Subscriber Participating TO Model

Revised Draft Final Proposal

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1 Introduction

The ISO developed the Subscriber PTO Model presented in this revised draft final proposal as an option for streamlining the development and enhancing the ongoing operation of transmission to meet public policy requirements or objectives, and California's energy policy goals in particular.

The need for additional generation of electricity over the next 10 years, including the need for carbon-free resources, some of which are out-of-state, has escalated rapidly in California as it continues transitioning to the decarbonized electrical grid required by Senate Bill 100 that was signed into law in 2018. This in turn has been driving a dramatically accelerated pace for new transmission development in current and future planning cycles. To help ensure we have the transmission in place to achieve this transition reliably and cost-effectively, the ISO has been coordinating with the state's primary energy planning and regulatory entities to adopt a much more strategic and proactive approach to resource, procurement, transmission planning and interconnections overall. The more proactive and coordinated strategic direction reflected in this year's transmission plan is set forth in a joint Memorandum of Understanding ("MOU")[1] signed by the ISO, the California Public Utilities Commission ("CPUC") and California Energy Commission ("CEC") in December 2022, that tightens the linkages between these key processes. The MOU emphasizes the continued role of the state agencies to provide resource forecasts - in the form of portfolios of resource quantities and locations – for planning purposes.

The CPUC has provided resource portfolios[2] as an input to the ISO's 2023-2024 transmission planning process calling for out-of-state wind generation that requires new transmission to reach the ISO border – 1,000 megawatts ("MW") from Idaho, 1,500 MW from Wyoming, and 2,328 MW from New Mexico. These volumes build on the amounts provided as part of the ISO's 2022-2023 transmission planning process, and match the values that the ISO used to size the transmission needed from the ISO border to coastal load centers in the 2022-2023 plan. These amounts also align with the longer-term requirements set out in the scenario provided by the CEC and the CPUC to the ISO for the ISO's 20-Year Transmission Outlook released in May 2022.

The ISO is developing a Subscriber PTO Model for transmission projects moving forward through commercial interest to efficiently and cost-effectively deliver generation from out-of-state resource developers to California without increasing the Transmission Revenue Requirement ("TRR") of the Transmission Access Charge ("TAC"),[3] - except as already allowed for reimbursement of network upgrades - and without selecting a specific project through the Transmission Planning Process ("TPP") but rather leveraging the actual commercial interest generated by authorized procurement and contracting. Beyond California's internal resource planning needs, markets like the Extended Day-Ahead Market and a potential regional market will also benefit from improved integration of

1 http://www.caiso.com/Documents/ISO-CEC-and-CPUC-Memorandum-of-Understanding-Dec-2022.pdf
2 CPUC Decision (D.) 23-02-040 adopted on February 23, 2023.
3 The access charge for use of the ISO controlled grid is currently $14.4449/MWH.

the ISO system with other utility systems in the Western interconnection through implementation of the Subscriber PTO Model.

Delivery of energy from out-of-state wind resources to the ISO balancing authority area will require development of long-distance transmission infrastructure to deliver power across multiple states. The ISO typically receives out-of-state generation from pseudo-tie arrangements. However, the ISO has found that standalone generation-only balancing authority areas ("BAA") are more complicated when it comes to pseudo-tie arrangements. They are also less flexible for the generation needing to be considered through the market import capability process, and more challenging in utilizing transmission capacity that becomes available in real-time for other uses.

In addition, the Federal Energy Regulatory Commission ("FERC") has established policies supporting the development of transmission projects, including high-voltage direct current ("HVDC") transmission projects capable of transmitting power over long distances, through an approach where subscribers agree to fund such transmission projects in exchange for long-term transmission service rights.[4] The ISO is developing a model that will facilitate the delivery of needed resources to the ISO by accommodating FERC's subscriber-funded transmission approach.

The ISO is already responding to requests from project developers seeking to join the ISO with a project using the FERC subscriber-funded transmission approach. As an example, TransWest Express, LLC ("TransWest") has submitted multiple study requests into the ISO's TPP for the TransWest Express Transmission Project ("TWE Project"). Approval of the TWE 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 that did not support development at that time. TransWest approached the ISO to discuss how it could be possible for a potential generator interconnection customer interested in supporting the project to determine its viability. The result of these discussions informed the ISO's broader efforts to accommodate FERC's subscriber-funded transmission development approach, and is reflected as the "Subscriber PTO Model".

In continuing to work with TransWest, and in evaluating all of the interconnection studies being performed by various transmission owners[5] to interconnect the TWE Project, the TWE Project including the 3,000 MW of wind generation is already being studied for reliability and deliverability as part of the transmission interconnection process. As there is no reason for the TWE Project to go through the generator interconnection study process twice, the ISO is revising the Draft Final Proposal to account for this change in the study process for the Subscriber Participating TO.

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[4] *See, e.g., Allocation of Capacity on New Merchant Transmission Projects and New Cost-Based, Participant-Funded Transmission Projects; Priority Rights to New Participant-Funded Transmission*, 142 FERC ¶ 61,038 (2013). Under this approach, subscribers are identified through an open solicitation process approved by FERC.

[5] Interconnection studies of the TWE Project are ongoing with PacifiCorp, Los Angeles Department of Water and Power, NV Energy, LS Power and Southern California Edison.

As part of the transmission interconnection request process for the Subscriber Participating TO applicant, the affected Participating TO and the ISO will study the project for interconnection facilities, and reliability and deliverability network upgrades. If upgrades have been developed in the TPP related to the generation to be served by the Subscriber Participating TO project for purposes of meeting the portfolios established by the CPUC, then the Subscriber Participating TO will have the first right of refusal to those upgrades included in an approved ISO transmission plan up to the capacity include in the portfolio. If additional upgrades are required for the generation served by the Subscriber Participating TO on the then existing ISO controlled grid it will still be financed upfront by the generator connected to the Subscriber Participating TO transmission facilities and the existing Participating TO will reimburse the generator consistent with the Generator Interconnection and Deliverability Allocation Procedure ("GIDAP"), Appendix DD and Section 25 of the ISO tariff that governs generator interconnection. If the TPP does not identify upgrades required for the Subscriber Participating TO project based on the CPUC portfolios, the generator will be studied in the generator interconnection process and deliverability will be allocated as part of the next Transmission Plan Deliverability ("TPD") allocation process.

The ISO proposes to change the Draft Final proposal with respect to the interconnection and deliverability study of the Subscriber Participating TO transmission and any generation included as part of the initial transmission project; establish a cap on the Subscriber Wheeling Charge or "SWC" to be no greater than the TAC or Regional Wheeling Access Charge ("WAC"); and clarify when a non-subscriber project can submit a generator interconnection request.

The proposed Subscriber PTO Model provides an opportunity for a project to move forward – or not – depending on whether the subscriber or subscribers to the project can contract its resources to be delivered to the ISO balancing authority area, *e.g.,* through contracts with California load serving entities.[6] Comparable projects can similarly move forward under this same model. This allows the load serving entities or other contracting parties to determine the most economic and best fit for their own portfolios.[7] Once the Subscriber Participating TO has determined it will build the project, it will notify the ISO. Once that notification has been received then other generators may request to interconnect to the Subscriber Participating TO transmission facilities. The Subscriber PTO Model would be used for transmission lines whose developers want to build and place their facilities under ISO operational control without a decision in the TPP process and finance through the subscriber process outside the TRR of the TAC or WAC. The ISO presents the Subscriber PTO Model as a potential win-win arrangement for the ISO, California load serving entities and project sponsors.

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[6] TransWest held a FERC-approved open solicitation process for the north-south capacity on the TWE Project, and the Power Company of Wyoming LLC ('PCW") obtained the subscription rights for the north-south capacity from Wyoming to the New Substation. PCW is a developer of wind projects in Wyoming.

[7] The ISO has also been exploring alternatives that may include a generation-only balancing authority area pseudo-tying resources into the ISO.

This Revised Draft Final Proposal presents a solution for establishing a Subscriber PTO Model with enhancements based on comments received from stakeholders on May 2, 2023 following the presentation of the Subscriber PTO Model Draft Final Proposal presented on April 18, 2023.

2 Subscriber PTO Model Development

A Subscriber Participating TO is a transmission owner whose transmission assets and Entitlements[8] were constructed, and whose transmission capacity is subject to long-term contractual obligations, to deliver energy, capacity, and associated attributes to satisfy state, municipal, county or federal policy requirements or directives. A Subscriber Participating TO will not include a TRR in the ISO's TAC or WAC except with respect to Generator Network Upgrades or Network Upgrades identified in the GIDAP and TPP for existing Participating TOs.

