up with what 1.1.1 says. 1.1.1 requires the entity to update the list of tasks ‘if necessary’. The Measure makes no reference to updating, and then the VSL refers to making identified changes. (16) VSLs – R1 – Severe VSL – the wording that references 1.3 is slightly different than what 1.3 actually says. 1.2 requires that the training be delivered according to its training program. The VSLs require the training be delivered according to its task list. (17) VSLs – R2 – the way the language is now is confusing. Needs to be clarified whether the percentage refers to the percentage of the System Personnel or the percentage of the capabilities. In other words, is it that 90% of the System Personnel had their capabilities verified, or is it that 90% of the capabilities were verified.

Individual

Kayleigh Wilkerson

Lincoln Electric System

Yes

Yes

Although supportive of the latest version of PER-005-2, LES is concerned with the amount of detail and information provided within the “Definitions of Simulation and Simulators” section of the Application Guidelines. As currently drafted, this section appears to be a copied and pasted document with portions resembling a third party sales pitch. While appreciative of the information, LES recommends consolidating the definitions of simulation, and other relevant information, to provide industry members a clear and concise reference.

Group

Oklahoma Gas and Electric

Terri Pyle

No

Initially, we believe that the existing language is sufficient, however, during the NERC webinar on Oct 7, there were several questions asked about the people that fall under the proposed definition of Support Personnel (e.g. managers, senior managers or VPs), and the answer provided by members of the SDT was that those people should be trained. If that is correct, a whole company’s employee roster could be implicated by this language. We ask that the SDT provide further clarification to the audit approach and guidance on the definition to avoid the definition from becoming a moving target.

No

The definition of Transmission Owner presents possible concerns: 4.1.4.1 Personnel at a facility, excluding field switching personnel, who act independently to carry out tasks that

require Real-time operation of the Bulk Electric System, including protecting assets, protecting personnel safety, adhering to regulatory requirements and establishing stable islands during system restoration. It was asked during the webinar on Oct 7 that if outage coordinator is listed as one of the operations support personnel and field switching personnel is excluded from definition of Transmission Owner, then, this presents a contradicting position. In addition, questions were asked about security since the definition of TO includes protecting assets and personnel safety. The SDT was not able to answers questions related to security and how they fit into training. We ask the drafting team to provide additional clarification on the definition of Transmission Owner.

Individual

Chris de Graffenried

Consolidated Edison Co. of NY, Inc.

No

Modify the current definition of System Operator to read as follows: System Operator: An individual at a control center of a Balancing Authority, Transmission Operator, or Reliability Coordinator, who monitors and controls the operation of the Bulk Electric System in Real-time. Rationale: Without tight wording, personnel at locations other than an “individual at a control center” who are not system operators may be swept into the definition. Distribution-related field, substation and satellite location personnel, such as District Operators, should not be classified as System Operators by an overly broad definition. A System Operator performs two critical functions: monitoring and control (of the status of bulk electric system assets). Anyone who does not perform these functions must rely on a System Operator, and is not operating independently. Therefore, they are not System Operators.

No

Delete Requirement R4 in its entirety. On page 4, the white paper notes: The argument for not including EMS personnel in the training standard at this time is based on a report provided by the Event Analysis Subcommittee (EAS). The EAS worked with the NERC Event Analysis (EA) staff to review the events that have been cause-coded since October 2010. The database has over 263 events; ... [and] only two were deemed to be a training issue. Therefore, based on the information, the EAS and PER ad hoc group do not believe it is necessary at this time to require EMS support personnel to receive the level of training required of a BA, Reliability Coordinator (RC), and TOP by NERC standard PER-005. Using the same rational employed in the white paper to defer consideration of requirements related to EMS support personnel, the drafting team should defer consideration of applicability of R4 to Operations Support Personnel until such time as a substantial, documented reliability gap is identified by further study. We do not believe that Operations Support Personnel should be

required “to receive the level of training required of a BA, Reliability Coordinator (RC), and TOP by NERC standard PER-005.” We, therefore, propose to revised the Applicability wording in 4.1.4.1. as follows: 4.1.4 Transmission Owner that has: 4.1.4.1 Personnel at a facility, excluding field switching personnel, who act independently to carry out tasks that require real-time reliable operation of the Bulk Electric System. The NERC glossary clearly defines the terms real-time and reliable operation.

Individual

RoLynda Shumpert

South Carolina Electric and Gas

Agree

SERC SOS

Individual

Ronald L Donahey

Tampa Electric Company

No

The section “Rational for R4” states: “This requirement does not require that entities create a new, comprehensive systematic approach to training process for training Operations Support Personnel.” However R4.1 states: “Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall conduct an evaluation each calendar year of the training established in Requirement R4 to identify and implement changes to the training.” M4 states: “Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall have available for inspection evidence (such as instructor observations, trainee feedback, supervisor feedback, course evaluations, learning assessments, or internal audit results) that it performed a training program evaluation each calendar year, as specified in Requirement R4 part 4.1. This would led one to believe that there is a need for a new training program/process for Operations Support Personnel.

Individual

David Kiguel

David Kiguel

No

1. The proposed draft continues to use the vague "Systematic Approach" term, which, as used, is not measurable. The Compliance Operations document tries to clarify its meaning by listing criteria that auditors would use to determine if a registered entity uses a systematic approach to training for developing its program. In doing so, it repeats the content of the Applications Guidelines in the draft standard, which only gives high level principles. As

written, auditors could potentially use their assessment in a subjective and inconsistent manner. I suggest modifying requirement R1 so it clearly establishes the minimum areas that the assessment must address. 2. R2 requires that each RC, BA, TOP, and TO shall verify, at least once, the capabilities of its System Personnel. The Implementation Plan states that entities that were not previously subject to PER-005-1 must have verified its System Personnel's capabilities to perform each of its assigned Real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, prior to the effective date of the standard. Requiring entities to perform certain activities prior to the effective date of the standard means in practice advancing its effective date, which is not feasible in certain jurisdictions. Requirements cannot be enforced prior to the standard's effective date. Doing it before the effective date may constitute good practice and being proactive, but an entity cannot be held non-compliant for not doing it at a time when the standard is not yet enforceable. I suggest changing to: Entities that were not previously subject to PER-005-1 must have verified its System Personnel's capabilities to perform each of its assigned Real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, within one year of the standard becoming in force within their respective jurisdiction. Note: The suggested 1 year could be reduced to 6 months at the SDT's option.

Group

Southwest Power Pool Regional Entity

Emily Pennel

Yes

Regarding R3 – the simulator training needs to be on the IROL, if that is the point of the requirement. M1 should be "Transmission Owner" not "Transmission owner."

Individual

Andrew Z. Pusztai

American Transmission Company, LLC

No

"The proposed definition of "Operations Support Personnel" includes individuals who "perform ... assessments ... or ... determine SOLs". These phrases can easily be misunderstood and further clarity is needed. On the webinar on Oct. 28th, the SDT noted that the definition is not intended to include personnel performing seasonal assessments. However, this may not be the natural reading of the definition in light of the TOP standards such as TOP-002-2.1b R11 and TOP-005-2a R2. If the personnel performing seasonal assessments are not to be included into the definition of "Operations Support Personnel", the definition should be revised to state what type of assessments are in view. In regard to determining SOLs, many parts of the interconnected system are not limited by stability-related SOLs, which might be

established on a day to day basis. Rather, these areas are limited by the thermal capability of system equipment and the established SOLs are determined based on these thermal ratings. Since the basis for these ratings (and, hence, the SOL) is the facility rating methodology required under FAC-008-3, this definition could pull in the engineering functions performing the work to determine the correct ratings. We don't believe this is the intention of the standard nor the FERC orders. If the intention is to incorporate the personnel who perform assessments that identify new SOLs for real-time operations but not those who perform seasonal assessments nor the engineering staff who determine the facility ratings, the definition should be revised to ensure the correct personnel are identified. Given the comments above, a proposed revision might be: "Operations Support Personnel: Individuals, as identified by the Reliability Coordinators, Balancing Authorities, Transmission Operators, or Transmission Owners, who perform current-day outage coordination or assessments, or who determine current-day SOLs, IROLs, or operating nomograms,2 in direct support of Real-time, reliability-related tasks performed by System Operators."

