ITP Evaluation Process Plan

North Gila-Imperial Valley #2 Transmission Project

June 15, 2022

The goal of the coordinated Interregional Transmission Project (ITP) evaluation process is to achieve consistent planning assumptions and technical data of an ITP to be used in the individual regional evaluations of an ITP. The joint evaluation of an ITP is considered to be the joint coordination of the regional planning processes that evaluate the ITP. The purpose of this document is to provide a common framework, coordinated by the Western Planning Regions, to provide basic descriptions, major assumptions, milestones, and key participants in the ITP evaluation process.

The information that follows is specific to the ITP listed in the ITP Submittal Summary below. An ITP Evaluation Process Plan will be developed for each ITP that has been properly submitted and accepted into the regional process of the Planning Region to which it was submitted.

ITP SUBMITTAL SUMMARY

Project Submitted To:	California Independent System Operator (California ISO), and WestConnect
Relevant Planning Regions[1]:	California ISO, and WestConnect
Cost Allocation Requested From:	California ISO[2]

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

ITP SUMMARY

NGIV2, LLC submitted the North Gila-Imperial Valley #2 (NGIV2) Transmission Project for consideration as an Interregional Transmission Project. NGIV2 is a proposed 500 kV AC transmission project that will

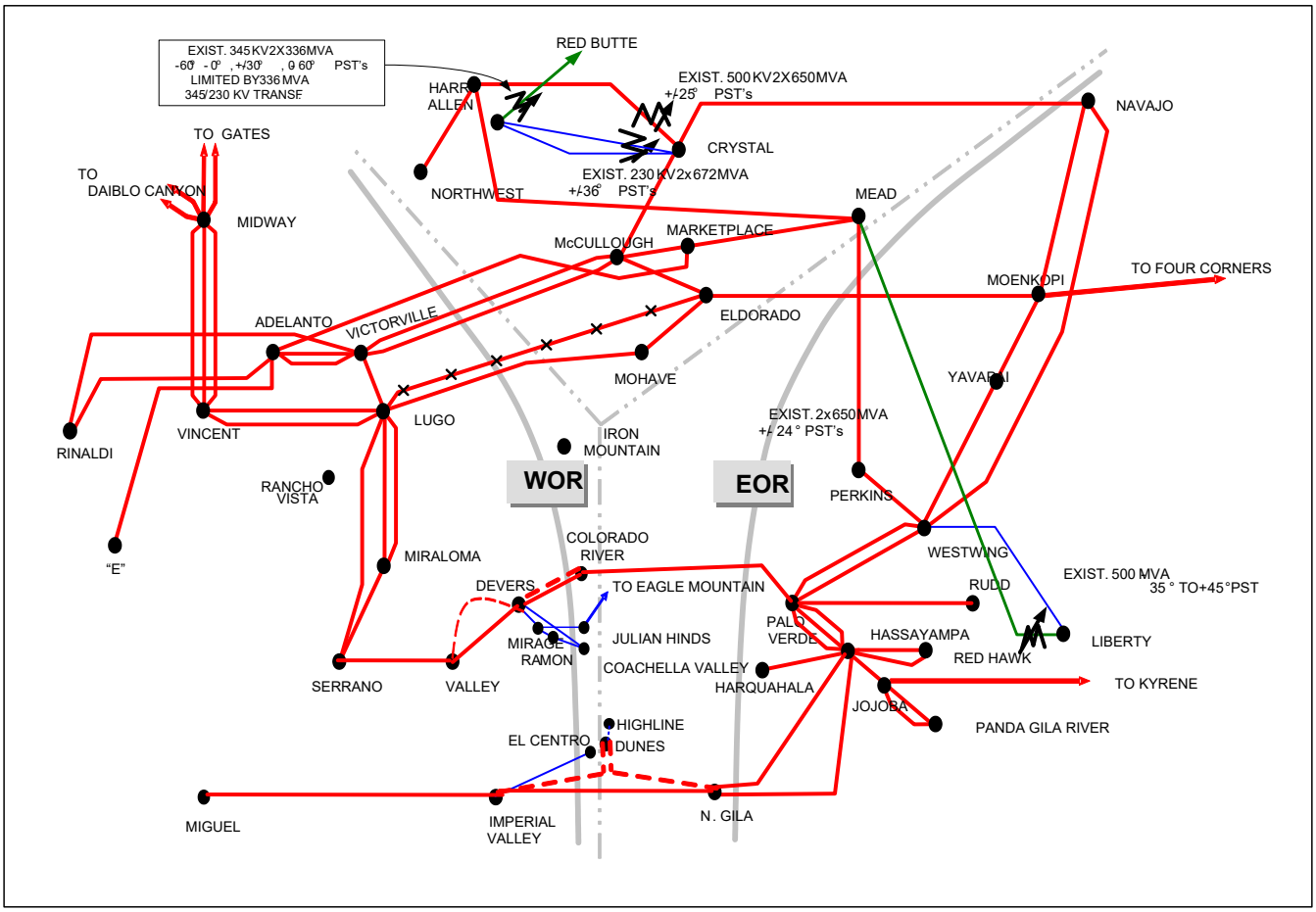
[1] With respect to an ITP, a Relevant Planning Region is a Planning Region that would directly interconnect electrically with the ITP, unless and until a Relevant Planning Region determines that the ITP will not meet any of its regional transmission needs, at which time it will no longer be considered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