As an initial step towards allowing a project developer to join the ISO with a project using the FERC subscriber-funded transmission approach, the ISO executed the Applicable Participating Transmission Owner Agreement ("APTO Agreement") with TransWest to establish a working relationship between the developer and the ISO similar to an approved project sponsor. This allows the Applicant Participating TO ("APTO") to act as a Participating TO predominately in the transmission planning and generator interconnection processes. It also allows communication between the ISO and the APTO regarding the status of the project. The APTO Agreement was filed at FERC and approved on March 15, 2023.[9]

The ISO received comments from 10 stakeholders regarding the Subscriber PTO Model Draft Final Proposal from The Bay Area Municipal Transmission group ("BAMx"), California Community Choice Association ("Cal CCA"), Clearway Energy Group ("Clearway"), Golden State Clean Energy, Gridworks, LS Power, NextEra Energy Resources ("NextEra"), Six Cities[10], Southern California Edison Company ("SCE"), and TransWest Express LLC ("TransWest").

The majority of stakeholders expressed support, some strongly, for the ISO developing a Subscriber PTO Model that would allow out-of-state resources connected to subscriber-funded transmission projects to be within the ISO BAA. It was noted that the ISO had taken into account stakeholder comments regarding the increasing cost of transmission and had succeeded in striking a balance between meeting the state's renewable generation goals while controlling the increasing TAC and WAC. Golden State Clean Energy commented that this initiative shows that the ISO takes California's challenges seriously and is willing to work with stakeholders to find creative solutions. They further commented this collaborative approach is critical to the success of state policy goals.

Others noted that the Subscriber PTO Model is an important new transmission initiative that can facilitate the development of much-needed transmission infrastructure in the western United

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[9] The ISO executed the Applicant Participating Transmission Owner Agreement with TransWest Express and filed it at FERC on January 13, 2023. Docket No. ER23-838

[10] Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California

States. Stakeholders commented that they appreciated the ISO's creativity and transparency on this approach. BAMx believes the ISO should encourage other out-of-state and offshore developers to consider the Subscriber PTO Model. If this model were applied it could have a significant impact on containing the cost of the ever-growing TAC, while providing appropriate price signals for resource procurement. BAMx's analysis indicates that if all the transmission projects needed to access out-of-state wind envisioned in the ISO 20-year outlook elected the subscriber model, nearly $9.95 billion of transmission costs would not be recovered through the Regional TAC. As a result, the projected Regional TAC 15-20 years from now would reduce by as much as $7/MWh. BAMx stated the transmission costs needed to deliver the power from the out-of-state or offshore wind transmission lines would instead be recovered from the parties electing to procure the output of those projects, thus enabling them to consider the full costs of those projects in comparison to others that don't require as much transmission investment.

TransWest's comments stated the following:

"TWE appreciates the ISO diligent efforts in formulating the Subscriber PTO Model. The Subscriber Participating TO Model is a key part of the ISO's strategy to facilitate development of much-needed transmission infrastructure in the West. As the ISO notes, recent planning cycles have identified an accelerating need for new transmission development to meet projected load requirements, improve system reliability, and further the coordination and sharing of resources among neighboring Western states. The CPUC and the ISO recognize the need for out-of-state wind resources. The CPUC's February 2023 Integrated Resource Planning base case portfolio now includes 4,828 MW of out-of-state wind on new transmission by 2030. Similarly, the ISO's 20-Year Transmission Outlook demonstrates that meeting California greenhouse gas objectives will require over 24 GW of new wind generation, with offshore wind projected to provide a substantial portion this generation. Wyoming wind operates with capacity factors comparable to those projected for California offshore wind at a fraction of the capital cost. California offshore wind is also likely more than a decade out and will require expensive seaport infrastructure and a land-based transmission buildout. Conversely, the TWE Project is a shovel-ready project that can deliver 3,000 MW of Wyoming wind in advance of the State's SB 100 deadlines. Wyoming wind, delivered on the TWE Project, will reduce greenhouse gas emissions, help curtail the use of natural gas, improve reliability, and make a significant contribution towards meeting load-serving entities' Renewables Portfolio Standard requirements. By implementing the Subscriber PTO Model, the CAISO is essentially expanding the existing ISO BAA to incorporate what could have been a generation-only BAA with previously-executed agreements into the existing ISO BAA tariff construct, all without increasing the transmission revenue requirement of the TAC. If a generation-only BAA was to interconnect to the ISO grid, its existing transmission contracts would be treated as encumbrances. Treating all existing Participating TO contracts in a similar manner is fair and avoids the need to develop and administer an alternative mechanism."

This Revised Draft Final Proposal addresses a number of specific stakeholder comments below and describes certain revisions made in response to stakeholder comments.

3 Implementation of Subscriber PTO Model

3.1 Use of Encumbrances

- Background

  Since inception, the ISO has honored Existing Contracts.[11] Existing Contracts are either Encumbrances[12] on the ISO Controlled Grid or are Entitlement rights that a Participating TO has on transmission facilities in a balancing authority area other than the ISO. If the existing rights are not used by the existing rights holder, they are available for use in the ISO market.

  The ISO holds the existing rights holder harmless from the cost of transmission and congestion because it has already paid for the transmission service through the Existing Contract. In addition, Existing Contracts have priority rights on the transmission path they have under contract. Providing this treatment for Subscriber Rights[13] would be much the same, except the legacy arrangements of existing Participating TOs were established at an earlier point in time. It is not uncommon for transmission owners to have legacy arrangements, which the ISO would honor if operational control of those facilities and entitlements are turned over to the ISO.

  Here, the ISO proposes to honor Subscriber Rights as an Encumbrance essential to development of transmission facilities and that pre-dates the transmission owner becoming a Participating TO. The ISO has concluded that affording Encumbrance treatment to Subscriber Rights under the Subscriber PTO Model is appropriate and necessary because FERC's subscriber-funded transmission approach relies on long-term contractual transmission rights to subscribers to allow the project to be funded and built. If Subscriber Rights are not recognized through Encumbrances, it is unlikely that subscriber-funded transmission projects connecting out-of-state resources and benefiting California load-serving entities would be built.

  The Subscriber Right will be treated in the same manner as an Existing Contract and receive the "perfect hedge" and scheduling priority since the contract rights holder will pay for the transmission under its transmission service agreements with the Subscriber Participating TO.[14]

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[11] The contracts, which grant transmission service rights in existence on the ISO Operations Date (including any contracts entered into pursuant to such contracts) as, may be amended in accordance with their terms or by agreement between the parties thereto from time to time. Section 16 of the ISO tariff provides for treatment of Existing Contracts. There are over 40 different Encumbrances on the ISO controlled grid today.

[12] A legal restriction or covenant binding on a Participating TO that affects the operation of any transmission lines or associated facilities and which the ISO needs to take into account in exercising Operational Control over such transmission lines or associated facilities if the Participating TO is not to risk incurring significant liability. Encumbrances shall include Existing Contracts and may include: (1) other legal restrictions or covenants meeting the definition of Encumbrance and arising under other arrangements entered into before the ISO Operations Date, if any; and (2) legal restrictions or covenants meeting the definition of Encumbrance and arising under a contract or other arrangement entered into after the ISO Operations Date.

[13] The ISO tariff would have this new definition: "Subscriber Rights means the transmission service rights and obligations of a Subscriber Participating TO to transmission customers with contracts entered into under the Subscriber Participating TO Tariff, as that tariff may change from time to time.

[14] The "perfect hedge" provides a scheduling priority for the contract path and exempts an Existing Rights holder from transmission service charges and congestion.

- Stakeholder Feedback

  CalCCA agrees with the principle that the capital and operations and maintenance costs of the Subscriber PTO transmission projects should not receive cost recovery through the ISO's TAC. Given that the subscribers and their off-takers will fund the project, rather than the TAC, CalCCA, and NextEra agree the subscribers should receive Encumbrances with scheduling rights and the perfect hedge. TransWest commented that honoring Subscriber Rights as Encumbrances is essential to the development of new transmission facilities using a Subscriber PTO Model.

  TransWest further explained that Subscriber Rights must be recognized through Encumbrances to allow for the financing and construction of a subscriber-funded transmission project that is intended to support California load-serving entities. TransWest's perspective is that the Draft Final Proposal correctly explains why the Subscriber Right should be treated in the same manner as an Existing Contract, i.e., receive a "perfect hedge." The contract rights holders should be entitled to scheduling priority for the contract path and exemption from transmission service charges and congestion because they will pay for the transmission under their transmission service agreements with the Subscriber Participating TO.

