

# ITP Evaluation Process Plan

## Mead – Mohave Project

The Interregional Transmission Project (ITP) joint evaluation process provides for planning assumptions and ITP technical data coordination for the individual regional evaluations of an ITP. This evaluation process plan was developed through coordination among the relevant planning regions. Its purpose is to document the outcome of the Western Planning Region’s coordination of the basic descriptions, key assumptions, milestones, and key participants in the ITP evaluation process that will be followed in the regional evaluations of the ITP.

The information that follows is specific to the ITP listed in the ITP Submittal Summary below. An ITP Evaluation Process Plan is developed for each ITP that has been properly submitted and accepted into the regional process of the Planning Regions to which it was submitted. ITP project sponsors will be provided an opportunity to review this evaluation process plan before it is finalized by the relevant planning regions who developed this evaluation process plan. Once finalized, the Western Planning Regions will post this evaluation process plan on their public websites.

### ITP SUBMITTAL SUMMARY

Project Submitted To:	California ISO, and WestConnect
Relevant Planning Regions <sup>1</sup> :	California ISO, and WestConnect
Cost Allocation Requested From:	California ISO, and WestConnect

The Relevant Planning Regions identified above developed and have agreed to the ITP Evaluation Process Plan.

### ITP SUMMARY

GridLiance West LLC (GLW) submitted the Mead - Mohave project for consideration as an Interregional Transmission Project.

The project is proposed as an upgraded 60-mile, 500 kV connection from Mead to Mohave by rebuilding the existing Mead to Davis 230 kV line to 500 kV single circuit and building a 5-mile Davis to Mohave extension. The Mead - Mohave Project includes the following additions:

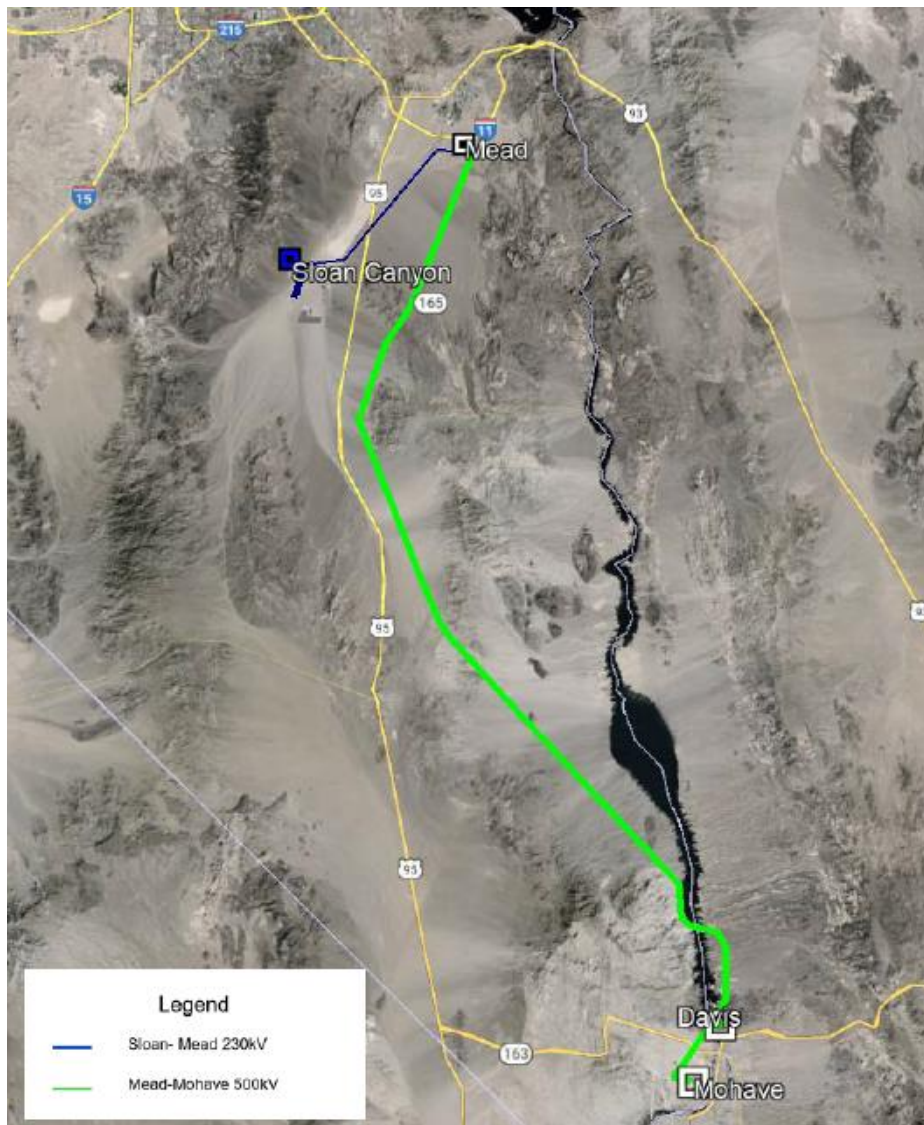
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<sup>1</sup> With respect to an ITP, a Relevant Planning Region is a Planning Region that would directly interconnect electrically with the ITP, unless and until a Relevant Planning Region determines that the ITP will not meet any of its regional transmission needs, at which time it will no longer be considered a Relevant Planning Region.

- Upgrade existing 60-mile, WAPA 230 kV to 500 kV from Mead to Davis.
- New 500 kV BAAH substation and 500/230 kV transformation at WAPA Davis
- Add a new 5-mile 500 kV line from Davis to Mohave.
- Applicable bus work at Mead and Mohave to terminate upgraded line.

The project has also been submitted in the 2024-2025 TPP CAISO process as an economic study project.

**Figure 1: Diagram showing the geographical location and preliminary project route**



## ITP EVALUATION BY RELEVANT PLANNING REGIONS

CAISO is the Planning Region that will lead the coordination among the Relevant Planning Regions involved in this evaluation process. In this capacity, CAISO will organize and facilitate interregional coordination meetings related to this ITP and document meeting action items and outcomes. For information regarding each Relevant Planning Region's ITP evaluation process, please contact that Planning Region directly.

The following is a summary of each Relevant Planning Region's evaluation process that will be followed to assess the ITP in its regional planning process. Please refer to each Planning Region's current study plan and/or Business Practice Manual for more details regarding its regional transmission planning process.

### WestConnect

WestConnect's 2024-25 Regional Study Plan was approved by its Planning Management Committee (PMC) in March of 2024.<sup>2</sup> The study plan describes the system assessments WestConnect will use to determine if there are any regional reliability, economic, or public policy-driven transmission needs. The models for these assessments are built and vetted during Q2 and Q3 of 2024. If regional needs are identified during Q4 of 2024, WestConnect will solicit alternatives (transmission or non-transmission alternatives (NTAs)) from WestConnect members and stakeholders to determine if they have the potential to meet the identified regional needs. If an ITP proponent desires to have their project evaluated as a solution to any identified regional need, they must re-submit their project during this solicitation period (Q5) and complete any outstanding submittal requirements. In late-Q5 and Q6 of the 2024-25 planning cycle, WestConnect will evaluate all properly submitted alternatives to determine whether any meet the identified regional needs and will determine which alternatives provide the more efficient or cost-effective solution. The more efficient or cost-effective regional projects will be selected and identified in the WestConnect Regional Transmission Plan. Any regional or interregional alternatives that were submitted for the purposes of cost allocation and selected into the Regional Transmission Plan as the more efficient or cost-effective alternative to an identified regional need will then be evaluated for eligibility for regional cost allocation, and subsequently, for interregional cost allocation.<sup>3</sup>

WestConnect regional needs assessments are performed using Base Cases as identified in the regional study plan. Base Cases are intended to represent "business as usual," "current trends," or the "expected future". WestConnect may also conduct information-only scenario studies that look at alternate but plausible futures. In the event regional transmission issues are observed in the assessments of the scenario studies, these issues do not constitute a "regional need", will not result in changes to the WestConnect Regional Transmission Plan and will not result in Order 1000 regional cost allocation. The WestConnect PMC has ultimate authority to determine how to treat regional transmission issues that are identified in the information-only scenario studies. They will determine whether an issue identified in a scenario —whether it be reliability, economic, or public-policy based—constitutes additional investigation by the Planning Subcommittee.