[2] NGIV2, LLC has indicated that if IID participates in the project, they would accept a capital cost allocation of $105 million with the remainder of the costs to be recovered through the CAISO TAC. If the CAISO and IID determine there is a need for this project, the CAISO and IID would have to agree upon an appropriate cost allocation.

extend approximately 90 miles and will be constructed between southwest Arizona and southern California (see Figure 1). The line will parallel the existing North Gila-Imperial Valley line, also known as the Southwest Power Link (SWPL), and will connect the existing 500 kV North Gila substation (in the WestConnect planning region) with the existing 500 kV Imperial Valley substation (in the California ISO planning region). NGIV2 would be constructed to loop in a new 500/230 kV Dunes substation (in the WestConnect planning region) and would also include construction of a new 230 kV line from Dunes into the existing IID Highline 230 kV substation. A new 500/230 kV transformer would be installed in the Dunes substation as part of the NGIV2 project. This project will become an additional component of the West of Colorado River path (Western Electricity Coordination Council (WECC) path 46) and is expected to increase the East of Colorado River path (WECC path 49) transfer capability by 1,250 MW. Series compensation may be added to the project to balance flows on this new circuit and the existing SWPL line.

NGIV2, LLC completed the WECC 3-phase rating process on September 5, 2019. NGIV2, LLC is currently evaluating potential alternative routes and working with the responsible regulatory agencies to obtain all necessary project approvals. According to NGIV2, LLC, the project is expected to be in-service by December 2026.

Figure 1: North Gila-Imperial Valley #2
One-Line Diagram
(Source: NGIV2 WECC 2022 Annual Progress Report
February 18, 2022)



ITP EVALUATION BY RELEVANT PLANNING REGIONS

WestConnect has been identified as the Planning Region that will lead the coordination efforts with the other Relevant Planning Regions identified for the ITP. In this capacity, WestConnect will organize and facilitate interregional coordination meetings and track action items and outcomes of those meetings. For information regarding the ITP evaluation conducted within each Relevant Planning Region's planning process, please contact that Planning Region directly.

Given that the joint evaluation of an ITP is considered to be the joint coordination of the regional planning processes that evaluate the ITP, the following describes how the ITP fits into each Relevant Planning Region's process. This information is intended to serve only as a brief summary of each Relevant Planning Region's process for evaluating an ITP. Please see each Planning Region's most recent study plan and/or Business Practice Manual for more details regarding its overall regional transmission planning process.