  NextEra and Six Cities requested that the ISO provide additional details, with examples, of the scheduling and settlement mechanics of an Encumbrance transaction under the proposal. Specific examples have been provided in Appendix A. Grid Works had specific questions that are also answered in Appendix A.

  SCE opposes the use of new contractual Encumbrances as a means of honoring Subscriber Rights. Rather, SCE is supportive of providing the Subscriber Participating TO with Congestion Revenue Rights ("CRRs") and an appropriate level of scheduling priority through its tariff. SCE's opposition to formal contractual Encumbrances is based on a concern that a new set of Encumbrances on the ISO grid could create future inefficiencies in operation of the grid, the future of which is unknown in many areas. SCE went on further to note that the ISO is currently working on creating an extended Day-Ahead market in the Western U.S., and the future of grid operation could include even more changes and evolution, some of which may not be foreseeable in terms of impacts to grid operations and how any Encumbrance may affect efficiency. As discussed in the ISO's previous papers on this topic, the ISO understands SCE's position and has considered it but disagrees with the claim that Encumbrances are not justified in certain circumstances. Using the existing Encumbrance functionality, tariff rules, and construct that is going to be employed in EDAM for legacy contractual arrangements in the EDAM BAAs, the ISO is incorporating the same mechanisms into the Subscriber PTO Model that it will be using for the future markets. Moreover, the ISO is not truly "allowing" new Encumbrances on the existing ISO controlled grid; the ISO is merely expanding the existing ISO BAA and controlled grid to incorporate what could have been a generation-only BAA for facilities that already are the subject of subscriber right agreements that include transmission service into the existing ISO BAA tariff construct without increasing the TRR of the TAC for the Subscriber Participating TO transmission facilities.

SCE believes that the provision of CRRs to the Subscriber Participating TO with an appropriate level of scheduling priority would provide a Subscriber Participating TO, and its subscribers, with the necessary ability to schedule its power with the highest certainty and without financial congestion impacts. The ISO understands SCE's position, considered it but respectfully disagrees. While providing CRRs to the Subscriber Participating TO for its off-takers would hedge congestion, the other charges and scheduling priority are not resolved. The ISO software is already set-up such that Transmission Ownership Rights ("TORs") and ETCs have the highest priority of scheduling right and new software would need to be implemented to provide a separate priority right for Subscriber Rights. [15] Then additional changes to the ISO's settlement software would need to be made to ensure the settlement treatment for the TAC and WAC, along with exclusion from bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation. The ISO sees no reason to make all these changes when existing tariff and software functionality meets the needs of honoring the Subscriber Rights, which is exactly what is being put in place for the EDAM BAAs contracts and where there is no evidence that developers of subscriber-funded transmission projects would agree to become Participating TOs under such an approach.

SCE also noted that its proposal to use CRRs as the means of assuring the ability of the Subscriber Participating TO to use its own facilities to provide service to its subscribers has nothing to do with funding the investment of the Subscriber Participating TO (as in the case of a Merchant PTO). The Subscriber Participating TO will recover its investment through its subscriber fees, not through CRR revenue. The CRR revenue obtained would merely offset congestion charges incurred through the operation of the ISO market, which is entirely appropriate. To the extent the Subscriber Participating TO is not using (all of) its transmission, but instead it is congested by other users, SCE states that the Subscriber Participating TO would still receive all CRR revenues. In effect, CRRs act as a mechanism to provide compensation to the Subscriber Participating TO when others are using the Subscriber Participating TO line (to the point of congestion). Thus, if the ISO is proposing the Subscriber Wheeling Charge approach simply to "compensate the Subscriber Participating TO when others use its line", CRR can accomplish this in a more workable and more reasonable manner. The ISO thanks SCE for clarifying its position on the use of CRRs for compensation to the Subscriber Participating TO but that would only compensate the Subscriber Participating TO if there were congestion on the line and not for the transmission service provided to non-subscriber usage of the line. As discussed previously the ISO has concluded that a separate Subscriber Wheeling Charge is appropriate under the unique circumstances of the Subscriber PTO Model. The ISO believes that, consistent with cost

[15] See BPM for Market Operations Section 5.1.9. However, the Subscriber Right would need to have a separate scheduling priority below ETCs. In addition, Section 5.1 discusses all of the existing functionality the ISO has constructed over the years for Encumbrances. Implementing a new structure when an existing structure based on tariff provisions previously accepted by FERC will work would be an inefficient use of resources that would introduce uncertainty in the ISO's proposal.

causation and open access principles, non-subscribers cannot use the Subscriber Participating TO project for free.

- Revised Draft Final Proposal

  The ISO does not propose to change the solution offered in the Draft Final Proposal and will use its existing Encumbrance functionality for the Subscriber Rights under the Subscriber PTO Model, thereby providing subscribers such as generator off-takers with the perfect hedge on the Subscriber Participating TO transmission facilities. As previously discussed, the perfect hedge provides the Subscriber Rights holder a scheduling priority for the contract path and exempts a Subscriber Rights holder from transmission service charges, congestion, bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation similar to all ETCs and TORs in the ISO BAA.

3.2 Transmission Costs

- Background

  A Subscriber Participating TO ***will not*** include in the ISO TAC the cost of its project (i.e. its TRR). The Subscriber Participating TO will enter into agreements with its subscriber(s) to pay for the original line costs – capital, operation and maintenance, administrative and general, etc. – and be allowed to recover a Subscriber Wheeling Charge for the use of its transmission facilities by a non-subscriber. The ISO will model the project in the full network model, and only the self-schedule quantity provided by the Subscriber Rights in the day-ahead and real-time market will encumber the line. Self-schedules with Subscriber Rights will not pay the TAC rate or the ISO's WAC rate for use of the Subscriber Participating TO facilities. The remaining portion of the project that is not subscribed or scheduled using Subscriber Rights will be available for ISO market optimization, and a non-subscriber that uses the line will pay the applicable TAC or WAC rates. The TAC rate is paid by load within the ISO BAA and the WAC rate is paid by exports at the scheduling point where the transaction leaves the ISO BAA.

3.2.1 Subscriber Wheeling Charge

The ISO has concluded that a separate Subscriber Wheeling Charge is appropriate under the unique circumstances of the Subscriber PTO Model. Consistent with cost causation and open access principles, the ISO believes non-subscribers cannot use the project of a Subscriber Participating TO for free. On the other hand, including any costs of a Subscriber Participating TO's transmission facilities in the TRR for the TAC or WAC would be contrary to a fundamental design principle of the Subscriber PTO Model, which allows these projects to move forward without funding through a TRR by all ISO customers. 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 a Subscriber Participating TO project, because the Subscriber Participating TO is not including the TRR for the original build of its transmission facilities or ongoing costs of its

project in the TRR for the TAC or WAC, the Subscriber Participating TO should be entitled to cost recovery if a Scheduling Coordinator other than a subscriber uses the project.[16]

The ISO will collect the TAC for imports or the WAC for exports on the Subscriber Participating TO scheduling points from Scheduling Coordinators that do not have a Subscriber Encumbrance (*i.e*. non-subscribers). The Subscriber Participating TO will develop a Subscriber Wheeling Charge in accordance with the ISO tariff and the Subscriber Participating TO's transmission owner tariff that will be approved by FERC. Any updates to the Subscriber Wheeling Charge will also need to be approved by FERC. The Subscriber Participating TO will notify the other Participating TOs and Approved Project Sponsors similar to the regulatory requirements of all other Participating TOs when it makes a FERC rate filing for the Subscriber Wheeling Charge. This Subscriber Wheeling Charge will be deducted from the revenue collected by the TAC and WAC.[17]

Specifically, the ISO will determine a MWH quantity based upon the bi-directional usage of the Subscriber Participating TO transmission facilities by non-subscribers. To obtain this rate, the ISO will determine the absolute value of non-subscriber import and export schedules at the Subscriber Participating TO scheduling point(s) and the Subscriber Wheeling Charge will be a volumetric charge ($/MWH) to use the Subscriber Participating TO facilities. The amount of revenue the Subscriber Participating TO would receive would equal the following:

[|MWH import at Subscriber Participating TO Scheduling Point| + |MWH import at Subscriber Participating TO Scheduling Point|] * Subscriber Wheeling Charge ($/MWH) = $ paid

The TAC and WAC revenue received from non-subscriber uses of the Subscriber Participating TO facilities will be disbursed first to pay the Subscriber Participating TO for non-subscriber uses of its facilities, with any remaining revenue allocated to the other Participating TOs consistent with the existing revenue allocation process for non-load serving Participating TOs.