GLW representatives and other stakeholders are encouraged to participate in the development of the Base Cases to be studied in WestConnect's 2024-25 Planning Cycle. These studies, as outlined in Figure 2, will form the basis for any regional needs that ultimately may lead to ITP project evaluations in 2025. Stakeholders are also encouraged to participate in the development of the scenarios identified in WestConnect's 2024-25 Study Plan. These studies are also outlined in Figure 2.

—Mead—Mohave Project ITP Evaluation Process Plan  
Final June 04, 2024

<sup>2</sup> <https://doc.westconnect.com/Documents.aspx?NID=21108&dl=1>

<sup>3</sup> Please see the [WestConnect Business Practice Manual](#) for more information on cost allocation eligibility.

**Figure 2: WestConnect 2024-25 Transmission Assessment Summary**

10-Year Base Cases (2034)	Scenario Studies
Heavy Summer Power Flow (reliability) Light Spring Power Flow (reliability) Production Cost Model Base Case (economic)	10-Year Decreased Facility Rating Study (2034, reliability) 10-Year Extreme Cold Weather Study (2034, reliability) 20-Year Increased Renewable Study (2044, reliability, economic)
May result in the identification of regional needs, requires solicitation for alternatives to satisfy identified needs	Informational studies that will not result in the identification of regional needs. Alternative collection and evaluation is optional and is not subject to regional cost allocation

### California Independent System Operator (CAISO)

The draft study plan for the 2024-2025 Transmission Planning Process was posted on the CAISO website on February 24<sup>th</sup>, 2024<sup>4</sup>. The final study plan will be posted sometime in Spring 2024. The study plan details the load, resources, interchange levels and other modelling assumptions and methodologies for the required studies to identify any need for reliability, economic, or policy-driven transmission projects. The CAISO has collaboratively worked with the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) to align the planning assumptions between the CAISO’s TPP and the CPUC’s Integrated Resource Plan (IRP) process, as well as the demand forecast assumptions embodied in the 2023 IEPR adopted by the CEC on February 14<sup>th</sup>, 2024. Please refer to the Memorandum of Understanding (MOU) between the state agencies and the CAISO, posted on the CAISO website, which reflects the collaboration, engagement and roles and responsibilities of these entities in California. <sup>5</sup>

GLW has submitted the project as an ITP to CAISO for consideration in its transmission planning process (TPP) during the submission window for the 2024-2025 TPP, which closed on March 31, 2024. The CAISO will study this project along with all other ITP submissions to (a) determine alignment with CPUC provided resource portfolios for the TPP process as the CAISO is required to plan transmission solutions that enable the integration of resource portfolios provided by the CPUC and (b) determine if the ITP submission is more efficient or cost-effective solution to meet a CAISO-identified regional need than any identified regional solution and that can be constructed and operational in the same timeframe as the regional solution.

The power flow and production cost model datasets used in CAISO studies are posted on the CAISO’s Market Participant Portal. The California ISO will coordinate its studies with WestConnect and will exchange modeling information commensurate with existing data confidentiality requirements.

### DATA AND STUDY METHODOLOGIES

The coordinated ITP evaluation process strives for consistent planning assumptions and technical data

<sup>4</sup> [Draft-Study-Plan-2024-2025-Transmission-Planning-Process.pdf \(caiso.com\)](https://www.caiso.com/Documents/Draft-Study-Plan-2024-2025-Transmission-Planning-Process.pdf)

<sup>5</sup> <https://www.caiso.com/Documents/ISO-CEC-and-CPUC-Memorandum-of-Understanding-Dec-2022.pdf>

among the Planning Regions evaluating the ITP. Below, the Relevant Planning Regions have summarized the types of studies that will be conducted that are relevant to the project evaluation in each Planning Region. Methodologies for coordinating planning assumptions across the Relevant Planning Region processes are also described.

