

Consideration of Comments on Initial Ballot — Interpretation of PRC-004-1 and PRC-005-1 for Y-W Electric and Tri-State (Project 2009-17)

Date of Initial Ballot: November 19, 2010 – December 3, 2010

Summary Consideration:

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, Herb Schrayshuen, at 609-452-8060 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

Voter	Entity	Segment	Vote	Comment
Paul B. Johnson	American Electric Power	1	Negative	The revised interpretation is a significant improvement and AEP appreciates the work by the drafting team. However, AEP feels the last sentence of the first paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES." In addition, AEP feels the last sentence of the last paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES and the transformer is a BES element."
John J. Moraski	Baltimore Gas & Electric Company	1	Affirmative	BGE is comfortable with the interpretation as written.
Eric Egge	Black Hills Corp	1	Negative	Black Hills Power respectfully votes against the interpretation because of the qualifiers 'that interrupts current supplied directly from the BES' and 'the transformer is a BES element'. These qualifiers force the issue of whether a transformer fed from a non-BES line can be considered a BES transformer. This issue arises because of disagreement of whether a radial transmission line tapped off the BES serving only load is part of the BES, and that question arises from different interpretation of what constitutes 'one' source or 'two' sources. Although the interpretation must be limited in scope to the standards affected, the original interpretation request from the submitting entities asks whether 'protection for a radially-connected transformer protection system energized from the BES is considered a transmission Protection System'. Because the interpretation as written

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
				does not allow the entities' question to be consistently and reliably answered, Black Hills Power is voting "No".
Danny McDaniel	Cleco Power LLC	1	Negative	Cleco respectively disagrees with the interpretation by the drafting team and the determination of a BES element should be clear and consistent across the continent. The definition of a BES element brings with it confusion when terms such as "generally" are used. In the example provided, one of the determinations should not be that the device interrupts current supplied directly from the BES but that the device interrupts current flowing between multiple BES substations or between a BES generator and a BES switchyard.
Paul Morland	Colorado Springs Utilities	1	Negative	The interpretation gives no clarity to the associated issue. The interpretation refers back to the "Bulk Electric System", which as yet has not been defined, and as such gives no clear indication on what an entity is to understand from this. Also, if a Distribution Transformer (serving radial load), is protected by fuses, a lower quality protection system, and not by transformer differential relay, with over current backup, it would not be required to comply. This seems backwards to the goal of improving the quality of the "Bulk Electric System", and will in the end encourage a lowering of the quality of the bulk electric system.
Dennis Minton	Florida Keys Electric Cooperative Assoc.	1	Negative	Radials should be exempted, provided there is no adverse material impact to the BES.
Claudiu Cadar	GDS Associates, Inc.	1	Negative	We do not support the interpretation of PRC-004-1 and PRC-005-1 requirements based on the following reasons: <ul style="list-style-type: none"> o Consistent with current reliability standards if the transmission line is radial in nature and no other network customer is impacted when the protective device operates, then no transmission Protection System exists. o NERC interpretation suggests certain situations where the transformer connected to the BES in a load serving radial configuration would be also considered a BES element. Would the secondary voltage of the transformer at 100 kV or above be determinant to consider the transformer a BES element? The definition of BES states that "Radial transmission facilities serving only load with one transmission source are generally not included in this definition." In load serving radial configurations the only party impacted by a potential transformer failure would be the customer and not the BES, so the transformer cannot be considered a BES element. o If a protection system exists for any other reason than fault protection of the Bulk Electric System, most of the times it would be categorized as a Special Protection System (i.e. preventing overload of a transformer or line based upon a contingent situation, etc.). Transfer trip schemes and blocking schemes react to faulted conditions, however we do not believe that