The ISO will not include the Subscriber Wheeling Charge of the Subscriber Participating TO transmission facilities in the calculation of the TRR for the TAC or WAC. Because new scheduling points will be added by the Subscriber Participating TO transmission facilities the ISO will be receiving more revenue than required to meet the existing Participating TO's TRR. This additional revenue will be available to meet the Subscriber Wheeling Charge discussed above.

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[16] Given the existing tariff requirement for the Participating TOs to reimburse generation owners for network upgrades and the March 27, 2023 FERC Order on the Interconnection Process Enhancement 2021 initiative established that external interconnection customers will be eligible for repayment of amounts advanced for network upgrades internal to the ISO need to maintain reliability, the transmission owner will reimburse them in cash within five years of commercial operation of the generating facility. *Tariff Amendment to Implement Interconnection Process Enhancements filed January 26, 2023 (FERC Docket No. ER23-941)* The ISO sees no reason to treat Subscriber Participating TOs any different with respect to network upgrades required on an existing Participating TO system.

[17] The Subscriber Wheeling Charge will not be separately paid by any customer taking transmission service over the ISO controlled grid. Instead, the Subscriber Wheeling Charge will be a component deducted from the revenues received from customers paying the TAC for imports or the WAC for exports on the Subscriber Participating TO scheduling points.

- Stakeholder Feedback

  Six Cities and Gridworks requested specific examples of how and when the SWC would be calculated, disbursed, paid by non-subscribers, etc. Those examples have been included in Appendix A to the Revised Draft Final Proposal.

  BAMx and CalCCA support the principle that the costs of the Subscriber PTO Model should not be included in the TRR for the TAC, and support the above-mentioned revisions to the revenue recovery of the Subscriber Wheeling Charge because they are consistent with the principle that the Subscriber Participating TO costs should not affect the Regional TAC or WAC. BAMx suggests that the ISO use the term Subscriber Wheeling Charge in the revised draft final proposal and draft tariff language instead of TAC or WAC to avoid any confusion with the Regional TAC or WAC. The ISO agrees and has tried to avoid any confusion by using the Subscriber Wheeling Charge term throughout the various stages of the initiative.

  TransWest supports the transmission charges, including the Subscriber Wheeling Charge, that are described in the Draft Final Proposal. TransWest will be funding the cost to build and operate the TWE Project, similar to other Participating TOs. However, unlike the existing Participating TOs, TransWest will not include its TRR in the ISO's existing TAC or WAC. Therefore, TransWest will need to charge both subscribers and non-subscribers for transmission services on the TWE Project. The Draft Final Proposal accommodates these requirements in a fair and equitable manner consistent with both open access principles and the general concept in FERC-regulated transmission that the "beneficiary pays."

  Clearway's understanding is that the SWC is not required to be formulaic. The ISO confirms that this is correct, similar to the other Participating TOs, the ISO has not prescribed to any Participating TO how to develop its TRR or rate. But the Subscriber Participating TO will need to get FERC approval of the SWC similar to any other Participating TO.[18] Six Cities and NextEra had similar concerns regarding the promulgation of the rate. Six Cities is correct, in that the Subscriber Participating TO has the burden to design and support its intended rate as just and reasonable and consistent with FERC's transmission rate principles. ISO stakeholders will have the opportunity to review and challenge the Subscriber Participating TO's filing proposing rates for non-subscriber use of its assets.

  As noted above in the formula, NextEra is correct, the revised proposal to be a netting of the Subscriber Wheeling Charge from the applicable TAC/WAC rate charged to non-subscribers using the transmission facilities. The proposal further recommends that any revenue surplus be credited toward other Transmission Owners ("TO"). NextEra requested clarity on why the TOs are the correct entity to receive the over collection as opposed to the non-subscriber Scheduling Coordinator ("SC") that was overcharged for use of the subscriber transmission facility. NextEra has a misconception that the non-subscribers would be overcharged. If the non-subscriber is a

[18] Appendix F, Schedule 3, Section 6 and 8.

LSE in the ISO BAA, it will pay the TAC, and those revenues need to cover all of the Participating TO's TRR. If the non-subscriber is exporting from the ISO BAA, that non-subscriber would pay the WAC at the export scheduling point. The WAC revenue also pays the Participating TO's TRR. Thus to ensure the lowest cost for transmission within the ISO BAA, the revenue needs to be disbursed to the Participating TOs and not the SC for the non-subscribers.

SCE believes that there is no basis for an SWC, since all of the costs of the Subscriber Participating TO facilities are to be recovered through charges to the subscribers. SCE states that from a rate development perspective, since the revenue requirement costs for Wheeling service over the Subscriber Participating TO line would be $0, any SWC rate would be $0 per MWh. Any revenue collected through a positive SWC rate would represent a double collection of the underlying revenue requirement costs of the Subscriber Participating TO facility. SCE claims this approach also avoids the administrative burden of the Subscriber Participating TO filing a rate case at FERC (that may ultimately be rejected since all costs are already recovered from subscribers). SCE therefore proposes that the ISO WAC assessed for use of the Subscriber Participating TO facility should not include any aspect of an SWC: The ISO agrees, that the ISO WAC will not include the TRR of the Subscriber Participating TO and the ISO WAC will be used as the rate assessed at the Subscriber Participating TO scheduling points. However, as stated above, the ISO disagrees that non-subscribers should pay $0 to use the Subscriber Participating TO transmission facilities.

SCE also believes that the Subscriber Participating TO should not be reimbursed for usage of the Subscriber Participating TO facilities when there is usage in the import direction. As stated above, the ISO supports principles of cost causation and believes the Subscriber Participating TO should be compensated for non-subscriber use of their transmission facilities. In addition, the ISO notes that FERC precedent applicable to participant-funded transmission projects includes expectations that the developer will have a rate on file with FERC for non-subscriber service on subscriber-funded transmission facilities.

Instead, SCE believes the ISO should pay the Subscriber Participating TO congestion revenue associated with the exit point from the Subscriber Participating TO by allocating the Subscriber Participating TO CRRs associated with its transmission. SCE claims this would not involve any rate pancaking, and would also generate revenues for the Subscriber Participating TO which could be returned to the Subscriber Participating TO subscribers. The ISO clarifies that, because it will charge the TAC or WAC, as applicable, to non-subscriber imports and exports from the ISO controlled grid using Subscriber Participating TO transmission facilities, there will be no pancaked rates under the ISO's proposal

SCE also comments that under the ISO proposal, if the Subscriber Participating TO's SWC was greater than the ISO WAC, this would result in an increased cost to California customers. This is completely contrary to the fundamental premise of the Subscriber model, namely Subscriber Participating TO costs will not be recovered from ISO customers and costs will not be put in the

TAC. The ISO agrees and will revise the Draft Final Proposal to incorporate a cap of the SWC rate at Regional TAC or WAC rate.

3.2.2 Future Network Upgrades

If in the future, as discussed further in Section 3.4, a generator wants to interconnect to the Subscriber PTO transmission facilities, the ISO will evaluate the generating facility as it does any other potential projects through the ISO's generator interconnection process consistent with Appendix DD of the ISO tariff. Also, if the ISO is provided portfolios from the CPUC that require generation in a certain area, the TPP determines transmission that must be built to meet the needs of the portfolio. If the Subscriber Participating TO's bid wins the competitive solicitation process consistent with Section 24 of the ISO tariff or if the Subscriber Participating TO is otherwise designated to build a new project (such as an upgrade to its existing facilities) under Section 24, then the Subscriber Participating TO could have its costs solely for the new TPP project paid for under the Regional TRR. In this scenario, the Subscriber Participating TO would establish a Regional TRR to recover those costs of new facilities or upgrades to accommodate the interconnection or TPP approved transmission facility.

Transmission Charge

	Subscriber	Non-Subscriber
During Subscriber Agreement term	Paid through transmission service agreement	Pays the TAC or WAC based on market usage
New transmission interconnection during term of Subscriber Agreement	No impact	Subscriber PTO develops a TRR to cover these additional costs and once approved by FERC, are added to the ISO TRR as if they were a new Participating TO.
Subscriber Agreement terminated	N/A	Pays the TAC or WAC based on market usage

- Stakeholder Feedback

  None

3.2.3 Termination of the Subscriber Encumbrance

The Subscriber Participating TO will establish the Subscriber Encumbrance terms and it may vary with different subscriber agreements with the Subscriber Participating TO. Whether to continuing the Subscriber Encumbrance will be determined based on the applicable regulatory requirements at that time and the Subscriber Participating TO's intentions for the future of its transmission facilities. However, the Subscriber Participating TO will not receive TAC/WAC rate recovery for the original building costs of the Subscriber Participating TO transmission facilities regardless of any continuation of Subscriber Encumbrances.

