Memorandum

To: ISO Board of Governors
From: Neil Millar, Vice President, Infrastructure and Operations Planning
Date: December 7, 2022
Re: Decision on Participating Transmission Owner Application of TransWest Express LLC

This memorandum requires ISO Board of Governors action.

EXECUTIVE SUMMARY

In July 2020, TransWest Express LLC ("TransWest") submitted an application to become a participating transmission owner with respect to its proposed transmission facilities connecting up to 3,000 MW of wind generation in Wyoming with California ("Project"). In accordance with the procedures established by the Transmission Control Agreement ("TCA") and the ISO tariff, Management reviewed the TransWest application and the stakeholder comments submitted and now recommends that the ISO Board of Governors approve the ISO’s acceptance of the TransWest application. TransWest satisfies all elements of the process to become a participating transmission owner applicable at this time and will satisfy all others prior to execution of the TCA. Approval of the TransWest’s application at this time will allow the Project to progress towards potential development, including submission of generator interconnection requests to the ISO which will determine and advance the commercial outcome of the Project.

If the Project is developed, the transmission lines and associated facilities would become part of the ISO controlled grid and extend the ISO balancing authority area accordingly. To facilitate this potential expansion, Management will continue working with participating transmission owners, stakeholders and TransWest to establish a new model for participation as a transmission owner ("Subscriber PTO Model"). Management intends at this time to pursue a protocol that would be added to the TCA as an amendment whereby the entity willing to build a transmission line finds subscribers to pay for the transmission facilities in accordance with their Open Access Transmission Tariff, versus fully incorporating the transmission facilities’ cost into the ISO’s transmission access charge or developing transmission in exchange for congestion revenue rights as a merchant transmission project.

The Subscriber PTO Model will allow the off-takers of the generation to make their own economic decisions with respect to which out-of-state wind projects to invest to satisfy the California Public Utility Commission’s current “Preferred System Plan.” At the same time,
this new model will allow the ISO to retain the ability to use its tariff authority with some conforming changes and its existing software systems to implement the protocol. This approach will facilitate development of projects that demonstrate their viability through the procurement process and will avoid the risk of stranded ISO ratepayer costs.

In addition, TransWest will need to solicit and confirm off-taker commitments following the submission of the proposed Wyoming wind generation through the ISO’s generator interconnection process. The generator interconnection process is needed at this time to fully understand the costs of the Project. This requires TransWest to act as a participating transmission owner for purposes of transmission planning and generator interconnection processes, and provide status reports to the ISO among other requirements. Given that TransWest will not execute the TCA until shortly before the Project is energized, the ISO and TransWest have negotiated a new agreement, the Applicant Participating Transmission Owner Agreement, which will bridge the timeframe from now until execution of the TCA and allow TransWest to perform critical tasks similar to projects approved in the ISO’s transmission planning process.¹

Accordingly, the approval recommended today is somewhat conditional in nature, as the eventual execution of the TCA depends on a satisfactory Subscriber PTO Model being developed and the necessary tariff changes being in place, as well as on TransWest moving forward with the construction of the Project. If a satisfactory Subscriber PTO Model cannot be developed, the ISO expects that TransWest may move forward as an independent generation-only balancing authority without gaining all of the operational inefficiencies that being a participating transmission owner entails.

Approval of the ISO’s acceptance of the TransWest application by the ISO Board of Governors is imperative now as the next generation interconnection study process opens in April 2023, and the deliverability results will not be known until March of 2025 for that study process.² Approval of TransWest as a future Participating TO allows TransWest to execute the Applicant Participating Transmission Owner Agreement, become a Participating TO upon fulfillment of the conditions cited in the motion below, and allows the ISO to file the Applicant Participating Transmission Owner Agreement in January with an expected FERC decision by March of 2023. Otherwise, TransWest will not have sufficient certainty to submit the necessary interconnection requests and determine the commercial viability of the Project.