Voter	Entity	Segment	Vote	Comment
				<p>non-BES elements would be considered part of a protection system unless the RC or TOP indicates that the portion of the transmission system would be critical.</p> <ul style="list-style-type: none"> o We suggest to revise the interpretation of the term "transmission Protection System" in a more clear and concise form. o We consider that not only the transmission Protection System is in need of subsequent clarifications and clearness, but also the definition of BES. This argument resides on FERC Order 693 and FERC Docket No. RC09-3-000 related to the definition of BES where the Commission explained that "Although we are accepting the NERC definition of bulk electric system and NERC's registration process for now, the Commission remains concerned about the need to address the potential gaps in coverage of facilities. For example, some current regional definitions of bulk electric system exclude facilities below 230 kV and transmission lines that serve major load centers such as Washington, DC and New York City. The Commission intends to address this matter in a future proceeding.[...]" o Although the above argument may be considered beyond the scope of current interpretation, we consider that due to the related nature of the mentioned definitions, NERC may need to pursue additional steps for clarification rather than a simple term interpretation. The drafting team may consider proposing the addition of a new term such as "Transmission Protection System", or to modify the existing "Protection System" definition and "Bulk Electric System" by case if found appropriate.
Michael Gammon	Kansas City Power & Light Co.	1	Affirmative	<p>Recommend the first paragraph in the interpretation make it clear this does not include transformer protection systems for transformers with secondary winding voltages less than 100kv. Please consider the following language. The request for interpretation of PRC-004-1 Requirements R1 and R3 and PRC-005-1 Requirements R1 and R2 focuses on the applicability of the term "transmission Protection System." The NERC Glossary of Terms Used in Reliability Standards contains a definition of "Protection System" but does not contain a definition of transmission Protection System. In these two standards, use of the phrase transmission Protection System indicates that the requirements using this phrase are 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 trips an interrupting device that interrupts current supplied directly from the BES and for transformers with secondary windings of 100kv or higher.</p>
Larry E Watt	Lakeland Electric	1	Negative	<p>a protection system installed on that non-BES transformer could be determined to be a "transmission Protection System" with this interpretation. This contradicts the example.</p>

Voter	Entity	Segment	Vote	Comment
Randi Woodward	Minnesota Power, Inc.	1	Negative	Further clarification is required regarding the definition of a "BES Element" (e.g., What is a BES transformer?). We propose the following definitions: - Non GSU transformers must have all windings (excluding tertiary windings) rated at 100kV and above in order to be classified as a BES transformer. - GSU transformers must have a primary winding rating at 100kV and above in order to be classified as a BES transformer.
Chifong L. Thomas	Pacific Gas and Electric Company	1	Negative	The interpretation applies Requirements R1 and R3 in PRC-004-1, and to 1 and R2 in PRC-005-1. PG&E is concerned that, as written, the interpretation could introduce confusion for the generator Protection System. The interpretation states, "a Protection System for a radially connected transformer energized from the BES would be considered a transmission Protection System and subject to these standards only if the protection trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element." However, from NERC Glossary of Terms, the definition of BES includes "the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher". Therefore, if a generator protection trips the generator, the generator protection system can also be deemed a transmission Protection System because the generator is included in the BES. PG&E suggests that the interpretation be modified to state, "a Protection System for a radially connected transformer, which serves only Load and energized from the BES, would be considered a transmission Protection System and subject to these standards only if the protection trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element."
Frank F. Afranji	Portland General Electric Co.	1	Affirmative	PGE agrees with the interpretation given by the System Protection and Controls Subcommittee. The protection system for a radially connected transformer should be considered a transmission Protective System since it interrupts current from the BES. If the transformer breaker was to misoperate, it could cause delayed tripping from the remaining transmission line breakers ultimately effectin the BES.
Robert Kondziolka	Salt River Project	1	Negative	The Interpretation does not answer the question asked. It bases its guidance on whether or not the transformer is a BES element. Determining whether the transformer is a BES element causes the confusion and inconsistencies we believe the Interpretation request wanted to resolve.
Rich Salgo	Sierra Pacific Power Co.	1	Negative	The Standards Drafting Team is commended for eliminating the elements of vagueness from the prior interpretation (use of "generally" and deferral to the Regional Entity for specific clarification). However, we disagree with a key concept of this version, that an applicable protection system would trip an interrupting device that interrupts current supplied directly from the BES. Focusing on the very purpose of a transmission protection system, the principle of inclusion of a