- Stakeholder Feedback

  CalCCA does not oppose this treatment as long as the Subscriber Participating TO project is fully subscribed, and the Subscriber Participating TO project will not receive any TAC cost recovery for the original project's costs and associated O&M.

  NextEra is concerned that the long-lived nature of linear transmission facilities, which can exceed 50 years, paired with the ISO's proposed termination of the subscriber encumbrance after the initial Subscriber Participating TO agreement (e.g., 30 years) would effectively require Subscriber Participating TO developers to "depreciate" the full value of certain transmission assets before the end of their useful life. NextEra suggests that this mismatch may result in scenarios that are inconsistent with FERC accounting and ratemaking principles and may not be supported by market prices for delivered power. The ISO is not setting a date for the length of the Encumbrance, the term of which will be up to the Subscriber Participating TO and the subscriber. Any concern of inflating initial costs, accelerated depreciation and insufficient payment would be between those two entities. The ISO is merely answering the question of what TAC/WAC recovery will there be once the Encumbrance is terminated.

- Revised Draft Final Proposal for Transmission Costs

  The ISO qualified the solution proposed in the Draft Final Proposal. The ISO will assess the TAC for non-subscriber imports using the Subscriber Participating TO scheduling point(s) and assess the WAC for non-subscriber exports using the Subscriber Participating TO scheduling point(s). If a new generator in the future were to connect to the Subscriber Participating TO transmission facilities, schedules for the new generator output not using subscriber rights will be assessed as a non-subscriber use of the Subscriber Participating TO transmission facilities. The revenue received from non-subscriber deliveries on these scheduling points will first pay the Subscriber Wheeling Charge for import and exports using the Subscriber Participating TO transmission facilities and the remainder will be available to pay the TRR of the other Participating TOs. The Subscriber Wheeling Charge will not be greater than the TAC or WAC.

  For any future network upgrades required by the generator interconnection process or TPP that is not part of the original build, the Subscriber Participating TO will develop a FERC-approved TRR that will be incorporated into the ISO's TAC and WAC.

The ISO and Subscriber Participating TO will memorialize the original-build costs and a schedule of depreciation as well as the initial subscriber term. At the end of the Subscriber Encumbrance term, the decision whether or not to continue the Subscriber Encumbrance will be determined based on the applicable regulatory requirements at that time and the Subscriber Participating TO's intentions for the future of their transmission facilities. The Subscriber Participating TO will not include its TRR in the TAC or WAC for the original build cost of the Subscriber Participating TO transmission facilities.

3.3 Transmission Cost Allocation

3.3.1 Cost to Subscribers

- Background

  Consistent with the design of the Subscriber Wheeling Charge discussed above, the Subscriber Participating TO will have its own TAC Area. The subscriber has already paid for the cost of transmission and congestion on the Subscriber Participating TO transmission facilities. In the case of the TransWest Project, the subscriber right for an ISO load serving entity would get the transaction to the New substation connecting to the Harry Allen – Eldorado transmission line.

  If the subscriber has already purchased ancillary services, it will not pay those charges. Similar to other Existing Contract Rights holder, the subscribers with Subscriber Rights will be excluded from bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation. They are exempt from these additional costs because: (1) the SC is providing its own supply to meet its own demand and the ISO is not economically dispatching resources to meet its load; (2) these schedules are not optimized by the market, and (3) the supply resource is a price taker and not eligible for bid cost recovery. As such, costs associated with these schedules will be minimal. The ISO will calculate all other ISO charges, including losses, in accordance with the tariff.

  If a non-subscriber uses Subscriber Participating TO transmission facilities, the SC would pay all applicable costs including the TAC or WAC, congestion and all other ISO charges, including losses, as calculated in accordance with the tariff.

- Stakeholder Feedback

  PCW and TransWest support the proposed cost to subscriber's process.

- Revised Draft Final Proposal

  The ISO does not propose to change the solution in the Draft Final Proposal. The Subscriber Participating TO will have its own TAC Area. Similar to other Existing Contract Rights holders, the subscribers have already paid for the cost of transmission and congestion and the ISO will apply the Existing Contract tariff provisions. Provided the subscriber uses a balanced schedule, it will be excluded from bid cost recovery allocation, offsets and IFM congestion allocation. If the subscriber already purchased ancillary services, it will not pay those charges.

3.3.2 Cost to Non-Subscribers

- Background

  Non-subscribers seeking to deliver through the existing ISO footprint and on the Subscriber Participating TO project will pay the TAC or the WAC, as applicable, for use of both transmission systems. The ISO will have Locational Marginal Prices ("LMPs") at each of the Scheduling Points on the Subscriber Participating TO transmission facilities and at the generation connected to the project. Energy, ancillary services, and all other applicable ISO charges will be charged in accordance with the ISO tariff.

  As discussed above, the Subscriber Wheeling Charge will be used to reimburse the Subscriber Participating TO for the use of its transmission facilities by non-subscribers and will be deducted from the TAC and WAC. Under the revised Subscriber PTO Model, Scheduling Coordinators using the Subscriber Participating TO's transmission, other than a subscriber, and other portions of the ISO Controlled Grid will not pay both the applicable Subscriber Wheeling Charge and the ISO's Access Charge separately. As stated above, to avoid rate pancaking, the ISO will charge the TAC or WAC, as applicable, to imports and exports at the Subscriber Participating TO scheduling points. The ISO will allocate revenues for the Subscriber Wheeling Charge through the ISO's settlement systems.

- Stakeholder Feedback

  Clearway requested clarification on CRRs. Based on the discussion on the stakeholder call, Clearway's understanding is that there would be no CRRs for the non-subscribed use of the north-south capacity. If there are no CRRs on the north-south portion, Clearway questioned who would receive the congestion revenue based on the congestion component of LMPs at the three new ISO scheduling points on the TransWest Express system. Similarly, for south-north congestion, it asked who would receive congestion revenues, assuming no market participant holds CRRs for that south-north path. The ISO would like to clarify its response to Clearway's CRR question at a high level. The CRR model removes the capacity associated with ETCs and TORs. So in the case of the Subscriber Participating TO transmission facilities, the capacity associated with the Subscriber Right is removed from the CRR model. Then the ISO releases 65% of system capacity (all constraints and thermal limits) in the annual process to load serving entities. The remaining 35% is available in the monthly process. For the annual allocation, the ISO allows LSEs to nominate up to a maximum of 75% of their historical load. After the ISO has held the three annual allocation tiers, the ISO then opens up for the auction participants. The auction revenues do go into the CRR balancing account, but the balancing account is no longer used to fund shortfalls on CRR payments. The ISO uses only the Day-Ahead Market congestion rents to fund CRRs and if there are insufficient congestion rents the CRR payments are reduced (to all CRR holders allocation and auction) to the level of Day-Ahead Market congestion rents collected. Auction revenues go back to demand on a monthly basis. Congestion revenue on the Subscriber Participating TO facilities is used to provide the perfect hedge to their off-takers.

- Revised Draft Final Proposal

  The ISO does not propose to change the solution proposed in the Draft Final Proposal. Non-subscribers load will pay the TAC and non-subscriber exports will pay the WAC. The Subscriber Participating TO will receive revenue commensurate with its Subscriber Wheeling Charge and the non-subscriber use of its transmission facilities.

3.4 Generator Interconnection Process and Subscriber PTO Project Interconnection

- Background

  As part of the transmission interconnection request process for the Subscriber Participating TO, the affected Participating TO and CAISO will study the project for interconnection facilities, and reliability and deliverability network upgrades. If upgrades have been developed in the TPP related to the generation served by the Subscriber Participating TO project for purposes of meeting the portfolios established by the CPUC, then the Subscriber Participating TO will have the first right of refusal to those upgrades up to the capacity include in the portfolio. If additional upgrades are required for the generation served by the Subscriber Participating TO on the then existing ISO controlled grid it will still be financed upfront by the generator connected to the Subscriber Participating TO transmission facilities and the existing Participating TO will reimburse the generator consistent with the Generator Interconnection and Deliverability Allocation Procedure ("GIDAP"), Appendix DD and Section 25 of the ISO tariff that governs generator interconnection.

