

Consideration of Comments on Initial Ballot for Project 2008-18: Manitoba Hydro Request for Interpretation (TOP-005-1 — Operational Reliability Information, IRO-005-1 — Reliability Coordination — Current Day Operations)

Summary Consideration:

Several stakeholders offered alternative views of the term degraded and suggested a formal definition be drafted. An interpretation of a standard does not permit the creation of requirements or definitions. Absent a specific definition of the term degraded, the SDT provided its subjective evaluation of the intent of the word. As stated in the interpretation, the Standard Drafting Team (SDT) has no objection to a formal definition being proposed and adopted. The SDT invites the requestor or those who offered comments and suggestions to submit a Standard Authorization Request (SAR) to modify the standard with a proposed definition. As part of the standards development process, any person that is directly and materially affected by an existing standard or the need for a new standard may submit a new standard or revision to a standard.

Given that the intent of the interpretation is not materially changed by the comments received, the SDT does not believe another posting is justified.

Voter	Entity	Segment	Vote	Comment
Kirit S. Shah	Ameren Services	1	Negative	The interpretation includes an implied definition of the term degradation; that is, degradation is a condition that will result in a failure of an SPS to operate as designed. We disagree with definition of degradation. Without a formal definition of degraded, we think that logic would imply you have three ways to describe the state of something: 1) all is well, 2) something is amiss but its working, 3) and the thing is not functioning. From our perspective, the word degrade fits into the category of 2) and failure into the category of 3). This interpretation puts degraded into category of 3). Further, the IRO-005-2, R12 requires the TOP to inform RC the status of the SPS including any degradation or potential failure to operate as expected. Two conditions are included in the R12 requirement; the first is degradation and the second one is a potential failure to operate as expected. The SDT's interpretation states that the first condition implies the second one and thereby degradation is a condition that will result in a failure of an SPS to operate as designed. If this was the intent, why would the wordings "any degradation" be specifically included in this requirement? We believe that the intent here is to inform the RC when the status of SPS is less than robust, that is when the redundancy (in this case one of the communication channels) is not available or not in-service. We do not agree with this part of the interpretation for R12 either.

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Mark Peters	Ameren Services	3	Negative	<p>The interpretation includes an implied definition of the term degradation; that is, degradation is a condition that will result in a failure of an SPS to operate as designed. We disagree with definition of degradation. Without a formal definition of degraded, we think that logic would imply you have three ways to describe the state of something: 1) all is well, 2) something is amiss but its working, 3) and the thing is not functioning. From our perspective, the word degrade fits into the category of 2) and failure into the category of 3). This interpretation puts degraded into category of 3). Further, the IRO-005-2, R12 requires the TOP to inform RC the status of the SPS including any degradation or potential failure to operate as expected. Two conditions are included in the R12 requirement; the first is degradation and the second one is a potential failure to operate as expected. The SDT's interpretation states that the first condition implies the second one and thereby degradation is a condition that will result in a failure of an SPS to operate as designed. If this was the intent, why would the wordings "any degradation" be specifically included in this requirement? We believe that the intent here is to inform the RC when the status of SPS is less than robust, that is when the redundancy (in this case one of the communication channels) is not available or not in-service. We do not agree with this part of the interpretation for R12 either</p>
<p>Response: An interpretation of a standard does not permit the creation of requirements or definitions. Absent a specific definition of the term degraded, the SDT provided its subjective evaluation of the intent of the word.</p> <p>As stated in the interpretation, the SDT has no objection to a formal definition being proposed and adopted. The SDT invites the commenter to submit a SAR to modify the standard with a proposed definition.</p> <p>The phrase "any degradation or potential failure to operate as expected" was interpreted to mean "any actual or any forecasted condition that would result in the SPS not operating as expected." It was viewed as separating a fact from an expectation. The commenter is invited to draft a SAR that will formally define "less than robust" and which "redundancy devices" must be monitored and reported upon.</p>				
Paul B. Johnson	American Electric Power	1	Negative	<p>AEP believes that the term "degraded" should be clarified such that an entity can be evaluated on a known measurable basis and not based on implication. AEP agrees with the SDT's interpretation that "degraded" is a condition that will result in the failure of an SPS to operate as designed, but does not agree that a definition is unnecessary in the standards. SPSs' are designed so that no one component failure will prevent the SPS to operate as designed. Although there may be other ways to ensure this functionality, redundant systems are most likely used. In such circumstances, with one system component failure, the system would still be able to function and there would be no</p>