California Independent System Operator

The final study plan for the 2022-2023 Transmission Planning Process has been posted on the CAISO website on March 31st, 2022[3]. 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.

NGVI2, LLC also submitted the NGIV2 project into the CAISO's 2022-2023 transmission planning process as an economic study request. If selected as a high priority economic study, the CAISO will assess as an alternative the NGIV2 project to determine if there is an economic need justification. NGIV2, LLC has indicated that if IID participates in the project, and subject to the IID Board of Directors, they would accept a capital cost allocation of $105 million with the remainder of the costs to be recovered through the CAISO Transmission Access Charge (TAC). If a need is determined by the CAISO and IID for this project, the CAISO and IID would need to agree upon an appropriate cost allocation.

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 with WestConnect commensurate with existing data confidentiality requirements.

WestConnect

WestConnect's 2022-23 Regional Study Plan was approved by its Planning Management Committee (PMC) in March of 2022.[4] 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 2022. If regional needs are identified during Q4 of 2022, 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

[3] http://www.caiso.com/InitiativeDocuments/FinalStudyPlan-2022-2023TransmissionPlanningProcess.pdf
[4] https://doc.westconnect.com/Documents.aspx?NID=20635&dl=1

period (Q5) and complete any outstanding submittal requirements. In late-Q5 and Q6 of the 2022-23 planning cycle, WestConnect will evaluate all properly submitted alternatives to determine whether any meet the identified regional needs, and will determine which alternative(s) 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.[5]

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.

NGIV2 Project representatives and other stakeholders are encouraged to participate in the development of the base cases to be studied in WestConnect's 2022-23 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 2023. Stakeholders are also encouraged to participate in the development of the scenarios identified in WestConnect's 2022-23 Study Plan. These studies are also outlined in Figure 2.

Figure 2: WestConnect 2022-23 Transmission Assessment Summary

10-Year Base Cases (2032)	10-Year Scenarios (2032)
Heavy Summer (reliability) Light Spring (reliability) Base Case (economic)	High Clean Energy Penetration Scenario Study (reliability and economic)
May result in the identification of regional needs, requires solicitation for alternatives to satisfy 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

DATA AND STUDY METHODOLOGIES

The coordinated ITP evaluation process strives for consistent planning assumptions and technical data among the Planning Regions evaluating the ITP. Below, the Relevant Planning Regions have summarized

[5] Please see the WestConnect Business Practice Manual for more information on cost allocation eligibility.

the types of studies that will be conducted that are relevant to the NGIV2 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	California ISO	WestConnect
Economic/Production Cost Model	Using the California ISO PCM Base Case, based on the WECC 2032 Anchor Data Set (ADS), GridView will be used to perform production cost simulation. All model information will be shared with WestConnect.	Regional Economic Assessment will be performed on WestConnect 2032 Base Case PCM[6]
Reliability/Power Flow Assessment	If needed, the GE PSLF will be used to perform steady state and as needed, transient stability analysis. The WECC 2032 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 2022-2023 study plan. All model information will be shared with WestConnect.	Regional Reliability Assessment will be performed on WestConnect 2032 Heavy Summer and Light Spring cases [7]

Note that the NGIV2 Project evaluation will be conducted by each Relevant Planning Region in accordance with its approved Order 1000 Regional Planning Process. This includes study methodologies and benefits identified in planning studies.

Data Coordination

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

Economic/Production Cost Model

Each Relevant Planning Region's economic planning models will include their most recent and relevant regional planning assumptions for transmission topology and generation data. The Relevant Planning Regions also intend to use the WECC 2032 Anchor Data Set (ADS) to inform their regional economic

[6] WestConnect transmission 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 2022-23 Base Case transmission needs assessments.
[7] Id

planning studies conducted in 2022 and 2023 (as applicable), particularly as it relates to the transmission and generation assumptions for the systems outside their Planning Region footprint. The Planning Regions will strive to coordinate any major updates made to the 2032 ADS as part of their regional model development efforts in late Q3, 2022[8].