Voter	Entity	Segment	Vote	Comment
				<p>protection system in the subject standards applicability should revolve around whether the protection system detects and acts to isolate faults on transmission elements from any source of energy, not whether it interrupts current supplied from the BES. In the 2nd paragraph, the interpretation reads "...only if the protection trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element". From this statement, it appears that the intent is for both conditions to be satisfied (interruption of current from the BES AND the transformer being a part of the BES). In that event, with the transformer presumed to be a part of the BES, there would be no doubt as to the status of the associated protection system and no need for interpretation. However, the situation posed in the request is that of a radial transformer, and as such, the transformer itself would not likely be part of the BES at any rate, given the general radial exclusion in the present NERC definition of BES. As well, the radial nature of the transformer indicates that it may not even be considered to be a transmission element at all, but rather, distribution. We suggest a modification to the interpretation such that a Protection System be considered to be a transmission Protection System if it is installed for the purpose of detecting faults on transmission elements identified as being included in the BES, initiating action to clear the protected element from any source of energy.</p>
Horace Stephen Williamson	Southern Company Services, Inc.	1	Negative	<p>Recirculation Comment: We do not feel the response adequately addressed our reliability concern in the proposed interpretation. We continue to believe that 'any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System' should be considered 'transmission Protection Systems' without any stipulation as to where they are installed or what they trip. The drafting team's response to our comment implies that low side equipment counts as part of the BES only if it fails to operate and impacts the BES reliability. What will be the criteria for determining the latter? Response to Original Comment: The drafting team believes the present interpretation appropriately addresses the reliability concern. In the commenter's example, if a failure to interrupt the Fault current from the 69 kV system resulted in a reliability concern the 69 kV Elements could be identified as BES Elements. Original Comment: Although we are in agreement with the first part of the definition that has been proposed for the phrase 'transmission Protection System' as "any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System" we do not concur with the modification to the qualifier noted as 'and trips an interrupting device that interrupts current supplied directly from the BES'. We feel that the original applicability to 'and initiates action to clear the protected element from all local sources' more accurately addresses the transmission reliability</p>

Voter	Entity	Segment	Vote	Comment
				concerns. As now proposed, a 230/69-kV facility that is interconnected with other non- BES 69-kV sources (other substations or generation facilities) and has Protection Systems installed to detect faults on the 230-kV source (. . . Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System..) and trips a 69-kV device, would not be included since it isn't tripping a device ' that interrupts current supplied directly from the BES'.
Keith V. Carman	Tri-State G & T Association, Inc.	1	Affirmative	Tri-State would like to point out that key to the interpretation is the condition that to be considered part of the "transmission Protection System" is that "the transformer is a BES element." Tri-State believes that a typical transformer that transforms from transmission voltage to distribution voltage is not a "BES element."
Gregory L Pieper	Xcel Energy, Inc.	1	Negative	Xcel Energy believes that this interpretation uses language that depends upon definition of BES elements (in this case transformers). How to determine if a transformer is classified as BES has not been clearly established (i.e. it is not clear as to if classification is based on high side or low side voltage). We believe it needs to be established how these boundary components and supporting systems (e.g. protection system) are classified in order to form a basis for the interpretation.
Timothy VanBlaricom	California ISO	2	Negative	We feel that a formal definition of 'transmission protection system' should be developed so that all RROs interpret the meaning in the same way.
Chuck B Manning	Electric Reliability Council of Texas, Inc.	2	Abstain	the interpretation does NOT clearly answer the question
Kim Warren	Independent Electricity System Operator	2	Affirmative	The IESO appreciates the drafting team's thoughtful consideration of the points we had raised in the previous two ballots. We accept that there are imitations to the current interpretation process and therefore respectfully suggest that the drafting team include in the Reliability Standards Issues Database for future consideration, the issue of how uncleared faults on non-BES elements that may impact the BES, should be addressed in the reliability standards. We also wish to point out that this issue is fully addressed in the NPCC region by virtue of the performance-based methodology applied for defining the BES (BPS).
Richard J. Mandes	Alabama Power Company	3	Negative	Recirculation Comment: We do not feel the response adequately addressed our reliability concern in the proposed interpretation. We continue to believe that 'any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System' should be considered 'transmission Protection Systems' without any stipulation as to where they are installed or what they trip. The drafting team's response to our comment implies that low side equipment counts as part of the BES only if it fails to

Voter	Entity	Segment	Vote	Comment
				<p>operate and impacts the BES reliability. What will be the criteria for determining the latter? Response to Original Comment: The drafting team believes the present interpretation appropriately addresses the reliability concern. In the commenter's example, if a failure to interrupt the Fault current from the 69 kV system resulted in a reliability concern the 69 kV Elements could be identified as BES Elements.</p> <p>Original Comment: Although we are in agreement with the first part of the definition that has been proposed for the phase 'transmission Protection System' as "any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System" we do not concur with the modification to the qualifier noted as 'and trips an interrupting device that interrupts current supplied directly from the BES'. We feel that the original applicability to 'and initiates action to clear the protected element from all local sources' more accurately addresses the transmission reliability concerns. As now proposed, a 230/69-kV facility that is interconnected with other non- BES 69-kV sources (other substations or generation facilities) and has Protection Systems installed to detect faults on the 230-kV source (.. Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System..) and trips a 69-kV device, would not be included since it isn't tripping a device ' that interrupts current supplied directly from the BES'.</p>
Raj Rana	American Electric Power	3	Negative	<p>The revised interpretation is a significant improvement and AEP appreciates the work by the drafting team. However, AEP feels the last sentence of the first paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES." In addition, AEP feels the last sentence of the last paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES and the transformer is a BES element."</p>
Steve Alexanderson	Central Lincoln PUD	3	Affirmative	<p>The new interpretation is an improvement over the last. We are still are baffled why the team did not include the NERC definition of "transmission" to show they are not creating a brand new definition. Perhaps comments included with affirmative ballots receive less attention than those with negative ballots. If so, this one may go unnoticed as well.</p>
Bryan Y Harper	Cleco Utility Group	3	Negative	<p>Cleco respectively disagrees with the interpretation by the drafting team and the determination of a BES element should be clear and consistent across the continent. The definition of a BES element brings with it confusion when terms</p>

Voter	Entity	Segment	Vote	Comment
				such as "generally" are used. In the example provided, one of the determinations should not be that the device interrupts current supplied directly from the BES but that the device interrupts current flowing between multiple BES substations or between a BES generator and a BES switchyard.
Kevin Querry	FirstEnergy Solutions	3	Affirmative	No Comments
Anthony L Wilson	Georgia Power Company	3	Negative	<p>Recirculation Comment: We do not feel the response adequately addressed our reliability concern in the proposed interpretation. We continue to believe that 'any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System' should be considered 'transmission Protection Systems' without any stipulation as to where they are installed or what they trip. The drafting team's response to our comment implies that low side equipment counts as part of the BES only if it fails to operate and impacts the BES reliability. What will be the criteria for determining the latter? Response to Original Comment: The drafting team believes the present interpretation appropriately addresses the reliability concern. In the commenter's example, if a failure to interrupt the Fault current from the 69 kV system resulted in a reliability concern the 69 kV Elements could be identified as BES Elements.</p> <p>Original Comment: Although we are in agreement with the first part of the definition that has been proposed for the phase 'transmission Protection System' as "any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System" we do not concur with the modification to the qualifier noted as 'and trips an interrupting device that interrupts current supplied directly from the BES'. We feel that the original applicability to 'and initiates action to clear the protected element from all local sources' more accurately addresses the transmission reliability concerns. As now proposed, a 230/69-kV facility that is interconnected with other non- BES 69-kV sources (other substations or generation facilities) and has Protection Systems installed to detect faults on the 230-kV source (.. Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System..) and trips a 69-kV device, would not be included since it isn't tripping a device ' that interrupts current supplied directly from the BES'.</p>
Gwen S Frazier	Gulf Power Company	3	Negative	Although we are in agreement with the first part of the definition that has been proposed for the phase 'transmission Protection System' as "any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System" we do not concur with the modification to the qualifier noted as 'and trips an interrupting device that