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				requirement for the SPS unit to be reported. However, when an SPS alone is not operating as designed (a degraded SPS), the SPS is not functional (or broken) and should be removed from the BES. Consequently, the use of this term without definition does not create the specificity of reporting that the standard is intended to provide.
Raj Rana	American Electric Power	3	Negative	AEP believes that the term "degraded" should be clarified such that an entity can be evaluated on a known measurable basis and not based on implication. AEP agrees with the SDT's interpretation that "degraded" is a condition that will result in the failure of an SPS to operate as designed, but does not agree that a definition is unnecessary in the standards. SPSs' are designed so that no one component failure will prevent the SPS to operate as designed. Although there may be other ways to ensure this functionality, redundant systems are most likely used. In such circumstances, with one system component failure, the system would still be able to function and there would be no requirement for the SPS unit to be reported. However, when an SPS alone is not operating as designed (a degraded SPS), the SPS is not functional (or broken) and should be removed from the BES. Consequently, the use of this term without definition does not create the specificity of reporting that the standard is intended to provide.
Brock Ondayko	AEP Service Corp.	5	Negative	AEP believes that the term "degraded" should be clarified such that an entity can be evaluated on a known measurable basis and not based on implication. AEP agrees with the SDT's interpretation that "degraded" is a condition that will result in the failure of an SPS to operate as designed, but does not agree that a definition is unnecessary in the standards. SPSs' are designed so that no one component failure will prevent the SPS to operate as designed. Although there may be other ways to ensure this functionality, redundant systems are most likely used. In such circumstances, with one system component failure, the system would still be able to function and there would be no requirement for the SPS unit to be reported. However, when an SPS alone is not operating as designed (a degraded SPS), the SPS is not functional (or broken) and should be removed from the BES. Consequently, the use of this term without definition does not create the specificity of reporting that the standard is intended to provide.

Response: An interpretation of a standard does not permit the creation of requirements or definitions. Absent a specific definition of the term degraded, the SDT provided its subjective evaluation of the intent of the word.

As stated in the interpretation, the SDT has no objection to a formal definition being proposed and adopted. The SDT invites the commenter to submit a SAR to modify the standard with a proposed definition.

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<p>The SDT phrase "a definition is unnecessary in the standards" was meant to indicate that this standard as written could exist without a formal definition, not that formal definitions are not needed in this or in any other standard. As noted above, if the commenter believes that the standard itself is incorrect or needs an explicit definition for degraded, the commenter is urged to submit a SAR with the appropriate additions, modifications, or deletions.</p>				
Jason Shaver	American Transmission Company, LLC	1	Affirmative	<p>In general ATC agrees with the interpretation, but we believe that the following change should be considered: Replace the phrase "as designed" with "as expected" IRO-005 Requirement 12 uses the phrase "as expected" not "as designed". The term "designed" is used in PRC-012 Requirement 1.3. Since the interpretation is for IRO-005 Requirement 12 we believe that the interpretation would be clearer if the identical phrase is used. Modified Interpretation would read: "... If the loss of the communication channel will result in the failure of an SPS to operate as expected, then the Transmission Operator would be mandated to report the information. ..."</p>
<p>Response: Thank you for the support and the proposed suggestion. Given that the intent of the interpretation is not materially changed by the proposed change, the SDT does not believe another posting is justified.</p>				
Robert Martinko	FirstEnergy Energy Delivery	1	Affirmative	<p>"FirstEnergy Corp. agrees with the interpretation and is voting AFFIRMATIVE. Per the current requirements of these standards as written today, the interpretation is correct. Standard IRO-005 addresses real time operations and not design requirements. The standard is intended to make sure the RC is aware of an SPS that will not operate properly. Assuming that a single communication channel failure does not render the SPS inoperable, then the loss of that channel has no impact as far as the RC is concerned. From a good utility practice view, if it becomes known to the TOP that the SPS back-up communication channel will be out for an extended period of time, then we believe this merits reporting to the RC so that the RC is aware of the situation. But since one cannot make these assumptions based on the requirements as presently written, the interpretation is correct. It should be expected that upon approval of this industry interpretation that the wording for "degraded" be revised to reflect "inoperable" if that is the conclusion of the interpretation. Additionally, the standards development process should further consider during real-time operations whether or not the RC needs to be made aware of loss of redundancy within an SPS design. FE proposes that the existing NERC standards development project 2007-18 should consider the results of this interpretation within their work scope and complete further refinements to the IRO-005 standard."</p>

