



Pseudo-Ties of Shared Resources

Issue Paper & Straw Proposal

May 7, 2020

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Table of Contents

1. Executive Summary.....	4
2. Background	4
3. Requirements for Shared Resource Pseudo-Tie Implementation	7
3.1. General Issues	8
3.2. Metering and Telemetry	9
3.3. Outage Management and Reporting	10
3.4. Treatment of Minimum Load and Start-up Costs	11
4. EIM Governing Body Role	12
5. Stakeholder Engagement, Implementation Plan & Next Steps	13

1. Executive Summary

This initiative proposes a limited tariff change to enable pseudo-ties with resources located outside of the CAISO balancing authority area that are shared with entities in the host balancing authority area to serve load in its native balancing authority area. With regards to resources in EIM entity balancing authority areas and load in the CAISO balancing authority area, this initiative will ensure there is no conflict with the accounting for energy transfers between balancing authority areas in the EIM by requiring the shared resource to be pseudo-tied rather than under dynamic schedules. Currently the CAISO tariff only allows pseudo-ties with resources for which the full output is dedicated into the CAISO balancing authority area. This policy initiative will address the rule changes needed to remove that current tariff-based restriction. Most of the requirements as they apply to the operation of pseudo-ties generally will also apply to such shared resources. Any special provisions as they apply to shared resources will also be reflected in the CAISO tariff and it will be necessary to document additional implementation details in separate business practice documents. The CAISO anticipates that the following requirements will also apply to pseudo ties of shared resources:

- A Logical Metering Settlement Quality Meter Data Plan, as currently required by the CAISO tariff for Scheduling Coordinator Metered Entities; and
- A Shared Resource Allocation Protocol, which would include establishing the shared pseudo-tie's operating characteristics, commitment costs, bid cost recovery for associated start-up and minimum-load costs, outage coordination, and other aspects of coordination when there are multiple Scheduling Coordinators bidding in the CAISO markets.

This issue paper and straw proposal contains the proposed framework of these elements, describes the applicability of other tariff requirements, and outlines the process for completing this phase of the stakeholder process. A more comprehensive development of enhanced functionality to address current market limitations for shared resources would be addressed in a future jointly-owned unit modeling enhancements initiative.

2. Background

Several balancing authority areas (BAAs) that participate in CAISO's energy imbalance market (EIM Entities) have joint ownership shares of EIM participating generation resources, which are transferred between BAAs using pseudo-ties.¹ CAISO's EIM implementation has accommodated these arrangements as pseudo-tied resources. In the case of dynamically transferred resources coming into

¹ Some other ISO/RTOs also support market participation by pseudo-tie resources representing less than the entire output of the generating facility, including resources providing capacity for resource adequacy. *See, e.g.*, PJM Manual 12, Balancing Operations, Version 41, Attachment F, Dynamic Transfers, pgs. 100-106 (March 26, 2020) (providing for partial unit transfers).

CAISO's BAA, dynamic scheduling (which is the other form of dynamic transfer) has been more common. The implementation of pseudo-ties in EIM has been workable for transfers of existing EIM participating generation resources between non-CAISO EIM Entities, with limitations in modeling some resource characteristics. However, some BAAs that are in the implementation process are hosts for resources that are currently dynamically scheduled into CAISO BAA or will require improved modeling of resource characteristics.²

As new entities join the EIM, the CAISO cannot support dynamic schedules of resources that will economically bid resources between EIM Entity BAAs because the energy prices would not be consistent with resource dispatch. The issue as new EIM Entities become active is that dispatchable dynamic schedules of resources between BAAs within the EIM Area would conflict with EIM's accounting of BAA-level transfers between these BAAs, which uses dynamic schedules between BAA-system portfolios of all resources within these BAAs. Essentially, a dynamic schedule would become a parallel dynamic transfer that would be priced differently from the implicit price of the regular EIM Transfer System Resource (ETSR)'s dynamic schedule, which reflects the bids of all EIM participating generation resources in the EIM BAA. This would result in inconsistency between dispatches and bids. Thus, CAISO cannot support

² Plans for currently-identified resources are as follows:

- Sutter Energy Center is currently an EIM participating generation resource for the Sacramento Municipal Utilities District as a utility within the Balancing Authority of Northern California, up to half of the plant's capacity. CAISO has asked FERC for approval of a split resource participation agreement for the remaining half of Sutter's capacity for delivery into the CAISO BAA, as a regulatory contract. Sutter is interconnected to Western Area Power Administration – Sierra Nevada Region, in the Balancing Authority of Northern California. See CAISO filing in FERC Docket No. ER20-1702.
- Los Angeles Department of Water and Power will join EIM in Spring 2021, and currently is the balancing authority for the Intermountain Power Plant (IPP), which is the source for several dynamic schedules into the CAISO BAA. EIM modeling will require the generating facility to be modeled as pseudo-ties for portions of the plant. Since some recipients of power from IPP are in the CAISO BAA, this will require the tariff change that is proposed in this stakeholder process.
- The LADWP BAA also contains the Magnolia power plant, which is partially owned by entities in the CAISO BAA, but Magnolia is located in the City of Burbank, which does not plan to initially be an EIM participant when LADWP joins EIM. Thus, continuing the dynamic scheduling of Magnolia is consistent with EIM modeling requirements.
- LADWP also includes the Milford unit 1 and Copper Mountain unit 3 in their BAA. Currently these other units are not within another EIM Entity, similar to Magnolia and additional changes are not needed at this time.
- Public Service of New Mexico's (PNM) Luna power plant and San Juan units 1 and 4 are jointly owned with Tucson Electric Power. Joint ownership modeling will not be needed when PNM joins EIM in Spring 2021 since Tucson will not join EIM until Spring 2022. A comprehensive joint ownership modeling policy initiative is currently in the roadmap for a stakeholder initiative in 2022, for implementation in 2023. Gaining experience by handling PNM's and Tucson's need as a pilot project, using functionality to be implemented in Fall 2021 for Tucson's EIM entry in Spring 2022, will be a valuable foundation for ultimately offering enhanced modeling to other market participants.

dynamic schedules between EIM Entity BAAs of resources with economic bids, and these dynamic transfers of resources must be converted to pseudo-ties.³

The key issue being addressed in this initiative is to resolve a current tariff-based limitation to only allow pseudo-ties from resources whose entire output is dedicated to CAISO balancing authority area and does not serve load in the host balancing authority area.⁴ The CAISO dynamic transfer stakeholder process in 2010-2011 covered a number of topics, including clarifying the treatment of dynamic schedules in which there can be multiple dynamic or hourly schedules from the same physical resource. At that time, though, CAISO's metering requirements required generation, including pseudo-ties, to be CAISO Metered Entities because the CAISO required direct polling. This meant that only full physical resources could be pseudo-ties because the resource itself was physically metered at the generation boundary and thus could not be split into multiple entities. Since the dynamic transfer stakeholder process in 2010-2011, tariff changes have broadened the opportunity for Scheduling Coordinators for generation within the CAISO BAA to provide metering using other mechanisms than direct polling of meters by CAISO.⁵ This change did not address metering for pseudo-ties, but did create processes that can enable the modeling of multiple shares of a physical resource as pseudo-ties. This issue paper and straw proposal addresses the minor tariff change needed to enable the modeling of multiple shares of a resource as pseudo-ties into the CAISO BAA.⁶ This initiative is not anticipated to require system changes to enable dynamic transfers into CAISO, because it will utilize the market functionality that CAISO has previously developed for pseudo-ties between EIM Entities.

This initiative addresses the near-term needs of allowing dynamically transferred resources, from new EIM Entity BAAs into the CAISO BAA, to continue participation in CAISO's markets. CAISO proposes to model each share as a simple generator with start-up and minimum-load costs, and a single operating

³ This inconsistency in modeling would apply between any BAAs in the EIM area. The conflict with dynamic schedules between a BAA in the EIM Area and a non-EIM BAA does not have this issue because there is no ETSR for a non-EIM BAA. Similarly, conflicts with a resource's bids and dispatch does not occur with self-scheduled resources or resources whose dispatch is driven by telemetry instead of economic dispatch, because these resources do not have bid prices.

