

**Comment Form
Proposed System Personnel Training Standard**

This form is to be used to submit comments on the proposed System Personnel Training Standard Authorization Request. Comments must be submitted by **March 20, 2006**. You may submit the completed form by e-mailing it to: sarcomm@nerc.com with the words "System Personnel Training SAR Comments" in the subject line. If you have questions please contact Mark Ladrow at mark.ladrow@nerc.net on 609-452-8060.

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 Do not submit a response in an unprotected copy of this form.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Walter Cintron	
Organization:	Con Edison of NY	
Telephone:	212 5808684	
E-mail:	cintronw@coned.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> MRO	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> RFC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SERC	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> SPP	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Background Information:

Posted for comments is the second draft of the System Personnel Training Standard Authorization Request (SAR). The approach proposed in this revised SAR is to be flexible to the industry in determining their unique training needs and not try to force a single set of training topics on a widely diversified audience. Rather than a “one-size fits all” list of requirements, this approach is based on the fact that quality training results from applying a systematic approach to training that includes training needs assessment, training development, delivery, and evaluation. The standard will provide the framework for a training program based on the tasks performed that impact reliability.

The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

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Regarding the scope of the SAR:

The SAR Drafting Team is proposing that this SAR will result in two standards:

- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

where is this information?

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For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

the information should be provided in order to make an assessment.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
2. **Designing and adjusting the training program** to make sure it directly correlates performance requirements, learning objectives, and learning evaluation to tasks. The training program must be designed to bring the system operators from their current level of competency to the organization's desired level of competency.
3. **Developing the training program** so that it includes effective learning experiences and delivery methods. The approach to this step, as well as step 2, will drive the requirements for training and operating staffs.
4. **Delivering the training to the personnel**; in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

Not in the form of the rejected SAR Draft.1.0 323825

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The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

The Draft SAR 1.0 323825 is missing sections R9,10,11,12,13 and 14.

I think that this initial SAR should limit itself to those performing operating tasks in a real time or day ahead time frame.

As is the SAR is too encompassing and requires resources that are not available and may be unrealistic to support if drafted by many entities throughout the country.

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Michael J. Pfeister	
Organization:	Salt River Project	
Telephone:	602-236-3970	
E-mail:	mjpfeist@srpnet.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
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Yes

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Yes

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- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

This should work if the requirement for a training plan that addresses "knowledge and competencies required for reliable system operations" remains in place (PER-002-0, R3.3).

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E-mail:		
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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

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2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

The SES believes that a Task Analysis is the correct approach.

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3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

The SES believes that this is the correct general approach but notes two concerns: 1) The drafting team is directly differing from the Functional Model. While there are many problems with the Functional Model, and NERC has already determined that differences between a requirement in a standard and the definition of the Functional Model will be resolved in favor of the standard, the SES prefers a more coordinated approach. 2) The detail of the tasks may result in some organizations with a very small set of tasks for which they must meet the personnel training standard.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

The SES notes that this is an excellent approach, but cautions that neither training programs nor personnel certifications nor qualifications are a guarantee of reliability.

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

The SES believes that it is appropriate to begin the development of training standards with those most affecting the real-time reliability. The SES also believes that it will be very difficult to develop training standards for personnel involved in longer range planning. It is an inherently different process, involving group efforts and cycles of review, that tends to identify strong and poor performers. There are general requirements for educational level and subjects, training in the tools of trade and the general processes used in longer range planning, but it difficult to conceive of a training program that could provide assurance of "good planning."

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Michael Scott	
Organization:	Arizona Public Service Company	
Telephone:	602-250-1384	
E-mail:	Michael.Scott@aps.com	
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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

We agree with this approach. We value the certification of operators, and the certification of personnel who perform support tasks such as engineering, management, and technical services.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

The wording here is a little ambiguous. Is it being proposed that the SAR Drafting Team identify and analyze the critical tasks associated with grid operations, and then each participating organization will determine within their unique structure who performs these critical tasks?...Then these identified personnel would fall under the auspices of the new standard?

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For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

Once the tasks that "directly impact reliability of the BES" are identified and analyzed, each participating organization would be in the best position to decide which individuals would need to comply with the standard.

Regarding the Focus of the Proposed SAR

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Yes

No

Comments

We agree with the SAT philosophy for determining training requirements. However, the description provided in Step 1 above prescribes strict adherence to the following model: Job Analysis, Task Analysis, Needs Assessment. At the risk of getting into semantics, the understanding of these terms is pivotal to successful training: (1) Job Analysis, i.e. identifying tasks associated with a job, and determining these task's (DIF) Difficulty/Importance/Frequency (2) Task Analysis, i.e. analysis of each of these tasks to identify the knowledge/skills/abilities involved, (3) "Needs Assessment" (aka Needs Analysis) regarding each task to identify/solve gaps between performance desired and existing performance.

We would challenge the Drafting Team to consider the possibility that thorough analysis can be performed correctly in a number of ways. For instance, many reserve the right to go no farther in the analysis process than the DIF determination, which

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may reveal that the task is so simple (or so prescriptively proceduralized), or that is so unimportant (from a stability or reliability standpoint), or is done so frequently that the likelihood of excellent performance is very strong, that no further analysis is indicated.