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Joanne Kathleen Borrell	FirstEnergy Solutions	3	Affirmative	<p>"FirstEnergy Corp. agrees with the interpretation and is voting AFFIRMATIVE. Per the current requirements of these standards as written today, the interpretation is correct. Standard IRO-005 addresses real time operations and not design requirements. The standard is intended to make sure the RC is aware of an SPS that will not operate properly. Assuming that a single communication channel failure does not render the SPS inoperable, then the loss of that channel has no impact as far as the RC is concerned. From a good utility practice view, if it becomes known to the TOP that the SPS back-up communication channel will be out for an extended period of time, then we believe this merits reporting to the RC so that the RC is aware of the situation. But since one cannot make these assumptions based on the requirements as presently written, the interpretation is correct. It should be expected that upon approval of this industry interpretation that the wording for "degraded" be revised to reflect "inoperable" if that is the conclusion of the interpretation. Additionally, the standards development process should further consider during real-time operations whether or not the RC needs to be made aware of loss of redundancy within an SPS design. FE proposes that the existing NERC standards development project 2007-18 should consider the results of this interpretation within their work scope and complete further refinements to the IRO-005 standard."</p>
Douglas Hohlbaugh	Ohio Edison Company	4	Affirmative	<p>FirstEnergy Corp. agrees with the interpretation and is voting AFFIRMATIVE. Per the current requirements of these standards as written today, the interpretation is correct. Standard IRO-005 addresses real time operations and not design requirements. The standard is intended to make sure the RC is aware of an SPS that will not operate properly. Assuming that a single communication channel failure does not render the SPS inoperable, then the loss of that channel has no impact as far as the RC is concerned. From a good utility practice view, if it becomes known to the TOP that the SPS back-up communication channel will be out for an extended period of time, then we believe this merits reporting to the RC so that the RC is aware of the situation. But since one cannot make these assumptions based on the requirements as presently written, the interpretation is correct. It should be expected that upon approval of this industry interpretation that the wording for "degraded" be revised to reflect "inoperable" if that is the conclusion of the interpretation. Additionally, the standards development process should further consider during real-time operations whether or not the RC needs to be made aware of loss of redundancy within an SPS design. FE proposes that the existing NERC standards development project 2007-18 should consider the results of this</p>

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				interpretation within their work scope and complete further refinements to the IRO-005 standard.
Kenneth Dresner	FirstEnergy Solutions	5	Affirmative	Per the current requirements of these standards as written today, the interpretation is correct. Standard IRO-005 addresses real time operations and not design requirements. The standard is intended to make sure the RC is aware of an SPS that will not operate properly. Assuming that a single communication channel failure does not render the SPS inoperable, then the loss of that channel has no impact as far as the RC is concerned. From a good utility practice view, if it becomes known to the TOP that the SPS back-up communication channel will be out for an extended period of time, then we believe this merits reporting to the RC so that the RC is aware of the situation. But since one cannot make these assumptions based on the requirements as presently written, the interpretation is correct. It should be expected that upon approval of this industry interpretation that the wording for "degraded" be revised to reflect "inoperable" if that is the conclusion of the interpretation. Additionally, the standards development process should further consider during real-time operations whether or not the RC needs to be made aware of loss of redundancy within an SPS design. FE proposes that the existing NERC standards development project 2007-18 should consider the results of this interpretation within their work scope and complete further refinements to the IRO-005 standard."
Mark S Travaglianti	FirstEnergy Solutions	6	Affirmative	FirstEnergy Corp. agrees with the interpretation and is voting AFFIRMATIVE. Per the current requirements of these standards as written today, the interpretation is correct. Standard IRO-005 addresses real time operations and not design requirements. The standard is intended to make sure the RC is aware of an SPS that will not operate properly. Assuming that a single communication channel failure does not render the SPS inoperable, then the loss of that channel has no impact as far as the RC is concerned. From a good utility practice view, if it becomes known to the TOP that the SPS back-up communication channel will be out for an extended period of time, then we believe this merits reporting to the RC so that the RC is aware of the situation. But since one cannot make these assumptions based on the requirements as presently written, the interpretation is correct. It should be expected that upon approval of this industry interpretation that the wording for "degraded" be revised to reflect "inoperable" if that is the conclusion of the interpretation. Additionally, the standards development process should further consider during real-time operations whether or not the RC needs to be made aware of loss of redundancy within an SPS design. FE proposes that the existing