No

Please see comments in response to Question #1.

Individual

Bret Galbraith

Seminole Electric

No

(1) The proposed definition for Operations Support Personnel appears to be too broad in that it does not give due process notification to the regulated community of which particular personnel this Standard will apply. This Standard will apply to those personnel who "perform outage coordination or assessments, or who determine SOLs, IROLs, or operating nomograms in direct support of Real-time, reliability-related tasks performed by System Operators." For example, one of Seminole's concerns is that personnel involved in developing Facility Ratings, such as under FAC-008, will be covered under this definition as their Facility Ratings methodology/inventories may directly affect the SOL/IROL development, and thus support System Operators. The same concern applies to relay protection engineers who design relay protections schemes, in that under a broad reading of this definition, their actions support System Operators. Seminole requests that the SDT attempt to clarify this proposed definition in a subsequent ballot action in order to provide clearer guidance to the regulated industry.

No

(1) The applicability section for Transmission Owners states the following: Personnel at a facility, excluding field switching personnel, who act independently to carry out tasks that require Real-time operation of the Bulk Electric System, including protecting assets,

protecting personnel safety, adhering to regulatory requirements and establishing stable islands during system restoration. (emphasis added). This applicability section is also broad in that it appears to cover multiple departmental personnel, ranging from environmental affairs staff, to relay system protection engineers, to possibly safety personnel. For example, if the need to fire fuel oil on a turbine arises due to an emergency, environmental staff may proceed independently to receive a waiver to a permit limit that limits hours on fuel oil. It is unclear whether these personnel are covered under this section. In addition, the reference to personnel involved in “protecting assets,” appears to be very broad, and Seminole requests that the SDT elaborate on those particular individuals the SDT wishes to be covered by this Standard. (2) In the posted redline version of the proposed Standard in section M-1, “Transmission Owner” was revised to “Transmission owner,” i.e., lower case “o.” Can the SDT explain the reason for the change as Seminole believes “Owner” should remain capitalized? (3) Ambiguity exists in Requirement R4 where it states “[Each Applicable Entity shall] ...develop and implement training for its Operations Support Personnel on the impact of their job function(s) to those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1” The statement appears to refer to the tasks of the system operators, however, Seminole cannot conclude whether the SDT has considered that the tasks of a support person and the tasks of an operator are different. The issue for Seminole is whether this statement mandates the creation and training of an entirely different set of tasks, one based on the overall tasks of support personnel, or are the support personnel to be trained on the tasks of the operators in which they support? Seminole requests that the SDT clarify this requirement. (4) Seminole has concerns with Reference #3 in the Application Guidelines, specifically, whether the topic criteria listed are mandatory criteria to be evaluated in developing training material. If the criteria listed are mandatory, or even suggested criteria, does the NERC SDT reason that personnel who support operations concerning the listed topics are all Support Personnel, such as personnel who assist in the development of tariffs (see Section F within Reference #3)? Seminole requests clarification on the References in the Application Guidelines.

Individual

John Idzior

ReliabilityFirst Corporation

Yes

No

ReliabilityFirst votes in the negative because this standard has a number of issues surrounding 1) the lack of periodicity in Requirement R1 and Requirement R2 and the lack of understanding of the intent of meaning of systematic approach to training from a compliance

standpoint. ReliabilityFirst offers the following comments for consideration: 1. Requirement R1, Part 1.2 a. ReliabilityFirst believes there should be a time period associated with Requirement R1, Part 1.2. As written, if an entity adds a new Real-time reliability-related task to their list, it would be left to the discretion of the entity on when they want to include the new training in their program. ReliabilityFirst recommends the following for consideration: “Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall design and develop training materials according to its training program, based on the Real-time reliability-related task list created in part 1.1. [Newly updated Real-time reliability-related tasks identified in part 1.1.1 shall be included in the training program within 45 calendar days of identification. 2. Requirement R1, Part 1.3 a. If an entity verified the capability of their System Operators to perform the company-specific reliability related tasks, are they required to deliver any other training unless needed? Can the SDT clarify if this is the intent SDT or is this more required in Requirement R2? 3. Requirement R2 a. ReliabilityFirst questions the intent of the phrase “at least once” within Requirement R2. Is it the intent that the capabilities of its System Personnel only need to be verified once before they are able to go on shift? ReliabilityFirst believes System Personnel should be trained prior being able to go on shift and then annually thereafter. ReliabilityFirst recommends the following for consideration: “Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall verify, at least once [prior to going on shift and annually thereafter], the capabilities of its System Personnel assigned to perform each of the Real-time reliability-related tasks identified under Requirement R1 part 1.1. 4. Requirement R3, Part 3.1 a. ReliabilityFirst believes the 12 month period in which an entity has to comply with Requirement R3 (if they gain operational authority or control over a Facility with an established IROL) is excessive. IROLs can have a large reliability impact on the BES and training using simulation technology should be provided as soon as practical. ReliabilityFirst recommends modifying the timeframe to six months. 5. ReliabilityFirst requests the SDT further elaborate what is meant by the term “systematic approach to training”. It is unclear how an auditor would assess whether an entity applied a systematic approach to training when assessing compliance with the requirements. 6. VSL for Requirement R1 a. The second Moderate VSL states the entity failed to “...implement the identified changes to the Real-time reliability-related task” though Part 1.1.1 does not require implementation. To be consistent with the language of the requirement, ReliabilityFirst recommends the following for consideration: “The Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner, failed to [update] the identified changes to the Real-time reliability-related task. (1.1.1.)

Individual

Kathleen Goodman

ISO New England Inc.
Agree
IRC SRC
Group
Southern Company: Southern Company Services, Inc.; Alabama Power Company; Georgia Power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation; Southern Company Generation and Energy Marketing
Pamela Hunter
Yes
Yes
Group
IRC/Standards Review Committee
Gregory Campoli
No
Defintion of System Operator Because it could impact the intent of other standards where the definition is used, the definition of system operator shouldn't be changed. If the PER standard is not intended to apply to control center operators of generator fleets or is to apply to Transmission Owners, we prefer it being addressed in the applicability of the standard. Definition of Operations Support Personnel If kept, the definition of Operations Support Personnel should be revised to: "Individuals, as identified by the Reliability Coordinators, Balancing Authorities, Transmission Operators, or Transmission Owners, who perform next-day or same-day outage coordination or assessments, or who determine SOLs, IROLs, or operating nomograms,1 in direct support of Real-time, reliability-related tasks performed by System Operators."
No
Definitions of Terms Used in Standard During the Industry Webinar (Question and Answer section at 39:00 minute mark), SDT made a distinction between the term "training" vs. "training program". SDT explained that the "training" term used in R4 and R5 does not have to follow all the steps involved in SAT in addition, the drafting team intention was to have less onerous documentation requirements for Compliance purposes. Because there is a meaningful difference meant by the SDT for each of the above terms, they should be defined under the section "Definitions of Terms Used in Standard". Introduction Section 4.1.4.1. While we don't disagree that Transmission Owners should protect personnel safety, the EPAct specifically precluded NERC from developing safety-related standards. The standard should be silent on safety issues. As such we recommend the section be modified such that the

