

Project 2009-17: Interpretation of PRC-004-1 and PRC-005-1 for Y-W Electric and Tri-State Consideration of Comments on Initial Ballot (July 31-August 10, 2009)

Summary Consideration:

The majority of negative voters provided concerns within three distinct areas: 1) The interpretation is defining a new term, “transmission Protection System,” which should not take place in an interpretation but rather as part of a standard revision; 2) The applicability of transmission Protection System; and, 3) The differences in the Regional Entity definitions of Bulk Electric System (BES) and that the use of the phrase “specific clarification may be required” created ambiguity within the interpretation. The drafting team has modified the interpretation to address these concerns and has provided responses to the comments received.

With regards to the concern that the interpretation was trying to define a new term “transmission Protection System,” the drafting team explained that this particular request was for an “interpretation of the specific phrase “transmission Protection System,” which is used in these standards, and that the response is meant only to clarify the use of this term in the context of these standards and does not propose a new defined term.

Another concern raised was with the applicability of the phrase “transmission Protection System.” The drafting team explained that this interpretation applies to all situations where the Protection System in question is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the BES. To provide further clarity, the drafting team has modified the phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” to now read “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.” The drafting team explained that 1) if circumstances exist that are not covered by this interpretation, the NERC *Reliability Standards Development Procedure* allows entities to request interpretations to address this need and 2) it would be inappropriate to reject an interpretation of a standard because it may lead to further interpretation requests.

The final concern deals with the differing definitions of the BES within the Region Entities. The drafting team explained that under the present standards process, the definition of the BES is assigned to the Regional Entities, each of which has provided a definition of BES to both the industry and NERC. Resolving these differences is beyond the scope of this project. The drafting team further explained that the use of the phrase “specific clarification may be required” was meant to identify that there are differences among the Regional Entities in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition. To provide further clarity, the drafting team modified the phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” to now read “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”

If you feel that the drafting team overlooked your comments, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Gerry Adamski, at 609-452-8060 or at gerry.adamski@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

¹ The appeals process is in the Reliability Standards Development Procedure: http://www.nerc.com/files/RSDP_V6_1_12Mar07.pdf.

Voter	Entity	Segment	Vote	Comment
Kim Warren	Independent Electricity System Operator	2	Negative	<p>(1) The interpretation appears to “define” transmission Protection System, but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term.</p> <p>(2) This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations of this system configuration and protection designs. We therefore believe that a more generally applicable solution is required.</p> <p>(3) In general, non-BES Protection Systems that do not initiate BES equipment action, or have any effect on the BES, should not be considered part of a transmission Protection System. However, the classification of non-BES Protection Systems that are designed to protect the BES against uncleared faults on non-BES elements that could be impactful on the BES, needs to be clarified.</p> <p>Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System.</p>

Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.

The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the Bulk Electric System (BES).” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.

If the question is “whether it is possible to have “transmission Protection Systems that are electrically/physically located on or in non-BES facilities,” the answer is yes. For example, the relays connected on the low side of a tapped substation (that is not defined as part of the BES) designed serve as transmission line protection due to system configuration would be considered “transmission Protection Systems.”

The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”

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Michael Schiavone	Niagara Mohawk (National Grid Company)	3	Negative	<p>The interpretation appears to “define” transmission Protection System, but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term. *</p> <p>This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations of this system configuration and protection designs.</p> <p>* Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System. In general, non-BES equipment that does not initiate BES equipment action, or has any effect on the BES should not be considered part of a transmission Protection System</p>

Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.

The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the Bulk Electric System (BES).” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.

If the question is “whether it is possible to have ‘transmission Protection Systems that are electrically/physically located on or in non-BES facilities,” the answer is yes. For example, the relays connected on the low side of a tapped substation (that is not defined as part of the BES) designed serve as transmission line protection due to system configuration would be considered “transmission Protection Systems.”

The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”

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Kathleen Goodman	ISO New England, Inc.	2	Negative	<p>1. The interpretation appears to “define” transmission Protection System but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term.</p> <p>2. This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations other system configuration and protection designs. 3. In general, passive non-BES equipment should not be considered part of a transmission Protection System.</p> <p>Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System.</p>

Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.

The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the Bulk Electric System (BES).” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.

If the question is “whether it is possible to have ‘transmission Protection Systems that are electrically/physically located on or in non-BES facilities,” the answer is yes. For example, the relays connected on the low side of a tapped substation (that is not defined as part of the BES) designed serve as transmission line protection due to system configuration would be considered “transmission Protection Systems.”

