

Unofficial Comment Form

Project 2010-05.2 Special Protection Systems Phase 2 of Protection Systems

Please **DO NOT** use this form for submitting comments. Please use the [electronic form](#) to submit comments on the proposed definition of Remedial Action Scheme (RAS). The electronic comment form must be completed by **8 p.m. Eastern, Friday, July 25, 2014**.

If you have questions, please contact Al.McMeekin@nerc.net or by telephone at (803) 530-1963.

The project page may be accessed by clicking [here](#).

Background Information

The existing NERC Glossary of Terms definition for “Special Protection System” (“SPS”) or “Remedial Action Scheme” (“RAS”) lacks the specificity necessary to consistently identify what equipment or protection schemes qualify as SPS or RAS across the eight NERC Regions. The existing definition also does not clearly stipulate the characteristics of a SPS or RAS. The actions listed in the definition of “Special Protection System” and “Remedial Action Scheme” are ambiguous and may unintentionally include equipment whose purpose is not expressly related to preserving System reliability in response to predetermined System conditions. Employing a single term; i.e., RAS, and clarifying its definition will lead to more consistent application of the NERC Reliability Standards related to RAS.

The proposed definition of RAS must be broad to include the variety of System conditions monitored and corrective actions taken by RAS. This “broadness”; however, necessitates an exclusion list because without the exclusions, equipment and schemes that should not be considered RAS could be subject to the requirements of the RAS-related Reliability Standards. The exclusion list assures that commonly applied protection and control systems are not unintentionally included as RAS.

Note: The term “**Remedial Action Scheme**” (“**RAS**”) is and will be used throughout the documents associated with this Project to reflect the proposed retirement of the term “Special Protection System” (“SPS”).

Questions

You do not have to answer all questions. Enter comments in simple text format. Bullets, numbers, and special formatting will not be retained.

1. Do you agree that using a single term; i.e., RAS, and clarifying its definition will lead to more consistent application of the related NERC Reliability Standards? If not, please provide specific suggestions and rationale.

Yes
 No

Comments: A single term will lead to a more consistent application of reliability standards.

2. Are there additional corrective actions that should be explicitly included in the proposed definition of RAS? If yes, please provide specific suggestions and rationale.

Yes
 No

Comments: The objective to "Meet requirements identified in the NERC Reliability Standards" improperly defines a NERC term by utilizing NERC requirements which can change over time. The purpose of this section is to describe the objectives of an RAS. An RAS is accomplished the objectives of adequate reliability. Those Standards and requirements that will apply to RAS will list RAS in their requirements.

The final bullet in an RAS objective "Address other Bulk Electric System (BES) reliability concerns" is open ended. The previous bullets of voltage, stability, flows and Cascade are the hallmarks of adequate levels of reliability.

To the existing definition of Special Protection System (Remedial Action Scheme), after "Such action may include changes in demand, generation (MW and Mvar)..." add the words HVDC power flows, FACTS device operating points,...

3. Are there additional objectives that should be explicitly included in the proposed definition of RAS? If yes, please provide specific suggestions and rationale.

Yes
 No

Comments: It is not clear why "unanticipated" was omitted from the first sentence of the definition. While it is true that at least in WECC most of the conditions its RASs detect are predetermined, in other regions that might not be the case and omission of the term creates a loophole that is not there now.

A RAS is designed to respond to System Conditions that could happen. The schemes are developed in response to Planning Studies. Protection systems are not installed without considering the conditions that will activate them.

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First bullet: Have SPS/RAS requirements literally been identified in NERC standards, or is the intent that the SPS/RAS be applied so that the power system meets the performance requirements identified in the NERC reliability standards?

Sixth bullet: What is a reliability "concern"? Wouldn't it be more accurate to say address other conditions that could otherwise result in failure to comply with reliability standards?

4. Do you agree with the exclusion list in the proposed definition of RAS? If not, please provide specific suggestions and rationale.

Yes

No

Comments: Regarding Item "c" (Undervoltage Load Shedding Programs [UVLS Programs]) of what does not individually constitute a RAS, UVLS Program must become an approved definition.

Local undervoltage load shedding schemes that are not installed "to mitigate the risk of Cascading, voltage instability, voltage collapse, or uncontrolled separation resulting from undervoltage conditions" as defined in the draft PRC-010-1 should be excluded, therefore, "c. Undervoltage load Shedding Programs (UVLS Programs)" should be changed to "c. Automatic undervoltage load shedding schemes, including UVLS Programs. However, centrally controlled dispersed undervoltage load shedding schemes are RAS." An objective could be added to address centrally controlled Remedial Action Schemes.

After the bulleted section, the sentence "The following do not individually constitute an RAS" could be read as implying that two or three of them taken together might constitute an RAS, which may or may not be the case. Suggest revising to read "The following do not individually, or combined in part or total, constitute a RAS."

Please list UFLS and UVLS programs with the same capital letters and use of parentheses.

5. Do you agree with the time frames in the proposed Implementation Plan associated with the proposed definition of RAS? Please provide specific comments in support of your position.

Yes

No

Comments: