



California ISO

# Subscriber Participating TO Model Status Update

November 28, 2022

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## **1 Introduction**

The current “Preferred System Plan” calls for 1,500 MW of out-of-state wind by 2032. The “High Transportation Electrification” portfolio calls for 4,828 MW of out-of-state wind by 2035. The starting point scenario provided to the ISO for transmission planning studies by the California Energy Commission and the California Public Utilities Commission for the 20-year outlook calls for 10,000 MW of out-of-state wind by 2040. These projects also call for roughly matching levels of off-shore wind, as well as California wind resources. The ISO is trying to develop an opportunity for these developers to deliver wind to California without increasing the Transmission Access Charge (“TAC”), which is currently \$16.62/MWH, and without picking the winner by selecting a project in the Transmission Planning Process (“TPP”)

The ISO was approached by TransWest Express, LLC (“TransWest”) which had submitted multiple study requests into the ISO’s TPP for the TransWest Express Transmission Project (“Project”); approving the Project as a regional or interregional project under ISO operational control did not occur for a number of reasons, largely due to the resource planning decisions underpinning policy-driven transmission needs not supporting the development at that time. The proposed Subscriber PTO Model provides an opportunity for the Project to move forward – or not – depending on whether the subscriber to the Project can contract its wind resources to California load serving entities.<sup>1</sup> Comparable projects would have a similar opportunity to move forward in the future under this model. Taking the ISO out of the decision-making process with respect to resource procurement allows the load serving entities to determine what is the most economic and best-fit for their own portfolios.

The ISO’s approach has been to explore a better alternative to having another gen-only balancing authority area pseudo-tying resources into the ISO. The ISO intends to implement this model as a win-win arrangement versus trying to extract value from those paying for the line for the benefit of the ISO’s existing ratepayers.

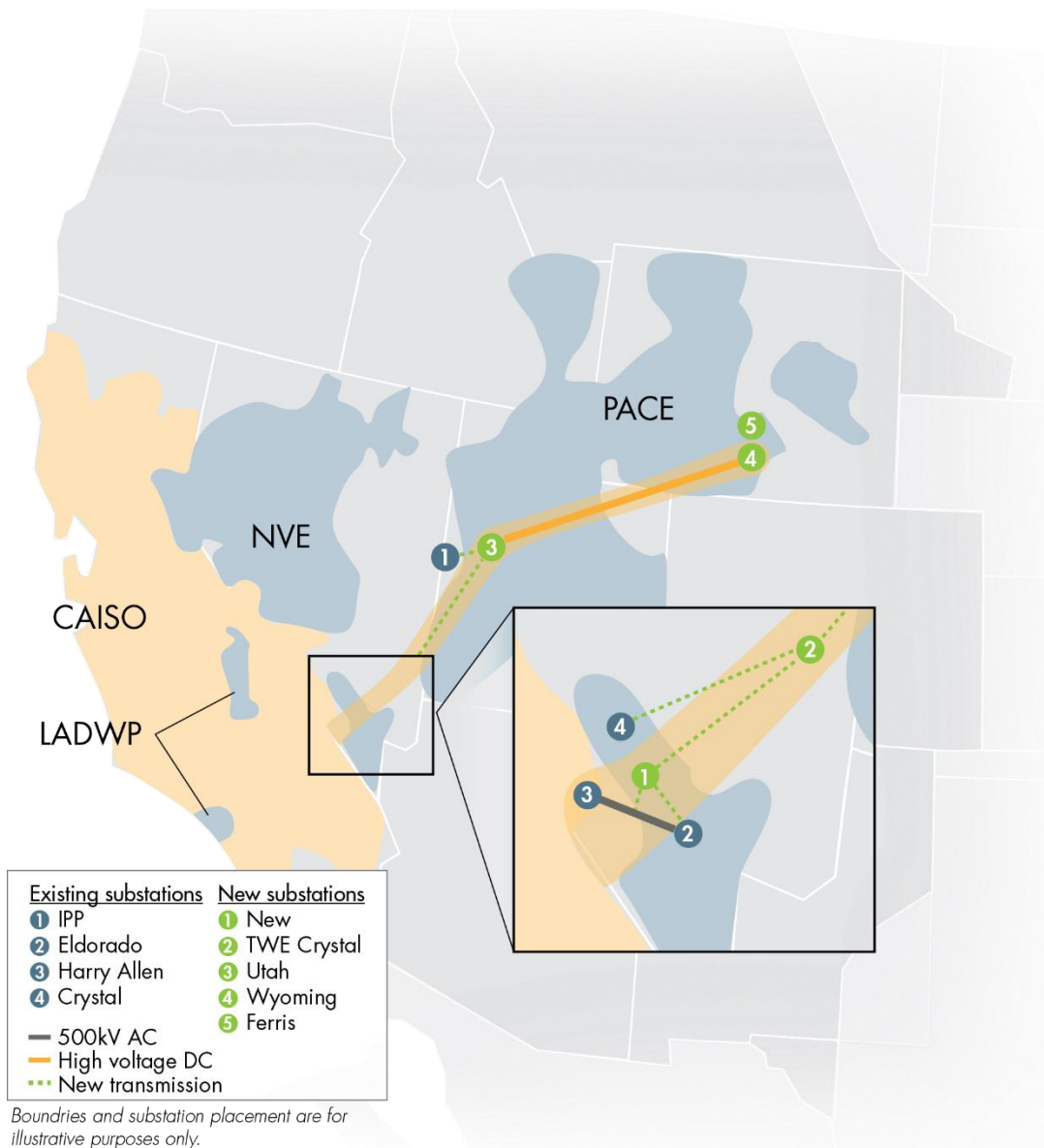
The Project is 405-mile, 3,000 MW HVDC transmission line from Wyoming to the Intermountain Power Project (“IPP”) and the 267-mile, 1,500 MW AC transmission line from IPP to TWE Crystal and an interconnection to the Harry Allen – Eldorado 500 kV transmission line, as more specifically outlined in TWE’s Participating TO application. The Project will initially consist of the HVDC line from Wyoming to IPP with 1,500 MW of capacity and the 500 kV AC line from IPP to TWE Crystal and the interconnection to the Harry Allen – Eldorado 500 kV transmission line (“New Substation”). Subsequently, the capacity of the HVDC line from Wyoming to IPP will

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<sup>1</sup> TransWest held a FERC-approved open solicitation process for the north-south capacity on the Project, and the Power Company of Wyoming (“PCW”) obtained the subscription rights for the north-south capacity from Wyoming to the New Substation.

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increase to the full 3,000 MW. TWE filed a Participating TO application in accordance with Section 4.3.1.1 of the ISO tariff and Section 2.2.1 of the Transmission Control Agreement (“TCA”).



- The ISO BAA boundary at Wyoming with PacifiCorp – East, Utah with the Los Angeles Department of Water and Power, and TWE Crystal with NV Energy
- Wyoming to Utah is 3,000 MW HVDC and south Utah is 1,500 MW 500 kV AC

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- The TWE Project adds three new BAA boundaries to the ISO BAA

The ISO is seeking Board approval in December 2022 to allow TransWest to become a Participating TO in the ISO BAA. Such request is contingent upon FERC acceptance of the Subscriber PTO Model, TransWest's execution of the TCA and FERC's approval of TransWest's TO tariff. The timing of board approval of TransWest as a new Participating TO is imperative to allow the ISO to include the Project in the transmission planning process and allow the wind generation to be studied in cluster 15 so that TransWest's subscribers will know the full costs of its Project.<sup>2</sup>

Under the proposed Subscriber PTO model, the generation connected at the Wyoming substation will be within the ISO BAA provided TransWest is approved as a new Participating TO and that its subscriber PCW is successful in securing sufficient off-takers for the wind generation. TransWest subscribers and others seeking interconnection will follow the same interconnection process in cluster 15 as other parties seeking interconnection to the ISO controlled grid, including payment of any additional costs associated with interconnection of the wind generation and the Project as discussed further below.

## 2 Subscriber PTO Process Development

The ISO, initially working with TransWest based on the commercial arrangements resulting from its FERC-approved open solicitation, drafted the Subscriber PTO Protocol intended to be an appendix to the TCA.<sup>3</sup> The protocol would establish a Subscriber PTO model whereby the entity willing to build the line finds subscribers that would pay for all or part of the transmission line in accordance with a FERC-approved open solicitation process and Open Access Transmission Tariff, rather than incorporating the cost into the ISO's TAC. This model allows the potential off-takers/California load serving entities to make their own economic decisions with respect to which out-of-state wind projects to contract with, while the ISO would continue to exercise its existing tariff authority and supporting software systems to implement the protocol. This model will provide load serving entities with additional opportunities to meet their renewable portfolio standard requirement and other state policy procurement requirements without increasing the TAC. The model also

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<sup>2</sup> The ISO seeks Board approval of TransWest as a new Participating TO so that the line may be included in the TPP and Cluster 15 Phase I results, which are likely to be available January 2024 with Phase II results in December 2024 and the Transmission Planning Deliverability assessment completed in March 2025.

