



# Memorandum

**To:** ISO Board of Governors  
**From:** Neil Millar, Vice President, Infrastructure and Operations Planning  
**Date:** May 15, 2024  
**Re:** **Decision on Participating Transmission Owner Application of SunZia Transmission, LLC**

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***This memorandum requires ISO Board of Governors action.***

## EXECUTIVE SUMMARY

In January 2024, SunZia Transmission LLC (“SunZia”) submitted an application to become a participating transmission owner with respect to its proposed 551 mile HVDC bi-pole transmission facilities connecting up to 3,021 MW of wind generation in New Mexico, with 2,131 MW currently planned for delivery to California via the Palo Verde substation (“Project”). In accordance with the procedures established by the Transmission Control Agreement (“TCA”) and the ISO tariff, Management reviewed the SunZia application and the stakeholder comments submitted and now recommends that the ISO Board of Governors approve the ISO’s acceptance of the SunZia application. SunZia satisfies all elements of the process to become a participating transmission owner applicable at this time and is expected to satisfy all others prior to execution of the TCA. Approval of SunZia’s application at this time will allow the Project to progress in its development, including execution of a three-party generator interconnection agreement with the ISO, which will determine and advance the commercial outcome of the Project. SunZia will become the second Subscriber Participating TO if approved by the Board.<sup>1</sup>

SunZia intends to begin commissioning the HVDC line in Q2 2025 with wind generation, which is being developed by other entities reaching commercial operation by Q2 2026. In addition, the wind project developers have solicited and confirmed off-taker commitments for the proposed New Mexico wind generation and have an executed generator interconnection agreement with SunZia.<sup>2</sup> The SunZia wind project will need to participate in the transmission planning deliverability allocation process to obtain full capacity deliverability. Subsequent

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<sup>1</sup> TransWest Express LLC’s application was approved in December 2022 and the Board approved the tariff changes for the Subscriber Participating TO model in July 2023, which was accepted by FERC in March 2024.

<sup>2</sup> The current generator interconnection agreement with SunZia will be renegotiated to materially conform to the ISO’s *pro forma* interconnection agreement when SunZia becomes a participating transmission owner.

requests for interconnection requires SunZia to act as a participating transmission owner for purposes of transmission planning and generator interconnection processes.

SunZia will not execute the TCA until shortly before the Project is energized. To bridge the timeframe from now until execution of the TCA, the ISO and SunZia have commenced negotiation of an Applicant Participating Transmission Owner Agreement. This agreement will allow SunZia to perform critical tasks similar to projects approved in the ISO's transmission planning process, including providing status reports to the ISO among other requirements.<sup>3</sup> Approval of SunZia as a future Subscriber Participating TO allows SunZia 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 June with an expected FERC decision in August of 2024.

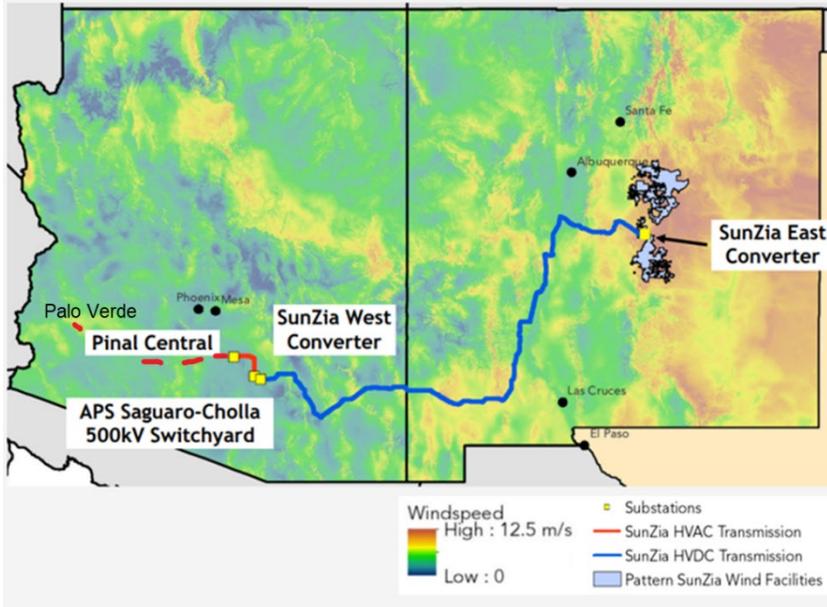
***Moved, that the ISO Board of Governors approve the ISO's acceptance of the application of SunZia Transmission, LLC for Participating Transmission Owner status, conditioned on (1) SunZia Transmission, LLC execution of the Transmission Control Agreement and (2) the Federal Energy Regulatory Commission's acceptance of a Transmission Owner Tariff, as set forth in the memorandum dated May 15, 2024.***

## **DISCUSSION AND ANALYSIS**

The California Public Utility Commission's ("CPUC") 2024-2025 "Preferred System Plan" calls for 2,131 MW of out-of-state wind by 2034 and 3,535 MW by 2039 in the base portfolio. 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 offshore 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 working to develop an opportunity for developers that does not increase the transmission access charge and does not pick the winner by selecting a project in the transmission planning process.