**Figure 3: Relevant Planning Region Study Summary Matrix**

Planning Study	WestConnect	CAISO
Economic/Production Cost Model	A Regional Economic Needs Assessment will be performed on the WestConnect 2034 Production Cost Model (PCM) Base Case (based on the WestConnect 2032 PCM Base Case and information from the WECC 2034 Anchor Dataset <sup>6</sup> )	Using the California ISO PCM Base Case, based on the WECC 2034 Anchor Data Set (ADS), GridView will be used to perform production cost simulation. All model information will be shared with the planning regions.
Reliability/Power Flow Assessment	A Regional Reliability Needs Assessment will be performed on WestConnect 2034 Heavy Summer and Light Spring cases, which are based off the WECC 2034 HS1 and 2034 LSP1S base cases <sup>7</sup>	If needed, the GE PSLF will be used to perform steady state and as needed, transient stability analysis. The WECC 2034 ADS and relevant WECC power flow cases will be modified as needed to accurately model the California network and resources that reflects the ISO’s finalized 2024-2025 study plan. All model information will be shared with the planning regions.

Data Coordination

The Planning Regions will strive to coordinate major planning assumptions through the following procedures.

Economic/Production Cost Model

Each Planning Region intends to update the WECC 2034 Anchor Data Set (ADS) with their most recent and relevant regional planning assumptions to reflect its starting point transmission topology and generation data.<sup>8</sup> The Planning Regions will strive to coordinate major updates made to the 2034 ADS as part of their

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Final June 04, 2024

<sup>6</sup> WestConnect ITP Project evaluation is subject to a number of factors, the first and most critical being the identification of regional needs as a part of the 2024-25 Base Case transmission needs assessments.

<sup>7</sup> Id

<sup>8</sup> For WestConnect, this update occurs when the WestConnect member Transmission Owners provide their local transmission plans for 2034 to WECC for inclusion in the WECC 2034 Heavy Summer power flow base case, which is used as a starting point for the WECC 2034 ADS.

regional model development efforts in late Q3, 2024. As an example, the California ISO will update the 2034 ADS to reflect their recently approved 2023-2024 Transmission Plan. WestConnect members will represent their local transmission plans for 2034.<sup>9</sup>

Through this coordination of planning data and assumptions, the Relevant Regions will strive to build a consistent platform of planning assumptions for Economic/Production Cost Model evaluations of the ITP.

#### Reliability/Power Flow Assessment

Since each Planning Region reflects characteristics and a planning focus that is unique, different power flow models are generally needed to appropriately reflect each region’s system and key assumptions. As such, each Planning Region will develop its models and data that accurately reflect their Planning Region, but will seek to coordinate this information with the other Relevant Planning Regions subject to applicable confidentiality requirements. The identification of the starting WECC power flow cases (“seed cases” for the purpose of this evaluation plan), and significant assumptions or changes a Planning Region may make to a seed base case are examples of information that will be considered by each Planning Region and coordinated with the other Planning Regions. As such, the inclusion or removal of major regional transmission projects will be coordinated through existing data coordination processes, but the season or hour of study and particular system operating conditions may vary by Planning Region based on its individual regional planning scope and study plan.

#### Cost Assumptions

In order for each Relevant Planning Region to evaluate whether the project is a more efficient or cost-effective alternative within their regional planning process, it is necessary to coordinate ITP cost assumptions among the Relevant Planning Regions. For planning purposes, each Relevant Planning Region’s cost share of the project will be calculated based on its share of the calculated benefits provided to the Region by the project.