<sup>3</sup> Through the process to date the ISO in evaluating the implementation of the Subscriber PTO model has identified administrative changes may be required to the ISO tariff to implement the model as discussed in Section 5.

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allows the ISO to facilitate out-of-state wind procurement without the ISO making a determination of which transmission project “wins”. This in turn reduces potential stranded cost risk and may expedite development.

BAMx noted in its comments, which support the ISO’s Subscriber PTO model, that if all the transmission projects needed to access out-of-state wind envisioned in the ISO’s 20-year outlook chose the Subscriber PTO model, nearly \$9.95 billion of transmission costs would not be recovered through the TAC. As a result, the projected Regional TAC in 15-20 years from now would be reduced by as much as \$7/MWH.<sup>4</sup>

### 3 Comments raised from the August 1, 2022 Stakeholder call and the Participating TO Application

#### 3.1 Use of Encumbrances

- Background

Since inception, the ISO has had Existing Contracts and Encumbrances on the ISO Controlled Grid and there are over 40 different Encumbrances on the system today. Section 16 of the ISO tariff requires the ISO to honor Existing Contracts. The functionality to hold Existing Rights holders harmless from the cost of transmission and congestion because they have already paid for the transmission service through the Existing Contract is foundational to the ISO’s tariff and market systems. The ISO intends to use this same functionality in EDAM to protect transmission contracts in other EDAM BAAs. Providing this functionality to TransWest Subscriber Rights is much the same, except the legacy arrangements of existing Participating TOs were established at an earlier point in time. TransWest has fully subscribed its transmission line from Wyoming south and will receive the “perfect hedge” and scheduling priority since the contract rights holder TransWest’s subscriber PCW – will pay for the transmission under its Transmission Service Agreements with TransWest.<sup>5</sup> The mechanism to implement this right is through contract reference numbers (“CRNs”) that can be associated with the off-takers’ scheduled use of the facilities. In this case, the CRN is only valid for the length of the TransWest owned facilities, and ISO transmission service would be required to deliver the resources to load. By using existing tariff functionality and software systems, integrating the Subscriber PTO model will result in no changes if the Encumbrance functionality is used.

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<sup>4</sup> See BAMx’s comments in the Draft 20-Year Transmission Outlook dated February 22, 2022.

<sup>5</sup> The “perfect hedge” exempts an Existing Rights holder from transmission service charges and congestion.

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The Subscriber Participating TO will identify all Subscriber Rights as Encumbrances in its Participating TO application, which TWE has done. There will be no additional Subscriber Rights added to the TCA as Encumbrances other than those identified in the Subscriber Participating TO application to become a Participating TO. The Subscriber Participating TO will provide the ISO with the transmission rights and transmission curtailment instructions to ensure that the ISO is modeling the contract correctly.

- Stakeholder Feedback

American Clean Power – California (“ACP-California”) requested additional detail on providing the Subscriber PTO customers an exemption for congestion and losses whereas a non-Subscriber PTO would have to pay those charges. The reason the non-Subscriber PTO would pay the cost of transmission and congestion is because they don’t have an Existing Contract that needs to be honored consistent with Section 16 of the ISO tariff. This is how the ISO has allowed these costs to be waved since start-up in 1998. The Existing Contract provides the rights holder the use of transmission and they have already paid for that and should not pay twice. However, the Subscriber PTO customers will be paying losses consistent with the ISO tariff.

LS Power inquired about the ability for the ISO to dispatch generation associated with a subscription and then generation that is connected to the Project but not associated with a subscription. Similar to the existing market, the Subscriber will need to self-schedule their rights in the day-ahead and real-time markets. Any capability on the line that is not used is available to the market for awards. Also similar to today, if a Subscriber self-schedules in real-time, the market will re-dispatch the system to provide the Subscriber generation to the load or export.

SCE believes that new Encumbrances and Existing Contracts are unnecessary and inappropriate, because open access should be a fundamental premise to any proposed transmission line in the ISO. SCE explains their concerns are further exacerbated with the complexity a Subscriber PTO model would introduce as the ISO makes progress with the Energy Imbalance Market and potential evolution towards becoming a Regional Transmission Organization. SCE proposes a “perfect hedge” north to south and an appropriate high level of scheduling priority that SCE believes should be able to meet the needs of a Subscriber Participating TO.

However, an Encumbrance grants the Existing Rights holder exactly that – a perfect hedge and a high level of scheduling priority. The tariff already allows this functionality and the software systems are already built. Moreover, the ISO will be using the Encumbrance functionality under new provisions that benefit customers in EDAM for the EDAM BAAs transmission contracts. The ISO believes using existing mechanisms is both appropriate and effective, without the need to create new

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functionality and software systems for the Subscriber Participating TO when existing Participating TOs and future EDAM entities will be using the existing Encumbrance functionality.

