Decision on ISO planning standards

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Seeking approval to changes to the Special Protection Systems guidelines in the ISO Planning Standards

- The ISO uses Special Protection Systems (also known as Remedial Action Schemes or RAS) extensively to lower costs, increase utilization of existing transmission, and speed interconnection of new resource.

- Current guidelines focus primarily on the basic design of the RAS itself, and generally do not address the potential interaction of the RAS with market operations.

- The complexity of various RAS logic has increased to a level that risks conflicting with market operations, and these issues must be addressed to ensure reliable system operation.

- The existing guidelines also need to be updated to reflect changes to NERC standards.
Changes to the guidelines:

• Simplifying how generation will be armed on a particular RAS by:
  – Setting RAS arming limits based on the maximum capacity of the generation, not the dispatched level at that time;
  – connecting only the most effective generation to the RAS; and
  – avoiding RAS arming and generation tripping based on generation output levels and transmission flow levels.

• Specifying that a RAS can be designed to trip storage in the discharging mode or in the charging mode but not both
Changes to the guidelines (continued)

• Allowing a relaxation of the guidelines under certain interim or exceptional conditions

• Updating the current guidelines in the ISO Planning Standards to align with and complement NERC Reliability Standards

  – Replacing use of the term “special protection system” with “remedial action scheme”, including in the title of the guidelines section; and

  – removing redundant language from the guidelines, now that NERC Standard PRC-012 has been implemented.
A stakeholder process to review and update the RAS guidelines was initiated in June 2021
  – Initiative was put on hold for period of time to address complexities of RAS implementation in ISO markets

The ISO received generally supportive comments and detailed questions throughout the stakeholder process

The ISO received comments on the Draft Final Proposal from San Diego Gas & Electric (SDG&E) and from AES Clean Energy (AES)
Stakeholder Process - Responses to Comments

- **SDG&E** recommended that the guidelines be classified as standards, or a tracking process should be established to document any RAS that do not meet the guidelines if these are not converted to standards.
  
  - **ISO response:** The ISO will work with Participating Transmission Owners on a tracking process for all new and existing RAS documenting their alignment with the RAS guidelines.
Stakeholder Process - Responses to Comments

• **AES** raised concerns with the guideline to avoid the monitoring of facilities more than 1 substation away
  
  ├── **ISO response**: Remote monitoring of facilities can add complexity to system operation due to the need for telecommunication facilities, and that remote facilities tend to be less effective for mitigating the problem
  
• To address AES’ concerns, the ISO modified the guideline language to allow relaxing this guideline in certain conditions
Management recommends

- Approving the ISO Planning Standards with renaming the updates to the SPS Guideline section (including renaming the section to the RAS Guideline section)