In addition, flexibility is often provided to analysts to allow the use of Needs Assessment first, which may preclude the need for JTA at all. For example, if a performance deficiency is detected, Needs Assessment may determine that this problem occurred because of a procedure deficiency, human factor shortfall, or other non-training related challenge. The correct intervention could be a job aid, procedure revision, or better lighting. IF there is a knowledge or skill deficit, THEN a JTA may be performed, learning objectives designed, and coursework developed.

In summary, we believe that the Systematic Approach to Training is an excellent process, but that this standard should not prescribe the absolute sequence or order of its application.

Finally, the term "assessment" in item 5 above has a broad range of meaning. Do you mean that the trainee must be assessed (i.e. evaluations or examinations)? Or do you mean that the evaluation process needs to be assessed for effectiveness (or audited) periodically? Or do you mean that the improvement in personnel performance (because of training) needs to be measured or assessed via some pre-determined metrics?

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 Do not submit a response in an unprotected copy of this form.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input checked="" type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> MRO	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> RFC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SERC	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> SPP	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Background Information:

Posted for comments is the second draft of the System Personnel Training Standard Authorization Request (SAR). The approach proposed in this revised SAR is to be flexible to the industry in determining their unique training needs and not try to force a single set of training topics on a widely diversified audience. Rather than a “one-size fits all” list of requirements, this approach is based on the fact that quality training results from applying a systematic approach to training that includes training needs assessment, training development, delivery, and evaluation. The standard will provide the framework for a training program based on the tasks performed that impact reliability.

The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

Comment Form – Proposed System Personnel Training Standard

Regarding the scope of the SAR:

The SAR Drafting Team is proposing that this SAR will result in two standards:

- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

NPCC participating members believe the scope of the SAR should be limited to the tasks directly impacting the reliability of the Bulk Electric System. It is not entirely clear to whom this standard will apply.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

NPCC Participating members, although believe it is a laudable approach to allow the Operating Tasks Analysis to determine what and who the training program should address, the Standard should be initially directed at those who have direct control or those that have supervisory control to implement actions that may impact reliability of the system.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

Many participating members of NPCC, although recognizing that this effort stems from a blackout recommendation have noted that the SAR seems vague, seems unmeasurable in a meaningful way and questions the overall need for a standard. Perhaps a guideline may be more appropriate.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
2. **Designing and adjusting the training program** to make sure it directly correlates performance requirements, learning objectives, and learning evaluation to tasks. The training program must be designed to bring the system operators from their current level of competency to the organization's desired level of competency.
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4. **Delivering the training to the personnel**; in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

If in fact a standard must develop then the NPCC participating members believe that the systematic approachful would be useful however it must be stressed that the individual organizations that must perform the training and show their affected employees must demonstrate a level of competency than they must be afforded the latitude to tailor their training programs to accomplish this. How does one apply a metric to competency?

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

**Comment Form
Proposed System Personnel Training Standard**

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ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

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Do not submit a response in an unprotected copy of this form.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Michael Calimano	
Organization:	New York Independent System Operator	
Telephone:	518-356-6129	
E-mail:	mcalimano@nyiso.com	
NERC Region	Registered Ballot Body Segment	
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input checked="" type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
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The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

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- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

The NYISO agrees with the SAR drafting Team's approach to limit the scope of the standard to the area of "real time operating tasks" and to require a systematic approach to training. However, the SAR as written is too vague with regard to whom the standard applies. If the standard is meant to merely apply program method, a standard is not required - a definition of what is intended by the existing requirement for "coordinated training" will do.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

A national "Operating Tasks Analysis" can provide a useful baseline reference on the topics training programs should address in assuring a base competency of operating personnel in North America. However, prior to the completion, review and evaluation of the task analysis project, it is premature to formalize a training standard based on that foundation. At the present time, if a training standard is needed, it should clearly be applied to those functional entities that are under compliance and certification requirements - RC, BA and TOP.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

The NYISO does agree that the proposed systematic approach to training will be helpful in developing effective training programs. The need for a North American "Operations Support Task Analysis" to define training which personnel or which organizational entities are required to comply with the training standard not clear. In the mandatory standard environment, each entity responsible to comply with NERC standards, will train operations staff to comply. Extending the standard to cover "support" tasks should be a secondary consideration, if it is necessary at all.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Delivering the training to the personnel;** in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

- Yes
- No

Comments

The NYISO agrees that a requirement of a "systematic" approach to training will be a benefit to the industry. However as mentioned before, simply putting this as a standardf requirement without (a) some mention of topics to be included in the training program, and (b) a sense of how the requirement can be measured will render the standard too vague, which bring into question the need for such a standard.

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

The NYISO agrees that each entity should determine their own specific training needs and the methods to address those needs. If there is to be a benefit of a NERC training standard, such a standard should define a consistent set of topics which need to be addressed across the industry, regardless of size, location or organizational structure.

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

The NYISO agrees that the systematic approach to training based on local needs and tasks is more that will benefit the reliable operation of the BES. However, the standard needs to be developed with a manageable scope, clearly defined measures of compliance, and it should contain an outline of topics that would insure consistency in both the method and the content of operations training across the industry.