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<sup>3</sup> 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, and is similar to the agreement entered into with TransWest Express LLC.



SunZia approached the ISO two years ago with respect to the Project. The Project consists of approximately 551-mile, 3,021 MW HVDC transmission line from New Mexico to Arizona, and then two(2) 0.75-mile, 500 kV AC transmission lines from SunZia West HVDC Converter station to Salt River Project’s Pinal Central substation. SunZia then has entitlement rights from Pinal Central to the ISO balancing authority area boundary at Palo Verde under Open Access Transmission Tariff (“OATT”) agreements with transmission service providers in Arizona. SunZia has also received two requests for interconnection to their eastern AC switchyard, with the generation interconnection request being eligible to apply to the ISO in cluster 16 as SunZia received them after the close of the ISO’s cluster 15 open access window for generator interconnection requests. The transmission interconnection request will apply to the ISO in accordance with the ISO tariff based on its preferred model of development.

In accordance with the procedures established pursuant to section 4.3 of the ISO tariff and section 2 of the Transmission Control Agreement (“TCA”), SunZia submitted an application to the ISO on January 13, 2024 that proposed SunZia join the ISO as a new participating transmission owner, specifically as a Subscriber Participating TO. In order for an applicant to become a participating transmission owner, sections 2.2.3 and 2.2.5 of the TCA require that the ISO consider comments and determine whether to accept the application. Section 2.2.3 of the TCA 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

- 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 Board of Governors 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.

SunZia 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 New Mexico consistent with the CPUC Integrated Resource Plan Portfolio requirement of procuring New Mexico wind. Because SunZia's rights from Pinal Central to Palo Verde are OATT entitlement rights acquired from other transmission service providers, the Arizona/New Mexico portion of the ISO balancing authority area will be connected with the existing ISO balancing authority area (*i.e.*, connected via the entitlement rights across Arizona). The ISO has exercised operational control of entitlement rights in other balancing authority areas since start-up, which have enabled the import of electricity on ISO controlled grid facilities from Oregon, Utah, Arizona, Nevada and originally the Four Corners area.

The TCA defines both entitlements and encumbrances, which together dictate how the ISO is required to treat the transmission rights provided by SunZia that were acquired from transmission service providers in Arizona. Entitlements bestow onto the ISO only the rights that SunZia has under the OATT agreements entered into with the applicable transmission service provider, including any encumbrance that may exist. Encumbrances may dictate the usage of those transmission rights by market participants seeking to import, export, or schedule energy within the boundaries of the extended ISO balancing authority area, among other potential limitations.

As an entitlement, these transmission rights will allow SunZia subscribers to schedule energy from the generation location or from Pinal Central to Palo Verde, which is sufficient for California load serving entities to procure and access the generation in New Mexico interconnected by the Project. At the same time, this entitlement also needs to be considered in the context of any encumbrance placed on it, *e.g.*, any OATT limitations that dictate the scheduling and re-sale of these transmission rights, with the encumbrances currently under discussion between SunZia and its transmission service providers in Arizona. It is our understanding that the ISO will not qualify as an eligible transmission customer nor has it applied to directly receive this transmission service from the Arizona transmission service providers. Instead, the ISO will rely on SunZia to provide the ISO access to these rights subject to any limitations under the respective OATTs. The ISO will implement the SunZia transmission rights on the Arizona transmission service provider systems according to applicable encumbrances and the ISO is not proposing a specific outcome with respect to usage of the rights by non-subscribers, nor is it asking the board to approve such an outcome. Instead, Management seeks approval of the application with the

understanding that SunZia will work with the applicable transmission providers to determine any use-limitations and will inform the ISO through agreed upon instructions so the ISO may implement the applicable limitations. In the meantime, we will continue to engage with SunZia as the discussions with the Arizona transmission service providers progress and continue to provide support as requested and appropriate.