### 3.2 TransWest Transmission Costs

- Background

As a Subscriber PTO, TransWest **will not** include in the ISO TAC the cost of their Project. TransWest will collect revenues from its Subscriber – PCW – and any additional revenues from the use of the Project’s capacity by non-subscribers to fund the Project costs. In addition, if network upgrades are required on the existing ISO grid to connect the line, those costs will be paid by TransWest’s Subscriber – PCW.

The entire Project will be modeled in the full network model and only the self-schedule provided by the Subscriber in the day-ahead and real-time market will encumber the line. The remaining portion of the line will be available for market optimization. However if a non-subscriber uses the line, there will be an additional Subscriber Wheeling Charge for use of the line since the cost is not recovered from the TAC or the ISO’s Regional Wheeling Access Charge (“WAC”). The ISO believes that, consistent with open access principles the Project cannot be used by non-subscribers for free. Similar to the TAC and WAC, the existing Participating TOs recover the cost of usage of current ISO controlled grid facilities through the ISO market systems. For the Project, because TransWest is not including the original build costs in the TAC or WAC, it should be entitled to cost recovery if a Scheduling Coordinator other than a Subscriber uses the Project. Therefore there will be an additional volumetric charge (\$/MWH) above the TAC – i.e. the Subscriber Wheeling Charge – to use the Project. The Subscriber Wheeling Charge will be developed in accordance with TransWest’s transmission owner tariff and approved by FERC just like all the inputs to ISO transmission charges for other Participating TOs.

In addition, the Subscriber Participating TO will adhere to the updating and approval of its Subscriber Participating TO-specific Subscriber Wheeling Charge as set forth in Sections 8 and 9 of Appendix F, Schedule 3 of the ISO Tariff, except that any reference in Sections 8 and 9 of Appendix F, Schedule 3 of the ISO Tariff to Regional Wheeling Access Charge shall be read as a reference to the specific Subscriber Wheeling Charge.

If in the future additional generation projects wish to interconnect into the TWE line, the generating facility will be evaluated just like other potential projects through the ISO’s generator interconnection process consistent with Appendix DD of the ISO tariff. TransWest would establish a Regional TAC to recover those costs if the ISO tariff still requires the Participating TOs to reimburse Interconnection Customers for the cost of network upgrades. This is only reasonable as the original Subscriber



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paid for the original line and should not bear the cost of additional network upgrades required by a new interconnection customer.

- **Stakeholder Feedback**

SCE believes that the development of a TransWest wheeling charge would necessarily require as a first step the determination of a FERC Transmission Revenue Requirement. The ISO agrees that the Subscriber Wheeling Charge must be a FERC approved rate, like all other Participating TOs, but does not necessarily agree that the rate must be based on a traditional cost-of-service Transmission Revenue Requirement. TWE is in a different position than the existing Participating TOs because as a transmission develop with no load, in that TransWest has been granted negotiated rate authority by FERC and held an open solicitation offering long-term firm north-to-south transmission service to subscribers at negotiated rates. PCW obtained that north-to-south capacity and is the only subscriber on the Project. The ISO will implement the Subscriber Wheeling Charge for all unused capacity, subject to the ISO tariff, as approved by FERC. The ISO also agrees with SCE's comment that the Subscriber Wheeling Charge would be provided in accordance with the ISO tariff and not through TWE's Open Access Transmission Tariff since the ISO has Operational Control of the TWE facilities. The Subscriber Wheeling Charge will only be assessed to non-subscribers using the TWE line as discussed further below.

SCE also proposed that an alternative to the Subscriber Wheeling Charge could be to provide TWE with Congestion Revenue Rights on the line. However, it is not clear CRR revenue would be sufficient or certain enough to compensate an entity willing to build and finance a transmission line of the scale of the Project.<sup>6</sup> Moreover, since more than half the line is DC, there will be no congestion.

### **3.3 Transmission Cost Allocation**

#### **3.3.1 Cost to Subscribers**

- **Background**

TransWest will have its own TAC Area. The Subscriber Wheeling Charge will not be applied to Subscriber rights, but if transactions by the Subscriber serve load in the ISO BAA or export the generation from a Scheduling Point that is not on the Project, they will pay the TAC or WAC. If the Subscriber has already purchased ancillary services, it will not pay those charges. Similar to other Existing Contract Rights holder, the Subscribers will be excluded from bid cost recovery allocation, offsets

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<sup>6</sup> Merchant Transmission Facility development in exchange for Merchant Transmission CRRs has not resulted in the development of a significant transmission project in the ISO BAA.

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and IFM congestion allocation. All other ISO charges, including losses, will be calculated in accordance with the tariff.

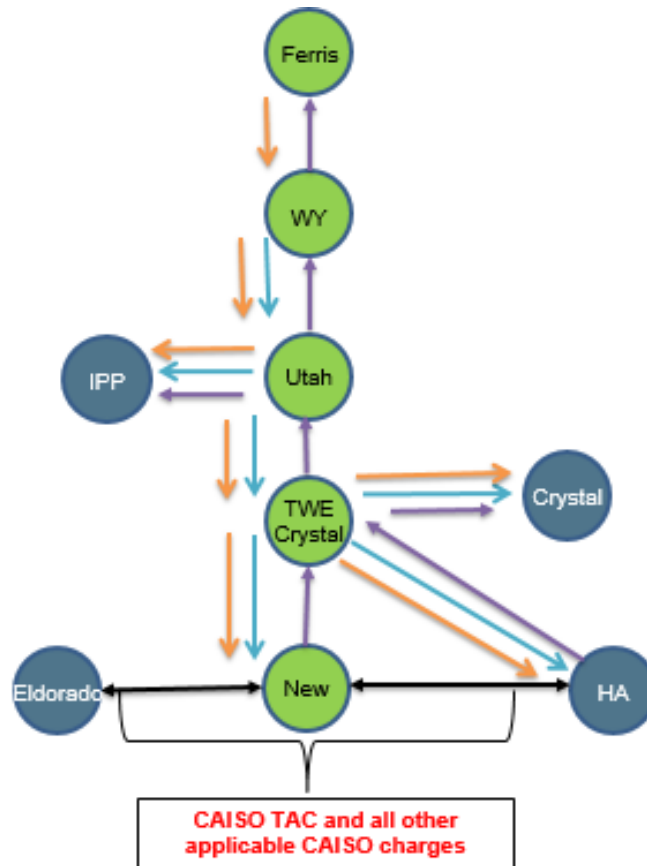
### **3.3.2 Cost to Non-Subscribers**

- Background

Non-Subscribers will pay the SPTO Wheeling Charge and the TAC or the WAC, as applicable, for use of both transmission systems since the Project is not included in the TAC or WAC rate. The ISO will have LMPs at each of the Scheduling Points and at the wind generation connected to the Wyoming substation. Energy, ancillary services and all other applicable ISO charges will be based on the LMP and calculated in accordance with the tariff.

If an ISO Market Participant that does not have Subscriber Rights uses the Subscriber Participating TO's transmission facilities, the ISO will collect the Subscriber Wheeling Charge to reimburse the Subscriber Participating TO for the use of its transmission on a \$/MWH basis consistent with the \$/MWH rate for its Subscriber Participating TO-specific Subscriber Wheeling Charge. The Subscriber Participating TO-specific Subscriber Wheeling Charge will be provided to the CAISO by the Subscriber Participating TO and administered in accordance with Section 14 of Appendix F, Schedule 3 of the ISO Tariff for the Wheeling Out or Wheeling Through transactions that are within the Subscriber Participating TO's TAC Area. In addition, any reference in Sections 14 of Appendix F, Schedule 3 of the ISO Tariff to Wheeling Out or Wheeling Through shall include non-wheeling transactions on the Subscriber Participating TO's transmission facilities released for use by ISO Market Participants in the ISO market. Market Participants using the Subscriber Participating TO's transmission, other than a Subscriber, and other portions of the ISO Controlled Grid will pay both the Subscriber Wheeling Charge and the CAISO's Access Charge, as applicable.

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Subscriber Rights: No ISO charges for transmission, energy, ancillary services (if applicable), congestion, bid cost recovery allocation, offsets and IFM congestion allocation. All other applicable ISO charges apply.



Market Use (North to South): The ISO will calculate an LMP at Ferris or Wyoming and it can be used as import to load or export from the ISO Controlled Grid. All ISO charges will apply, including the Subscriber Wheeling Charge and TAC or WAC.



Market Use (South to North): The ISO will calculate an LMP for the generation or import in the transaction and all ISO charges will apply including the Subscriber Wheeling Charge and TAC or WAC. Note: There are no subscriber rights from south-to-north on the Project.