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	James H. Sorrels, Jr.	
Organization:	American Electric Power	
Telephone:	(614) 716-2370	
E-mail:	jhsorrels@aep.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input checked="" type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

- Yes
- No

Comments

Yes, the NERC Certification Program already includes a list of required continuing education topics. Additional NERC training documents developed to influence and support the known training tasks from the NERC task analysis, would be good to support the standard, but not to measure the standard. These documents would be created separate from the standards and would be added to the existing NERC training documents.

Comment Form – Proposed System Personnel Training Standard

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

The standard should provide a time specification and allowance for implementation of the standard. Putting future continuing education training materials and programs into format will fall into place more readily than the existing initial training program materials already in place by most entities. Re-development of these programs, especially if requiring additional staffing to handle development and delivery methods, would require more time to implement for existing progression programs.

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<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Comment Form – Proposed System Personnel Training Standard

Group Comments (Complete this page if comments are from a group.)
Group Name: Midwest Reliability Organization (MRO)
Lead Contact: Dick Pursley
Contact Organization: MRO for group (Great River Energy for lead contact)
Contact Segment: 2
Contact Telephone: (763) 241-2249
Contact E-mail: dpursley@grenergy.com

Additional Member Name	Additional Member Organization	Region*	Segment*
Al Boesch	NPPD	MRO	2
Terry Bilke	MISO	MRO	2
Robert Coish	MHEB	MRO	2
Dennis Florom	LES	MRO	2
Ken Goldsmith	Alliant Energy	MRO	2
Todd Gosnell	OPPD	MRO	2
Wayne Guttormson	SPC	MRO	2
Tom Mielnik	MEC	MRO	2
Jim Maenner	WPSC	MRO	2
Pam Oreschnick	XEL	MRO	2
Dave Rudolph	BEPC	MRO	2
Darrick Moe, Chair	WAPA	MRO	2
Joe Knight, Secretary	MRO	MRO	2
27 Additional MRO Members	Companies not named above	MRO	2

* If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

However, NERC needs to seriously address the accuracy and usability of the Functional Model.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

The concern we have with a "systematic" approach is training that is required in areas where Operator exposure in real time is sporadic (e.g. disturbances, restoration, frequency arrest, voltage collapse) may be sacrificed. A "systematic" approach in our view will tend to concentrate more on supporting daily operating functions, and ignore keeping Operators familiar with abnormal operations which is critical to maintaining the BES. Unfortunately a "systematic" approach has challenges in the compliance world whereas a specific number of hours is measurable and can easily fit in the compliance world.

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

It appears that this SAR is not a new standard as checked under SAR type on SAR-1 but is actually a revision to existing standard PER-002-0. The PER-002-0 standard would appear to be redundant and not needed after this standard has been developed. We are very pleased about the NERC Personnel Subcommittee's interest and efforts to clarify and develop standards concerning training of support personnel. We also applaud the responsiveness of the System Personnel Training SAR Drafting Team to the initial concerns with the first draft of the SAR.

**Comment Form
Proposed System Personnel Training Standard**

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(Complete this page for comments from one organization or individual.)		
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E-mail:		
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The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

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- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

We don't disagree with the concept but asking for endorsement of the "Operating Tasks Analysis" that has not been published or included for review with this SAR seems inappropriate and premature in the development of the standard itself especially if it will be used to "determine which types of organizations will be required to comply with the standard".

Need clarification on "type of organization" as this seems to be getting away from the registered entity concept.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

Need clarification on "type of organization" as this seems to be getting away from the registered entity concept.

The FRCC believes that efforts and resources should focus on "real-time" personnel standard at this time and should be closely coordinated and complementary to the developments of the PCGC and the new CEH Certification policy. Real-time personnel have the "primary" impact to the reliability of the BES and as such should be the focus of the standard. The development of any standards should at the very least, complement the Operator Certification process especially in terminology and overlapping of compliance "measures".

The PS scope with regard to "support personnel" needs to be limited at this time and not included within this SAR. Further, we would propose to eliminate "support personnel" training scope completely from this SAR and initiate a "stand-alone" SAR addressing "support personnel" training.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
2. **Designing and adjusting the training program** to make sure it directly correlates performance requirements, learning objectives, and learning evaluation to tasks. The training program must be designed to bring the system operators from their current level of competency to the organization's desired level of competency.
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4. **Delivering the training to the personnel**; in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

The FRCC appreciates the tremendous efforts that have been undertaken in researching, addressing and developing training program improvement strategies for the industry with respect to BES system operator training. We also agree in principle that the "systematic" approach to developing training programs is the "best" approach for the industry as we go forward.

Having said that, we do have significant concerns with the proposed implementation track via the "training standard". Our concern lies in translation of these subjective training concepts, principles and approaches into "clear" and "measurable" compliance elements, if the standard were to proceed through the development process.

The SAR states that "the training standard includes all five of these steps (of the systematic approach), and measures compliance by requiring documentation that these steps were performed". The FRCC contends that the necessary documentation to demonstrate compliance of a valid "systematic approach" leaves too much ambiguity to become effective Reliability Standards, Measures.

Comment Form – Proposed System Personnel Training Standard

As we further reviewed this issue, we have come to the conclusion that the Reliability Standard may be the wrong document to use to convey the requirements of a "systematic training program" to the industry.