Voter	Entity	Segment	Vote	Comment
				interrupts current supplied directly from the BES'. We feel that the original applicability to 'and initiates action to clear the protected element from all local sources' more accurately addresses the transmission reliability concerns. As now proposed, a 230/69-kV facility that is interconnected with other non- BES 69-kV sources (other substations or generation facilities) and has Protection Systems installed to detect faults on the 230-kV source (.. Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System..) and trips a 69-kV device, would not be included since it isn't tripping a device ' that interrupts current supplied directly from the BES'.
Charles Locke	Kansas City Power & Light Co.	3	Affirmative	Recommend the first paragraph in the interpretation make it clear this does not include transformer protection systems for transformers with secondary winding voltages less than 100kv. Please consider the following language. The request for interpretation of PRC-004-1 Requirements R1 and R3 and PRC-005-1 Requirements R1 and R2 focuses on the applicability of the term "transmission Protection System." The NERC Glossary of Terms Used in Reliability Standards contains a definition of "Protection System" but does not contain a definition of transmission Protection System. In these two standards, use of the phrase transmission Protection System indicates that the requirements using this phrase are 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 trips an interrupting device that interrupts current supplied directly from the BES and for transformers with secondary windings of 100kv or higher.
Bruce Merrill	Lincoln Electric System	3	Negative	Further clarification is required regarding the definition of a "BES element" (e.g., What is a BES transformer?). Receiving current from the BES is not a suitable criterion for applicability. As currently written 115kV/12kV distribution transformers would incorrectly be classified as a BES element because they receive current from the BES. We propose the following definitions: Non-GSU transformers must have all windings (excluding the tertiary winding) rated at 100kV and above in order to be classified to be a BES transformer. GSU transformers must have a primary winding rated at 100kV and above in order to be classified to be a BES transformer.
Thomas C. Mielnik	MidAmerican Energy Co.	3	Negative	We are concerned that the interpretation could be interpreted in a way that incorrectly leads to the conclusion that transformers with low side below 100 kV (and the transformer's sytem protection) are BES. Both windings need to be 100 kV and above to be considered to be BES.
Don Horsley	Mississippi Power	3	Negative	Recirculation Comment: We do not feel the response adequately addressed our reliability concern in the proposed interpretation. We continue to believe that 'any Protection System that is installed for the purpose of detecting faults on