The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”

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Terry L. Blackwell	Santee Cooper	1	Negative	<p>1. There is no mention of a minimum size of the potential source. Concerning a generator, this should be limited at least to the same size that makes it reportable as generation and subject to the generation protection system requirements.</p> <p>2. The mention of “networked low side system” seems beyond the scope of the standards. This could potentially extend the transmission bulk electric system protective elements down to the 230/69 and 115/69 kV transformers, as well as any of the 69 kV lines whose relay elements could possibly extend onto the high side of the transformers as backup protection.</p>
Zack Dusenbury		3		
Suzanne Ritter		6		
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage.</p>				
Steve Alexanderson	Central Lincoln PUD	3	Negative	<p>Central Lincoln votes no on this interpretation. Our compliments on the straight forward and concise treatment of the matter. While some entities may ask for a more prescriptive approach in dealing with the question of what size generation or network constitutes a “potential source”, Central Lincoln believes there is no reason for any more specificity. The controlling part of the interpreters’ statement deals with the purpose of the installed protection system in question. If the installation was not designed for transmission faults, there is no reason to look at potential source sizes. If the protection was designed for transmission faults, then the designers clearly considered the potential source sizable enough to matter. If a more prescriptive approach is really needed for reliability, this should be handled by the SAR rather than the Interpretation Request process; since it would require changing these standards, or the addition a new one. We also understand that some entities may object to the interpreters’ introduction of a “new” definition of “transmission protection system.” Central Lincoln would like to point out that both “transmission” and “protection system” are already in the NERC glossary, and that the interpreters’ use of the combination is consistent with the individual definitions.</p>

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				<p>The reason for the no vote is that Central Lincoln joins other entities in its concern over the last sentence: "It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity." Central Lincoln is supportive of the intent, which re-iterates the Regional Entity's right to define the BES; but the verbiage presently gives the Regional Entity room to reject or modify the interpretation through "specific clarifications" in regard to the interpretation. This last sentence defeats the intent of the interpretation request from Y-W Electric Association, Inc. and Tri-State Generation and Transmission Association, Inc. to clear up the differences between Regional Entities, by continuing to allow conflicting "specific clarifications" such as the ones from RFC and WECC that were referenced in the request. Central Lincoln would prefer verbiage that resembles the following:</p> <p>It should also be noted that the appropriate Regional Entity definition of the BES be considered in deciding whether certain aspects of transformer protection should be designated as a transmission Protection System.</p>
<p>Response: The phrase "specific clarification may be required" is meant to identify that there are differences among Regional Entities in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES within a given Regional Entity, the protection schemes installed to detect faults on a radial line are not considered "transmission Protection Systems." However, they would be considered as such within a Regional Entity that includes radial lines in its BES definition. The phrase "It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity" has been replaced with "It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity."</p>				
Russell A Noble	Cowlitz County PUD	3	Negative	<p>Cowlitz votes negative with reluctance, but must take exception with the last sentence of the interpretation. This sentence gives room for the Regional Entity to reject or modify the interpretation by implying the Regional Entity may give "specific clarification" in regard to the interpretation. This last sentence defeats the intent of the interpretation request from Y-W Electric Association, Inc. and Tri-State Generation and Transmission Association, Inc. to clear up the differences between Regional Entities. Cowlitz would prefer verbiage that resembles the following: It should also be noted that the appropriate Regional Entity definition of the BES be considered in deciding whether certain aspects of transformer protection should be</p>

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				designated as a transmission Protection System.
<p>Response: The phrase “specific clarification may be required” is meant to identify that there are differences among Regional Entities in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES within a given Regional Entity, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such within a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
John C. Collins	Platte River Power Authority	1	Negative	Clarity is needed to draw the lines of demarcation on “transmission Protection Systems.” However, the interpretation raises more questions.
<p>Response: The interpretation applies to all situations where the Protection System in question is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the BES. The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p> <p>The drafting team would require more specifics related to what other questions are raised.</p>				
Jalal (John) Babik	Dominion Resources, Inc.	3	Negative	<p>Dominion believes the term ‘transmission Protection System’ is applicable to any Protection System that is designed to detect and initiate action for faults on transmission elements (lines, transformers, breakers, etc.) identified as being included in the BES. While we understand that the request for interpretation specifically addressed transformer protection on radial transmission lines, we do not believe that such a narrow interpretation is in the best interests of the industry and would have preferred this to be dealt with more broadly if it is going to be addressed in an interpretation. We believe that the interpretation should state that each Protection System is designed specifically for the elements it protects and each has a somewhat unique design and in some cases there may be justifiable regional differences.</p> <p>The Stakeholders are looking at these interpretations closely and if they are going to be implemented, they have to answer more questions than</p>
Mike Garton		5		
Louis S Slade		6		

Voter	Entity	Segment	Vote	Comment
				<p>they themselves might produce. Dominion suggests the following language:</p> <p>If a transformer's Protection System is designed to trip transmission elements other than the transformer high side isolating device to clear a fault, then that transformer has a direct impact on the associated transmission element. If, on the other hand, the transformer's Protection System is designed so as NOT to trip the associated transmission elements other than the transformer high side isolating device to clear the fault, then that transformer does not have a direct impact on that transmission element (other than loss load).</p> <p>We further suggest that the first assessment an entity needs to perform is to determine whether or not a Protection System has a direct impact on the associated transmission element.</p> <ul style="list-style-type: none"> o If the assessment is that it does not, then the cited standard(s) and requirement(s) DO NOT apply. o If the assessment is that it does, then the entity needs to review regional criteria to determine if the impacted transmission element is designated by the region as being part of the BES. o If it is not, then the cited standard(s) and requirement(s) DO NOT apply. o However, if the impacted transmission element is designated by the region as being part of the BES, then the cited standard(s) and requirement(s) DO apply <p>It is the entity's responsibility to ensure that the Protection Systems on the BES elements are reviewed and analyzed for misoperations. Since there will be regional differences interpreting the applicability of a System Protection on a radial line, we recommend that if an entity is not able to analyze the status of a radial line to contact the RRO to clarify the applicability regarding Protection Systems on the BES. (See RFC BES Definition FAQ and Interpretation) http://www.rfirst.org/MiscForms/BESDefinition.aspx</p>