paragraph ends at “Bulk Electric System” as shown below: 4.1.4.1 Personnel at a facility, excluding field switching personnel, who act independently to carry out tasks that require Real-time operation of the Bulk Electric System. Requirements and Measures R1 Part 1.1 We do not agree with the additional phrase “based on defined and documented methodology”. The training program for the responsible entity needs to be based on “the list of Bulk Electric System (BES) company specific Real-time reliability-related tasks”. Part 1.1 thus should end at the word “tasks”. Adding the phrase “based on defined and documented methodology” does not add any value to the requirement, but creates an uncertainty as to “who defines the methodology” and with what criteria is the methodology defined. In the SDT’s Summary Consideration report, there is no mention of any comment made to this part in the previous posting, and hence we have no idea on the basis for this addition. We suggest removing this phrase from Part 1.1. R3 R3 ties simulation training for Emergency Operations (EO) directly to an entity’s operational authority or control over facilities with established IROLs. NERC’s Glossary of Terms defines Emergency as “Any abnormal system condition that requires automatic or immediate manual action to prevent or limit the failure of transmission facilities or generation supply that could adversely affect the reliability of the Bulk Electric System”. EO clearly goes beyond operating guidelines and/or protection systems to mitigate IROLs and includes loss of generation resources, operating and contingency reserves, load shedding, loss of EMS, loss of primary control center, power system restoration ... SRC believes that simulation training for EO should be a requirement for RC, BA, and TOP and agrees with the applicability of R3 to TO if TO has operational authority or control over IROL facilities or established operating guides or protection systems to mitigate IROLs. Furthermore, the standard should clarify that the training should not be on individual IROL’s, but the established guidelines and protection systems to mitigate IROLs. R3 Part 3.1 can create confusion . R2 requires the verification of the capabilities of each System Personnel to perform new or modified Real-time reliability-related tasks within six months. Addition of new IROL will, in most cases, modify or create new Real-time reliability-related tasks. As such, applicable entities are required to train on the addition or change of Real-time reliability-related tasks associated with the new IROL within six months. The language for R3 Part 3.1 needs to clarify that applicable entities still have to comply with R2. R4 We appreciate the SDT’s effort to revise Requirement R4 to address concerns raised in the last posting regarding the lack of clarity in this requirement. The revised R4 is much improved in terms of providing clarity as to who need to be trained and on which set of tasks. However, the language as presented is still a bit confusing despite our understanding of the intent. R4 stipulates that: R4. Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall use a systematic approach to training to develop and implement training for its Operations Support Personnel on the impact of their job function(s) to those

Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1. We do not agree that these personnel need to be trained on the “impact of their job functions to those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1”. Rather, we believe the intent is to train these personnel “on their job functions that have an impact on those Real-time reliability-related tasks identified by the entity pursuant to Requirement R1 part 1.1.” We suggest R4 be revised accordingly. R5 Requirements R5: The words “to training” are missing after “systematic approach”. Table of Compliance Elements Requirements R1, R4 and R5 stipulate the use of systematic approach to training to develop and implement training or training program for their respective group of personnel. While R4 and R5 contain a HIGH VSL for failing to use systematic approach to training to develop and implement the training program, R1 does not have a similar VSL. Suggest to add a HIGH VSL to R1 to address this.

Individual

Alice Ireland

Xcel Energy

No

Xcel Energy believes it is inappropriate to have the same term defined one way in the NERC glossary, and another way in a standard. Either the term System Operator should be modified and implemented to all relevant standards, or the team should find another way to clarify applicability within PER-005.

Yes

Other than the comment on the definition of System Operator, Xcel Energy is in support of the current draft. However, affirmation/clarification is requested on the following items: 1) Is continuing training required? 2) Are job performance measures (JPMs) required? 3) If JPM is successfully completed, then does that negate the need for initial training – in other words do we need both JPMs and Training? 4) Confirmation of a “narrow JTA” – only tasks that directly affect real time system operations, not a full JTA.

Group

Dominion

Mike Garton

No

Suggest the definition of Operations Support Personnel be modified by replacing "System Operators" with "System Personnel" as indicated below: Operations Support Personnel: Individuals, as identified by the Reliability Coordinators, Balancing Authorities, Transmission Operators, or Transmission Owners, who perform outage coordination or assessments, or who determine SOLs, IROLs, or operating nomograms,¹ in direct support of Real-time,

reliability-related tasks performed by System Personnel.

No

1. Requirement R1, subpart 1.1 – Dominion does not believe the added language “based on a defined and documented methodology” adds clarity and in fact, may add ambiguity. Suggest striking this language from R1, subpart 1.1 as well as Measure M1, subpart M1.1. 2. M1 – Dominion suggests that “Transmission owner” needs to be capitalized consistent with R1. 3. R5 – this is the only requirement in the standards that includes ...”during normal and emergency operations.” Therefore, Dominion suggests striking this language in R5 to be consistent. 4. General comment – The requirement sub-parts (e.g. 1.1, 1.2, etc.) are not preceded with an “R” while the measure subparts (e.g. M1.1, M1.2) are preceded with an “M.” Dominion suggests applying the same convention to both requirements and measures. 5. For clarity of applicability, Dominion suggests removing the sentence “This personnel does not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions, without making any modifications” from section 4.1.5.1 and instead making it a footnote to that section. 6. Implementation Plan Actions to be Completed as of the Effective Date – Requirement R1, subpart 1.3 states in part that entities that were not previously subject to PER-005-1 are not expected to have delivered training prior to the effective date; however, Requirement 2, suggests that these same entities must have verified the capability of their System Personnel to perform Real-time reliability-related tasks prior to the effective date of the standard. PER-005-1 does not apply to System Personnel therefore there should be no assumption that the capabilities of such personnel has been previously verified regardless of whether PER-005-1 applied to the Applicable Entity. Dominion suggests that the SDT review and modify the Implementation Plan accordingly. 7. Suggest Revising Section 4.1.5.1 as follows: “This personnel does not include . . . “ should be “These personnel do not include . . . “

Individual

Scott Berry

Indiana Municipal Power Agency

No

IMPA is concerned about the wording used for applicability of the Generator Operator. What happens when a Generator Operator as part of normal operations relays dispatch instructions, but has the one time when an emergency occurs and they have to follow emergency instructions to prevent damage to the generating unit. An Audit may view this emergency action as not relaying dispatch instructions and say the standard is applicable to the Generator Operator who has not used a systematic approach to develop and deliver training to its personnel. The auditor could find the Generator Operator in violation of the

applicable requirements of the standard. IMPA would recommend allowing Generator Operators to take emergency action to prevent damage to their generating units and not let this go against the action of “relay dispatch actions”. IMPA also agrees with the comments submitted by Carol Chinn with Florida Municipal Power Agency (FMPA).