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				NERC standards development project 2007-18 should consider the results of this interpretation within their work scope and complete further refinements to the IRO-005 standard.
Response: Thank you for your support. Your comment regarding Project 2007-18 (Reliability-based Control) will be shared with that project's SDT.				
Brad Chase	Orlando Utilities Commission	1	Abstain	OUC does not have any SPS in place and therefore let those that do have them influence the vote.
Response: Thank you for your comment.				
Terry Bilke	Midwest ISO, Inc.	2	Affirmative	We have a major concern in that there is no way to tell who drafted the interpretation. This is true for the other interpretation out for pre-ballot review. This lack of transparency is sure to give people the impression that the interpretation process could be manipulated. Finally, the lack of a comment period precludes the assembly of information that could improve the quality of the interpretation. Speed should not take priority over quality.
Response: The comment concerns process as opposed to content. Changes to the process are not within the scope of this team. Process questions and comments may be directed to the NERC standards process manager.				
Russell A Noble	Cowlitz County PUD	3	Negative	The interpretation is confusing. It implies that all conditions which may result in an SPS to mis-operate must be reported, even if such a report would be quite obvious: i.e. loss of both communication lines will result in the failure of the SPS to operate as designed. Also implied is that an SPS must have redundancy, although no such requirement is made in standard IRO-005-1, or any other standard for that matter. If the SPS is designed with one communication line, a report of a condition must be filed. The interpretation fails to clarify the intent of the use of the word "degradation" and whether failure of redundancy is a degraded condition. If "degradation" can be loss of redundancy, then there should be a corresponding requirement in a standard that an SPS must be designed with redundancy.
Response: The interpretation is predicated on "changes in operating conditions," as opposed to a list of "possible conditions." There are no implied requirements in the interpretation. An interpretation of a standard does not permit the creation of requirements or definitions.				

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<p>Absent a specific definition of the term degraded, the SDT provided its subjective evaluation of the intent of the word. As stated in the interpretation, the SDT has no objection to a formal definition being proposed and adopted. The SDT invites the commenter to submit a SAR to modify the standard with a proposed definition.</p>				
John Apperson	PacifiCorp	3	Affirmative	<p>While performing NERC required maintenance, making programming changes, upgrades, or due to a component failure of an SPS a transmission owner may have one of the two redundant SPS's out of service. If the remaining SPS fails, does the transmission owner have the 30 minute window according to TOP standards to bring the system into a non-SPS required state (within planned AROL and SOL limits) without a TOP/TPL requirement violation? If the answer is yes to the above and a system condition occurs within the 30 minute window, but prior to reaching a non-SPS required state and it results in a system disturbance, is this a violation of the TPL requirements? If a system event occurs requiring the only remaining SPS to operate and it fails to function as designed, resulting in a disturbance, is this considered a single point of failure according to the TPL requirements?</p>
David Godfrey	PacifiCorp Energy	5	Affirmative	<p>While performing NERC required maintenance, making programming changes, upgrades, or due to a component failure of an SPS a transmission owner may have one of the two redundant SPS's out of service. If the remaining SPS fails, does the transmission owner have the 30 minute window according to TOP standards to bring the system into a non-SPS required state (within planned AROL and SOL limits) without a TOP/TPL requirement violation? If the answer is yes to the above and a system condition occurs within the 30 minute window, but prior to reaching a non-SPS required state and it results in a system disturbance, is this a violation of the TPL requirements? If a system event occurs requiring the only remaining SPS to operate and it fails to function as designed, resulting in a disturbance, is this considered a single point of failure according to the TPL requirements?</p>

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Gregory D Maxfield	PacifiCorp	6	Affirmative	While performing NERC required maintenance, making programming changes, upgrades, or due to a component failure of an SPS, a transmission owner may have one of the two redundant SPS's out of service. Q1. If the remaining SPS fails, does the transmission owner have the 30 minute window according to TOP standards to bring the system into a non-SPS required state (within planned AROL and SOL limits) without a TOP/TPL requirement violation? Q2. If the answer is yes to the above and a system condition occurs within the 30 minute window, but prior to reaching a non-SPS required state and it results in a system disturbance, is this a violation of the TPL requirements? Q3. If a system event occurs requiring the only remaining SPS to operate and it fails to function as designed, resulting in a disturbance, is this considered a single point of failure according to the TPL requirements?
<p>Response: This interpretation specifically addresses IRO-005-2 and is not intended to address scenarios involving other standards. Comments and questions regarding TPL requirements may be addressed to the SDT working on Project 2006-02 (Assess Transmission Future Needs and Develop Transmission Plans).</p> <p>The interpretation states that the asset owner is responsible for determining when the SPS is in danger of not being able to operate. The question the Transmission Operator must ask is, "Is the current state of activities rendering the SPS inoperable?" If yes, the situation should be communicated to the Reliability Coordinator. If no, there is no "mandate" to tell the Reliability Coordinator, but neither is there a prohibition from reporting to the Reliability Coordinator what is happening.</p> <p>If there were two redundant SPSs, and one is inoperable due to maintenance or any other of the stated conditions, the Transmission Operator must decide if the operating system will "work normally" with only one SPS. If yes, then there is no "mandate" to tell the Reliability Coordinator, but again there is no prohibition from reporting to the Reliability Coordinator what is happening. If no, then the situation should be communicated to the Reliability Coordinator.</p>				
John Yale	Chelan County Public Utility District #1	5	Affirmative	It seems a good definition for "degraded" is essential in applying this standard and should be developed.
<p>Response: As stated in the interpretation, the SDT has no objection to a formal definition being proposed and adopted. The SDT invites the commenter to submit a SAR to modify the standard with a proposed definition.</p>				