We suggest that the "Training Standard" should proceed but with a slightly different approach. The evaluation /verification and accreditation / certification (for lack of a specific terminology) of an entity's "systematic training program" should occur outside the Reliability Standards and Compliance arena. The evaluation should also be performed by appropriate personnel who are qualified and knowledgeable in the training concepts to ensure accurate determination of adequacy of such programs. The "Training Standard" would then prescribe training requirements, by job function (ie. hours in relevant study areas as determined by competency evaluations), and based on JTA impacts on BES reliability.

On further reflection, we would also offer that such an approach will lend itself better to improving the overall quality of industry training programs than the proposed track of the standard. An evaluation / accreditation process will re-focus the programs away from striving to meet the "minimum" documentation requirements of a "systematic training program" to a cooperative process geared to, not only evaluate the program, but perhaps serve as an opportunity to share industry-wide training "best practices".

Finally, in light of limited resources, this approach would provide the industry the greatest flexibility at achieving compliance to the "Training Standard" by allowing entities access to not only "in house" training programs but also access to external training resources (as long as they have been "accredited" as a "systematic approach program") to fulfill their training objectives.

Comment Form – Proposed System Personnel Training Standard

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

Some degree of self-determination is appropriate as long as it is based on an appropriate "Job Task Analysis".

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

We reiterate our concern with the development of a "support staff" training standard at this time. The NERC PS should focus its efforts on real-time operations of the BES at this time. Trying to get every entity to have a "Cadillac" training system is beyond the charge of establishing MINIMUM standards as stated in the SAR "purpose". Training programs for all the "support staff" in an organization would be a significant cost that may not significantly improve the reliability of the BES.

Introduction - Page SAR-5, item number 5. What process is an "amendment of the Training Standard"? The word "amendment" is not used in the Reliability Standards Process Manual, Version 4 of 8/2/05. The SDT/PS should follow the approved process for modification and not attempt to create a new process by saying they are going to "amend" a standard when they can get around to it.

Finally, we want to reiterate our appreciation for the significant work of the PS and by no means are we suggesting it should be tempered or abandoned. We feel that the concepts, as described, do "need" to be delivered to the industry, we just don't concur that the "Training Standard" is an appropriate "systematic training program" evaluation and measurement vehicle.

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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

For each of the proposed standards for real time operating tasks and support tasks, would the standard differentiate between the new hire who may need to be trained to perform all of the tasks identified to a specified minimum level of competency and the more experienced person who might need, on a periodic basis, to demonstrate that they can still perform at the minimum level of competency and perhaps also perform at a specified higher level of competency?

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform ‘real-time’ operating tasks, the SAR Drafting Team is proposing that the ‘Operating Tasks Analysis’ being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team’s approach to determining which types of organizations will be required to comply with the standard for personnel who perform ‘real-time’ operating tasks?

Yes

No

Comments

Using the task analysis would be a good method for identifying who would be subject to the real time operating tasks standard. The approach suggests that if a person performs any of the tasks identified with “real time operating” that person’s organization regardless of its functional model type would be subject to the standard. Would the standard apply to an organization if the person performed only one or two tasks or if an organization’s understanding of what a particular task entails differs from the accepted task analysis prepared by the Personnel Subcommittee?

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

While this could be an acceptable method for identifying support tasks that directly impact reliability the range of organizations that might be affected could be much broader and more difficult to assess. And the same question needs to be asked...what if an organization performs only one or two support tasks and what if those tasks are performed by different kinds of persons in a wide variety of organization types? Would any organization that had perhaps one person in one department and one person in another department who each performed only one or two tasks be subject to the standard?

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

The systematic approach is an excellent approach to developing training versus requiring a specific number of hours of training on specific topics.

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

A standard that requires any given entity to determine its own specific training needs is preferable to one that prescribes or mandates training that might not be applicable to all organizations.

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

This is a much more labor intensive process. Arriving at an assessment that accurately measures a person's competency could be difficult to create or achieve, particularly in an organization with limited training resources.

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Telephone:	410 597 7593	
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2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Every effort should be made to examine and leverage existing work and efforts that are in place already and functioning well. In the PJM RTO, LCC and MOC operators have PJM training requirements that need to be met for initial operator and ongoing continuing operator training. These requirements were established by taking into account several factors. It is strongly desired that the NERC standard would align with and recognize the initiatives currently underway in PJM.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

The role of the support staff at the Transmission Operator should be the primary focus, with the role of the support staff at Local Control Centers being secondary since the local control center individuals support the Transmission Operator who is the ultimate responsible entity.

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

Yes, this approach is critical to ensuring that the training is relevant and specific to benefit each organization.

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Comments

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Organization:	Cinergy	
Telephone:	513-287-3368	
E-mail:	jeff.baker@cinergy.com	
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- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
2. **Designing and adjusting the training program** to make sure it directly correlates performance requirements, learning objectives, and learning evaluation to tasks. The training program must be designed to bring the system operators from their current level of competency to the organization's desired level of competency.
3. **Developing the training program** so that it includes effective learning experiences and delivery methods. The approach to this step, as well as step 2, will drive the requirements for training and operating staffs.
4. **Delivering the training to the personnel**; in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

My concern is this approach will result in voids. I believe high level goals should be outlined by the SAR drafting team with the individual entities providing the necessary training to meet each goal.

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

**Comment Form
Proposed System Personnel Training Standard**

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ALL DATA ON THIS FORM WILL BE TRANSFERRED AUTOMATICALLY TO A DATABASE.