Group

Duke Energy

Michael Lowman

No

We commend the drafting team on its continued effort and appreciate the opportunity to provide the following comments. Duke Energy suggests rewording Section 4.1.4.1 of the Applicability Section as follows: “4.1.4 Transmission Owner (TO) that has: 4.1.4.1 Personnel at a facility, excluding field switching personnel, who exercise control over a significant portion of the Bulk Electric System. Such personnel may carry out tasks that require Real-time operation of the BES under the direct supervision of the registered Transmission Operator. This TO personnel may also act independently to implement pre-defined operating procedures.” Duke Energy believes that definitions used in NERC standards should be added to the NERC Glossary of Terms instead of having “standard only” definitions. Having definitions only applicable and imbedded in the standard could lead to confusion for an auditor and others if multiple definitions are created. By keeping these definitions in the NERC Glossary of Terms, it eliminates this confusion and provides clarity to the industry by having one universal definition for each term instead of having multiple definitions. Having “standard only” definitions appears to be in disagreement with the first paragraph of the Introduction to the NERC Glossary of Terms which states, “This Glossary lists each term that was defined for use in one or more of NERC’s continent-wide or Regional Reliability Standards and adopted by the NERC Board of Trustees from February 8, 2005 through October 30, 2013.”

No

Requirement 3 – While Duke Energy can support this requirement as written, we strongly believe that the 32 hours of Emergency Operations Training is necessary for the industry. While we understand that NERC is moving towards a more risk based approach, our concern is the lack of a tangible amount of training hours that would be deemed appropriate by an auditor. In theory, Duke Energy agrees with the concept of allowing the registered entities to determine an acceptable time/level of training. However, we feel in this instance that based on the impact that Emergency Operations has on the reliability of the BES, and the open-ended nature of interpretation available to an auditor, an industry-wide number of training hours is more suitable. Requirement 4 - Duke Energy believes that the time horizon in Requirement 4 should be set to the Operations Planning Time Horizon instead on the Long-

Term Planning Horizon. Outage coordination and assessments, determination of SOLs, IROLs, and development of operating nomograms are performed in the Operations Planning Time Horizon and not in the Long Term Planning Horizon as indicated in Requirement 4. Duke Energy is concerned that an auditor could come the conclusion that Transmission Planners would fall under the compliance umbrella of Operations Support Personel based on the current time horizon as written in this requirement. Requirements 4 & 5- Duke Energy believes clarification is needed regarding the timeframes for administering initial training for TOP and GOP support staff and the frequency of training thereafter in Requirements 4 & 5. This clarification will enable the industry to shape their training programs for new employees, transfers, and existing employees. Duke Energy is concerned that without specifying timeframes and frequency of training in this requirement, entities could be found non-compliant if an auditor disagreed with the way their training programs are established. These timing requirements are clearly identified for System Personnel in R1-R3, but are not included for the GOP or Operations Support Personel in Requirements 4&5 as currently written. Requirement 5 – Duke Energy believes that coordination between the GOP and those who define the reliability-related tasks is essential for ensuring that the GOP receives meaningful training on the impacts that their job functions have on the BES. FERC order 693 P.1356 states, “stating that training for Generator Operators need not be as extensive as that required for Transmission Operators, and the training requirements developed by the ERO should be tailored in their scope, content, and duration so as to be appropriate to Generation Operations personnel and the objective of promoting system reliability. “ Duke Energy is concerned that the removal of this coordination would not satisfy the FERC Order and would not be tailored in scope, content, and duration so as to be appropriate to Generation Operations personnel and the objective of promoting system reliability. Duke Energy recommends reinserting the language for coordination as used in the previous draft of this standard. Based on our belief on the importance of coordination between the GOP and those who define the reliability-related tasks , Duke Energy is unable to support this standard as written.

Individual

Gerald G Farringer

Comsumers Energy

No

: The term “System Personnel” is still redundant and seems to provide no useful distinction. It refers to the “System Operator”’s of the applicable entities and should be removed from the standard. The definition for “Operations Support Personnel” can still pull individuals that simply administer outage scheduling programs into the rquirements of PER-005. We believe this is an over-reach for the standard and causes more administrative overhead without a

reliability gain. We applaud the clarity added in the definition for “Generator Operator” in 4.1.5.1.

No

The addition of the term “methodology” in M1.1 is not required and only serves to add subjectivity to the process. If the right tasks are identified the methodology of how they were determined does not matter.

Group

US Bureau of Reclamation

Erika Doot

Yes

The Bureau of Reclamation (Reclamation) believes that the definitions of Support Personnel and System Operator have improved since the first posting. Reclamation agrees with the drafting team’s decision to define System Operators as Balancing Authority, Transmission Operator, and Reliability Coordinator personnel only. Reclamation also agrees with the drafting team’s decision to specify that Operations Support Personnel perform assessments “in direct support of Real-time reliability-related tasks” performed by System Operators.

No

Reclamation is unable to determine which Transmission Owner and Generator Operator personnel would be subject to the standard because of unclear language in the Applicability Section. In Transmission Owner applicability statement 4.1.4.1, Reclamation does not understand how or when Transmission Owners “act independently to carry out tasks that require Real-Time operation of the Bulk Electric System.” Reclamation believes that Transmission Owners who are not Transmission Operators do not “act independently,” when protecting assets, protecting personnel safety, adhering to regulatory requirements, and establishing stable islands. Instead, Transmission Owners operate in coordination with Transmission Operators when altering the state of Bulk Electric System facilities. Reclamation struggles to understand which Transmission Owner personnel could be subject to the standard under the proposed Transmission Owner applicability section. Reclamation believes that Transmission Owners who act independently should be registered as Transmission Operators. In addition, the proposed Transmission Owner applicability language does not appear to be consistent with the recommendataion in FERC Order 742 paragraph 62, which is directed at “local control center personnel” who act “under the supervision of the personnel of the registered Transmission Operator.” Reclamation recommends that NERC and the drafting team engage FERC in conversations to better understand the intent of the order. Reclamation is also unclear on which Generator Operator personnel would fall within the scope of the proposed standard. Reclamation requests clarification on the term “centrally

located dispatch centers,” and whether a “centrally located dispatch center” may control a single generation site. Reclamation does not consider Generator Operator control room personnel to be dispatchers. Instead, Reclamation considers dispatchers to be the System Operators of Balancing Authorities, Transmission Operators, and Reliability Coordinators. The proposed Applicability Section appears to exempt “plant operators located at a generator plant site,” however generation control room personnel often “receive direction from” their Transmission Operators and Balancing Authorities. Reclamation recommends that the drafting team redraft the Generator Operator applicability statements to remove mention of dispatch centers or define the term.

Individual

David Jendras

Ameren

Yes

The NERC Glossary of Terms defines that System Operator is at TOP, BA or RC, so leave that out of definition for System Personnel.