**3.4 Generator Interconnection Process**

- Background

The ISO has in place the Generator Interconnection and Deliverability Allocation Procedure, Appendix DD and Section 25 of the ISO tariff that govern generator interconnection. PCW wind generation is required to go through the cluster process to be connected to the ISO controlled grid like any other generator. The generator will sign the three-party Generator Interconnection Agreement and be governed by

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the tariff and business practice manuals like any other generator in the ISO BAA. Since the Wyoming wind facilities would be generation connected to the ISO controlled grid within the ISO BAA they are required to abide by the ISO tariff interconnection process. If during the study process for the PCW wind generation additional network upgrades are identified on the existing ISO system, the interconnection customer (in this case PCW) will pay for those upgrades and not be reimbursed by the affected Participating TO. This is appropriate because those costs should be considered part of the transmission interconnection, similar to a new transmission interconnection with another transmission system that includes generation. Consequently, there is virtually no risk of any stranded assets that existing ISO ratepayers have paid for.

If subsequent non-subscriber generators desire to interconnect to TWE, then the interconnection requests will be studied in accordance with Appendix DD and Section 25 of the ISO tariff, any network upgrades would be financed by the generator and such cost would be subject to refund by TransWest over a five-year period. In this case, TransWest would develop a TAC rate in accordance with Section 26 and Schedule 3, Appendix F of the ISO tariff to recover the cost of these network upgrades that would be added to the ISO's then existing TAC rate.

- **Stakeholder Feedback**

ACP-California requested additional information on the impact to interconnection and deliverability. The impact will be no different than any other generator requesting to interconnect to the ISO controlled grid. The studies will be completed and any network upgrades required will be paid by the interconnection customer. The only difference is that TransWest will not be required to reimburse the subscriber generator for network upgrades required for the Project as required by Section 24 of the ISO tariff because they are not recovering their transmission costs through the transmission access charge.

### **3.5 Transmission Planning Process and Transmission Issues**

- **Background**

As discussed in the Introduction, TransWest has proposed to the ISO multiple study requests into the ISO planning processes and the ISO has studied the Project to the extent enabled by its tariff. However, approving the Project as a regional or interregional project under ISO operational control did not occur for a number of reasons, largely due to the resource planning decisions underpinning policy-driven transmission needs not providing sufficient support for the project. On the other hand, with the new CPUC preferred system plan and the high transportation electrification portfolio, the decision to encourage the development of out-of-state wind now to ensure that it is built in time to meet California's needs the time has

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come to provide an opportunity for out-of-state resources to be considered in the existing generator interconnection process. While this may be considered a new category of transmission, it is not ISO-approved rate-based transmission that would be paid for through the ISO TAC. Rather the Subscriber PTO model is a unique opportunity for the ISO to leverage existing transmission line development opportunities without the resulting cost impact to California ratepayers by putting the cost for the Project in the TAC and WAC.

The addition of the Project, is no different than the addition of Harry Allen – Eldorado or Delaney – Colorado River with respect to intertie bidding. There will be three new scheduling points added to the ISO BAA with the introduction of the Project.

### **3.6 Deliverability**

#### **3.6.1 Maximum Import Capability**

- Background

Maximum Import Capability (“MIC”) represents deliverability for imports (any resource not physically connected inside the ISO BAA and is calculated for all Scheduling Points at the ISO BAA boundary as discussed in Section 6.1.3.5 of the Business Practice Manual for Reliability Requirements. With the addition of the TWE line, the ISO will have three new BAA boundary points, Ferris with PacifCorp - East, Utah with Los Angeles Department of Water and Power, and TWE Crystal with NV Energy. The Wyoming wind generation interconnected to the Project will be within the ISO BAA and will not need a MIC allocation in order to count for Resource Adequacy, however, it will need to go through the cluster study process to get deliverability similar to any other resource internal to the ISO BAA. Deliverability for internal resources is done based on the ISO deliverability methodology irrespective of internal entitlements (those are for financial hedge and scheduling priority). MIC capability at the three new ISO BAA boundary points will be calculated the same as all other intertie points, based on historical schedules (not applicable in year one), portfolio needs and MIC expansion requests as allowed under the ISO tariff. The amount of available MIC at these new interties will be determined as part of the annual MIC calculation process when the TWE line is energized and every year thereafter. The amount of current MIC at Eldorado and Harry Allen will likely not change due to the addition of the TWE project.

- Stakeholder Feedback

ACP-California requested additional detail on how interim deliverability would be treated and the impact to MIC. As discussed in the background, there will be no impact to the current MIC. The interaction between internal resources and the new MIC calculated on the three new interties with the TWE line is also explained in the background. With respect to interim deliverability, that will be determined for PCW

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wind resources through the exact same generator interconnection process that is set for the in Appendix DD of the tariff and available to other interconnection customers.