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<p>Response: Based on your comments, the drafting team has made the following changes:</p> <p>The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p> <p>The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Henry Ernst-Jr	Duke Energy Carolina	3	Negative	<p>Duke Energy votes “Negative” on this Interpretation because we believe it goes beyond the accepted role of an interpretation, and changes the requirements of PRC-004 and PRC-005 by introducing a definition of “transmission Protection System” which is in conflict with RFC’s Bulk Electric System Definition and RFC’s procedures for analyzing misoperations and implementing Corrective Action Plans. The definition introduced for “transmission Protection System” in the Interpretation is not consistent with RFC. The definition begins by stating that the term is applicable to “any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System.” Then a general exemption is given for radially connected transformer protection systems. The definition clarifies that its scope does include those transformers with low side “connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission system faults,...”. RFC’s “Clarification to the BES definition” does not include protective relays for these potential sources or network systems if they do not automatically trip a BES facility. Duke Energy believes that the definition of “transmission Protection System” and any changes to the requirements of PRC-004 and PRC-005 should be pursued via a SAR to revise the standards.</p>
<p>Response: This particular request was for an ‘interpretation’ of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				

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David A. Lapinski David Frank Roth	Consumers Energy	3 4	Negative	Even though this interpretation seems reasonable from an engineering perspective, there seems to be a (perhaps unintended) expansion of the applicability of these NERC Standards to Protection Systems well outside the BES as defined within NERC and within the RFC. Such an expansion, if it is to happen, should be via a full standards development activity, not through an interpretation.
<p>Response: The drafting team believes this interpretation does not expand the applicability of the cited standards. The interpretation only clarifies that in the context of these standards the phrase “transmission Protection System” applies to Protection Systems that are installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources.</p>				
Ajay Garg Michael D. Penstone	Hydro One Networks, Inc.	1 3	Negative	<p>Hydro One Networks Inc. casts a negative vote with the following comments:</p> <ol style="list-style-type: none"> 1. The interpretation goes beyond being a mere clarification of the requirements. It changes the requirements of PRC-004 and PRC-005 by introducing a definition of “transmission Protection System. In accordance with the Reliability Standards Development Procedure, definitions and any changes to the requirements of PRC-004 and PRC-005 should be pursued via a SAR to revise the standards 2. This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that, if this interpretation is adopted, will generate numerous other interpretation requests for variations of this system configuration and protection designs. 3. In the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission Protection System and a Special Protection System. In general, non-BES equipment that does not initiate BES equipment action, or has any effect on the BES should not be considered part of a transmission Protection System.
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the Bulk Electric System (BES).” If other circumstances exist that are not covered by this interpretation,</p>				

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<p>the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.</p> <p>The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
Richard Salgo	Sierra Pacific Power Co.	1	Negative	I agree with the general concept of the interpretation. Such radial facilities ought not to be considered applicable to the requirements of the subject standards. However, the interpretation indicates that a radial transmission line feeding a distribution substation could be considered BES if the distribution station acted as the collector for small and insignificant amounts of generation (perhaps even an emergency generator at a customer premise). Clearly, there must be a threshold of significance above which there is an impact upon the otherwise radial line.
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p>				
Edward C Stein	Edward C Stein	8	Negative	I am voting no because a failure to trip of the low side distribution breakers will require that the high side breaker trips. Failure to do so may cause the BES breakers supplying the substation in question to trip.
<p>Response: The drafting team concurs with this statement if the Regional Entity has included these facilities in its definition of the BES; however, they should not be included if the Regional Entity’s definition does not include these facilities.</p>				
Terry Harbour	MidAmerican Energy Co.	1	Negative	MidAmerican believes the interpretation goes beyond the role of an interpretation and that the defition of a Transmission Protection System should be considered using the SAR process.
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				

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Bud Tracy	Blachly-Lane Electric Co-op	3	Negative	<p>Blachly-Lane Electric Cooperative votes no on this ballot for the following reasons:</p> <p>1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.)</p> <p>2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus.</p> <p>3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems:</p> <ul style="list-style-type: none"> a) Networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. <p>4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

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<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Dave Markham	Central Electric Cooperative, Inc. (Redmond, Oregon)	3	Negative	<p>Central Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak</p>

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				<p>Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Dave Hagen	Clearwater Power Co.	3	Negative	<p>Clearwater Power Company votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of</p>

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				<p>clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide ‘meaningful’ flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity’s (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Roman Gillen	Consumers Power Inc.	3	Negative	<p>Consumers Power, Inc votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system</p>

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				<p>that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				

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Roger Meader	Coos-Curry Electric Cooperative, Inc	3	Negative	<p>Coos-Curry Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.