Moved, that the ISO Board of Governors approve the ISO’s acceptance of the application of TransWest Express, LLC for Participating Transmission Owner status, conditioned on (1) TransWest Express, LLC executing the Transmission Control Agreement and (2) the Federal Energy Regulatory Commission’s

¹ This new agreement is based upon a similar ISO pro forma service agreement executed by transmission projects selected in the competitive solicitation process, the Approved Project Sponsor Agreement.
² The Project is currently scheduled for a 2027 energization date.
acceptance of a Transmission Owner Tariff, as set forth in the memorandum dated December 7, 2022.

DISCUSSION AND ANALYSIS

The California Public Utility Commission’s (“CPUC”) 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 CPUC for the 20-year outlook calls for 10,000 MW of out-of-state wind by 2040. These portfolios also call for roughly matching levels of off-shore wind, as well as California wind resources. Since the state has not made a determination as to which projects will supply California’s wind resource need, the ISO is trying to develop an opportunity for these developers that doesn’t increase the transmission access charge, which is currently $16.62/MWH, and doesn’t pick the winner by selecting a project in the Transmission Planning Process.

The ISO was approached by TransWest last spring with respect to the Project. The Project consists of a 405-mile, 3,000 MW HVDC transmission line from Wyoming to the Intermountain Power Project (“IPP”) in Delta, Utah, and then a 267-mile, 1,500 MW AC transmission line from IPP to TWE Crystal and an interconnection to the ISO’s Harry Allen – Eldorado 500 kV transmission line. 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. Subsequently, the capacity of the HVDC line from Wyoming to IPP will increase to the full 3,000 MW. The first stage of the Project is expected to be completed in 2027.

In accordance with the procedures established pursuant to section 4.3 of the ISO tariff and section 2 of the TCA, TransWest submitted an application to the ISO on July 21, 2022 that proposed TransWest join the ISO as a new participating transmission owner. In order for an applicant to become a participating transmission owner, sections 2.2.3 and 2.2.5 of the Transmission Control Agreement require that the ISO accept the application. Section 2.2.3 of the Transmission Control Agreement states that the ISO shall permit a party to become a participating transmission owner if it determines that:

1. The applicant’s transmission lines and associated facilities, including entitlements, that are to be placed under the ISO’s operational control can be incorporated into the ISO controlled grid without any material adverse impact on its reliability;
2. Incorporating such transmission lines and associated facilities and entitlements into the ISO controlled grid will not put the ISO in breach of

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3 TWE had previously submitted multiple study requests into the ISO’s transmission planning process, but 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.

4 TWE has held a FERC approved open solicitation process for the north-south capacity of the Project, and the Power Company of Wyoming (“PCW”) has obtained all the subscription rights for the north-south capacity from Wyoming to the new substation on the Harry Allen – Eldorado 500 kV line.
applicable reliability criteria and its obligations as a member of Western Electricity Coordinating Council;

3. Objections by the ISO under Section 4.1.3 shall have been withdrawn or determined by the ISO Governing Board to be invalid;

4. All applicable regulatory approvals of the applicant’s TO Tariff have been obtained, which approvals shall specify that the effective date of the TO Tariff is the date that the ISO assumes operational control of the applicant’s transmission lines and associated facilities and entitlements; and

5. The applicant is capable of performing its obligations under this Agreement.

TransWest satisfies the first and second elements because the transmission lines and associated facilities will be an addition to the ISO controlled grid, expanding the ISO balancing authority area to Wyoming.

TransWest also satisfies the fifth element because they have demonstrated in their application that they have the ability to perform the operational obligations under the TCA. These obligations include compliance with the transmission maintenance standards, processing generator interconnection requests, and other actions associated with the physical facilities themselves. TransWest has been very responsive to the ISO during the participating transmission owner application process and has demonstrated its willingness to perform obligations associated with the TCA.