No

We are concerned that the language for this Standard might be interpreted by some to cover all training. We believe that this Standard only applies to training on Real-time Reliability Related tasks. There is nothing in this Standard that addresses initial training on theory and operation of the electrical system or training on Real-time Non-Reliability Related tasks. The term "Training Program" as it relates to PER-005 only applies to training developed and delivered on Real-time Reliability Related tasks that are company specific. We are concerned that their drafting team is moving away from industries general understanding of the SAT process. The SAT process is used to analyze, design, develop, implement and evaluate training materials based on Job Tasks and Job Tasks Analysis. Yes the SAT it is used to develop a total training program, but this is not addressed in this Standard. Rational for changes to R3 - The 32 hours of Emergency Operations Training needs to be left in R3 as it applies only to System Operators. There is nothing in R1 that addresses 32 hours of annual training. There is also nothing in this Standard that says you have to have a Continuous Education section in the training. This Standards says that I have to develop training on Real-time Reliability Related Tasks that are company specific, deliver the training, verify at least once that the task can be performed, and verify that any new or modified task can be performed. Once this has been done there is nothing in this Standard that says we have to do any other kind of additional training ever! That is why the 32 hours needs to remain as part of this Standard. We request the following changes and clarifications to the drafting team: (a) Purpose - Don't re-write it - just insert "System Personnel". (b) System Personnel definition needs to include Generator

Operator. (c) R1 - Don't re-write it, just insert "Transmission Owner" and "System Personnel". (d) R1.1 - Add "performed by its System Personnel" (e) R1.2 - Delete "according to its training program" (f) R1.3 - Don't re-write it, just add "Transmission Owner". (g) R3 - Leave this the way it is as it currently as it only applies to System Operators. (h) R3.1 - Leave it the way it is currently just add "Transmission Owner". Never did like this section about using simulation technology as it only applies to entities with IROs. You could be a very large company with no defined IROs and would not be required to use emergency operations training using simulation. Don't think this is what FERC was getting at! (i) R3.2 - Make the new R3.1 into R3.2. (j) R4 - Doesn't address training on new or modified tasks.

Individual

Brian Evans-Mongeon

Utility Services

No

The applicability section of the standard related to Transmission Owners and Generator Operators requires some clarity. Suggest more restrictive language for 4.1.4.1: "Operations Personnel at a BES transmission facility, excluding field switching personnel, who have the authority and responsibility to act independent of dispatch instruction from a RC, BA or TOP to carry out tasks that require Real-time operation of the Bulk Electric System, including protecting assets, protecting personnel safety, adhering to regulatory requirements and establishing stable islands during system restoration." Suggest changing "may" to "has the authority". It is possible that the GOP may receive specific dispatch instructions in some instances, but in other instances be allowed the flexibility to develop dispatch instructions based on RC, BA or TOP guidance. Additionally, "plant operators" needs to clarify that it only applies to dispatch instructions for BES generators, and does not include dispatch instructions for non-BES generation plant operators. "Dispatch personnel at a centrally located dispatch center who receive direction from their Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner and has the authority to develop specific dispatch instructions for BES generator plant operators under their control. This personnel does not include plant operators located at a generator plant site or personnel at a centrally located dispatch center who relay dispatch instructions, without making any modifications." Remove footnotes 2 and 3 as unnecessary. R5: Training in R5 is required regardless of the personnel's capability since there is no requirement to assess the capabilities of the personnel, for the identified tasks. Suggest adding language to allow for a demonstration of capabilities on the required tasks similar to R2. Additionally, a grace period similar to R2.1 should be added to R5 to allow time between a change in the training program to the time training is required to be completed.

Group
PPL NERC Registered Affiliates
Brent Ingebrigtsen
Yes
<p>These comments are submitted on behalf of the following PPL NERC Registered Affiliates (PPL): Louisville Gas and Electric Company and Kentucky Utilities Company; PPL Electric Utilities Corporation, PPL EnergyPlus, LLC; PPL Generation, LLC; PPL Susquehanna, LLC; and PPL Montana, LLC. The PPL NERC Registered Affiliates are registered in six regions (MRO, NPCC, RFC, SERC, SPP, and WECC) for one or more of the following NERC functions: BA, DP, GO, GOP, IA, LSE, PA, PSE, RP, TO, TOP, TP, and TSP. The PPL NERC Registered Affiliates believe that the Applicability section should be changed so that, in parallel with the industry approved criteria in CIP V5, section 4.1.5 reads: 4.1.5 Generator Operator that has: 4.1.5.1 Dispatch personnel at a centrally located dispatch center, used to perform the functional obligations of the Generator Operator for an aggregate highest rated net Real Power capability of the preceding 12 calendar months equal to or exceeding 1500 MW in a single Interconnection, who receive direction from their Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner and may develop specific dispatch instructions for plant operators under their control.</p>
Individual
Texas Reliability Entity
Texas Reliability Entity
No
<p>(1) The Generator Operator applicability statement (4.1.5) is too narrow and somewhat ambiguous. GOP operating personnel at a dispatch center need to understand the dispatch instructions and related communications that they relay, even if they are not intended to make modifications. If they do not understand the instructions they are much more likely to pass them along incorrectly or to take improper actions. Furthermore, these dispatch personnel often need to consider personnel safety, equipment limitations and other issues in connection with instructions they receive and pass along. (1A) Texas RE has several examples of operator voice recordings in which generation dispatch personnel did not understand basic information and instructions that they received from BA and TOP operators. These occurrences demonstrate that it is critical for GOP operators to receive a reasonable amount of training, so that operating instructions do not sound like a foreign language to them, even if they are not personally responsible for taking action. Failure to require this training will result in a reliability gap. (1B) The standard as drafted does not satisfy the cited FERC directive. In Order 693 (P 1359) FERC stated “Although a generator may be given direction</p>

from the balancing authority, ***it is essential that generator operator personnel have appropriate training to understand those instructions***, particularly in an emergency situation in which instructions may be succinct and require immediate action. Further, if communication is lost, the generator operator personnel should have had sufficient training to take appropriate action to ensure reliability of the Bulk-Power System.” Applicable instructions include MW dispatch, voltage support, emergency readiness, emergency steps, weather issues, status conditions, and similar instructions. (1C) Proposed standard COM-002-4 introduces the defined term “Operating Instruction.” GOP personnel who deal with Operating Instructions should be trained under this PER standard to ensure the reliability of the Bulk Power System. We suggest changing the GOP applicability provision to “4.1.5 Generator Operator that has dispatch personnel at a centrally located dispatch center who receive Operating Instructions from their Reliability Coordinator, Balancing Authority, Transmission Operator, or Transmission Owner. This does not include plant operators located at a generator plant.” (2) Requirement R5 presently calls for applicable GOP personnel to be trained only “on the impact of their job function,” similar to the training required in R4 for Operations Support Personnel. We feel that this is insufficient, and that the standard should require GOP personnel to be trained to perform their reliability-related job functions. Unlike Operations Support Personnel, these GOP personnel are directly involved in real-time operations and communications. (3) Applicability section 4.1.4, Transmission Owner, is unclear and ambiguous. We have been told that this language was intended to address a situation in a different part of the country (perhaps a registration irregularity), but it is not clear who this is intended to apply to in the ERCOT region. Many TO personnel are involved with protecting assets and personnel safety, so this description would appear to include all TOs who have “personnel at a facility.” (4) VSLs for R2: First, it is not clear whether the percentages in the VSL refer to the number of individuals whose capabilities are to be verified, or to the number of individuals multiplied by the number of identified tasks. Second, is this intended to be a zero-defect requirement? The way it is written, failure to verify one task for one individual constitutes a violation. Third, if an individual fails to successfully demonstrate a capability, does that count as a failure to verify, resulting in a violation? In other words, is the intent to ensure that the verification process occurs, or to ensure that every individual is proficient in every task? (5) The VSLs for R5 should mirror those for R4. The requirements are almost identical, and we don’t understand why the VSLs are different.