If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating

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<p>action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Dave Sabala	Douglas Electric Cooperative	3	Negative	<p>Douglas Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide ‘meaningful’ flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity’s (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

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<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Bryan Case	Fall River Rural Electric Cooperative	3	Negative	<p>Fall River Rural Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary</p>

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				sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Michael Henry	Lincoln Electric Cooperative, Inc.	3	Negative	Lincoln Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of

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Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.

If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.

The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).

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Rick Crinklaw	Lane Electric Cooperative, Inc.	3	Negative	<p>Lane Electric Cooperative, Inc. votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.

If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating

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<p>action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Richard Reynolds	Lost River Electric Cooperative	3	Negative	<p>Lost River Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide ‘meaningful’ flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity’s (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

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<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Jon Shelby	Northern Lights Inc.	3	Negative	<p>Northern Lights, Inc. votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at</p>

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<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Ray Ellis	Okanogan County Electric Cooperative, Inc.	3	Negative	<p>Okanogan County Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the</p>

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				<p>transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide ‘meaningful’ flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity’s (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Aleka K Scott	Pacific Northwest Generating Cooperative	4	Negative	<p>PNGC Power votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria</p>

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				<p>for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide ‘meaningful’ flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity’s (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Heber Carpenter	Raft River Rural Electric Cooperative	3	Negative	Raft River Rural Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system)

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				<p>and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>

Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.

If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.

The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not

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mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).				
Ken Dizes	Salmon River Electric Cooperative	3	Negative	<p>Salmon River Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p>				

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<p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Steve Eldrige	Umatilla Electric Cooperative	3	Negative	<p>Umatilla Electric Cooperative votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC's generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term "the networked low side system" is too general. We believe that the following should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional</p>

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				Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer’s primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Marc Farmer	West Oregon Electric Cooperative, Inc.	3	Negative	West Oregon Electric Cooperative, Inc. votes no on this ballot for the following reasons: 1) The second paragraph, second sentence of the NERC response, states: In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission faults, then these Protection Systems would be considered transmission Protection Systems. This sentence is much too general. As stated a 1 kW generator could cause a protective system to be included. We believe that PRC-004-1 and PRC-005-1 should only apply to a facility within a distribution system that connects a generator that meets NERC’s generator registration criteria for Generator Owner. (Currently this criterion is 20 MVA for a single unit and 75 MVA for aggregate units. We have chosen to reference the registration criterion, rather than the specific values, so that if thresholds change in the future this criterion would continue to consistent.) 2) Further, a Protection System for a transformer should only be considered a transmission Protection System if it is also be capable of clearing a high-current fault on the transmission side of the transformer, not just limited fault conditions from inside the transformer or on the low-side bus. 3) In addition, we also believe that the term “the networked low side system” is too general. We believe that the following

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				<p>should be excluded from being considered as transmission Protection Systems: a) networks serving only load from one transmission source, including radial transmission facilities with normally-open secondary sources, and b) Weak Loops operated at voltages below 200kV. Weak Loops are defined, in this context, as loops connected to the BES that provide redundancy to serve distribution but are not intended to and do not provide 'meaningful' flow-through capability. 4) The third paragraph, which re-iterates the Regional Entity's (WECC in this case) right to define the BES, should be retained. We strongly support this concept as it recognizes the significant regional differences.</p>
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p> <p>If the Protection System of the transformer's primary function is to provide protection for the transformer, and the transformer is not an element of the BES, then the Protection System is not covered by this interpretation. However, regardless of the magnitude of current involved, if the Protection System is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the BES and initiating action to clear the protected element from all local sources, then it is covered by this interpretation.</p> <p>The reference to "networked low side system" in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the Protection System would qualify as a "transmission Protection System," regardless of the voltage of the network voltage. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Gregory L. Pieper	Xcel Energy, Inc.	1	Negative	Please refer to Xcel Energy's segment 3 comments.
<p>Response: There is no Xcel Energy Segment 3 comment.</p>				
Terry L Baker	Platte River Power Authority	3	Negative	PRPA does not believe the interpretation provides clarity, or consistency within the regions. Networked low side system needs to be defined.
<p>Response: The term "networked low side system" in this case does not refer to any specific voltage level. It is used to identify location where the low side of the transformer has a normally closed system configuration to another system source. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				

