

### Project 2020-06 & 2020-02

Summary Response to SAR Comments | June 2021

#### Introduction

The Standard Authorization Request (SAR) drafting team thanks all who provided comments during the informal comment period. All comments received were reviewed and the identified common themes are addressed below. Some comments have been reserved for consideration during the standard drafting phase of the project. As the standard drafting phase begins, the financial impact question and risk will be considered.

Industry raised concern of the practicality for validation of large-signal response testing for Inverter Based Resources (IBR) if required within the standard.

The existing MOD-026/027 Standards do not explicitly require model verification using large-signal disturbance tests. In the revised standard(s), the SDT will consider reasonable testing including alternate means of model verification.

Given the change of generation mix (increase of IBRs) since the MOD-026/027 effective date, the current 75MVA/100MVA thresholds for applicability is too high.

The SAR Detailed Description has added language to include a review of the Applicability sections.

Besides MOD-026/027, revisions to MOD-032 or MOD-033 could also be made to improve dynamic model verification and model accuracy.

The SAR focuses on revisions to MOD-026/027 to include IBR model verification and clarify any important differences from synchronous resources. Though MOD-032/033 are related, the SAR DT believes the improvements can be achieved by revising MOD-026/027.

Questions/concerns about implementation plan(s) for MOD-026/027 R2 considering the ongoing phased approach.

The SDT will propose a reasonable implementation plan inclusive of IBRs and dynamic reactive resources that is considerate of current phased implementation MOD-026/027.

#### Revisions to MOD-026/027 are not necessary.

The Industry Need and Detailed Description sections articulate the need for revisions to MOD-026/027, especially considering the increased usage of both IBR's and transmission-connected reactive resources.

Consider adding requirement language to MOD-026/027 that a Registered Entity with a reliability related need (such as a PC) can request model information from a GO, and the GO be obligated to provide the information.

MOD-026/027 requires the GO to provide the TP verified modeling information. In addition, MOD-032 prescribes the Planning Coordinator (PC) & associated TPs to jointly develop dynamic modeling data



requirements and reporting procedures for the PC's planning area, which can then be requested of the GO. Therefore, the SAR DT does not see a need to expand the obligations of the GO.

#### It is unclear whether MOD-026/027 are applicable to EMT models.

The SDT will review and determine if revisions to MOD-026/027 are needed to clarify language related to EMT models.

## (2020-02) There is needed definition or clarification of what is considered a transmission-connected dynamic reactive resource (TCDRR).

The revised standard language and/or applicability will make clear what is meant by a transmission-connected dynamic reactive resource and applicable MVA thresholds. The SAR allows the SDT to add, modify or retire Glossary Terms.

# (2020-02) Majority of comments advocate the combination of scopes for Projects 2020-02 and 2020-06 under a single drafting team for the sake of efficiency and consistency.

Project 2020-06 SAR DT intends to maintain and address the scope outlined in two separate SAR's for revisions to MOD-026 and MOD-027. Revisions to the remaining standards MOD-025, PRC-019, and PRC-024 will be addressed by other drafting teams.

#### Resources

Project 2020-06 Verifications of Models and Data for Generators

- MOD-026-1 and MOD-027-1 SAR
- <u>Industry Comments</u>

Project 2020-02 Transmission-connected Reactive Dynamic Resources

- TCR SAR (MOD-026, MOD-027, MOD-025, PRC-019, PRC-024)
- Industry Comments