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.

[8] This schedule is dependent on the 2032 Anchor Data Set being provided by WECC no later than the end of Q2, 2022, and the sharing of planning data or assumptions will be subject to applicable confidentiality requirements in each Planning Region.

Cost Assumptions

In order for each Relevant Planning Region to evaluate whether the NGIV2 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, NGIV2, LLC estimated the total project cost to be $377.0 million, with a proposed split of $105.0 million for IID (WestConnect member) and $272.0 million via a CAISO Participating Transmission Owner (PTO). The project cost of the NGIV2 Project, as provided in their ITP Submittal form, is provided below.

Figure 4: North Gila-Imperial Valley #2 Project Sponsor Cost Information[9]

Project Configuration	Cost ($)
Single circuit project cost estimate	$377.0 million (2022 $$), with a proposed split of $105 million for IID and $272.0 million for a CAISO PTO

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

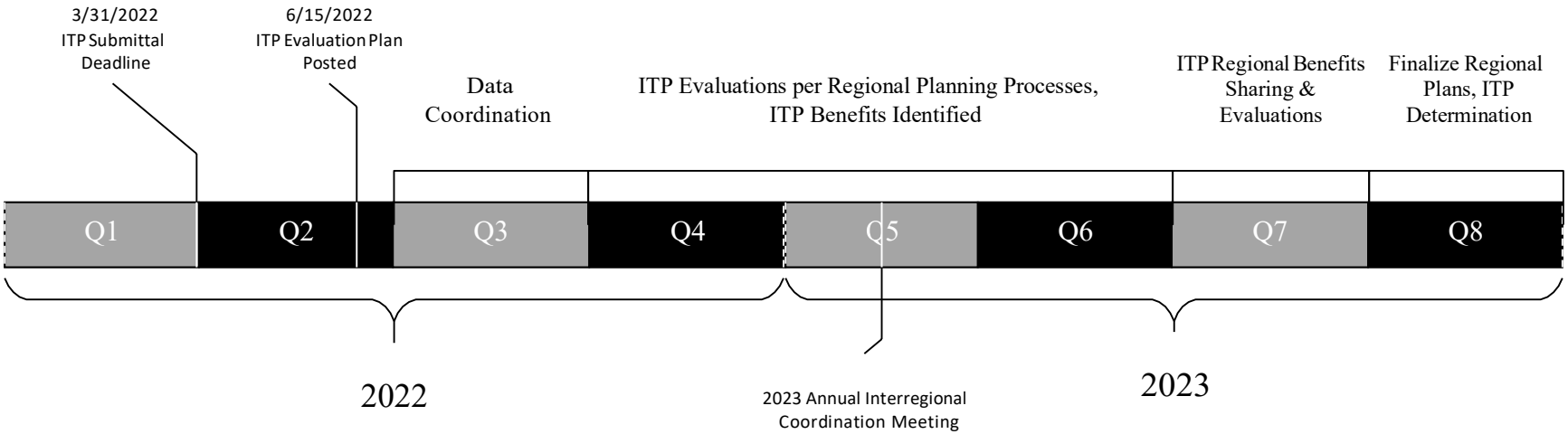
Cost allocation was not requested by the NGIV2 Project for the 2022-2023 cycle from WestConnect but it was requested from the CAISO. The project's capital costs allocated to IID (WestConnect Member) would be based on a contractual agreement made between the project participants. NGIV2, LLC has indicated that if IID participates in the project, they would accept a capital cost allocation of $105 million with the remainder of the costs to be recovered through the CAISO TAC. If the CAISO and IID determine there is a need for this project, the CAISO and IID would have to agree upon an appropriate cost allocation.

[9] This information is contingent upon verification by the Planning Regions and may be subject to change during the ITP evaluation process

SCHEDULE AND EVALUATION MILESTONES

The ITP will be evaluated in accordance with each Relevant Planning Region's regional transmission planning process during 2022 and (as applicable) 2023. 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 6: 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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