Group

Florida Municipal Power Agency

Frank Gaffney

No

1. THE APPLICABILITY TO TRANSMISSION OWNERS IS TOO BROAD AND NOT NECESSARY TO

ADDRESS THE FERC DIRECTIVE Original Applicability language from last posting: Transmission Owner that has: 4.1.4.1 Personnel in a transmission control center who operate a portion of the Bulk Electric System at the direction of its Transmission Operator. Proposed Standard language was revised to the following applicability: Transmission Owner that has: 4.1.4.1 Personnel at a facility, excluding field switching personnel, who act independently to carry out tasks that require Real-time operation of the Bulk Electric System, including protecting assets, protecting personnel safety, adhering to regulatory requirements and establishing stable islands during system restoration. This applicability language will still apply to all Transmission Owners to comply with this standard regardless of whether they have a thousand breakers or one breaker. Even if the Transmission Owner does not meet these qualifications, the Transmission Owner will still have to “prove the negative” on a routine basis creating an unnecessary administrative burden. The FERC simply directed NERC to define “local transmission control center” and that has not been done. The following FMPA comments from last posting are still of concern and apply to this version of the standard. It is clear by the language in the order at P62, that FERC was concerned with large entities with significant control and impact on the BES. Order 742 at P62. The Commission understands that local transmission control center personnel exercise control over a significant portion of the Bulk-Power System under the supervision of the personnel of the registered transmission operator. This supervision may take the form of directing specific step-by-step instructions and at other times may take the form of the implementation of predefined operating procedures. For example, ISO New England, Inc., PJM Interconnection, L.L.C., and New York Independent System Operator, Inc., are registered transmission operators who issue operating instructions that are carried out by local transmission control centers such as PSE&G, PPL Electric Utilities Corp., PECO Energy Company, Baltimore Gas and Electric Co., Consolidated Edison of New York, Inc., National Grid USA, and Long Island Power Authority, which are not registered transmission operators. The combined peak load of these three RTOs is in excess of 200 gigawatts. In all cases, the local transmission control center personnel must understand what they are required to do in the performance of their duties to perform them effectively on a timely basis. Thus, omitting such local transmission control center personnel from the PER-005-1 training requirements creates a reliability gap. The Commission believes that identifying these entities would be a valuable step in delineating the magnitude of that gap. (emphasis added) The directive in the order 742 did not direct that all Transmission Owners be included in the training requirements, but only directed that local transmission control center operator personnel have training requirements and to define “local transmission control center”. 64. Accordingly, we adopt our NOPR proposal and direct the ERO to develop through a separate Reliability Standards development project formal training requirements for local transmission control center operator personnel. Finally, given the numerous comments stating that term

“local transmission control center” should be defined, we direct NERC to develop a definition of “local transmission control center” in the standards development project for developing the training requirements for local transmission control center operator personnel. (emphasis added) The SDT should abandon the approach of adding the broad Transmission Owners applicability that will include any Transmission Owner regardless of size or impact to the BES and/or to prove they are excluded. Instead, the SDT should establish some boundaries and criteria around a “local transmission control center” definition as directed by FERC. Possibly MW’s controlled by the control center or other criteria, such as those within the CIP v5 bright lines, may be appropriate.

2. THE DRAFT RSAW WAS POSTED WITH THE PROPOSED STANDARD, BUT THERE ARE CONFLICTING STATEMENTS IN THE CONSIDERATION OF COMMENTS SUMMARY DATED SEPT 27, 2013 On Page 7 of the Consideration of Comments from last posting, the following is stated: Compliance Input The SDT received comments regarding a Reliability Standards Audit Worksheet (RSAW). The Compliance department will not provide the RSAW until six months before the standard is implemented. In the meantime, a document titled “Compliance Input” is provided, along with the posted standard, to explain the contents of the RSAW. It’s not clear whether this applies to the Draft RSAW that was posted and whether it may be revised without Stakeholder knowledge after the Standard is approved. The Standard Process Input Group RSAW recommendation that was approved by the BOT in 2012 stated that the “Changes to RSAWs after the ballot body develops measure/standard require Board approval”.

3. THE DRAFT RSAW “NOTES TO AUDITOR” INCLUDE RELIABILITY ASSURANCE INITIATIVE (RAI) LANGUAGE THAT ALLOWS FOR AUDITOR DISCRETION WITHOUT ESTABLISHED GUIDELINES, PLUS A ZERO TOLERANCE APPROACH. The draft RSAW was developed and posted during this ballot period, which is appreciated. But the RSAW includes vague language that does not provide regulatory certainty for registered entities. The references to “risk factors” and “auditor’s assessment of management practices” are similar to what is being proposed in the RAI program that is still under development and not ready for implementation. Additionally, there are references to risk and internal controls that provides the auditor the latitude to either exclude a requirement or review an entity’s entire population of training records, which is zero tolerance approach to auditing. This is problematic. The following language is included in the NOTES TO AUDITOR for all Requirements (R1-R5) in the Standard. The nature and extent of audit procedures applied related to this requirement will vary depending on certain risk factors to the Bulk Electric System and the auditor’s assessment of management practices specific to this requirement. In general, more extensive audit procedures will be applied where risks to the Bulk Electric System are higher and management practices are determined to be less effective. Based on the assessment of risk and internal controls, as described above, specific audit procedures applied for this requirement may range from exclusion of this requirement from audit scope

to the auditor reviewing training records for an entity's entire population of System Personnel. (emphasis added)
Group
MEAG Power
Scott Miller
Agree
Lower Colorado River Authority
Individual
Michelle R. D'Antuono
Occidental Chemical Corporation
Agree
City of Austin dba Austin Energy (AE)
Individual
Andrew Gallo
City of Austin dba Austin Energy
Yes
No
<p>City of Austin dba Austin Energy (AE) respectfully requests consideration of the following comments/suggestions: (1) The applicability language for Transmission Owners (TO) in Section 4.1.4.1 has been incrementally modified to address various industry comments and has recently ballooned to a point where it has lost clarity. For example, use of the term "facility" instead of "control center" and phrases like "protecting personnel safety" and "adhering to regulatory requirements" could lead to interpretations of including personnel working for an entity registered as a TO but having nothing to do with the local control center. As AE understands it, the SDT is trying to bring in only TOs who have a local control center for BES facilities who are not registered as TOPs, and we believe this can be conveyed in a simple manner by leveraging the proposed revised definition of System Operator. That is, 4.1.4 should read "Transmission Owner that has personnel at a control center who operate or direct the operation of the Bulk Electric System in Real-time." Note "control center" is intentionally lower case. The consistency in this definition puts the focus on the job function of the personnel while addressing the fact that there are variations in registration. (2) As an alternative to comment (1), if the SDT can specify the target TOs by including references to specific regions or addressing AE's concerns in some other way, AE could support that approach, as well. (3) AE suggests the SDT revise the applicability language for Generator Operators (GOPs) in Section 4.1.5.1 to exclude specific regions, such as the ERCOT Region,</p>

which operate a centralized nodal market. In those regions, an ISO (or similar entity) issues dispatch instructions and GOPs do not have independent decision-making authority regarding dispatch as described in FERC Order 693 paragraph 1360 (see page 7 of the PER-005 Standards White Paper.) (4) AE suggests the following revision to Requirement R2 part 2.1: “Within six months of a modification or addition to its BES company-specific Real-time reliability-related task list, each ... identified in Requirement R1 part 1.1.1.” This slight change clarifies that the timeframe is based on a change to the task list not the task, which matches the language in the associated VSL. Additionally, the change to reference part 1.1.1 instead of part 1.1 more accurately points to the act of modifying or adding to the list instead of writing the original list. In this way, R2 goes with R1 part 1.1 and R2 part 2.1 goes with R1 part 1.1.1. (5) AE requests the SDT revise the similar but not identical language in R4 and R5. R4 says “... shall use a systematic approach to training to develop and implement training ...” whereas R5 says “... shall use a systematic approach to develop and deliver training ...” Using different language seems to indicate different intent. AE believes the intent of the terms “implement” and “deliver” is the same and identical language would be appropriate. The VSLs would also need revision. (6) The VSL for R1 includes a moderate level to address the failure “to implement the identified changes to the Real-time reliability-related task (1.1.1.)” and a severe level to address the failure “to prepare a Real-time reliability-related task list (1.1 or 1.1.1.)” AE believes the act of implementing the identified changes to the task is accomplished by updating the task list as required by R1 part 1.1.1. As such, two VSLs cover the same failure. AE recommends resolving this discrepancy by striking “or 1.1.1” from the severe VSL. (7) AE recommends striking the phrase “to establish training requirements” from the VSL for R4 since R4 does not require the establishment of training requirements. (8) The VSLs for R1 and R4 both address the failure to develop training. However, the VSL is high in R1 and severe in R4. AE requests the “develop” VSL for R4 be changed from severe to high. Failure to develop training for Operations Support Personnel (R4) should not be higher than the failure to develop training for System Personnel (R1).