The third and fourth elements are addressed through the conditional nature of the Board’s approval. While neither stakeholders nor the ISO have any objections to TransWest’s transmission rights in the Project, there are discussions ongoing regarding the market impacts associated with the addition of the Subscriber PTO Model. While the ISO intends to use mostly existing tariff functionality for the Subscriber PTO Model, the ISO will need to make some minimal administrative changes and add a subscriber charge concept to the ISO tariff. These details are still being reviewed with TransWest, the TCA parties and stakeholders.

If the ISO’s acceptance of the application is approved, the Project will be incorporated into the 2023-2024 TPP and the generation will be studied in cluster 15 generator interconnection process which opens April 1, 2023 to ensure that the Project can be operated safely and reliably by the ISO. This analysis will determine 1) any network upgrades required on the existing ISO grid to ensure reliability; 2) any network upgrades required on the existing ISO grid to ensure deliverability of the Wyoming wind generation to ISO load serving entities; and 3) establish the costs associated with those upgrades that will be paid for by TransWest’s subscriber – the Power Company of Wyoming. These costs will then allow load serving entities to know the full cost of being a subscriber to the Project.

The approval of the application today, and the execution of the transitional Applicant Participating Transmission Owner Agreement, allows discussions to continue and the Subscriber PTO Model to be finalized. The Subscriber PTO Model provides an opportunity for the Project to move forward – or not – depending on the progress the resources that subscribed to the Project through the TransWest process make in getting contracts for their wind resources. This approach allows the load serving entities to determine what is the
most economic and best-fit for their own portfolios taking any ISO decision out of the equation. The ISO intends to implement this model as a win-win arrangement versus trying to unduly extract value from those paying for the Project for the benefit of the ISO’s existing ratepayers. This model will increase load serving entities opportunities to meet their renewable portfolio standard requirement and other state policy procurement requirements without increasing the ISO’s transmission access charge. The model also allows the ISO to facilitate out-of-state wind procurement without making a determination of which project wins. Any transmission project in the future will be able to avail itself of this model. Management will follow up with the Board on the development of Subscriber PTO Model that would support the Project and future development opportunities.

The Subscriber PTO Model will require an amendment to the TCA that allows transmission owners to join the ISO balancing authority area as a participating transmission owner with transmission lines and facilities that are encumbered with subscriber rights. In turn, the subscriber rights will be treated as an existing contract in accordance with the ISO tariff. The Subscriber PTO will pay for the entire cost of the Project and will not recover any costs for the initial Project through the ISO’s transmission access charge. The protocol will require the Subscriber PTO to adhere to all of the requirements of a participating transmission owner in the ISO tariff and TCA. To the extent there is excess transmission capability on the Project that can be used by ISO market participants, the capacity will be included in the market optimization and scheduling coordinators will be allowed to use it, but the user will pay a subscriber charge in addition to the transmission access charge. The Subscriber PTO will be required to seek FERC approval of the subscriber charge similar to the other Participating TOs for the ISO to include that rate in its tariff.

Since the project won’t be energized until 2027, TransWest provided in their application a draft transmission owner tariff which would be filed with FERC closer to the energization date. The draft transmission owner tariff included in the application is similar to other existing participating transmission owners’ tariffs. The TCA, once negotiated with the parties and discussed with stakeholders will ultimately factor in the Subscriber PTO Model protocol and the proposed motion states that FERC’s acceptance of these filings is an express condition of accepting TransWest as a participating transmission owner. TransWest would also need to execute the TCA closer to its energization date. Accepting TransWest’s application subject to these conditions at this time is necessary to support the

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5 If subsequent generators want to interconnect to the Subscriber Participating Transmission Owner line, then the ISO tariff rules for generator interconnection will also apply and the Subscriber Participating Transmission Owner may apply to FERC for a Transmission Revenue Requirement that will be added to the ISO’s transmission access charge because the subscribers did not build the line for such additional generation.

