

**California Independent System Operator**

**&**

**LS Power Grid California, LLC**

**Joint Transmission Planning Base Case  
Preparation Process**

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

Version 1.0

**March 2025**

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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 LS Power Grid California, LLC (LSPGC) 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 LSPGC 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**

LSPGC 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 LSPGC system model up-to-date and consistent with any changes that may have occurred throughout the year.

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

Requirement R6 of FAC-014-3 directs each transmission planning entity to use Facility Ratings and criteria that are not less limiting than those described in RC West's SOL methodology unless the entity provides a technical rationale to the entities identified in the standard. To that end, LSPGC as a Transmission Owner shall ensure that the Facility Ratings including the applicable time duration it provides for its facilities to California ISO PC in planning models and the Transmission Register are consistent with the Facility Ratings data they provide to their Transmission Operator and/or RC West per the RC's SOL Methodology and the Facility Ratings criteria in the ISO Planning Standards and/or the ISO TPP Study Plan.

## **2.1 Roles and Responsibilities**

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

## **2.2 Modeling Assumptions and Responsibilities**

LSPGC's modeling data will follow the WECC Data Preparation Manual wherever applicable. LSPGC will submit WECC base case modeling information in accordance with the CAISO-LSPGC 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 LSPGC and CAISO.

## **2.3 CAISO TPP Base Case Development Process**

LSPGC 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 LSPGC'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 LSPGC 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 LSPGC modeling information is incorporated into their WECC base case data submittals for the area coordinator area.

## **2.5 Short Circuit Modeling Data**

LSPGC 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	CAISO-LS Power Grid California (LSPGC) Joint Transmission Planning Base Case Preparation Process document for MOD-032-1 Requirement R1 Implementation and Compliance, initial version	Binaya Shrestha	XX/XX/20XX

## Technical Review

Reviewed By	Name	Signature	Date
Infrastructure Compliance Manager, Infrastructure and Operations Planning, CAISO	Jamie Johnson	DocuSigned by: <i>Jamie Johnson</i> FD06904F882B46F...	3/28/2025
Manager, Regional Transmission North, Infrastructure Development (CAISO)	Binaya Shrestha	Signed by: <i>Binaya Shrestha</i> 3E1735ECBE89465...	3/31/2025
Vice President, Transmission Planning, LS Power Grid California	Diwakar Tewari	<i>Diwakar Tewari</i>	3/19/2025
Compliance Manager, LS Power Grid California	Chris Bills	<i>Christopher Bills</i>	3/24/2025

## Approval

Approved By	Name	Signature	Date
Manager, Regional Transmission North, Infrastructure Development (CAISO)	Binaya Shrestha	Signed by: <i>Binaya Shrestha</i> 3E1735ECBE89465...	3/31/2025
Vice President, Transmission Planning, LS Power Grid California	Diwakar Tewari	<i>Diwakar Tewari</i>	3/19/2025

## **Appendix A.      Modeling Communications**

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Entities responsible for providing data should send it to:

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

Transmission Planner (TP) – LS Power at: [DTekeste@lspower.com](mailto:DTekeste@lspower.com)

## **Appendix B. Evidence Retention**

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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 May 6, 2024 through May 17, 2024, 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 LSPGC 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.