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Do not use numbering or bullets in any data field.
Do not use quotation marks in any data field.
Do not submit a response in an unprotected copy of this form.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Kathleen A. Davis	
Organization:	Tennessee Valley Authority	
Telephone:	423-751-8023	
E-mail:	kadavis@tva.gov	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> MRO	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> RFC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input checked="" type="checkbox"/> SERC	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> SPP	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Background Information:

Posted for comments is the second draft of the System Personnel Training Standard Authorization Request (SAR). The approach proposed in this revised SAR is to be flexible to the industry in determining their unique training needs and not try to force a single set of training topics on a widely diversified audience. Rather than a “one-size fits all” list of requirements, this approach is based on the fact that quality training results from applying a systematic approach to training that includes training needs assessment, training development, delivery, and evaluation. The standard will provide the framework for a training program based on the tasks performed that impact reliability.

The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

Comment Form – Proposed System Personnel Training Standard

Regarding the scope of the SAR:

The SAR Drafting Team is proposing that this SAR will result in two standards:

- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Ron Falsetti	
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Telephone:	905-855-6187	
E-mail:	ron.falsetti@ieso.ca	
NERC Region	Registered Ballot Body Segment	
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input checked="" type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
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The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

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- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

We agree that the scope of the initial standard should cover training program pertaining to real-time operating tasks that directly impact reliability of the BES. However, the way this question is worded (...to persons performing...) and from the SAR as presented, it is not clear whether the proposed standard, even within the aforementioned scope, is intended to set requirements for:

(i) the entities that perform these operating functions to develop the needed training program for their operating personnel to acquire the competency to perform these tasks, or

(ii) the training program to cover a minimum set of topics that enables the operating personnel to acquire the competency to perform these tasks, or

(iii) both of the above or something else.

While we agree with the recommendation that a systematic approach be used to develop the required training program, and further recognize a training standard should not be overly prescriptive as different organizations (entities) may assign different/additional tasks to its operating personnel. We nevertheless believe that absent any specificities such as to whom the standards apply and a high level scope of the minimum tasks or task related topics to be covered by the training program, the need for having an industry-wide standard for personnel training becomes questionable.

In brief, the SAR as written fails to convey the essence of the requirements - to whom the standard apply and whether or not it is a process that is required, which we feel is too vague, or a minimum set of topics that need to be included in the training program, or both.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

While we agree that the Operating Tasks Analysis can offer assistance in providing a focus on who and the topics that a training program should cover, the analysis itself is not a critical factor in determining which organizations or functional entities should comply with the training standard (assuming a standard on training program development is needed). Without prejudice to the yet to be made available Operating Tasks Analysis results, we feel that, as a first step, the standard should be directed to at least those recognized entities that must make decisions in implementing, approving or directing others to implement actions that have a direct bearing on system reliability.

At the onset, the functional entities that are required to have a training program should be the prime candidates to comply with such a standard. At present, the certification standards for RC, BA and TOP are being developed and expected to be posting for balloting. Each of these standards contains a requirement for the respective entity (organization) to have a training program and provide its operating personnel with training (e.g. Standard ORG-022-1). Given this requirement, it makes logical sense that a standard on training program development be also applied to these entities.

To require other entities for which an organization certification standard and the corresponding requirement for having a training program do not current exist or expect to be established in the near future would likely be challenged by these other entities. Moreover, the scope of the training standard would be too wide for effective development and compliance monitoring.

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

We do not hold a position on whether or not the proposed analysis be performed since the priority at this time is to (a) determine the need for having a standard for the entities (or is it the personnel as the question implies?) that perform "direct" tasks, and (b) develop the standard. Extending the standard to cover entities (or personnel) that perform the "support" tasks should be a secondary consideration and, when pursued, can be built upon the structure and success of the initial set.

We agree that the systematic approach will help responsible organizations develop a structured and effective training program for operating personnel to attain the required competency to perform their tasks. We further recognize that the training standards should not be prescriptive as different organizations may assign different tasks to its operating personnel, and hence the standards should provide the flexibility for these organizations to develop the training program according to their specific needs, budget and resource considerations, etc. However, as mentioned earlier, simply putting this as a standard requirement without (a) some mention of the topics, even just at a high level, to be included in the training program and (b) a sense of how the requirement can be measured may render the standard too vague, which begs a question on the need for this standard.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

We agree that the systematic approach can help responsible organizations to develop a structured and effective training program to help operating personnel to acquire the needed competency to perform their tasks. However, as mentioned earlier, simply putting this as a standard requirement without (a) some mention of the topics, even just at a high level, to be included in the training program and (b) a sense of how the requirement can be measured may render the standard too vague, which begs a question on the need for this standard.

Comment Form – Proposed System Personnel Training Standard

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

We agree that each entity should determine their specific training needs. However, believe the standard needs to include at least a set of high level training topics to be covered by the training program. Commensurate with our proposal that the RC, BA and TOP are the entities to which this standard will apply at least in the onset, their operating functions are clearly defined in the functional model. There is no reason why some of the topics that reflect their operating functions should not be included, as minimum requirements, in the standard to ensure that there is consistent coverage in the training programs for the same function across the industry, regardless of size, location and organization structure.