  If the TPP does not identify upgrades required for the Subscriber Participating TO project based on the CPUC portfolios, deliverability will be allocated as part of the next Transmission Plan Deliverability ("TPD") allocation process. In these circumstances, upgrades on the then existing ISO controlled grid will still be financed upfront by the generator connected to the existing Participating TO, which will reimburse the generator consistent with the Generator Interconnection and Deliverability Allocation Procedure, Appendix DD and Section 25 of the ISO tariff that governs generator interconnection.

  When the Subscriber Participating TO has determined the project will be built the Subscriber Participating TO will notify the ISO. Once that notification is received, if subsequent non-subscriber generators desire to interconnect to the Subscriber Participating TO transmission facilities, because they have committed to become part of the ISO controlled grid, the interconnection requests will be studied and treated in accordance with Appendix DD and Section 25 of the ISO tariff. The generator would finance upfront any new network upgrades, on both the Subscriber Participating TO transmission facilities and Participating TO transmission facilities, if applicable, and those costs would be subject to refund by the Subscriber Participating TO over a five-year period. This is similar to a Participating TO, and consistent with the ISO tariff. In this case, the Subscriber Participating TO would develop a TRR in accordance with Section 26 and Appendix F, Schedule 3 of the ISO tariff to recover the cost of these new network upgrades to the

Subscriber Participating TO transmission facilities that will be included in the existing ISO TAC rate. This is consistent with the ISO's treatment of transmission upgrades on the ISO grid triggered by new generator interconnections.

- Stakeholder Feedback

  NextEra and TransWest support the ISO draft final proposal allowing for reimbursement of network upgrades comparable to the treatment of all other ISO BAA interconnecting customers. For purposes of cost recovery, treating downstream network upgrades for new generation projects that interconnect with a Subscriber Participating TO in the same manner as other projects in the ISO generator interconnection process is fair and consistent with ISO policy and FERC precedent. Generators subscribing to transmission services on a new transmission project intended to serve the ISO system should be eligible under the ISO tariff for reimbursement of network upgrades to the existing ISO system.

  BAMx, CalCCA, and SCE support the Subscriber Participating TO developing a TRR for network upgrades associated with only subsequent generator interconnection requests that are not a part of the original build of the project. They commented the ISO should only include generator network upgrades identified after the original build and identified through the generator interconnection and deliverability allocation procedures in the TAC. BAMx, CalCCA and SCE oppose allowing reimbursement of the cost of the ISO network upgrades needed to support the Subscriber Participating TO transmission facilities (i.e. network upgrades required on other Participating TO transmission facilities required by the original build of the Subscriber Participating TO transmission facilities). They argue that the FERC order approves cost reimbursement by the ISO Participating TOs for all network upgrades needed for generators interconnecting to an affecting system. However, the Subscriber Participating TO facilities would not be connecting to an affecting system, and instead would be part of the ISO BAA; therefore, generators connecting to the Subscriber Participating TO facilities should not be treated as those connected to an affecting system. The ISO understands the concern raised by the stakeholders, but with the existing tariff and the recent FERC order, generators that impact the ISO controlled grid, whether they are inside the ISO BAA or adjacent to the ISO BAA will upfront finance the network upgrades and then be reimbursed by the applicable Participating TO. There is no reason to treat generators interconnecting to the ISO BAA via Subscriber Participating TO transmission facilities differently.

  SCE and Six Cities continue to have concerns that recovery of these initial network upgrade costs on an existing Participating TO system through the TAC, claiming it would represent a violation of the principle that the Subscriber Participating TO model should not result in the ISO's TAC being increased. Subscriber Participating TO transmission facilities do not go through the ISO's Transmission Planning Process, but instead are developed based on economic considerations by Subscribers and the Subscriber Participating TO. They say the decision to go forward with a Subscriber Participating TO facility should be based on a consideration of all of the costs and benefits of the Subscriber Participating TO, without ignoring network upgrade costs. If network upgrade costs are to be socialized to all other Participating TOs with load through the ISO's TAC,

the Subscribers will be more prone to move forward with the Subscriber Participating TO facility, and in fact, the facility may be uneconomic from a societal point of view. Reliance on generator reimbursement policy alone to dictate any funding structure for network upgrades associated with interconnecting generation under the Subscriber Participating TO model is misplaced. It does not seem reasonable to fully insulate potential subscribers from costs associated with upgrades on the ISO system that are necessary to accommodate interconnection of generation and transmission services that they are purchasing. If it can be demonstrated that subscribers will also be paying TAC and WAC charges associated with their full use of the line (i.e., not for the use of the line, but for any associated use to withdraw power from the line and deliver it on the ISO system or elsewhere), SCE and Six Cities comment then it may be reasonable to include initial generation network upgrade costs in the ISO's Access Charges. The ISO clarifies that subscribers will still be paying the TAC if they are a LSE in the ISO BAA and if they are wheeling on the Subscriber Participating TO transmission facilities and exiting at a point that is not a Subscriber Participating TO scheduling point, they will be assessed the WAC. Therefore, in both instances the subscribers would be paying the WAC and TAC for transactions not using the Subscriber Participating TO transmission facilities.

With respect to network upgrade costs associated with interconnecting generation subsequent to the initial generation resources, the Six Cities reiterate their earlier comments, which requested that the ISO address situations where off-takers are not ISO LSEs. The ISO's proposal is that non-ISO, non-subscriber off-takers of subsequently interconnected resources would be assessed the ISO WAC if they exit the ISO controlled grid at an ISO scheduling point.

- Revised Draft Final Proposal

  The ISO revises the Draft Final Proposal and using the transmission interconnection process to study the network upgrades for the Subscriber Participating TO project, including the attached generation facilities, and to require the generator to finance upfront and then reimburse the generator for network upgrades on existing ISO controlled grid facilities as required by the tariff if the network upgrade is not required by the TPP. The interconnection process will also provide the deliverability network upgrades if upgrades for the Subscriber Participating TO project exist in the TPP for purposes of meeting the portfolios established by the CPUC, then the Subscriber PTO will have the first right of refusal to those upgrades. The Subscriber Participating TO transmission facilities will become part of the GIDAP base case, and available for other generator interconnection, once the ISO has been notified that the project is being built.

  Future non-subscriber generator network upgrades identified in the generator interconnection process would also be financed upfront and reimbursed consistent with the ISO tariff. The Participating TOs will be allowed to recover such costs in a TRR developed for such network upgrades, consistent with the ISO tariff. In the case of the Subscriber Participating TO, it will be allowed to recover the costs of future non-subscriber generator network upgrades identified in the generator interconnection process in a TRR, which will be developed for such network upgrades, consistent with the ISO tariff.

3.5 Transmission Planning Process and Transmission Issues

- Background

  With the new CPUC preferred system plan, high transportation electrification portfolio and the decision of policymakers to encourage the development of out-of-state wind now to ensure it is built in time to meet California's needs, the time has come to provide an opportunity for out-of-state resources to be considered in the existing generator interconnection process. The ISO seeks to effectuate this through a new category of transmission to be placed under the ISO's operational control but that would not be ISO-approved rate-based transmission paid for through the TRR of the TAC. Rather, the Subscriber PTO Model is a unique opportunity for the ISO to leverage existing transmission line development without significantly affecting all ISO ratepayers by putting the cost of the project in the TRR for the TAC and WAC.

  A Subscriber Participating TO applicant, once approved by the ISO Board will execute the APTOA requiring the Subscriber Participating TO to fully participate in the transmission planning and, once the Subscriber Participating TO has notified the ISO that it is committing to build the project, subsequent interconnection requests can be received and the Subscriber Participating TO will participate in the generator interconnection processes in advance of turning over operational control of its transmission facilities to the ISO.

- Stakeholder Comments

  Golden State Clean Energy commented that the transmission planning process will continue to be at the center of ISO's planning for new transmission, but alternative methods for developing new transmission will increase California's chances of succeeding while managing ratepayer concerns. Having such additional options allows for new business models to be created that can result in ratepayer savings and increased competition and Golden State Clean Energy urges the ISO to refrain from including any unnecessary limitations on the Subscriber PTO Model and instead preserve optionality and not create hurdles for future innovation. The primary benefit of the Subscriber PTO Model is transmission development that avoids increasing the TRR of the TAC. That benefit can be captured irrespective of the physical location of transmission and generation resources, so ISO should ensure it does not limit this potential.