Voter	Entity	Segment	Vote	Comment
				<p>transmission elements identified as being included in the Bulk Electric System' should be considered 'transmission Protection Systems' without any stipulation as to where they are installed or what they trip. The drafting team's response to our comment implies that low side equipment counts as part of the BES only if it fails to operate and impacts the BES reliability. What will be the criteria for determining the latter? Response to Original Comment: The drafting team believes the present interpretation appropriately addresses the reliability concern. In the commenter's example, if a failure to interrupt the Fault current from the 69 kV system resulted in a reliability concern the 69 kV Elements could be identified as BES Elements. Original Comment: Although we are in agreement with the first part of the definition that has been proposed for the phase 'transmission Protection System' as "any Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System" we do not concur with the modification to the qualifier noted as 'and trips an interrupting device that interrupts current supplied directly from the BES'. We feel that the original applicability to 'and initiates action to clear the protected element from all local sources' more accurately addresses the transmission reliability concerns. As now proposed, a 230/69-kV facility that is interconnected with other non- BES 69-kV sources (other substations or generation facilities) and has Protection Systems installed to detect faults on the 230-kV source (.. Protection System that is installed for the purpose of detecting faults on transmission elements identified as being included in the Bulk Electric System..) and trips a 69-kV device, would not be included since it isn't tripping a device ' that interrupts current supplied directly from the BES'.</p>
Anthony Schacher	Salem Electric	3	Negative	The system protection devices have been installed to protect the substation transformers and distribution system downstream of the protection device, not the BES upstream. Therefore they should be exempt of the standard requirements
John T. Underhill	Salt River Project	3	Negative	The Interpretation does not answer the question asked. It bases its guidance on whether or not the transformer is a BES element. Determining whether the transformer is a BES element causes the confusion and inconsistencies we believe the Interpretation request wanted to resolve.
James R. Keller	Wisconsin Electric Power Marketing	3	Negative	The Comment Period and Ballot Period should not overlap. The industry and Standard Drafting Team should have opportunity to review comments prior to a ballot.
Gregory J Le Grave	Wisconsin Public Service Corp.	3	Affirmative	The interpretation needs to be further clarified to state: BES transformers are defined as: Generator step-up transformers that have high side voltage of 100Kv or greater. Or Transformers that have a high and low side voltages of 100Kv or greater.

Voter	Entity	Segment	Vote	Comment
Michael Ibold	Xcel Energy, Inc.	3	Negative	Xcel Energy believes that this interpretation uses language that depends upon definition of BES elements (in this case transformers). How to determine if a transformer is classified as BES has not been clearly established (i.e. it is not clear as to if classification is based on high side or low side voltage). We believe it needs to be established how these boundary components and supporting systems (e.g. protection system) are classified in order to form a basis for the interpretation.
Anthony Jankowski	Wisconsin Energy Corp.	4	Negative	The interpretation is contrary to the NERC BES definition and the RFC BES definition.
James A Ziebarth	Y-W Electric Association, Inc.	4	Affirmative	Y-WEA appreciates the clarity that the drafting team put in this interpretation. This interpretation should bring about much more uniform understanding and enforcement of standards PRC-004-1 and PRC-005-1.
George Tatar	Black Hills Corp	5	Negative	BHP voted No because of the qualifiers "that interrupts current supplied directly from the BES' and 'the transformer is a BES element". These qualifiers force the issue of whether a transformer fed from a non-BES line can be considered a BES transformer. Because the interpretation, as written, does not allow the entities question to be consistently and reliably answered, BHP is voting NO.
Amir Y Hammad	Constellation Power Source Generation, Inc.	5	Abstain	Although this interpretation is reasonable when viewed between transmission and distribution elements, Constellation is concerned with this interpretation potentially being used for generation facilities connected to the BES. As an example, take a 10 MW generation facility connected at 115kV . This facility would not be part of the BES per the current definitions. However, as written, this interpretation would conclude that any protection of the step up transformer makes it part of the BES, even though the facility does not meet the BES criteria. Although this is not the intent of the interpretation, it is a potential consequence if applied incorrectly.
Scott Heidtbrink	Kansas City Power & Light Co.	5	Affirmative	Recommend the first paragraph in the interpretation make it clear this does not include transformer protection systems for transformers with secondary winding voltages less than 100kv. Please consider the following language. The request for interpretation of PRC-004-1 Requirements R1 and R3 and PRC-005-1 Requirements R1 and R2 focuses on the applicability of the term "transmission Protection System." The NERC Glossary of Terms Used in Reliability Standards contains a definition of "Protection System" but does not contain a definition of transmission Protection System. In these two standards, use of the phrase transmission Protection System indicates that the requirements using this phrase are 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 trips an interrupting device that interrupts current supplied directly from the BES and for transformers with secondary windings of 100kv or higher.