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

We feel that development of a training standard is a step in the right direction in view of the recommendations of the 2003 blackout report and given the requirements to have certified personnel for some of the functional entities and these entities' responsibility to provide training. However, the standard needs to be developed with manageable scope, tangible requirements that can be measured, and with an aim to achieve consistency in training development not just in terms of the process but also in terms of the topics for the same function across the industry. In this vein, we offer the following suggestions for consideration:

- a. The SAR to clearly convey to whom (entities) the proposed standard would apply. To limit the scope at the onset, we suggest the standard be developed for compliance by the RC, BA and TOP only.
- b. The SAR to provide a high level description of the requirements, which should include (i) the use of a systematic approach to develop the training program and (ii) a high level scope of coverage of the training program. The tasks listed in the draft Organization Certification standards for RC, BA and TOP could serve to provide this coverage.

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Ed	
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Telephone:	601-339-2614	
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NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
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<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Background Information:

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The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

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- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

This SAR continues to be overly broad, ambiguous and confusing. We are not sure but it appears the initial standard would require a process to be developed and not require training of anyone. Therefore this question is not appropriate at this time. We do agree that when the appropriate SAR is presented that the training standard should be limited to those persons performing real-time operating tasks that directly impact reliability of the BES.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

We are not sure but it appears the initial standard resulting from this SAR would require a process to be developed and not require training of anyone. Therefore this question is premature, not appropriate at this time, and should be asked when the SAR for personnel training is presented to the industry.

However, at this time we will say we do not agree with the drafting team's approach. The standard that will apply to the personnel who perform real-time operating tasks should apply to those personnel performing the tasks, not to the organizations.

An organization that takes on responsibility for meeting the requirements of a standard may delegate the tasks to another organization to actually perform the tasks. The training standards should apply to the personnel actually performing the work for the second organization, not the second organization, nor the organization responsible for meeting the requirements of the standards.

Comment Form – Proposed System Personnel Training Standard

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3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

Our response to Question 2 above also applies here with respect to Operations Support Task Analysis, the personnel performing those tasks, and the applicable organizations.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

We agree that the standard developed from this SAR should expand on this SYSTEMATIC TRAINING PROCESS.

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

We are not sure but it appears the initial standard resulting from this SAR would require a process to be developed and not require training of anyone. Therefore this question is premature, not appropriate at this time, and should be asked when the SAR for personnel training is presented to the industry.

Also, we are not sure we understand the statement nor the question. An organization should be able to specify the tasks for which it is responsible. That specification of tasks is through being the functional entity responsible to meet the requirements of a standard, or through a delegation agreement.

An organization whose employees perform tasks to meet reliability-related real-time tasks should have a process to evaluate the competency of its personnel and to train its personnel to perform those tasks. That process should evaluate the specific training needs of the employees performing those tasks.

Competency standards should apply to the personnel performing the tasks, not to the organization.

A list of training topics may be included in the standard but they would apply to the personnel performing the tasks, not to the organization.

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comment Form – Proposed System Personnel Training Standard

Comments

We commend the SAR authors for modifying the SAR based on comments submitted. However, we believe the authors have not modified the SAR enough. This SAR continues to be overly broad, ambiguous and confusing. The SAR contains a discussion of many issues but does not specify the requirements of a standard resulting from THIS SAR.

We are not sure but THIS SAR seems to be requesting the initial standard would require a process to be developed and not require training of anyone. We agree that the development of the process should be vetted through the industry standards developemnt process to obtain industry-wide comments. However, we think the development of a PROCESS rises to the level of being a STANDARD. We also think that the PROCESS of a training program is not really measurable, except in a very subjective sense, and will cause significant problems with audits and sanctions.

Also, after reading the SAR it is not clear which entity is being discussed: the corporation that needs to develop a training program, or the employee who may need training. If the SAR is discussing both the corporation and the employee then it is not clear which parts of the SAR apply to the corporation and which apply to the employee.

However, we do not think the industry participants should guess about the intent and/or content of a standard to be developed. Nor should we agree to march forward with a vague request for a standard and associated requirements.

The SAR contains a discussion of Job Task Analysis, Operating Task Analysis and Operations Support Task Analysis that will be performed. Then, based on those results something else will be done. We suggest another SAR be written and submitted when those analyses are complete. For instance, Item 3 states the task analysis will supply the industry with the task analysis data that will serve as the foundation for performance requirements required to determine competency gaps.

There is a section entitled Concepts of the Training Standard which includes the statement that the proposed NERC training standard includes the requirements for these training standards. We are unable to find the requirements of the training standards in the SAR. They do not seem to be there.

The SAR contains 5 steps which appear to be steps in a training program PROCESS. Those steps seem reasonable.

The SAR also contains a highlighted section with three paragraphs. The first paragraph contains a reasonable statement that every organization should determine the tasks that its operating personel perform. The second paragraph contains the seemingly contradictory statement that the organization is not required to perform a Job Task Analysis. The third paragraph contains a statement that the Personnel Subcommittee is conducting three studies.

What would be the requirements of a standard that resulted from this SAR? We do not know from the content of this SAR and therefore suggest the authors make the SAR more explicit.

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Proposed System Personnel Training Standard**

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(Complete this page for comments from one organization or individual.)		
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Organization:		
Telephone:		
E-mail:		
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The SAR Drafting Team is proposing that this SAR will result in two standards:

- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

The ISO/RTO Council (IRC) agrees with the SAR Drafting Team's approach to limit the scope of the standard to real-time operating tasks that directly impact the reliability of the Bulk Power System.