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Catherine Koch	Puget Sound Energy, Inc.	1	Negative	PSE generally supports the response to the question however the last sentence creates confusion as to what "variance in the Regional Entity definitions of the BES" means. Please clarify the response to describe if the Regional Entity definition of the BES must be formally approved by FERC or NERC or whether it can be made defined informally. The ability for a Registered Entity to know how NERC's response to this question can vary needs to be clear and transparent. PSE understands that at this point since WECC does not have a FERC approved definition of the BES different from NERC, PSE assumes there is no regional variation to what NERC's response is as provided. Please confirm that PSE is interpreting the last sentence of NERC's response correctly as it applies to the WECC region.
<p>Response: The phrase “specific clarification may be required” is meant to identify that there are differences among Region Entities in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES within a given Regional Entity, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” But they would be considered as such within a Regional Entity that includes radial lines in its BES definition.</p> <p>Under present standards, the definition of the BES is assigned to the Regional Entity. Each Region has a definition of the BES and has provided that definition to NERC.</p> <p>The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
William SeDoris	Northern Indiana Public Service Co.	3	Negative	The final sentence in the interpretation appears to be a disclaimer that needs to be addressed. Variance in Regional Entity definitions of the BES should be eliminated by NERC especially since there are entities that span multiple regions
Joseph O'Brien		6		
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under present standards, the definition of the BES is assigned to the Regional Entity. Each Region has a definition of the BES and has provided that definition to NERC. The phrase “specific clarification may be required” is meant to identify that there are differences among Regional Entities in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of</p>				

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the regional definition, if needed, should be directed to the appropriate Regional Entity.”				
Fred E. Young	Northern California Power Agency	4	Negative	The interpretation leaves the door open for the Regional Entities to make the determination. This provides additional ambiguity and uncertainty.
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under present standards, the definition of the BES is assigned to the Regional Entity. Each Regional Entity has a definition of the BES and has provided that definition to NERC. The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Daniel Duff	Liberty Electric Power LLC	5	Negative	The interpretation leaves the question unresolved. The phrase "specific clarification may be required from the appropriate RC" negates the guidance in paragraph 2, and leaves the requesting entities without a resolution of the question.
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under the present standards process, the definition of the BES is assigned to the Regional Entity. Each Regional Entity has a definition of the BES and has provided that definition to NERC. The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Gordon Pietsch	Great River Energy	1	Negative	The last sentence of the interpretation removes the clarity that the first two paragraphs has created.
Sam Kokkinen		3		

Voter	Entity	Segment	Vote	Comment
Cynthia E Sulzer Donna Stephenson		5 6		
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under the present standards process, the definition of the BES is assigned to the Regional Entity. Each Regional Entity has a definition of the BES and has provided that definition to NERC. The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Robert Kondziolka John T Underhill Glen Reeves Mike Hummel	Salt River Project	1 3 5 6	Negative	SRP believes that the protective relays (Differential and Overcurrent) for transformers tapped off a Bulk Electric System line should be included under PRC-005 and PRC-004. In reality, the line relaying will not be able to discern a difference between a fault on the line and a fault on the high voltage winding of the transformer. Therefore, a transformer fault can and will cause the line from which it is tapped to trip. The relays protecting the transformer are just as important as the relays protecting the BES facility.
<p>Response: The subject Protection Systems are covered by this interpretation only if the transformers noted are included in the scope of the Regional Entity definition of the BES. The drafting team believes the commenter’s recommendation would modify the applicability of the standard.</p>				

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Henry G. Masti	New York State Electric & Gas Corp.	1	Negative	<p>The interpretation appears to “define” transmission Protection System, but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term.</p> <p>* This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations of this system configuration and protection designs.</p> <p>* Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System. In general, non-BES equipment that does not initiate BES equipment action, or has any effect on the BES should not be considered part of a transmission Protection System</p>
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate action for system faults on transmission elements identified as being included in the BES.” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.</p> <p>The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
Peter T Yost	Consolidated Edison Co. of New York	3	Negative	<p>The interpretation appears to “define” transmission Protection System, but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term. *</p> <p>This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations of this system configuration and protection designs. *</p> <p>Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System. In</p>

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				<p>general, non-BES equipment that does not initiate BES equipment action, or has any effect on the BES should not be considered part of a transmission Protection System</p>
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate action for system faults on transmission elements identified as being included in the BES.” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.</p> <p>The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
<p>Christopher L de Graffenried</p>	<p>Consolidated Edison Co. of New York</p>	<p>1</p>	<p>Negative</p>	<p>The NPCC Regional Standards Committee (RSC) has conducted an extensive review of the interpretation. The RSC has reached a consensus and is recommending a vote to "reject" the interpretation with the following comments. * The interpretation appears to “define” transmission Protection System, but in accordance with the Reliability Standards Development Procedure, an interpretation is not the appropriate process for defining a NERC term. * This interpretation appears to be applicable to a particular circumstance of a protection system. It is quite likely that this action will generate numerous other interpretation requests for variations of this system configuration and protection designs. * Finally, in the phrase “...designed to detect and initiate action for...” the interpretation seems to blur the distinction between a transmission protection system and a Special Protection System. In general, non-BES equipment that does not initiate BES equipment action, or has any effect on the BES should not be considered part of a transmission Protection System.</p>
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The interpretation applies to all situations where the Protection System in question “is designed to detect and initiate action for system faults on transmission elements identified as being included in the BES.” If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards</p>				

