

Change Summary

When first developed, the WECC common Remedial Action Scheme (RAS) format was not valid for dynamic simulations. Since initial implementation, software vendors have updated the model to integrate into dynamic simulation; however, there has been no formal requirement to update models. Existing models may not include the appropriate time delay(s) needed to model a RAS in a dynamic simulation. Changing the language in the Data Preparation Manual (DPM) to require that submitted RAS are valid for both steady-state and dynamic simulations would ensure entities using the RAS models for studies are modeling the scheme accurately.

Full implementation may take several years given the number of RAS in WECC and known issues with software implementation. However, having a requirement will encourage software vendors to address implementation issues and will help identify additional issues with the models.

Schedule

Incorporate language into DPM: April 2025 for inclusion in 2026 DPM

Adherence to revised DPM language: Same as 2026 DPM

Detailed Description

Revise Remedial Action Scheme Data section to require that submitted RAS models are valid for both steady-state and dynamic simulations.

Benefits

The following benefits are intended by completing the proposed DPM change request:

- Ensure RAS models are accurate for dynamic simulation.
- RAS modeling in dynamics will help the UFLSWG perform the PRC-006 UFLS assessment.

Cost

The following “costs” may be incurred by completing the proposed DPM change request:

- Data Submitters may need to update models to ensure they work properly for dynamic simulations.

Alternatives

No alternatives from the proposed change exist.

Proposed Edits

The following modifications to the presenting approved DPM are proposed to implement the change being requested. Existing language is identified in blue and changed language in red:

Remedial Action Scheme Data

Remedial Action Scheme (RAS) data must be shared with WECC and WECC must securely store the information separate from the interconnection-wide cases.

The following approach should be taken when providing RAS data:

1. All models should be provided ~~upon request by PCs in their preferred format until~~ in the WECC common format. ~~is available in the provider's preferred software.~~
2. RAS models should be provided if the affected elements are modeled in the case.
3. All models should identify the data owner by naming the models with the member system abbreviation and an underscore at the front. (e.g., "member system abbreviation_descriptive model name")
4. ~~RAS models provided should be valid for both steady-state and dynamic simulations.~~
5. RAS models must be provided for all operations base cases. These are denoted by an "-OP" in the base case compilation schedule. New models must be provided when the RAS are placed in use by the Operations department of each member, while existing models need only be updated when changes occur. PCs must notify WECC staff if any already provided models are no longer online and should be removed.
6. ~~RAS models may be used to represent other automatic protection schemes, which do not meet the NERC definition of RAS, that the data submitter would like to include to accurately reflect system response.~~
7. RAS data will be available on the WECC website. Only those users who are logged in and authorized may access it.