The IRC also agrees with the concept that a mandatory NERC standard not be overly prescriptive. In the case of a Personnel Training Program each Reliability Entity must tailor its Training Programs to the specific tasks its operating personnel are required to perform.

The IRC also recognizes the conflict facing this Drafting Team:

- Reliability entities do not have a common set of jobs tasks for "...the persons performing real-time operating tasks..." and therefore the Team logically wants to allow the Reliability entity to define the tasks that require training and to define the level of competency needed to achieve a desired outcome. However,

- Reliability entities that face non-compliance penalties want to be certain about what is expected from them including who (organization / personnel) and what (process / job tasks) are being covered. Equally critical is the issue of how to measure competency in a way that ensures that all operating personnel have the competency to ensure that the reliability of the bulk power system is maintained. Leaving the definition of competency to each Reliability entity does not ensure a base competency level for North America.

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The IRC, while understanding of the Drafting Team's above noted conflict, requests that if the Industry consensus is to have a Training Standard, then the Drafting Team must address:

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Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

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Comments

While the IRC agrees that the Personnel Subcommittee's Operating Tasks Analysis can offer assistance in providing a focus on who and on what topics a training program should cover, the analysis itself is not a critical factor in determining which organizations or functional entities should comply with the training standard (assuming a standard on training program development is needed). Without prejudice to the yet to be made available Operating Tasks Analysis results, it is the IRC's opinion that, as a first step, the standard should be directed to at least those recognized entities that must make decisions in implementing, approving or directing others to implement actions that have a direct bearing on system reliability.

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To require other entities for which an organization certification standard and the corresponding requirement for having a training program do not currently exist or expect to be established in the near future would likely be challenged by these other entities. Moreover, the scope of the proposed training standard is too wide for effective development and compliance monitoring.

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3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

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Comments

In the mandatory standard environment each entity responsible to comply with a NERC standard, must do whatever is required to comply with that standard. To the extent that support persons need training to ensure that the entity complies, then training will be done (otherwise the entity would in the long or short run be unable to continually comply).

The IRC proposes that the priority of the Drafting Team be:

1 - Determine the need for having a standard

2 - Define WHO the standard applies to (is it reliability entities or is it directed at personnel as the question implies)

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Extending the standard to include entities (or personnel) that perform "support" tasks is a secondary consideration; one that, if needed, should be pursued subsequent to the development of the primary standard.

The IRC does agree that the proposed Systematic approach would be useful to help organizations develop structured and effective training programs attain a required (by standard or by organization's needs) level of competency. The IRC agrees that training standards should not be prescriptive and that any Training standard must permit flexibility in HOW each responsible entity complies to the standard. However, as previously mentioned, crafting this SAR into a mandatory standard (a) without some definition of the topics to be included in the Training Programs, and (b) without some indication of how compliance will be measured - renders this SAR too vague, which in turn begs the question of the need for a standard at all.

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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

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Yes

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Comments

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Murale Gopinathan	
Organization:	Northeast Utilities	
Telephone:	(860) 665-6896	
E-mail:	gopinm@nu.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
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- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
- One standard will require training personnel who perform 'support tasks' that directly impact reliability of the BES.

The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?

Yes

No

Comments

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Delivering the training to the personnel;** in other words, ensure that the training actually takes place as designed.
5. **Verifying and documenting the competency** that the personnel achieved through a documented assessment process

4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

Northeast Utilities endorses the use of SAT process

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

**Comment Form
Proposed System Personnel Training Standard**

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 Do not use quotation marks in any data field.
 Do not submit a response in an unprotected copy of this form.

Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	Jason Shaver	
Organization:	American Transmission Company	
Telephone:	262 506 6885	
E-mail:	jshaver@atcllc.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
<input checked="" type="checkbox"/> MRO	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	5 — Electric Generators
<input checked="" type="checkbox"/> RFC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SERC	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> SPP	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

Background Information:

Posted for comments is the second draft of the System Personnel Training Standard Authorization Request (SAR). The approach proposed in this revised SAR is to be flexible to the industry in determining their unique training needs and not try to force a single set of training topics on a widely diversified audience. Rather than a “one-size fits all” list of requirements, this approach is based on the fact that quality training results from applying a systematic approach to training that includes training needs assessment, training development, delivery, and evaluation. The standard will provide the framework for a training program based on the tasks performed that impact reliability.

The requestor would like to gauge the level of consensus regarding the revised SAR and to obtain the input of the industry on the scope and applicability of the proposed standards. Accordingly, your comments included on this form, e-mailed with the subject “System Personnel Training SAR Comments” by March 20, 2006, would be appreciated.

Comment Form – Proposed System Personnel Training Standard

Regarding the scope of the SAR:

The SAR Drafting Team is proposing that this SAR will result in two standards:

- One standard will require training all personnel who perform 'real-time operating tasks' that directly impact the reliability of the Bulk Electric System (BES)
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The SAR Drafting Team wants to develop the standard for the personnel who perform 'real-time operating tasks' first, then develop the standard for personnel who perform 'support tasks'.

1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

ATC supports the position of the SAR Drafting Team of breaking out the training standard into two separate standards. With the SAR Drafting Team creating this two tier approach, any standards from the initial phase should be balloted separately from standards developed in the second phase.