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<p>Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation.</p> <p>The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
Diane J. Barney	National Association of Regulatory Utility Commissioners	9	Negative	The interpretation appears to offer a definition for "transmission Protection System" which can only take place through the SAR process.
<p>Response: This particular request was for an ‘interpretation’ of the specific phrase “transmission Protection System”, which is used in these Standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				
Donald E. Nelson	Commonwealth of Massachusetts Department of Public Utilities	9	Negative	The interpretation appears to offer a definition for "Transmission Protection System" which can only take place through the SAR process.
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				
Larry E Watt	Lakeland Electric	1	Negative	This standard update seems to change the definitino of a protection system. If this is the intent - then this process needs to begin with a SAR.
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				
Karl Bryan	U.S. Army Corps of Engineers Northwestern Division	5	Negative	The interpretation did not address the disparity between the 2 Regional Entities examples given.
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under the present standards process, the definition of the BES is assigned to the Regional Entity. Each Regional Entity has a definition of the BES and has</p>				

Voter	Entity	Segment	Vote	Comment
<p>provided that definition to NERC.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
<p>Michael Gammon</p> <p>Charles Locke</p> <p>Thomas Saitta</p>	<p>Kansas City Power & Light Co.</p>	<p>1</p> <p>3</p> <p>6</p>	<p>Negative</p>	<p>The interpretation offered here does not substantially provide a clarification of what constitutes equipment that falls inside the BES and the PRC-004 and PRC-005 requirements. There are many different types of transmission configurations involving radial transformers with load and generation which makes this interpretation an extremely difficult challenge to fully express and clarify.</p>
<p>Response: The interpretation applies to all situations where the Protection System in question is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the BES. The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
<p>Scott Heidtbrink</p>	<p>Kansas City Power & Light Co.</p>	<p>5</p>	<p>Negative</p>	<p>Not a good enough clarification of what constitutes equipment that falls inside the BES and the PRC-004 and PRC-005 requirements.</p>
<p>Response: The interpretation applies to all situations where the Protection System in question is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the BES. The phrase “The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)” has been replaced with “The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources.”</p>				
<p>James Tucker</p>	<p>Deseret Power</p>	<p>1</p>	<p>Negative</p>	<p>The notion that if there is any source on the radial system makes it a protection system is a problem for me.</p>

Voter	Entity	Segment	Vote	Comment
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p>				
Denise Roeder	North Carolina Municipal Power Agency #1	3	Negative	<p>The original Request for Clarification gave opposing illustrations of how radially-connected transformer protection systems have been viewed by different regions. The first paragraph of the response seems clear that the relevant systems are only those identified as part of the BES. However, the second paragraph that addresses radially-connected transformer protection systems, by not mentioning the BES specifically, still leaves it unclear whether there could be inconsistencies in the application of these standards when left to specific clarification by the Regional Entities. It would have been better if the second paragraph also included the term "BES" when discussing the circumstances of a radial connection that would be included. The response should have said the standards are applicable for systems installed to detect and initiate actions for "BES" transmission system faults.</p>
<p>Response: The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p> <p>The first paragraph of the interpretation states “any Protection Systems that is designed.... on transmission elements... included in the BES.” It does not say that these Protection Systems are “identified as being on the BES.”</p> <p>The drafting team acknowledges that the differences in the Regional Entity definitions of the BES can result in different applicability of the standards being addressed in this interpretation. This interpretation is limited to the phrase “transmission Protection System.” Resolving differences in Regional Entity definitions of the BES is beyond the scope of this project.</p>				

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James B Lewis	Consumers Energy	5	Negative	The paragraph in the interpretation beginning with "In general, a radially..." is overly broad. The simple act of connecting a 5 kw wind turbine or similar sized low head hydro unit (an infinitesimal potential source) to "the transformer low side" should not create a part of a transmission Protection System. I believe this could be addressed by setting a size requirement for the potential source such as a size which required listing on the compliance registry.
<p>Response: The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a "transmission Protection System," regardless of the size of the generation sources that created the need.</p>				
Jeff Knottek	City Utilities of Springfield, Missouri	1	Negative	The second paragraph of the interpretation only adds more confusion to the issue. The first paragraph defined which protection systems apply. "In general" leads us to wonder what are the exceptions? Is this going to require another interpretation? Unless every possible scenario is addressed, there will be questions. This paragraph should be deleted. Also, there needs to be consistency amongst regions for what the BES is.
<p>Response: The interpretation applies to all situations where the Protection System in question "is designed to detect and initiate isolation of system faults on transmission elements identified as being included in the Bulk Electric System (BES)." If other circumstances exist that are not covered by this interpretation, the NERC Reliability Standards Development Procedure allows entities to request interpretations to address this need. It would be inappropriate to reject an interpretation of a standard because it may lead to further requests for interpretation. The phrase "The term transmission Protection System is applicable to any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES)" has been replaced with "The term transmission Protection System is applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and initiating action to clear the protected element from all local sources."</p>				
Brad Chase	Orlando Utilities Commission	1	Negative	This Interpretation goes beyond the accepted role of an interpretation, and changes the requirements of PRC-004 and PRC-005 by introducing a definition of "transmission Protection System" which is in conflict with RFC's Bulk Electric System Definition and RFC's procedures for analyzing misoperations and implementing Corrective Action Plans.
<p>Response: This particular request was for an interpretation of the specific phrase "transmission Protection System," which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				