Individual

Keith Morisette

Tacoma Power

Yes

No

The use of the phrase “systematic approach to training” (SAT) in R4 is problematic since the same phrase is used in R1 to mean something different. The term SAT is well defined by FERC and understood as it relates to R1. The use of the term “systematic approach to training” in R4 is not consistent with this definition of “systematic approach to training” as written in

FERC Order No. 742 para 25, which indicates that “[the training] ...is directly related to the needs of the position in question”. The training in R4 requires the training of Operations Support Personnel on the impact of their job function to the Real-time reliability-related tasks and not on the needs of their own position. Additionally the Rationale for R4 in the latest redline states: “This requirement does not require that entities create a new, comprehensive systematic approach to training process for training Operations Support Personnel.” We agree that this should not be required and therefore the phrase “systematic approach to training” should not be used in the requirement.

Group

National Grid

Michael Jones

No

Recommendation to modify the current definition of System Operator to read as follows:
System Operator: An individual at a control center of a Balancing Authority, Transmission Operator, or Reliability Coordinator, who monitors and directs the operation of the Bulk Electric System in Real-time. Without more explicit wording, personnel at locations other than an “individual at a control center” who are not system operators may be encompassed by the definition. Distribution-related field, substation and satellite location personnel should not be classified as System Operators by an overly broad definition. A System Operator performs two critical functions: monitoring and directs the control (of the status of Bulk Electric System assets). Anyone who does not perform these functions must rely on a System Operator to perform them, and is not operating independently. They are not System Operators.

No

The Applicability section of the standard related to Transmission Owners and Generator Operators requires clarification. In the Applicability section, for the Transmission Owner the list of tasks in 4.1.4.1 does not adequately clarify applicable Transmission Owner personnel. The protection of Transmission Owner assets and personnel safety should be outside the reach of NERC standards. Section 4.1.4.1 rewording: Personnel at a facility that acts as a centralized Control Center for the Transmission Owner whose role is to interact with their Reliability Coordinator, Balancing Authority or Transmission Operator. Field switching personnel or other personnel who do not act independently of this centralized Transmission Owner Control Center are exempt. Requirement R2: Requires that each RC, BA, TOP, and TO shall verify, at least once, the capabilities of its System Personnel. The Implementation Plan states that entities that were not previously subject to PER-005-1 must have verified its System Personnel’s capabilities to perform each of its assigned real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, prior to the effective date of the

standard. This potentially results in requiring entities to perform compliance activities prior to the effective date of the standard which could present problems in certain jurisdictions. Suggest changing to: Entities that were not previously subject to PER-005-1 must have verified its System Personnel's capabilities to perform each of its assigned Real-time reliability-related tasks, at least once, as identified in Requirement R1 part 1.1, within one year (or six months), of the standard becoming in force within their respective jurisdiction.

Group

JEA

Tom McElhinney

No

The term Support Personnel is still to vague and could encompass all back office workers and perhaps planning groups therefore requiring them to take all the training that system operators are required to take.

Individual

Brett Holland

Kansas City Power & Light

Agree

SPP - Robert Rhodes

Group

Luminant

Brenda Hampton

Yes

No

Since this standard is not intended to apply to GOPs that receive unit specific dispatch instructions and then relay them to plants, Applicability Section 4.1.5.1 should be modified to explicitly state that GOPs in certain regions are not included in this standard; i.e. this standard does not apply to GOPs within ISOs/RTOs that normally issue unit specific dispatch instructions (e.g. ERCOT). This way there is no misunderstanding about whether the Requirement is applicable. The rational for R5 states that the requirement mandates a systematic approach to training be used to tailor the training program to the needs of the organization and that the systematic approach to training does not need to be as comprehensive as the ones used for RCs, BAs and TOPs. While we agree with the rational, it is not clear based on the requirement what specifically a systematic approach to training would be or what could constitute compliance. Also the measure (M5) requires evidence of completed training but the RSAW ask for evidence that training was developed using a

systematic approach. The measure or the evidence requirement in the RSAW needs to be changed so they are in sync.
Individual
Jack Stamper
Clark Public Utilities
Agree
Austin Energy
Individual
Catherine Wesley
PJM Interconnection
No
PJM still finds the definition for Support Personnel confusing. Further clarification is needed to better define what direct support is provided by the Support Personnel. PJM recommends the addition of the phrase, 'and next day analysis' after Real-time in the definition.
No
PJM continues to feel there are concerns with this approach to the FERC directives and "issues" that "should be vetted" in conjunction with other "equally effective and efficient" solutions, even as Order 742 allows. PJM offers that reliability would be better served if the standard included an option or path for applicable entities to participate in a training program that has been granted accreditation. This would be more in line with how other industries implement a systematic approach to training and seem more in line with the stated goals of the NERC Reliability Assurance Initiative (RAI). Instead of incenting a minimalistic, siloed approach to training that potentially focuses on finding administrative errors in training records and learning objectives, accreditation could promote excellence by putting focus on the program and its processes. A more holistic approach to training would provide the industry more flexibility in responding to trends and changes, including identifying and requiring appropriate training for new types of participants as their potential to effect the reliability of the BES increases.
Individual
John Brockhan
CenterPoint Energy Houston Electric LLC.
Yes
CenterPoint Energy agrees with the SDTs revisions to the definitions of Support Personnel and System Operator. CenterPoint Energy would like the SDT to consider the following additions to the definitions to assist in delineating those specific personnel intended for System

Operator. "System Operator: An individual at a control center of a Balancing Authority, Transmission Operator, or Reliability Coordinator, granted with the responsibility and authority to operate or direct the operation of the Bulk Electric System in Real-time."

No

CenterPoint Energy appreciates the SDT for their time and effort dedicated to facilitating the industry in its understanding and input into the Operations Personnel Training Standard. CenterPoint Energy is concerned that many years from approval of this standard as written, the intent and the scope of the Transmission Owner applicability would be lost. An auditor, auditing to the written language and not being a part of the development and the history of this standard could interpret the applicability section and expect to see personnel that were not originally a part of the FERC directive. "Protecting personnel safety," for example could be interpreted as safety personnel, working for a TO registered entity that has no relevance to a control center or a facility that has personnel that are operating or directing the operation of the BES. CenterPoint suggest removing the following language "including protecting assets, protecting personnel safety, adhering to regulatory requirements and establishing stable islands during system restoration", and suggest the following for consideration. "4.1.4.1 Personnel at a control center, excluding field switching personnel that have been granted independent authority or responsibility to perform Real-time reliability related operation of the Bulk Electric System."