Voter	Entity	Segment	Vote	Comment
Glen Reeves	Salt River Project	5	Negative	The Interpretation does not answer the question asked. It bases its guidance on whether or not the transformer is a BES element. Determining whether the transformer is a BES element causes the confusion and inconsistencies we believe the Interpretation request wanted to resolve.
Karl Bryan	U.S. Army Corps of Engineers Northwestern Division	5	Negative	The interpretation does not clearly answer the question posed by the "request for interpretation". The intent of the Reliability Standards is to have one set of rules for the BES and yet the Regional Entities appear to be carving out exceptions that are going beyond the intent of a reliable BES. In regards to this particular issue, either the transformer feeding a radial load is in or out of the BES and the disparity amongst the REs (RFirst and WECC) needs to be fixed.
Linda Horn	Wisconsin Electric Power Co.	5	Negative	The Comment Period and Ballot Period should not overlap. The industry and Standard Drafting Team should have opportunity to review comments prior to a ballot.
Liam Noailles	Xcel Energy, Inc.	5	Negative	Xcel Energy believes that this interpretation uses language that depends upon definition of BES elements (in this case transformers). How to determine if a transformer is classified as BES has not been clearly established (i.e. it is not clear as to if classification is based on high side or low side voltage). We believe it needs to be established how these boundary components and supporting systems (e.g. protection system) are classified in order to form a basis for the interpretation.
Edward P. Cox	AEP Marketing	6	Negative	The revised interpretation is a significant improvement and AEP appreciates the work by the drafting team. However, AEP feels the last sentence of the first paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES." In addition, AEP feels the last sentence of the last paragraph of the interpretation could be improved from: "...trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element." to the following: "...trips an interrupting device (such as circuit breakers and circuit switchers) that interrupts current flowing through the networked BES and the transformer is a BES element."
Matthew D Cripps	Cleco Power LLC	6	Negative	Cleco respectively disagrees with the interpretation by the drafting team and the determination of a BES element should be clear and consistent across the continent. The definition of a BES element brings with it confusion when terms such as "generally" are used. In the example provided, one of the determinations should not be that the device interrupts current supplied directly from the BES but that the device interrupts current flowing between multiple BES substations or between a BES generator and a BES switchyard.

Voter	Entity	Segment	Vote	Comment
Eric Ruskamp	Lincoln Electric System	6	Negative	Further clarification is required regarding the definition of a "BES element" (e.g., What is a BES transformer?). Receiving current from the BES is not a suitable criterion for applicability. As currently written 115kV/12kV distribution transformers would incorrectly be classified as a BES element because they receive current from the BES. We propose the following definitions: Non-GSU transformers must have all windings (excluding the tertiary winding) rated at 100kV and above in order to be classified to be a BES transformer. GSU transformers must have a primary winding rated at 100kV and above in order to be classified to be a BES transformer.
David F. Lemmons	Xcel Energy, Inc.	6	Negative	Xcel Energy believes that this interpretation uses language that depends upon definition of BES elements (in this case transformers). How to determine if a transformer is classified as BES has not been clearly established (i.e. it is not clear as to if classification is based on high side or low side voltage). We believe it needs to be established how these boundary components and supporting systems (e.g. protection system) are classified in order to form a basis for the interpretation.
Kent Saathoff	Electric Reliability Council of Texas, Inc.	10	Abstain	The question being asked is if the transformer protection system of a radially connected transformer, energized by the BES, is considered a BES transmission Protection System. The interpretation does not clearly state whether or not the transformer is part of the BES and further implies it may be some times but not all times, depending on how the transformer is cleared (separated from the transmission by the breaker vs. disconnecting the transformer and including clearing a section of transmission).
Dan R. Schoenecker	Midwest Reliability Organization	10	Negative	Further clarification is required regarding the definition of a "BES element" (e.g., What is a BES transformer?). Receiving current from the BES is not a suitable criterion for applicability. As currently written 115kV/12kV distribution transformers would incorrectly be classified as a BES element because they receive current from the BES.

End of Report