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

ATC reserves judgement on the SAR Drafting Team's approach until the results are revealed to the industry. In addition, the SAR does not discuss any alternate approaches considered by the SAR Drafting Team .

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. **Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

ATC reserves judgement on the SAR Drafting Team's approach until the results are revealed to the industry. In addition, the SAR does not discuss alternate approaches considered by the SAR Drafting Team.

Regarding the Focus of the Proposed SAR

The SAR Drafting Team proposes that the training standards require the use of a 'systematic' approach to developing training. The 'systematic' approach requires the following:

1. **Determining the needs for training** through a task analysis or job and task analysis process, followed by a training needs assessment. This step enables the organization to know what training its operators need.
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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

- Yes
 No

Comments

ATC is supportive of the 'systematic' approach to developing customized, personnel training as opposed to a centrally developed, topic specific, standardized approach to personnel training. The former approach allows for more flexibility between companies while providing a common framework for the industry. That being said, ATC recommends the team give consideration to how NERC will validate and audit this standard as a customized approach will likely result in varying levels of documentation and results among companies.

Any standards that come out of this SAR should be complimentary, or at a minimum parallel, to NERC's CEH accreditation process. This standard should not create a conflicting approach to what is currently being used for the NERC CEH accreditation process.

Comment Form – Proposed System Personnel Training Standard

The SAR Drafting Team proposes that the training standard should not include a list of required training topics, because any list of training topics would not be applicable to all entities. Instead, the SAR Drafting Team proposes that each entity provide training to support competent performance of all reliability-related real-time tasks performed within that entity. The final determination of what tasks are performed within each entity, and therefore what tasks must be addressed in the training program needs to be determined by each entity.

5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments

The SAR Team should consider whether this SAR, if applicable to Planning Authority personnel, also has applicability to other Reliability Functions, as indicated in the "Reliability Functions" section, such as Resource Planner, Transmission Planner and Distribution Provider.

Any standards that come out of this SAR should be complimentary ,or at a minimum parallel, to NERC's CEH accreditation process.

ATC requests that meeting invites for the proctored JTA Workshops be sent out by email in addition to being posted on the NERC Standards Development web page. The industry should know about the workshops as soon as they are agreed to by NERC to allow for adequate scheduling time.

ATC looks forward to reviewing this standard in the future.

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Proposed System Personnel Training Standard**

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
<input type="checkbox"/> FRCC	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> MRO	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> RFC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input checked="" type="checkbox"/> SERC	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> SPP	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	

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1. Do you agree with the approach to the training standard to limit the scope of the initial standard to persons performing real-time operating tasks that directly impact reliability of the BES?

Yes

No

Comments

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2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

Comment Form – Proposed System Personnel Training Standard

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- 3. Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

Regarding the Focus of the Proposed SAR

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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

We agree but there are still some very basic training requirements which are needed regardless of the function or region the work is being done. These functions must be done the same way by all or there will be confusion in the industry.

Comment Form – Proposed System Personnel Training Standard

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Individual Commenter Information		
(Complete this page for comments from one organization or individual.)		
Name:	John Horakh, 03-09-2006	
Organization:	MAAC	
Telephone:	609-625-6014	
E-mail:	john.horakh@pepcoholdings.com	
NERC Region	Registered Ballot Body Segment	
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> ECAR	<input checked="" type="checkbox"/>	2 — RTOs, ISOs, Regional Reliability Councils
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Yes

No

Comments

Regarding the applicability identified in the SAR:

For the Standard that will apply to the personnel who perform 'real-time' operating tasks, the SAR Drafting Team is proposing that the 'Operating Tasks Analysis' being conducted by the NERC Personnel Subcommittee serve as the basis for determining which types of organizations will be required to comply with the standard.

2. Do you agree with the SAR Drafting Team's approach to determining which types of organizations will be required to comply with the standard for personnel who perform 'real-time' operating tasks?

Yes

No

Comments

But also need to determine the type of personnel within those organizations that perform "real-time" operating tasks

Comment Form – Proposed System Personnel Training Standard

For the Standard that will apply to the personnel who perform 'support tasks', the SAR Drafting Team is proposing that an 'Operations Support Task Analysis' planned for development by the NERC Personnel Subcommittee serve as the basis for determining which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard.

3. **Do you agree with the approach proposed above to determine which support tasks directly impact reliability of the BES and for determining which types of organizations will be required to comply with the standard?**

Yes

No

Comments

But also need to determine the types of personnel that perform the support tasks

Regarding the Focus of the Proposed SAR

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4. **Do you agree with the SAR Drafting Team that the training standards should require use of the 'systematic' approach to training as opposed to requiring specific topics be taught to all personnel for a specific number of hours?**

Yes

No

Comments

But this "systematic" approach pre-supposes that personnel are NOT at the organization's desired level of competency. There really needs to be a "Step 0" that periodically measures whether an individual currently possesses the organization's desired level of competency for the job or tasks they are performing. If not, then they need training.

Comment Form – Proposed System Personnel Training Standard

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5. Do you agree with the approach to a training standard that requires each entity to determine their specific training needs?

Yes

No

Comments

However, a list of "such as" training topics would be acceptable

6. Please provide any additional comments on the revised SAR that you haven't already provided above.

Comments