Group

Western Area Power Administration

Lloyd A. Linke

Agree

US Bureau of Reclamation

Individual

Michiko Sell

Public Utility District No. 2 of Grant County, Washington

No

GCPD feels the definition of "Operations Support Personnel" is too vague and fears that the measure of Operations Support Personnel cannot be consistently applied without further interpretation. Individuals who serve in roles that directly support real-time, reliability-related tasks performed by System Operators that are merely administrative in nature, should not be subject to this training requirement.

No

GCPD agrees with comments (1-8) as submitted by City of Austin dba Austin Energy.

Group
Bonneville Power Administration
Jamison Dye
Yes
No
BPA recommends that the standard drafting team create a definition for “Bulk Electric System company specific reliability related task.” Although BPA understands the benefit of having the flexibility to create a company-specific definition and to create a task list based on that definition, BPA maintains this would allow auditors the ability to make different and inconsistent interpretations of definitions. BPA understands the drafting team does not have control over the auditors, and this is why we are recommending the definition in order to create more clarity in the standard. BPA believes that R3.1 should also address when a new IROL is discovered within its TOP or BA. BPA believes that each reference material should refer back to a specific requirement in the standard. For example, Reference #3. The only reference to “normal and emergency operations” is in R6. BPA recommends the drafting team either revise each reference to refer to a specific requirement or eliminate the reference from the standard. BPA also believes that R4.1 and M4.1 have become too prescriptive; the requirement of both an annual evaluation of the training and the number of elements listed to show that it was evaluated, is unnecessary for meeting the training requirements of support personnel. BPA requests that “internal audit results” in M4.1 be defined.
Group
seattle city light
paul haase
Agree
Lower Colorado River Authority (LCRA)
Group
FirstEnergy
Doug Hohlbaugh
No
FirstEnergy disagrees with each definitions based on 1) the revised applicability statement for the Transmission Owner and 2) the use of the "as identified" within the Operating Support Personnel definition. FirstEnergy does not agree with the revised Transmission Owner applicability statement that now indicates personnel "who act independently". FirstEnergy recommends the team revert to the prior Transmission Owner statement since the Transmission Owners within PJM operate BES facilities under the direction of the PJM

Transmission Operator. Since each definition in question refers to the Transmission Owner, by extension we disagree with each on this basis. Additionally, the Operating Support Personnel definition raises questions as to which entity is responsible for the tasks described and clear expectations are needed for a compliance audit. It should not be up to each functional entity to simply "self identify" which tasks they support. The task expectations need to come from clearly identified standard requirement, agreements, assignments, etc. For example, in the operations time horizon the determination of SOLs, IROs is a functional responsibility of the Transmission Operator and Reliability Coordinator as described in NERC reliability standard FAC-014-2. A Transmission Owner's role in the determination of SOLs/IROs should not come into question unless the responsible Transmission Operator/Reliability Coordinator has established a clear reliance on the Transmission Owner through clear documented agreements or protocols. Lastly, we believe the general reference to "assessments" in the phrase "outage coordination or assessments" as stated in the Operating Support Personnel may inadvertently extend the training to some Transmission Owner support staff beyond what is intended. The definition should clarify that the assessments are current-day, day-ahead or week ahead to avoid potential inclusion of corporate personnel who may have a longer term seasonal assessment view.

No

FirstEnergy's concerns/comments raised regarding Draft 1 of the proposed standard remain. In the last comment period we suggested that that collaborative effort already completed by separately registered TOP and TO organizations, such as an IOU and RTO/ISO organizations, should be permitted without the need for a Transmission Owner to independently perform expectations under requirement R1. For example, PJM (TOP) and its member TO companies have already invested a significant amount of time and resources to jointly and consistently implement a systematic approach to training (SAT) for applicable transmission operations personnel. As part of the implemented SAT, a detailed job task analysis was performed collaboratively, resulting in a common approach for the established set of reliability-related tasks. The Requirement R1 should be clarified to recognize and maintain these coordinated efforts. Based on the above comments, FE recommends that text "jointly or independently" after the word "shall" in requirement R1. As revised the text would read "R1. Each Reliability Coordinator, Balancing Authority, Transmission Operator, and Transmission Owner shall independently or jointly use a systematic approach to training (SAT) ..." FirstEnergy would appreciate a response from the drafting team as to why the "jointly or independently" was not incorporated, to the extent the next draft remains unchanged in this regard.

Group

SPP Standards Review Group

Robert Rhodes

Yes
The definition of Operations Support Personnel is fine as long as the audit approach and guidance adhere to the definition. If it varies any, then the definition becomes a moving target and the compliance focus isn't directed toward the definition.
No
In the Applicability Section under Transmisssion Owner in 4.1.4.1 'field switching personnel' have been excluded from the training requirements of PER-005-2. This is somewhat confusing and we ask the drafting team to provide additional clarification as to how they arrived at this decision. In the first sentence in the 4th line of M2, 'task' should be plural.

Additional Comments Submitted:

NIPSCO

Huston E. Ferguson

Comments for NIPSCO to justify Negative votes:

- Aspects of this revision don't adhere to the NERC Functional Model
- This revision contains definitions unique to just this standard and not applicable across all standards
- Unsure of how or if the unique definitions used in just this standard, just this revision, will apply or interact with the other standards

Apprehensive about how auditors will interpret this standard and it's unique stand-alone definitions and their interaction with the other standards and the NERC model definition

Blue Ridge Electric

Lee Layton

My negative vote on 2010-1, PER-005 is as follows,

“This revision of the standard is including TO’s without a strong justification for the need and no tangible information on how the need for a TO to comply will be determined.”

Tri-State Generation and Transmission

Sergio Banuelos

1. The drafting team has revised PER-005-2 in response to stakeholder comments. Do you agree with the revised Support Personnel and System Operator definitions? If you do not agree

or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments.

Yes

No

Comments: **We do not believe the new defined term "System Personnel" is needed. Maintaining the System Operator definition is adequate.**

When the term "System Operator" is used within PER-005-2, it is used in the "System Personnel" definition that is defined for use only within PER-005-2 which is not intended to be a NERC Glossary definition. Within the "System Personnel" definition, "System Operators" are limited to those from entities that are RCs, TOPs, BAs, and TOs. GOPs are not listed, and therefore are excluded as it is written. The PER team did not make it clear whether GOPs are going to be included in the proposed "System Personnel" definition.

Support Personnel needs to be defined more clearly and in more detail.

We question the need to extend the applicability of the standard to Transmission Owners. Local transmission control centers that operate portions of the BES meet the definition of a System Operator, therefore meeting the conditions required to register as a Transmission Operator.

2. The drafting team has revised PER-005-2 in response to stakeholder comments. Do you agree with the revised standard? If you do not agree or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments.

Yes

No

Comments: **Requirement 1.3 states training shall be delivered to System Personnel. We believe System Operator should be added, and prefer it be used in place of the new term System Personnel.**

Currently the ad-hoc group has some useful rationale for Generator Operator under 4.1.5. However, once the standard gets approved the rationale box will be removed and the applicability to plant operators will not be clear. Therefore Tri-State requests that the last sentence from the "Rationale for Generator Operator" box stating "*Plant operators located at the generator plant site are not required to be trained in PER-005-2*" should be added as the last sentence in the Applicability Section 4.1.5.1.