Memorandum

To: ISO Board of Governors
From: Neil Millar, Vice President, Infrastructure and Operations Planning
Date: December 11, 2023
Re: Decision on Southwest Intertie Project (SWIP) North

This memorandum requires ISO Board of Governors action.

EXECUTIVE SUMMARY

The ISO has completed its assessment of the SWIP North transmission project (SWIP North) as an extension of the 2022-2023 transmission planning cycle, and recommends that the ISO Board of Governors approve the project as described below, subject to the conditions in the proposed motion. The project consists of funding the SWIP North transmission line project running from Midpoint, Idaho to Robinson Summit, Nevada, and certain upgrades to the existing ON Line from Robinson Summit to Harry Allen, Nevada, in return for entitlements on the resulting path from Midpoint, Idaho, through Robinson Summit and to Harry Allen.

As set out in the 2022-2023 Transmission Plan presented to the ISO Board of Governors at the May 2023 meeting, and as approved at that meeting, analysis of the project and discussions with Idaho Power about joint participation continued beyond the approval of the rest of the Transmission Plan.

SWIP North will facilitate access to wind resources in Idaho, as described in the ISO’s 2022-2023 Transmission Plan - Addendum 1 (attached). In doing so, it will support access to the Integrated Resource Planning (IRP) portfolios the California Public Utilities Commission (CPUC) submitted to the ISO for study in its transmission planning process (TPP). Specifically, the 2022-2023 sensitivity portfolio and 2023-2024 base portfolio identify 1,000 MW of Idaho wind resources to be imported into the ISO. SWIP North is the sole known transmission project that would serve California Load Serving Entities (LSEs) in accessing wind resources in Idaho by 2027. The ISO’s economic studies also demonstrate other economic benefits contributing to the overall value provided by the project, as set out in the 2021-2022 TPP and the 2022-2023 TPP.
Concurrently, Idaho Power studied the value proposition that SWIP North delivers to Idaho to access power markets in the Desert Southwest and add resource diversity to its portfolio. Idaho Power has indicated the need for 500 MW in the South to North direction.

Management proposes to assume entitlements on SWIP North from Great Basin Transmission (GBT), an LS Power subsidiary, and the existing ON Line which connects to the ISO at Harry Allen, thereby completing the transmission path between Idaho and California. Management proposes to move this project forward as a regional policy-driven project, jointly with Idaho Power, to take advantage of cost-sharing benefits. The proposal calls for the ISO’s assumption of 1,117.5 MW in the North to South direction and 572.5 MW in the South to North direction, with the remaining 500 MW in the South to North direction held by Idaho Power. This proposal is as an extension of the ISO’s Board-approved 2022-2023 Transmission Plan to facilitate alignment with Idaho Power’s intent to file a SWIP-related case with the Idaho Public Utilities Commission (IPUC) for SWIP North by the end of this year.

**Moved, that the ISO Board of Governors approves Addendum 1 to the 2022-2023 Transmission Plan identifying the ISO’s assumption of operational control of Great Basin Transmission (GBT), an LS Power subsidiary, entitlements on the SWIP North transmission line and One Nevada transmission line (to which SWIP North connects), as a joint regional policy-driven project with Idaho Power, as set forth in the memorandum dated December 6, 2023, and conditioned upon:**

- Idaho Power filing and receiving approval for its SWIP-related case from the IPUC by September 30, 2024;
- The CPUC reaffirming the need for Idaho wind in its 2024-2025 TPP portfolio decision;
- Great Basin Transmission, LLC, a subsidiary of LS Power, declaring its intent to become a Participating Transmission Owner by July 1, 2024, submission and approval of its application in accordance with the CAISO Tariff and Transmission Control Agreement; and
DISCUSSION AND ANALYSIS

As indicated in Addendum 1 to the ISO’s 2022-2023 Transmission Plan, the base portfolio provided by the CPUC included 1,062 MW of out-of-state wind resources from Wyoming or Idaho, and the sensitivity portfolio included 1,000 MW specifically from Idaho. In the ISO’s 2023-2024 TPP cycle, the CPUC identified 1,000 MW of Idaho wind in the base portfolio itself.

SWIP North is the sole known transmission project that would serve California LSEs in accessing wind resources in Idaho in the time frame needed to support integration of Idaho wind. It is a near-shovel ready project which has achieved key milestones such as a Bureau of Land Management (BLM) Right-of-Way Grant, an approved Construction, Operation, and Maintenance Plan, and a Conditional Notice-to-Proceed. Apart from meeting CPUC resource planning portfolio, SWIP North also provides certain economic benefits which have been highlighted in the 2022-2023 TPP. The project will provide resource diversity, create a parallel path to the California Oregon Interface (COI) line, reduce congestion costs on COI, reduce renewable resource curtailment, and enable the export of excess solar from California.

Idaho Power\(^1\) has identified the benefits that SWIP North provides to Idaho in its 2023 IRP and intends to execute definitive agreements with GBT, with conditions which would include, but not be limited to ISO Board of Governors approval of the ISO’s intent to assume entitlements, FERC approval of the GBT and Idaho Power agreement(s), sufficient Idaho Power benefits to justify the project cost, and necessary state regulatory approvals of the project. Assuming successful discussions with GBT, Idaho Power intends to file a SWIP-related case with the IPUC by year end.

The Southwest Intertie Project (SWIP North and ON Line) is governed by a Transmission Use and Capacity Exchange Agreement (TUA), between NV Energy and LS Power affiliates including Great Basin Transmission LLC (GBT), the owner of SWIP North.\(^2\)

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\(^2\) See Second Amended and Restated TUA, FERC Docket No. ER20-2295. Note Nevada Power and Sierra Pacific Power merged as subsidiaries doing business as NV Energy.
Under the TUA, completion of SWIP North triggers a capacity swap such that GBT gets 1,117.5 MW from Midpoint to Harry Allen in the North-South direction and 1,072.5 MW in the South-North direction. NV Energy holds the remaining capacity.³

Management proposes to assume operational control of entitlements for 1,117.5 MW in the North-South direction and 572.5 MW in the South-North direction with the remaining 500 MW in the South-North direction held by Idaho Power. Entitlements in the North-South direction will enable the integration of Idaho wind resources included in CPUC resource portfolios and the South-North entitlements will provide export opportunities for excess California solar generation.

The ISO is not pursuing this project through a competitive procurement process because the ISO is not seeking to approve an entirely new roughly 500 kV transmission line between Midpoint and Harry Allen. The ISO only intends to assume operational control of GBT’s entitlements on SWIP North and the existing ON Line, where the ON Line facilities have already been constructed. Additionally, Idaho Power does not have a competitive procurement framework for developing transmission projects in the state of Idaho.

The current project cost estimate is $1,090 Million ($3.8 M/mile) and includes ON Line system upgrades. Based on the allocation of shares between GBT and Idaho Power, the ISO will ultimately be responsible for 77.2% of the overall project costs (estimated at $841.5 Million) and Idaho Power will be responsible for 22.8% (estimated at $248.5 Million) of the overall project cost.

GBT will be required to apply to become a Participating Transmission Owner (PTO), at which point the ISO Board of Governors may evaluate the specific cost-containment measures agreed to by the parties. The approval of the assumption of entitlements is conditioned on this ISO Board of Governors approval of GBT’s PTO application. Additionally, one of the conditions for the approval of the ISO’s recommendation is FERC acceptance of GBT’s transmission revenue requirement rate structure and TO tariff.

**POSITIONS OF THE PARTIES**

Stakeholders generally support the ISO’s proposal to jointly assume entitlements, with Idaho Power, of the proposed SWIP North transmission line and the existing ON Line.

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³ Under the second amended and restated TUA, for the ON Line capacity allocation, NV Energy gets the first 900 MW, GBT gets the next 800 MW as well as 50% of capacity above 1,700 MW. For the SWIP North Line, GBT gets the first 900 MW, NV Energy gets the next 700 MW. GBT gets 100% of the capacity above 1,600 MW up to their ON Line rights. Anything additional goes to NV Energy.
Stakeholders did not express any concerns regarding the ISO’s proposal to bring forth the recommendation under the 2022-2023 TPP.

A number of stakeholders expressed concern with the estimated project costs that were provided in the ISO’s TPP since 2020-2021 and used by the CPUC in its IRP processes since then in order to determine the need for out-of-state wind from Idaho, $636 Million, and the most recent estimates provided by the developer, LS Power, which is $1,090 Million. The ISO notes that the initial considered costs did not include NV Energy’s facilities studies for interconnecting at Robinson Summit which concluded recently, increasing cost of equipment, and new labor collective bargaining agreements with significant rate increases. The ISO understands these concerns. In response, the ISO has added an additional condition to the Board approval request, requiring CPUC reaffirmation of the need for Idaho wind resources in its 2024-2025 TPP portfolio decision to be issued in early 2024.

Other stakeholders requested clarifications regarding RPS eligibility, whether schedules would be considered imports, whether LS Power had sought DOE funding for the project, and an update on land issues associated with a wind resource under construction in Idaho. The ISO will provide the following clarifications to stakeholders:

- Pseudo-tied resources in Idaho which utilize the ISO’s entitlements to schedule power from the renewable resources in Idaho to the ISO BA would qualify under Bucket 1 of the CPUC RPS requirements.
- MIC will be given at the scheduling points of Midpoint and Robinson Summit over and up to the entirety of the ISO’s entitlements on the SWIP North and ON Line. The quantity of MIC at these scheduling points maybe restricted until such time network upgrades internal to the ISO are in service.
- The ISO is not aware if the proponent has sought and received any DOE funding for the project despite being requested to do so by the ISO.
- The CPUC portfolios are based on generic wind resources in Idaho, and are not tied to specific generating facilities.

Regarding cost containment, the ISO clarifies that the latest project estimates provided by the developer are only estimates at this point in time. Cost containment measures will be specified in definitive agreements with GBT and filed with FERC as appropriate. Though there are no cost caps on project costs or Return on Equity (ROE), in addition to cost containment measures, there are several conditions attached to this request for ISO Board approval of the ISO’s recommendation to ensure continued cost-effectiveness of the proposal, the viability of integrating Idaho wind resources and adequate and appropriate consideration of stakeholder concerns.
One stakeholder requested clarity on the ISO’s continued assessment of SWIP North in the 2021-2022 TPP and 2022-2023 TPP for integrating Idaho wind resources as compared to Wyoming and New Mexico, and an explanation for the absence of competitive procurement. The ISO’s continued assessment of SWIP North for integrating Idaho wind resources is due to the submission of actionable Idaho-specific resource portfolios from the CPUC and the need for planning to this as compared to Wyoming and New Mexico resources which are also identified in CPUC portfolios but for which transmission projects are already being developed by TransWest Express (TWE) and SunZia, respectively. Additionally, the ISO, as noted on the stakeholder call, is seeking ISO Board approval for entitlements on the proposed SWIP North and the existing ON Line as opposed to building an entirely new 500 kV line, and hence not pursuing a competitive procurement process. Moreover, Idaho Power, a joint capacity off-taker, does not have a competitive procurement framework for building transmission.

In response to questions around the benefits of SWIP North, the ISO reiterates the benefits, which include resource diversity, creation of a parallel path to the California Oregon Interface (COI) line, reduction of congestion costs on COI, reduced renewable resource curtailment, and the ability to export excess solar from the state.

**CONCLUSION**

Approving assumption of operational control of entitlements on SWIP North and the existing ON Line will provide an overall benefit to California ratepayers. The ISO will not need to identify and pursue an entirely new line. In addition to the timeframe benefits of near-shovel ready status and completion of key BLM and NEPA milestones, SWIP North is the only known transmission line that can integrate Idaho wind resources. Idaho Power’s interest and need for resources in the Desert Southwest power markets is timely and allows the ISO to pursue this project with additional cost savings. Should Idaho Power not file a SWIP-related case with the IPUC or should the IPUC not approve Idaho Power’s SWIP-related case, the ISO would reassess at that point and bring forward a revised recommendation for ISO Board approval upon further review, due diligence, and appropriate stakeholder engagement.