  LS Power noted that in the Draft Final Proposal the ISO indicates that a new Subscriber Participating TO line would be added to the TPP if: (1) a generator interconnection request is approved by ISO that requires the Subscriber Participating TO transmission facilities, and the transmission provider agrees to be a Subscriber Participating TO in ISO's BAA; or (2) a new Participating TO wanting to join ISO that desires the Subscriber Participating TO rate recovery, and it meets all of the transmission control agreement requirements and the ISO Governing Board approves the new Participating TO. With regard to item 1, LS Power said it is unclear at what point in the generator interconnection process a request is "approved by ISO". As noted above, the ISO would not accept an interconnection request using the Subscriber Participating TO transmission facilities until the ISO has been notified by the Subscriber Participating TO that it has

sufficient subscribers and is committing to build the transmission facilities.[19] The ISO would clarify that similar to other transmission projects being added to the TPP, the Subscriber Participating TO transmission facilities would be added to the TPP once the Subscriber Participating TO has executed the APTOA and the Subscriber Participating TO and subscriber have executed the generator interconnection agreement. With regard to item 2, clarification on when ISO considers that a project "meets all of the transmission control agreement requirements" is needed. All of the transmission control agreement ("TCA") requirements would not be met until the TCA has been executed, both the TCA and Subscriber Participating TO's TO tariff have been approved by FERC, and the Subscriber Participating TO has turned over operational control of the transmission facilities to the ISO.

NextEra supports the ISO draft final proposal that allows for the annual ISO transmission planning processes to identify and approve future transmission upgrades interconnecting with, or upgrading to, Subscriber Participating TO original facilities. While the Subscriber PTO Model may provide a pathway for recovery of capital costs and operating and maintenance costs, the Subscriber PTO Model is by nature singularly focused on enabling the initial investment. However, once part of the ISO network transmission grid, any new upgrades or expansion to the line that are incremental to the initial subscriber-based investment, should be approved through the ISO transmission planning process and recovered via the TAC. The ISO agrees.

- Revised Draft Final Proposal

  The ISO proposes to maintain the Subscriber Participating TO being part of the transmission planning process and transmission issues as discussed in the Draft Final Proposal. The ISO, as requested, clarified the requirements and path to become a Subscriber Participating TO. The Subscriber Participating TO transmission facilities will become part of the TPP base case after the APTOA has been executed, and the generator interconnection agreement has been executed with the Subscriber Participating TO Subscriber.

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 the ISO calculates this 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 a Subscriber Participating TO line, the ISO may have new BAA boundary points. The generation interconnected to the project will be within the ISO BAA and will not need a MIC allocation to count for Resource Adequacy; however, it will need

[19] LS Power comments that "[T]his is not clearly defined in the tariff or GIDAP BPM." Since the Subscriber Participating TO is a policy initiative, all tariff change would be determined by FERC after the Board approval of the policy and all BPM changes are timed to be in place once FERC approves the tariff. As noted in Section 6, draft tariff language is scheduled to be published on June 22, 2023.

to go through the generator interconnection process to get deliverability similar to any other resource internal to the ISO BAA. The ISO determines deliverability for internal resources based on the ISO deliverability methodology irrespective of internal entitlements (those are for financial hedge and scheduling priority). The ISO will calculate MIC capability at new ISO BAA boundary points 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 ISO will determine the amount of available MIC at new interties as part of the annual MIC calculation process when the project is energized and every year thereafter.

- Stakeholder Feedback

  Gridworks questioned the ISO's statement that "existing MIC will retain priority above the deliverability allocation for the resources subsequently connecting to Subscriber Participating TO facilities," and that "Full or Partial Capacity Deliverability Status for a generator seeking to interconnect to the ISO controlled grid via a Subscriber Participating TO project is contingent upon all pre-cursor TPP, generation interconnection process, and reliability and deliverability network upgrades specified in the generator interconnection agreement being in service. If any required 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 generating facility can have deliverability during the next resource adequacy cycle, in advance of completion of all upgrades." Gridworks then asks, does this mean that if TransWest Express comes on line in, say, 2028, and the Trout Canyon – Lugo 500 kV line proposed in the Draft 2022-2023 TPP does not come online until 2033, then generators interconnecting to the TWE line in Wyoming could only obtain "Interim Deliverability" until the Trout Canyon-Lugo line is in service? The ISO confirms that is the process the ISO has implemented for all interconnections where not all of the upgrades are completed at the time the generator achieves its commercial operation date.

  With regard to MIC, LS Power said it appreciates the clarification that ISO provided in the Draft Final Proposal on the deliverability allocation process for generator interconnections on a Subscriber Participating TO line. While it is understood that the existing MIC will retain priority consistent with the ISO tariff, the tariff does allow ISO to transfer MIC to internal resources.[20] LS Power asks whether the ISO plans to transfer MIC associated with the out-of-state capacity in the CPUC's 2022-2023 TPP portfolio to the Power Company of Wyoming LLC projects? The ISO clarifies that this is not the case. If TransWest becomes a Subscriber Participating TO the Power Company of Wyoming LLC projects will be within the ISO BAA and therefore do not require MIC.

[20] The CAISO Tariff and BPM (see section 6.1.3.7 Deliverability of Resources Subject to Resource Transitions) does allow for transfer of Import Deliverability (MIC) to resources that transition in the BAA, however as clearly described in the BPM that is only applicable to resources that are n-service and that had actually schedules to the CAISO load for the same days and hours as those used to established MIC.

- Revised Draft Final Proposal

  The ISO proposes to maintain the MIC process as discussed in the Draft Final Proposal.

3.6.2 Deliverability Allocation Process

- Background

  Similar to any other generating facility seeking to interconnect to the ISO controlled grid, Full or Partial Capacity Deliverability Status for a generator seeking to interconnect to the ISO controlled grid via a Subscriber PTO project is contingent upon all pre-cursor TPP, generation interconnection process, and reliability and deliverability network upgrades specified in the generator interconnection agreement being in service. If any required 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 generating facility can have deliverability during the next resource adequacy cycle, in advance of completion of all upgrades.

- Stakeholder Feedback

  LS Power requests clarification on whether or not deliverability allocation for resources connecting to Subscriber Participating TO facilities would degrade existing MIC and if so, LS Power believes they should not. Because the project is connecting to an existing intertie, LS Power states it is reasonable to believe the resulting MIC in the area will be affected because the additional injection will contribute to the same downstream constraints. Consistent with the ISO's current practice, LS Power comments that existing MIC and MIC expansion in the current TPP should retain priority above the deliverability allocation for the resources connecting to Subscriber Participating TO facilities that enter future ISO queue clusters. The ISO agrees its existing MIC will retain priority above the deliverability allocation for the resources subsequently connecting to Subscriber Participating TO facilities consistent with the ISO tariff.

- Revised Draft Final Proposal

  The ISO proposes to maintain the deliverability allocation process as discussed in the Straw Proposal.

4 General Comments and Questions

LS Power and Clearway requested additional information on the ISO's statement referencing a potential for consideration of a second or non-contiguous ISO BAA to support Subscriber Participating TO projects. LS Power and Clearway requested more detail on this aspect of the proposal with explicit identification of MIC implications for both new and existing MIC and the mechanics of this model. The ISO has been approached by a project that does not have a transmission line directly connected to the ISO controlled grid but has long-term firm transmission contracts to bridge the distance from the termination of its transmission line to the ISO BAA boundary. In addition, the project has requested that the ISO be the BA for its gen-only BAA. In this instance, the project would be electrically contiguous, pay the ISO for BA services, the

transmission facilities including the Entitlements associated with the contracts would be treated as Subscriber Participating TO facilities and the Subscriber Participating TO would need to use its off-taker's MIC to bring the generation into the existing ISO BAA. For the generator interconnection process, for generators subsequent to the original build, any generator seeking to interconnect to such a project would submit an interconnection request in the generator interconnection process.

5 WEIM Governing Body Role

This initiative proposes certain tariff amendments to enhance the opportunities for transmission developer to become a Participating TO. ISO staff believes that these proposed tariff changes will go to the Board of Governors only and that the WEIM Governing Body will have no role in the decision.

The Board and the WEIM Governing Body have joint authority over any

> proposal to change or establish any CAISO tariff rule(s) applicable to the EIM Entity balancing authority areas, EIM Entities, or other market participants within the EIM Entity balancing authority areas, in their capacity as participants in EIM. This scope excludes from joint authority, without limitation, any proposals to change or establish tariff rule(s) applicable only to the CAISO balancing authority area or to the CAISO-controlled grid.

Charter for EIM Governance § 2.2.1. The tariff changes proposed here would not be "applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM." Rather, they would be applicable "only to … the CAISO-controlled grid." Accordingly, these proposed changes to implement these enhancements would fall outside the scope of joint authority.

The WEIM Governing Body also has an advisory role that extends to any proposal to change or establish tariff rules that would apply to the real-time market but are not within the scope of joint authority. This initiative, however, does not propose changes to real-time market rules.