LS Power asked if the MIC at Eldorado will be impacted and with the CPUC policy increasing the import capability at Eldorado as part of the transmission planning process, there will be more MIC there than there is now. The ISO is currently studying the increase in MIC required due to the policy portfolios and MIC expansion requests and the study results will show the capability of the current system and what additional upgrades may be necessary to fulfill such increases. LS Power also asked how the Subscribers will be allocated MIC. Internal transmission entitlements do not result in MIC allocations, MIC is allocated to Load Serving Entities and TWE is not adding any load. The allocation of MIC will be the same as today, just adding these three additional scheduling points created by the TWE project. Moreover, the Wyoming wind generation directly connected to the TWE project would be within the ISO BAA and does not require MIC.

### **3.6.2 Deliverability Allocation Process**

- Background

Deliverability for the PCW wind facilities under construction in Wyoming that will be connected to the Project will be determined in the generator interconnection process. Similar to any other generating facility seeking interconnection to the ISO controlled grid, Full Capacity Deliverability Status is contingent upon all pre-cursor TPP, pre-cursor generation interconnection process as well as reliability and deliverability network upgrades specified in the generator interconnection agreement being in service. If any upgrade mentioned above is not yet in-service, a generating facility can obtain “Interim Deliverability” status if the annual net qualifying capacity deliverability study determines that the project can have deliverability during the next RA cycle, in advance of all upgrades being completed.

### **3.7 TCA Obligations**

- Background

TransWest, like any other Participating TO, will upon execution of the TCA be obligated to meet all of the requirements of the TCA. This includes, but is not limited to,

- transferring operational control to the ISO<sup>7</sup>;

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<sup>7</sup> Operational Control means the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct Participating TOs how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting Applicable Reliability Criteria.

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- operate and maintain their transmission facilities consistent with NERC and WECC reliability standard, and good utility practice; follow the ISO tariff, protocols, operating procedures and operating orders unless the health or safety of personnel or the general public would be endangered;
- notify the ISO if an order is not being followed and why;
- coordinate outages with the ISO;
- restore service to the transmission facilities as soon as possible and in the priority order determined by the ISO;
- provide technical information as required or requested;
- provide information to the ISO regarding entitlements and encumbrances to ensure that the contracts are honored;
- maintain a EMS/SCADA system to allow the ISO to monitor the controlled grid; coordinate critical protective systems with the ISO and other Participating TOs;
- during system emergencies, comply with all directions from the ISO unless doing so would impair the health or safety of personnel or the general public;
- facilitate transmission and generation interconnections by establishing technical standards;
- generating facility interconnections will be in accordance with Appendix DD and Section 25 of the ISO tariff; and
- develop maintenance standards that are performance-based or prescriptive or both, are maintained by the Transmission Maintenance Committee, and the ISO audits the Participating TOs on an annual basis.

These TCA obligations are not limited to facilities in California. Since inception, the ISO has had transmission lines in Arizona, Nevada and Oregon. Similar to other BAAs with lines in other states, the Project will be under the ISO's jurisdiction and not available for another state to "divert production" or "take over the line in a reliability emergency". Transmission owners and operators must follow the NERC reliability standards which are not limited by state boundaries.

In addition, if TransWest executes the TCA and then later determined to withdraw from the ISO, TransWest, like most other Participating TOs, would need to provide the ISO with two years notice to withdraw their transmission facilities from the ISO controlled grid.

- Stakeholder Feedback

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SCE noted that TransWest should comply with all reliability standards including local reliability criteria applicable to the Project. As an example, the proposed 500 kV segment that interconnects between the Harry Allen and Eldorado substations should comply with SCE's Interconnection Handbook for transmission interconnections. The ISO understands that TransWest is in discussions with both SCE and DesertLink about the interconnection to the Harry Allen – Eldorado 500 kV transmission line and the parties are working together on interconnection studies that will lead to interconnection agreements. The ISO believes that the transmission interconnection agreement between the Transmission Owners should establish these requirements.

### **4 General Comments and Questions**

EDF-R asked if the generation interconnection process would be impacted by an out-of-state Participating TO joining the ISO and thereby requiring future interconnection tariff changes to go before the joint ISO and WEIM Governing Boards. The answer is no. The ISO has had Southern California Edison Company, Valley Electric Association, Ten West Link and DesertLink as Participating TOs with transmission being built in states other than California for a number of years and only the ISO Governing Board votes on generator interconnection policy changes that require tariff amendments.

LS Power asked if the ISO will include TranWest's transmission capacity in its Operating Reserve calculations. Operating reserve is calculated based on three percent of generation and three percent of load. Thus the transmission capacity is not part of the operating reserve calculation.