Management understands that point-to-point transmission rights under an OATT may differ substantially from traditional entitlements and encumbrances that have existed on the ISO controlled grid since the TCA was originally negotiated. Nonetheless, the ISO maintains that the multi-faceted nature of operational control allows sufficient flexibility to implement these new OATT entitlements and encumbrances consistent with the TCA today. In other words, it is reasonable for the Project to rely on these rights and be considered as an extension of the ISO's balancing authority area because SunZia has applied to become a Subscriber PTO and the OATT entitlement rights across Arizona will be sufficient for the ISO to maintain reliability and meet applicable reliability criteria associated with the Project despite the associated encumbrances.

SunZia 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 for the facilities for which they are responsible. These obligations include compliance with the transmission maintenance standards, processing generator interconnection requests, and other actions associated with the physical facilities themselves. SunZia 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. The ISO received four comments regarding the application, one fully supporting SunZia as a Subscriber PTO, one raising questions regarding mechanics of implementation, and the other two raising concerns as to the meaning of operational control of transmission in another balancing area which is also an implementation issue. The ISO has spoken to both parties that raised concerns about operational control of entitlements in their balancing area and, similar to the discussion above, has explained and confirmed that operational control is contingent solely on the rights turned over to the ISO by the participating transmission owner in accordance with their contract rights.<sup>4</sup> Accordingly, while the ISO is not aware of any outstanding objections to SunZia's transmission rights in the Project and entitlements as outlined in the TCA, discussions are ongoing regarding the implementation of SunZia's entitlement rights from Pinal Central to Palo Verde as described above. Despite these ongoing discussions concerning the encumbrances on SunZia's entitlements on the Arizona transmission service provider systems, management has determined that SunZia's transmission facilities and entitlements to be placed under its operational control will satisfy the applicable requirements regardless of the outcome of these discussions. This

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<sup>4</sup> The ISO can only refuse transmission facilities or entitlements if: i) the ISO can't meet the Applicable Reliability Criteria; ii) encumbrances unduly impair the ISO's ability to exercise operational control; or iii) entitlements located in another balancing area cannot be integrated into the ISO controlled grid due to technical considerations. Moreover, objections under this section relating solely to entitlements do not prevent the applicant from becoming a participating transmission owner while the objections are being resolved.

determination was made because SunZia has applied to become a Subscriber Participating TO and none of the costs of the underlying transmission facilities or entitlements will be included in the transmission access charge. In other words, even if the applicable encumbrance restricts the ability for the ISO to make unused capacity available in its market, the ISO would not pay for any cost associated with the entitlement because the usage would be limited to subscribers. Further, the entitlements are sufficient for the subscribers to interconnect and deliver the wind resources within the ISO balancing area and, if non-subscriber use is ultimately permitted under the applicable OATT of the Arizona transmission service providers, that use would be appropriately subject to a non-subscriber usage charge under the ISO tariff.

If the ISO's acceptance of the application is approved, the Project will be incorporated into the 2024-2025 transmission planning process and the generation will be studied in cluster 16 generator interconnection process 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 controlled grid to ensure reliability; 2) any network upgrades required on the existing ISO controlled grid to ensure deliverability of the New Mexico wind generation to ISO load serving entities; and 3) establish any costs associated with those upgrades to be paid for by SunZia's subscriber.<sup>5</sup> These costs will then allow load serving entities to know the full cost of being a subscriber to the Project.

Since the project will not be energized until late 2025, SunZia 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. SunZia would also need to execute the TCA closer to its energization date. Accepting SunZia's application subject to these conditions at this time is necessary to support the implementation timeline of SunZia, analysis of the Project and timely transferring operational control of the Project and associated entitlements to the ISO.

## **POSITIONS OF THE PARTIES**

As required by section 2.2.2 of the TCA, the ISO posted SunZia'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 four stakeholders, (both PTOs and non-PTOs) on the application. The critical comments addressed the use of the entitlement rights that SunZia is turning over to the ISO for the extended portion of the ISO balancing area. As noted above, discussions continue with interested parties concerning the use of these rights. As a requirement of becoming a Participating TO, the ISO will receive transmission rights and transmission curtailment instructions that outline the terms and conditions of the entitlement rights that will be turned over to the ISO for optimizing in market. These detailed instructions will include the capacity, point-of-receipt, point-of-delivery, instructions for derates, tagging requirements and usage limitations, if any, under the terms of the agreement between SunZia and the

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<sup>5</sup> The SunZia subscriber is SunZia Wind PowerCo LLC which is an indirect wholly owned subsidiary of Pattern Energy.

applicable transmission service provider. These instructions will ultimately inform how the ISO will exercise its operational control of the entitlement rights, and limitation on usage of those rights by non-subscribers does not limit SunZia's eligibility to be considered as a Subscriber Participating TO.

## **CONCLUSION**

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