After each Relevant Planning Region identifies their transmission needs and (as applicable) the benefits of the ITP, project costs for each Region to use in the determination of the more efficient or cost-effective alternatives for the region will be determined as follows:

Assumptions
Total Benefits (\$) = CAISO Benefits (\$) + WestConnect Benefits (\$)
Project Cost (\$) = Total capital cost of project, as agreed upon by Regions

Cost Calculations (for Planning Purposes)
CAISO Cost for Planning Purposes = [CAISO Benefits/Total Benefits] * Project Cost
WestConnect Cost for Planning Purposes = [WestConnect Benefits/Total Benefits] * Project Cost

<sup>9</sup> WestConnect 2024-2025 Base Transmission Plan

Note that this information on cost assumptions applies to costs that will be used for planning evaluation purposes. These costs may be different than what is assumed for any relevant cost allocation procedures.

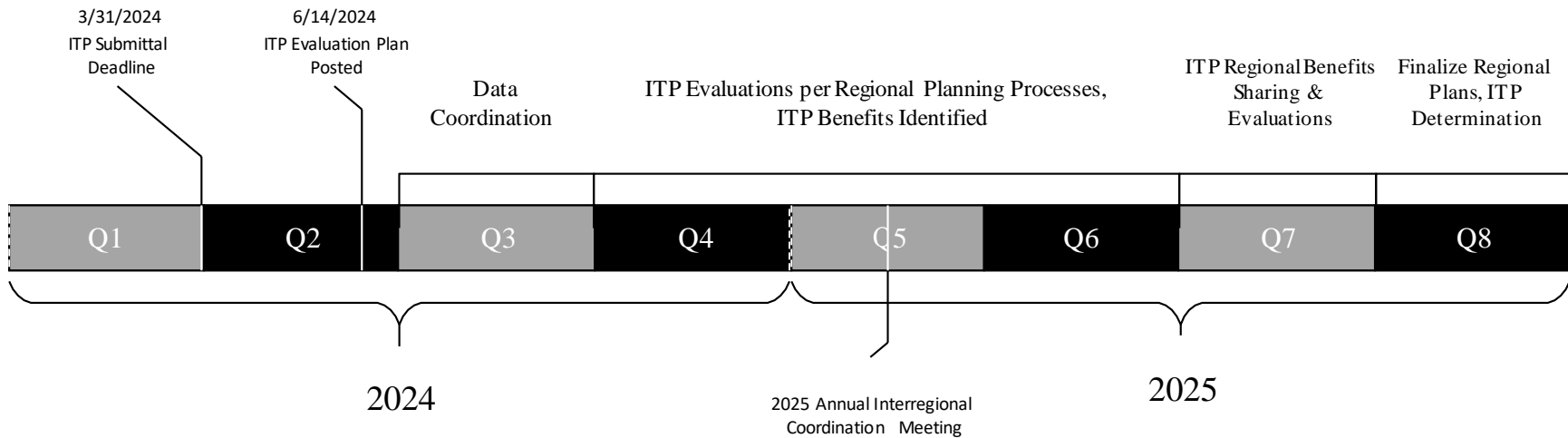
## COST ALLOCATION

Interregional cost allocation may apply for the project for the 2024-2025 cycle. If only one of the two Relevant Planning Regions for the project select the project in its regional transmission plan for purposes of Interregional Cost Allocation, and the number of Relevant Planning Regions for the project is reduced to one, the project will no longer be eligible for interregional cost allocation.

## SCHEDULE AND EVALUATION MILESTONES

The ITP will be evaluated in accordance with each Relevant Planning Region’s regional transmission planning process during 2024 and 2025 cycle. The ITP Evaluation Timeline was created to identify and coordinate key milestones within each Relevant Planning Region’s process. Note that in some instances, an individual Planning Region may achieve a milestone earlier than other Regions evaluating the ITP.

**Figure 4: ITP Evaluation Timeline**



Meetings among the Relevant Planning Regions will be coordinated and organized by the lead Planning Region per this schedule at key milestones such as during the initial phases of the ITP evaluations and during the sharing of ITP regional benefits.



## CONTACT INFORMATION

For information regarding the ITP evaluation within each Relevant Planning Region's planning process, please contact that Planning Region directly.

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