PG&E understands that other independent transmission facilities may be interested in using the Subscriber PTO model and inquired (1) whether each of these additions will necessitate network upgrades on the ISO system and (2) how the ISO will evaluate the various transmission options for network upgrades (and their timing) to assure that the least-cost, best-fit, out-of-state renewables are chosen to meet the state's portfolio needs. A key benefit of the Subscriber PTO model is that the ISO is not making that decision for the load serving entities. Each entity desiring to use the Subscriber PTO model will need to go through the process to determine the cost impact for the transmission interconnection to the existing ISO BAA and incur all costs for interconnection without reimbursement for network upgrades from the ISO's then existing customers. Then the entity would need to find subscribers willing to pay those costs to implement the Subscriber Participating TO model.

PG&E also inquired if including Subscriber PTOs in the ISO will create any operational or planning issues. Specifically the ISO has expressed challenges producing meaningful study results to accommodate a significant volume of interconnection requests that are based on reasonable study scenarios and dispatch



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assumptions. Given the states mandate of 100% renewable generation by 2045 and rapidly increasing need for generation interconnections and planning studies, the ISO believes the Subscriber PTO model will help in this activity because the execution of the TCA will only take place if there are sufficient subscribers to pay for the lines and therefore the generating facility is contracted to come on line by a certain date, whereas today, developers can put many projects in the planning and generator interconnection process without any off-take agreement requiring a certain online date.

## **5 Tariff Sections Potentially Requiring Amendment**

As part of the further development of the Subscriber PTO Model over the past six months, the ISO has identified a few tariff sections that may need to be amended to implement the model as follows:

- Section 11 – confirm whether references to ETCs and ETC Self-Schedules throughout will cover Subscriber Encumbrances without the need for amendments
- Section 11.11 RACs and Wheeling Transactions -- revise to reference Subscriber Wheeling Charge
- Section 11.29.17.2 Payment Default Allocation – consider adding references to Subscriber Wheeling Charge
- Section 16 Existing Contracts – add references to Subscriber Encumbrances being treated as Existing Contracts
- Section 24.14.2 Cost of Needed Addition or Upgrade to be Borne by PTO – consider adding reference to Subscriber Wheeling Charge (as proposed in SPTO implementation document)
- Section 24.14.4 RAC Treatment of New Regional Transmission Facilities Costs – consider adding references to Subscriber Participating TOs and Subscriber Wheeling Charge (as proposed in SPTO implementation document)
- Section 26.1.4 Wheeling – consider adding new subsection addressing Subscriber Wheeling Charge

Appendix A - Potential New Definitions:

- Subscriber Encumbrance
- Subscriber Participating TO
- Subscriber Rights
- Subscriber Wheeling Charge

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Appendix A - Potential Amended Definitions

- Existing Rights
- Existing Transmission Contracts (ETC) or Existing Contracts
- Participating TO or Participating Transmission Owner (PTO)
- Revenue Requirement
- Transmission Revenue Requirement (TRR)
- Transmission Revenue Balancing Account (TRBA)

Appendix F, Schedule 3 Regional Access Charge and Wheeling Access Charge – add new provisions addressing Subscriber Wheeling Charge

## **6 Next Steps**

To allow the Project to be modeled as a transmission facility, TransWest to act as a Participating TO in the TPP and generator interconnection process, and allow PCW to submit an interconnection request into the cluster 15 process to determine the deliverability status of the Wyoming wind, the ISO and TransWest will be executing an Applicant Participating TO Agreement which is very similar to the Approved Project Sponsor agreement already approved by FERC. To facilitate this execution, the ISO will be going to the ISO Governing Board at its December meeting to seek approval of TransWest as a Participating TO and apprise them of the Applicant Participant TO Agreement and the amendment to the TCA to add TransWest as a Participating TO. By approving TransWest as a Participating TO, subject to final resolution of the TCA and tariff, the ISO can move forward with the interim Applicant Participating TO Agreement and continue discussions and negotiations on the TCA and tariff changes. The ISO will also continue its stakeholder engagement as discussed further below.

## **7 Stakeholder Engagement**

The schedule for stakeholder engagement is provided below.

<b>Date</b>	<b>Event</b>
November 28	Publish status paper
December 5	Stakeholder workshop on status paper
December 19	Stakeholder comments due on status paper and workshop
January 23, 2023	Publish replies to stakeholder comments
TBD	

The ISO will hold a stakeholder meeting on December 5, 2022 to review the Status Report. Stakeholders are encouraged to submit comments on this Status Report through the ISO's commenting tool using the link on the initiative webpage by close

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of business on December 19, 2022. Depending upon the stakeholder comments and responses, the ISO may issue additional status papers or schedule additional stakeholder meetings.