Stakeholders are encouraged to submit a response in their written comments to the proposed classification as described above, particularly if they have concerns or questions.

6 Stakeholder Engagement

The schedule for stakeholder engagement is provided below. The ISO presented to the Board of Governors the request for TransWest to become a Participating TO and it was conditionally approved in December 2022. The Board of Governors' approval in December 2022 contemplated a further stakeholder process on the Subscriber PTO Model. The Subscriber PTO Model is anticipated to be presented to the Board of Governors in July 2023.

Date	Event
5/15/2023	Publish revised draft final proposal
5/22/2023	Stakeholder conference call on revised draft final proposal
6/5/2023	Stakeholder comments due on revised draft final proposal
6/22/2023	Publish final proposal and draft tariff language
6/29/2023	Stakeholder conference call on final proposal and draft tariff language
7/19/2023	Comments due on draft tariff language
7/20/2023	Board of Governors Meeting

The ISO will hold a stakeholder meeting on May 22, 2023 to review the Revised Draft Final Proposal. Stakeholders are encouraged to submit comments on this Revised Draft Final Proposal through the ISO's commenting tool using the link on the initiative webpage by close of business on June 5, 2023.

7 Appendix A

A number of stakeholders requested specific examples of the various components of the Subscriber PTO Model in the comments to the Draft Final Proposal. The following is an attempt by the ISO to respond to those requests.

Scenario 1: The scheduling coordinator ("SC1") is a subscriber of the TWE Project and has subscriber rights to 100 MW of Wyoming wind generation purchased from the Power Company of Wyoming and its delivery point is the SCE Default Load Aggregation Point ("DLAP"), how is this scheduled? What portion of that transaction would receive the scheduling priority that would exempt the subscriber rights holder from congestion? Would that priority extend to the bid from Eldorado to a DLAP in the ISO BAA, or would SC1 with the ETC be competing with all other resources attempting to inject into the ISO BAA at the same source and potentially expose themselves to curtailment risk?

SC1 would schedule a Gen = 100 MW and Load at SCE DLAP = 100 MW using CRN_SC1_PCW

The transaction would have scheduling priority from Wyoming to the New substation, and would not be charged for TAC, congestion, bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation. There will be a pricing node at the New substation to allow the calculation of an LMP. From the New substation to the SCE DLAP, the transaction is competing with all other transactions using the same transmission path and will pay the TAC, congestion, bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation.

Scenario 2: The scheduling coordinator ("SC2") is a non-subscriber of the TWE Project but has purchased 75 MW from PacifiCorp at Ferris and its delivery point is the SCE DLAP, how is this scheduled? What portion of that transaction would receive the scheduling priority that would exempt the subscriber rights holder from congestion? Would that priority extend to the bid from Eldorado to a DLAP in the ISO BAA, or would SC1 with the ETC be competing with all other resources attempting to inject into the ISO BAA at the same source (and potentially expose themselves to curtailment risk)?

SC2 would schedule an Import = 75 MW and Load at SCE DLAP = 75 MW

If the line were fully encumbered, the transaction would not be accepted in IFM due to lack of transmission. If the line is not fully used by the subscribers, and 75 MW were available for the transaction it would pay all ISO applicable costs, including TAC, congestion, bid cost recovery allocation, offsets and Integrated Forward Market congestion allocation. If in real-time a subscriber submits a schedule that fully encumbers the line, the market would re-dispatch the system to serve the 75 MW, which may be at a higher cost.

Scenario 3: How is the Subscriber Wheeling Charge paid?

The ISO will calculate the MW per hour of imports and exports at the Subscriber Participating TO scheduling points used by non-subscribers. While the ISO can't color code electrons or revenue,

since the TAC and WAC distribution is done on a monthly basis and all revenues collected are combined, the intent of charging the non-subscriber users of the Subscriber Participating TO transmission facilities the Subscriber Wheeling Charge is still valid.

For discussion, purposes assume in one month the non-subscriber imports are 5,000 MWH, exports are 800,000 MWH, and the Subscriber Participating TO's Subscriber Wheeling Charge is $10/MWH, the Subscriber Participating TO would be paid $8,050,000 for the month.[21]

Scenario 4: How is the Subscriber Wheeling Charge determined and what is the disbursement process[22]?

The Subscriber Participating TO will file at FERC a $/MWH rate for FERC approval that is no greater than the then existing ISO TAC or WAC. The ISO will use the rate approved by FERC in the distribution of revenues. Although the ISO will have no authority over the specifics of this rate filing, the ISO anticipates this rate would be similar to a non-firm rate for transmission service in a vertically integrated utility BAA since the transmission facilities are already paid for by the Subscribers. For discussion, purposes assume that the WAC is $14.4449/MWH and the SWC is $10/MWH. The Subscriber Participating TO will be a third category of Participating TO whereby the distribution calculation will be done first so that the Billed Regional Access Charge ("RAC") will be at its maximum amount for the month. If the total RAC in a month is $25 million, then using the scenario above, the Subscriber Participating TO would be paid $8.05 million and the remaining would be disbursed consistent with Appendix F, Schedule 3, Section 10 of the ISO tariff.[23]

The only potential revenue shortfall is if the Subscriber Wheeling Charge is so close to the TAC or WAC rate that the combined imports and exports of non-subscribers at the Subscriber Participating TO's scheduling points times is substantial, and the actual MWH for the year is less than total gross load for the ISO BAA then there could be an increase in the TRBAA for the other Participating TOs.

General Questions:

Q: How and at what location would the quantity of energy delivered into the ISO be determined for purposes of generating renewable energy credits?

A: The Subscriber Participating TO project is already in the ISO BAA, so no energy credits are delivered. The generation counts as Tier 1 Resource Adequacy capacity.

Gridworks' specific questions are address below.

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21 The current TAC and WAC charges are $14.4449/MWH. HighVoltageAccessChargeRatesEffectiveJan012023R4.pdf (caiso.com)

22 The existing disbursement process can be found in Appendix F, Schedule 3, Section 10.

23 A Participating TO receives 100% of the WAC revenue at its scheduling points, but in this proposal, the revenue is limiting the Subscriber Wheeling Charge to only the non-subscriber usage of the Subscriber Participating TO facilities to ensure that WAC revenue is available to pay for the exports and at least some of the imports on the Subscriber Participating TO transmission facilities. That is also the reason for capping the SWC.

1) Assume that a generator with Subscriber Rights (and that has thus paid for capacity on the Subscriber PTO system) is interconnected to the Subscriber PTO system in Wyoming. That generator schedules a delivery power to the New Substation where the Subscriber PTO facility connects to the existing ISO grid. At that point the generator sells its power to a California Load Serving Entity ("LSE") for delivery to its own load. Does the LSE then pay the full ISO TAC for delivery from the New Substation to its load?

   Yes. The load serving entity is still using the ISO controlled grid to move the energy from the New substation to its load and therefore must pay the TAC.

   1a) Is there any partial or full crediting of that TAC revenue back to the Subscriber PTO or to the generator that used its Subscriber Rights?

   The Subscriber Participating TO will be paid for the non-subscriber use of its line. Since the LSE has already paid the full cost to build the line, the ISO presumes that revenue would go back to the LSEs.

2) Assume instead that a non-subscriber generator is interconnected to the Subscriber Participating TO system at Wyoming. That generator sells power to a California LSE at its point of interconnection in Wyoming, and the LSE then schedules that power over the Subscriber PTO facilities and the existing ISO grid for delivery to its own load.

   First, there is a problem with the scenario. If a non-subscriber generator is connected at Wyoming, and the line is already fully subscribed, then if power is sold to a California LSE, it could only flow to the extent a subscriber does not use their entitlement, which may be very risky for the California LSE.

   2a) Does that non-subscriber LSE then pay both the Subscriber PTO's Wheeling Access Charge and the ISO TAC? According to the discussion at pages 12-13 and 17-20 of the Draft Final Proposal, it appears that the LSE would pay only the TAC, and that an amount of revenue equal to the Subscriber Wheeling Charge would be subtracted from the TAC revenue and paid to the Subscriber PTO, is that correct?

   Correct, the non-subscriber LSE would pay the TAC and the revenue from that use of the Subscriber Participating TO transmission facilities would be used to pay the SWC.

3) If, in Scenario 1 above, there is no partial or full crediting of TAC revenue back to the Subscriber Participating TO or to the generator that used its Subscriber Rights, wouldn't the non-subscriber generator described in Scenario 2 have a competitive advantage over the Subscriber Generator?

   There is a payment made to the Subscriber Participating TO as discussed above.