Unofficial Comment Form

# Project 2022-04 EMT Modeling

**Do not** use this form for submitting comments. Use the [Standards Balloting and Commenting System (SBS)](https://sbs.nerc.net/) to submit comments on **Project 2022-04 EMT Modeling ) - Revisions to FAC-001-4 and FAC-002-4** Standard Authorization Request (SAR)by **8 p.m. Eastern, Tuesday, January 21, 2025.   
m. Eastern, Thursday, August 20, 2015**

Additional information is available on the [project page](https://www.nerc.com/pa/Stand/Pages/Project2022-04EMTModeling.aspx). If you have questions, contact Senior Standards Developer, [Jessica Harris](mailto:Jessica.Harris@nerc.net) (via email) or at 404-710-4885.

## Background Information

This project will modify the latest versions of NERC FAC-001 and FAC-002, while ensuring alignment and complement with FERC Order No. 2023 and FERC GIA/GIP. The scope of the project is to modify NERC Standards to:

1) Include specific IBR interconnection topics in FAC-001-4 for which generator interconnection requirements shall be defined by TOs/TPs

2) Include specific steps for a conformity assessment intended to assess FAC-001-4 conformity in FAC-002-4

3) Include requirements for TOs to include pre-commissioning requirements for GOs to provide evidence that the facility:

a. Successfully passes an evaluation with performance that meets commissioning requirements. Discrepancies between plant performance and commissioning requirements should be shared with associated TP and PC to ensure visibility into the discrepancies and mitigation actions.

b. Ensure that the parameters and control modes intended to be placed in-service produce performance that matches the performance of the as-designed plant model that was used in generator interconnection studies.

4) IBR control parameter updates that affect the performance of the facility, made during the commissioning process, are updated in the facility model and studied to ensure reliability

As the scope of this project relates to Milestone 3 Standards Development projects but has no assigned FERC directives from Order No. 901, this project will be developed in tandem with Milestone 3 projects but is not considered a Milestone 3 project. This project will also continue to address the reliability‐related need and benefit by ensuring Transmission Planners (TPs) and Planning Coordinators (PCs) have the models and tools necessary to adequately conduct reliability assessments under increasing levels of inverter‐based resources. This requires the collection of electromagnetic transient (EMT) models by applicable entities and TPs and PCs to conduct EMT studies where needed. The result will produce three deliverables:

* Modifications to FAC-002 - which will require TPs and PCs to conduct EMT studies where necessary, ensure accurate models are provided and verified prior to commercial operation, and clarify requirements on applicable entities providing accurate models.
* Modifications to MOD-032 (or a new standard related to EMT model collection) – which will include explicit inclusion of EMT models, a process for collection of EMT models and modeling data, and model quality enhancements
* Modifications to TPL-001 – which will differentiate stability portions from existing requirements, have a process for conducting EMT studies, and include appropriate stability criteria.

Modifications to each standard seek to incorporate EMT modeling and studies, as applicable, and include model quality checks for all models used in reliability studies.

**Questions**

1. Do you agree that only FAC-001 and FAC-002 standards should be revised to fulfill the scope of the SAR? If you do not agree, or if you agree but have comments or suggestions for the project scope please provide your recommendation and explanation.

Yes

No

Comments:

1. Do you agree that the Project Scope will fulfill all aspects of the Purpose or Goal? If you do not agree, or if you agree and wish to provide comments or suggestions for the project scope, please provide your recommendation and explanation?

Yes

No

Comments:

1. Do you agree that the Detailed Description provides the full list of technical specifications to fulfill the Project Scope?  If you do not agree, or if you agree and wish to provide comments or suggestions for the project scope, please provide your recommendation and explanation?

Yes

No

Comments:      

1. Provide any additional comments for the drafting team to consider, if desired.

Comments: