

California Independent System Operator

&

Horizon West Transmission

**Joint Transmission Planning Base Case
Preparation Process**

**NERC Reliability Standard MOD-032-1
Data for Power System Modeling and Analysis**

Version 1.0

November 2019

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1 Introduction

1.1 Purpose

The purpose of this document is to (i) as required by NERC Reliability Standard MOD-032, Requirement 1, provide a jointly developed process for the California ISO (CAISO) as the Planning Coordinator (PC) and Balancing Authority (BA), and Horizon West Transmission (HWT) as the Transmission Planner (TP), to comply with steady state, dynamics, and short circuit modeling data requirements and reporting procedures for the CAISO Planning Coordinator planning area; (ii) provide details of the assumptions for HWT and CAISO to use in the annual CAISO Transmission Planning Process (TPP) Base Cases; and (iii) provide an overview of the process used in the development of the CAISO Transmission Planning Process (TPP) and Western Electricity Coordinating Council (WECC) Base Cases.

1.2 Overview of the Process

Horizon West Transmission (HWT) owns Bulk Electric System transmission facilities in the SDG&E service territory, but does not have any load or generation directly connected to their transmission facilities. HWT will annually provide the latest available modeling data for their facilities to the CAISO. The model data will be provided during Phase 1 of each TPP planning cycle, during the timeline in the CAISO TPP Study Plan.

This document includes details of the process followed for developing the WECC and CAISO TPP base cases.

2 CAISO TPP and WECC Base Case Development Process

The base case development process is completed on a yearly basis in order to keep the Horizon West Transmission SVC model up-to-date and consistent with any changes that may have occurred throughout the year.

Horizon West Transmission will provide validated data and ensure that it is accurate and represents up-to-date information for modeling the Horizon West Transmission facilities in the CAISO Planning Coordinator Area.

2.1 Roles and Responsibilities

Horizon West Transmission, as its own TP, is responsible for maintaining all models and modeling data related to Horizon West Transmission's ownership of transmission facilities in the CAISO Planning Coordinator Area.

2.2 Modeling Assumptions and Responsibilities

Horizon West Transmission’s modeling data will follow the WECC Data Preparation Manual wherever applicable. Horizon West Transmission will submit WECC base case modeling information in accordance with the CAISO-HWT Joint Transmission Planning Base Case Preparation Process document posted on the [CAISO web site](#). This section provides additional information on what assumptions are made and what level of detail is required for modeling the various aspects of the base cases created.

2.2.1 Transmission Project Modeling

The existing system model will be based upon as-built design and equipment test reports. Future capacity projects approved by CAISO will reflect the most up-to-date information available for both scope and in-service dates.

2.2.2 Outage Information

Planned outages that are at least 6 months in duration will be modelled based upon the planned dates of outages using the outage information provided by HWT and CAISO.

2.3 CAISO TPP Base Case Development Process

HWT is responsible for providing its transmission system model updates to the CAISO at least once a year, during Phase 1 of each CAISO TPP planning cycle, during the timeline in the CAISO TPP Study Plan, to accurately capture HWT’s transmission system model in the TPP study cases.

2.4 WECC Base Case Development Process

For the development of WECC base cases, the CAISO will ensure that the latest modeling information provided by HWT for the CAISO TPP base cases is provided to the appropriate WECC base development area coordinator(s). The area coordinator(s) will ensure that the latest HWT modeling information is incorporated into their WECC base case data submittals for the area coordinator area.

2.5 Short Circuit Modeling Data

HWT maintains short circuit modeling data for their transmission planning area and will provide it to CAISO, or WECC upon request.

Version History

Version	Change	By	Date
1.0	<u>CAISO-Horizon West Transmission (HWT) Joint Transmission Planning Base Case Preparation Process document</u> for MOD-032-1 Requirement R1 Implementation and Compliance, initial version	Donna Jordan Robert Sparks	11/5/2019

Technical Review

Reviewed By	Name	Signature	Date
Market and Infrastructure Compliance Manager, Market and Infrastructure Development, CAISO	Donna Jordan	Original signed	11/5/2019
Sr. Manager, Regional Transmission South, Infrastructure Development (CAISO)	Robert Sparks	Original signed	11/5/2019
Executive Director – Transmission Development, NextEra Energy Transmission on behalf of Horizon West Transmission (HWT)	Wayne Galli	Original signed	12/17/2019
Project Director – Transmission Development, NextEra Energy Transmission on behalf of Horizon West Transmission (HWT)	Edina Bajrektarevic	Original signed	12/16/2019
Project Manager, NextEra Energy Transmission on behalf of Horizon West Transmission (HWT)	Raul Perez	Original signed	12/17/2019

Approval

Approved By	Name	Signature	Date
Sr. Manager, Regional Transmission South, Infrastructure Development (CAISO)	Robert Sparks	Original signed	12/10/2019
President, NextEra Energy Transmission on behalf of Horizon West Transmission (HWT)	Eric Gleason	Original signed	12/17/2019

Appendix A. Modeling Communications

Entities responsible for providing data should send it to:

Planning Coordinator (PC) – California ISO at: GridModelingData@caiso.com

Transmission Planner (TP) – Horizon West Transmission at: DL-HWTplanning@nexteraenergy.com

Appendix B. Evidence Retention

The following evidence for demonstrating compliance with MOD-032 will be retained for a period of 4 years unless one of the following is true:

1. Last audit of the ISO Planning Coordinator function was performed by the Compliance Enforcement Authority during November 26, 2018 through December 7, 2018, therefore at a minimum, maintain evidence from the last audit until a new audit of the Planning Coordinator function is performed.
2. Maintain evidence for a longer period of time if asked by the Compliance Enforcement Authority, as part of an investigation.
3. If an applicable entity is found non-compliant, it shall keep information related to the non-compliance, at a minimum, until mitigation is complete and approved.

The following documents need to be retained:

- Documentation showing that HWT and CAISO jointly developed required modeling data requirements and reporting procedures;
- Modeling requirements document;
- Posting and reporting procedures for modeling requirements documents; and
- Written notification regarding technical concerns with data submitted under R2, including the technical basis or reason for the technical concerns.