Voter	Entity	Segment	Vote	Comment
Liam Noailles	Northern States Power Co.	5	Negative	We are supportive of the interpretation describing how a radially connected transformer protection system is treated. However the language regarding a “potential source” introduces further confusion. We believe that if language regarding potential sources is to be included in the interpretation then it should be clarified so as to not require additional interpretation.
<p>Response: The reference to “networked low side system” in this interpretation intentionally does not refer to any specific voltage level. Once it has been determined that the network source creates a need for such relaying to detect faults on transmission elements, the protection system would qualify as a “transmission Protection System,” regardless of the voltage of the network voltage.</p>				
David F. Lemmons	Xcel Energy, Inc.	6	Negative	We are supportive of the interpretation describing how a radially connected transformer protection system is treated. However the language regarding a “potential source” introduces further confusion. We believe that if language regarding potential sources is to be included in the interpretation then it should be clarified so as to not require additional interpretation.
<p>Response: The term “networked low side system” in this case does not refer to any specific voltage level. It is used to identify location where the low side of the transformer has a normally closed system configuration to another system source. The strength of the system (provide meaningful flow-through capability) does not mitigate the need to have appropriate protection schemes in place to protect the transmission element and de-energize the element (remove it from all sources).</p>				
Louise McCarren	Western Electricity Coordinating Council	10	Negative	<p>We would consider the protection system for a transformer with a High Side Voltage greater than 100Kv, connected to a transmission line at greater than 100KV by a tap as a BES protection system if:</p> <ol style="list-style-type: none"> 1) the transformer tap connection had two power supplies. Or 2) the transformer protection system had direct communication with another BES relay or protection system such as a transfer trip. <p>The current definition of BES specifies that a radial transmission line serving only load is not considered as BES IF there is only a single power source. WECC considers these tapped connections as having two power sources. We also believe these transformer protection systems for this configuration should be considered as BES protection systems and subject to PRC-005 because of the potential impact on the BES should they fail to operate. If a tapped transformer has a relay protection failure, the backup protection would be 2 remote breakers in the BES which would isolate not</p>

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				only the affected transformer and its load but any other tapped circuits between the open breakers and also would remove a section of BES transmission from service. It is clear that a failure or misoperation of this transformer protection equipment would impact the BES and we believe it should be considered as an applicable BES protection system.
<p>Response: The Drafting Team acknowledges this fact and acknowledges that there are differences in the Regional Entity definitions of the BES; however, under the present standards process, the definition of the BES is assigned to the Regional Entity. Each Regional Entity has a definition of the BES and has provided that definition to NERC. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Paul B. Johnson	American Electric Power	1	Negative	While AEP generally agrees with the response offered in the interpretation, we do not believe that is appropriate to define a term used in the standard through an interpretation, especially where it changes the meaning of requirements, rather than through the standard development process. It also concerns AEP that there seem to be regional differences in what constitutes the BES and that this interpretation is in conflict with some of the regions. Without a common knowledge of what constitutes the BES, it only creates a greater lack of clarity as Interpretations attempt to stipulate what is included and what is not included in the BES, particularly when it differs from the regions.
<p>Response: This particular request was for an “interpretation” of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				

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Raj Rana	American Electric Power	3	Negative	While AEP generally agrees with the response offered in the interpretation, we do not believe that is appropriate to define a term used in the standard through an interpretation, especially where it changes the meaning of requirements, rather than through the standard development process. It also concerns AEP that there seem to be regional differences in what constitutes the BES and that this interpretation is in conflict with some of the regions. Without a common knowledge of what constitutes the BES, it only creates a greater lack of clarity as Interpretations attempt to stipulate what is included and what is not included in the BES, particularly when it differs from the regions.
<p>Response: This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Brock Ondayko	AEP Service Corp.	5	Negative	While AEP generally agrees with the response offered in the interpretation, we do not believe that is appropriate to define a term used in the standard through an interpretation, especially where it changes the meaning of requirements, rather than through the standard development process. It also concerns AEP that there seem to be regional differences in what constitutes the BES and that this interpretation is in conflict with some of the regions. Without a common knowledge of what constitutes the BES, it only creates a greater lack of clarity as Interpretations attempt to stipulate what is included and what is not included in the BES, particularly when it differs from the regions.
<p>Response: This particular request was for an “interpretation” of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a</p>				

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<p>given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Edward P. Cox	AEP Marketing	6	Negative	<p>While AEP generally agrees with the response offered in the interpretation, we do not believe that is appropriate to define a term used in the standard through an interpretation, especially where it changes the meaning of requirements, rather than through the standard development process. It also concerns AEP that there seem to be regional differences in what constitutes the BES and that this interpretation is in conflict with some of the regions. Without a common knowledge of what constitutes the BES, it only creates a greater lack of clarity as Interpretations attempt to stipulate what is included and what is not included in the BES, particularly when it differs from the regions.</p>
<p>Response: This particular request was for an “interpretation” of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Kenneth Goldsmith	Alliant Energy Corp. Services, Inc.	4	Affirmative	<p>While I am voting affirmative, we believe this is a misuse of the interpretation process. This should go through the SAR process.</p>
<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>This particular request was for an interpretation of the specific phrase “transmission Protection System,” which is used in these standards. The response only clarifies use of this term in the context of these standards and does not propose a new defined term.</p>				

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Robert Martinko	FirstEnergy Energy Delivery	1	Affirmative	FirstEnergy generally supports the Interpretation and is voting AFFIRMATIVE, but believes the last paragraph only confuses the matter and should be removed from the Interpretation. For both Regional Entity examples the interpretation response provides clarity and the same endpoint can now be reached regarding what would be in and out of scope for the transmission Protection System. The first two paragraphs are sufficient to address the question raised regarding what constitutes a "transmission Protection System" with the key phrase in the response being "... any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc) identified as being included in the Bulk Electric System (BES)."
<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>The phrase "specific clarification may be required" is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered "transmission Protection Systems." However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase "It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity" has been replaced with "It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity."</p>				
Joanne Kathleen Borrell	FirstEnergy Solutions	3	Affirmative	FirstEnergy generally supports the Interpretation and is voting AFFIRMATIVE, but believes the last paragraph only confuses the matter and should be removed from the Interpretation. For both Regional Entity examples the interpretation provides clarity and the same endpoint can now be reached regarding what would be in and out of scope for the transmission Protection System. The first two paragraphs are sufficient to address the question raised regarding what constitutes a "transmission Protection System" with the key phrase in the response being "... any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc) identified as being included in the Bulk Electric System (BES)."
Kenneth Dresner		5		
Mark S Travaglianti		6		
<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>The phrase "specific clarification may be required" is meant to identify that there are differences among Regions in what facilities are included in the BES;</p>				

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<p>therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Douglas Hohlbaugh	Ohio Edison Company	4	Affirmative	<p>FirstEnergy generally supports the Interpretation and is voting AFFIRMATIVE, but believes the last paragraph only confuses the matter and should be removed from the Interpretation. For both Regional Entity examples the interpretation response provides clarity and the same endpoint can now be reached regarding what would be in and out of scope for the transmission Protection System. The first two paragraphs are sufficient to address the question raised regarding what constitutes a "transmission Protection System" with the key phrase in the response being "... any Protection System that is designed to detect and initiate action for system faults on transmission elements (lines, buses, transformers, etc) identified as being included in the Bulk Electric System (BES)."</p>
<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>The phrase “specific clarification may be required” is meant to identify that there are differences among Regions in what facilities are included in the BES; therefore, the interpretation is contingent on the Regional Entity definition of the BES. For instance, if radial lines are not considered as part of the BES in a given Region, the protection schemes installed to detect faults on a radial line are not considered “transmission Protection Systems.” However, they would be considered as such in a Regional Entity that includes radial lines in its BES definition. The phrase “It should also be noted that due to the variance in the Regional Entity definitions of the BES, specific clarification may be required from the appropriate Regional Entity” has been replaced with “It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.”</p>				
Harold Taylor, II	Georgia Transmission Corporation	1	Affirmative	<p>I would like to see a more firm stand on what constitutes transmission asset/protection and what is distribution. Example: A distribution provider may have a peak shaving generator with no intention of export to the transmission system. A reverse power relay applied to the bank lowside may be designated as transmission protection, but bank differentials and backup overcurrents should not be. Example: Transmission breakers may be required to protect distribution banks due to available fault current but they should not be considered as being applied for transmission protection.</p>

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<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p>				
James A Ziebarth	Y-W Electric Association, Inc.	4	Affirmative	<p>Y-WEA thanks the standard drafting team for their work on this interpretation. While we have some serious reservations about the clarity of the language in the interpretation regarding protection systems installed where there may be a generator connected downline, Y-WEA feels that the need for a general exclusion of protection systems for radial facilities outweighs these concerns. It should be noted, however, that the language about downstream connected generators and the design intent of a protection system could potentially be broadly interpreted and applied unless the drafting team added to the interpretation some additional criteria relating to generator size and/or specifically who makes the determination as to the intended design of a protection system and whether or not the protection system was intended to react to transmission system faults.</p>
<p>Response: The Team acknowledges your affirmative response and thanks you for your clarifying comment.</p> <p>The need for the installation of the subject relays may be dependent on the system configuration and the size of the installed generator. Once it has been determined that such relaying is needed in order to detect system faults on transmission elements, it would qualify as a “transmission Protection System,” regardless of the size of the generation sources that created the need.</p>				
Terry Bilke	Midwest ISO, Inc.	2	Abstain	<p>Several of our members have expressed concern with this interpretation. We would like to hear others' positions before casting a final ballot.</p>
<p>Response: The Team acknowledges your response and thanks you for your clarifying comment.</p>				