6 The principle of reciprocity under the Western Energy Imbalance Market (“WEIM”) would remain and this charge would not apply to real-time transfers of energy with adjacent WEIM balancing areas. Under the proposed Extended Day-Ahead Market design, the additional transfer capability created by the addition of the Project may be eligible for revenue recovery through the mechanism for that purpose being considered in that initiative.

7 The Subscriber PTO Model once finalized will be filed at FERC for approval as soon as possible to provide comfort to TransWest, PCW and the off-takers regarding the treatment of the Project.
implementation timeline of TransWest analysis of the Project and timely transferring operational control of the Project to the ISO.

POSITIONS OF THE PARTIES

As required by section 2.2.2 of the TCA, the ISO posted TransWest's application for participating transmission owner status on the ISO website for 60 days to give interested parties an opportunity to review the application and submit comments to the ISO. The ISO received comments from ten stakeholders (both PTO and non-PTO) on the application and separately on the draft Subscriber PTO Model itself. The comments stem not from the addition of the Project, but instead how the Subscriber PTO Model will impact interconnections, market scheduling and price formation, and a desire to have a competitive transmission process to approve the Project that demonstrates the benefit to the ISO controlled grid. Most stakeholders support the concept and seem to be in favor of allowing load serving entities the opportunity to determine which out-of-state wind projects they choose to serve their load, but they do have questions about how that should be accomplished. These comments, therefore, do not relate to the approval being recommended today, but to the nature of the Subscriber PTO Model itself that is not being finalized today.

Some stakeholders philosophically oppose the use of encumbrances for subscriber rights, but agree that the subscriber should be afforded protection from transmission costs and congestion price differences for use of their facilities. i.e., the “perfect hedge,” and scheduling priority on the line they have paid for. The ISO has accommodated encumbrances on the ISO controlled grid since the initial start-up and has built software systems to incorporate these rights into the market systems. By using existing tariff functionality and software systems, integrating the Subscriber PTO Model will result in minimal changes to how the ISO manages encumbrances for others if this functionality is used.

Some stakeholders are leery of the subscriber charge. The subscriber charge will be applied to transactions in the market by non-subscribers that use the Project since the cost of the Project is not recovered in the ISO’s transmission access charge. The ISO believes that, consistent with open access principles, the Project should not be used by non-subscribers without compensation. The subscriber charge will be developed in accordance with TransWest’s transmission owner tariff and approved by FERC similar to all the inputs to ISO’s transmission access charges for other Participating TOs.

Generator interconnection studies will be done in accordance with the ISO tariff to determine the impact, if any, to other participating transmission owners, and the process that the Power Company of Wyoming will go through for connecting its Wyoming wind generation is

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8 After posting the application, the ISO held a stakeholder briefing on August 1, 2022 which discussed the Subscriber PTO Model, the merits and issues that still needed discussion.

9 This is the same functionality the ISO intends to use in EDAM for honoring existing contract rights in the EDAM balancing authority areas.
no different than any other generator interconnecting to the ISO controlled grid except as described in this document.

As discussed above, with respect to the desire to have a competitive transmission process to choose the line, a benefit analysis is not required because the Project is not going to be designated by the ISO’s transmission planning process nor recovered through the ISO’s transmission access charge. It will be up to the load serving entities that subscribe to the Project to make the determination of whether the Project is economical and a best-fit for themselves. Moreover, by having the subscribers pay for the Project and all network upgrades required on the existing ISO grid, there is very little potential for stranded assets or costs to existing ratepayers who remain non-subscribers.

CONCLUSION

Based on the criteria set forth in the Transmission Control Agreement, Management has concluded that the application submitted by TransWest satisfies all of the requirements for acceptance applicable at this time and recommends that the Board approve the ISO’s acceptance of TransWest’s application for participating transmission owner status conditioned on (i) TransWest’s execution of the Transmission Control Agreement, and (ii) FERC’s acceptance of TransWest’s transmission owner tariff.