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Thomas J. Bradish	Reliant Energy Services	5	Negative	Reliant votes "no" on the Manitoba interpretation. If a Special Protection System ("SPS") is fully redundant it is likely for good reason; namely, if one side fails the SPS remains functional. Therefore, the degree to which the operationally-intended, full redundancy of a SPS has been "compromised," "limited" or otherwise "reduced" is the degree to which it has been "degraded." Semantics aside, and at a minimum, off-nominal SPS operating states should be appropriately reported.
Trent Carlson	Reliant Energy Services	6	Negative	If a Special Protection System ("SPS") is fully redundant it is likely for good reason; namely, if one side fails the SPS remains functional. Therefore, the degree to which the operationally-intended, full redundancy of a SPS has been "compromised," "limited" or otherwise "reduced" is the degree to which it has been "degraded." Semantics aside, and at a minimum, off-nominal SPS operating states should be appropriately reported.
<p>Response: The interpretation question is about operations of the system, i.e, is the operation of the power system compromised? Loss of full redundancy may be a fact, but if the system can continue to operate using alternate, albeit temporary, procedures then there is no mandate to call the Reliability Coordinator. (Though there is no mandate to report, it does not mean the TOP is prohibited from reporting.) If the system is at risk, then yes the TOP is mandated to report the conditions. In short, the issue is not redundancy but operational integrity.</p> <p>The commenter is invited to submit a SAR regarding off-nominal operating states.</p>				
Martin Bauer	U.S. Bureau of Reclamation	5	Affirmative	The response provided infers that the communication system is not considered a part of the SPS and therefore not subject to the IRO 005 reporting. It is not clear if that was the intent of the response. It would have been far better for the response to be explicit.
<p>Response: An interpretation of a standard does not permit the creation of requirements or definitions. The question asked in the request had to do with the communications system. The interpretation strictly addresses the communications issue and is not intended to imply anything beyond the question posed.</p>				
Guy Zito	Northeast Power Coordinating Council, Inc.	10	Affirmative	During the next revision to the standard, further clarity as to what constitutes a "degradation" for a SPS that would fall under the reporting requirements. Although this interpretation does clarify this issue, further clarification is desirable. There may be other types of degradation of a SPS that the industry be struggling with that may result in compliance issues and initiate repeals.
<p>Response: Thank you. Your comment has been shared with the SDT working on Project 2007-05 (Balancing Authority Controls) for its consideration.</p>				

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Carter B. Edge	SERC Reliability Corporation	10	Negative	The interpretation declines to answer the question. I would vote to approve if the interpretation stopped there. Rather, it goes on to provide interpretations of several other requirements, which while associated with the request, do not in themselves answer the question. This appears to be an overly broad application of the interpretations process to the extent that the standards development process is undermined.
<p>Response: The team respectfully disagrees with the premise that the interpretation doesn't answer the question or that it extends to other, unrelated requirements. Questions regarding the process may be directed to the NERC standards process manager.</p>				
Louise McCarren	Western Electricity Coordinating Council	10	Negative	WECC agrees with the conclusion for IRO-005-1 but disagrees with the response that a definition for the term degraded is not needed for TOP-005. If an RC asks for information on new or degraded special protections systems, the TOP and BA are obligated to provide that information. Without a definition of what the term degraded means, the TOP and BA could be uncertain for which special protections schemes they need to send data to the RC.
<p>Response: An interpretation of a standard does not permit the creation of requirements or definitions. Absent a specific definition of the term degraded, the SDT provided its subjective evaluation of the intent of the word.</p> <p>As stated in the interpretation, the SDT has no objection to a formal definition being proposed and adopted. The SDT invites the commenter to submit a SAR to modify the standard with a proposed definition.</p>				