⁴ CAISO Tariff, Appendix N, Sections 1.2.1.2 and 1.2.1.10 require the total output of a pseudo-tie generating unit to be telemetered to CAISO, through a pre-determined intertie where it competes in the market's congestion management.

⁵ CAISO Metering Rules Enhancements initiative, available at <http://www.caiso.com/StakeholderProcesses>. FERC filing ER17-949 filed 2/8/2017, approved 3/31/2017 and 12/15/2017. CAISO tariff section 10.3, Metering For Scheduling Coordinator Metered Entities, establishes the applicable eligibility and processes.

⁶ CAISO considered and rejected alternatives of (a) including a provision in the EIM Entity Agreement for an affected BAA to permit partial pseudo-ties to the CAISO, or (b) requiring an affected EIM Entity to assume responsibility for all imbalances of the jointly owned generation. Option (a) would still require FERC approval of the agreement, would be inconsistent with other EIM Entity Agreements (which are not intended to deal with issues between CAISO and market participants within the EIM Entity), and would require non-conforming pseudo-tie agreements between CAISO and the resource owners. Option (b) would alter existing agreements between the affected EIM Entity and resource owners.

range (as the similar EIM participating generation resources are modeled).⁷ This initiative does not address related issues of modeling the physical characteristics of multiple pseudo-tied shares (for example, configuration changes in combined cycle generators). CAISO's market initiatives roadmap includes consideration of a comprehensive modeling solution that will more accurately align the market model with the operation of jointly-owned resources, to alleviate some of the potential operational challenges, and also consider and address potential settlement implications of modeling jointly-owned resources. This initiative is included on the market initiatives roadmap in the 2021-2022 timeframe, to be implemented by 2023.⁸

3. Requirements for Shared Resource Pseudo-Tie Implementation

In the near-term, creating multiple shares of a pseudo-tie raises additional issues than when a single owner has responsibility for all operational and financial consequences of operating the pseudo-tie resource. When there are multiple owners of a generator, the modeling is more complex, although it can be facilitated when a single entity can act as a coordinator or operator among the multiple owners. This issue paper and straw proposal describes the requirements for a Shared Resource Allocation Protocol to be developed among the joint owners, and expects that the joint owners will designate one of their Scheduling Coordinators as the coordinator and operator for the overall resource's protocol. This issue paper and straw proposal calls this entity the Protocol Administrator. In that case, many of the technical details are consistent with the implementation for a single-owner resource.⁹

By establishing a resource with shared ownership or rights, requirements for additional metering and telemetry processes and the establishment of an outage allocation procedure are key requirements imposed upon the shared resources. Other issues are also affected by these, such as allocation of start-up and minimum load costs for bid cost recovery. Each generating unit will remain subject to all CAISO tariff requirements, contractual terms, and business practices that are applicable to generating unit

⁷ Except for requirements due to crossing BAA boundaries, pseudo-ties are treated like internal generation, including eligibility to be certified to provide ancillary services, and CAISO carrying the associated operating reserve obligations and receiving credit for frequency response (thereby reducing requirements for which CAISO has needed to contract with other BAAs for responsive capacity).

⁸ The CAISO Final Policy Initiatives Roadmap 2020, page 20, is available at <http://www.caiso.com/Documents/2020FinalPolicyInitiativesRoadmap.pdf>.

⁹ Implementation of a pseudo-tie requires agreements among multiple entities, including agreements between the resource owner and its balancing authority and transmission provider, and a coordinated operating procedure between CAISO and the Native Balancing Authority Area to facilitate continued delivery to the desired delivery points. (Reference: CAISO tariff, Appendix N (Pseudo-tie Protocol), section 1.2.1.14.) In the case of dynamic schedules, the tariff's Appendix M (Dynamic Scheduling Protocol), section 1.5.12, requires that only one Dynamic System Resource may be associated with any one physical generating resource, unless CAISO approves an implementation plan to establish multiple Dynamic System Resources for that generating resource. The Shared Resource Allocation Plan discussed in this document may serve the role that an implementation plan serves for dynamic schedules.

participation in the CAISO markets. The fundamental principles are further outlined in the following sections, including in summary:

- Shares of a resource that are associated with an owner within the CAISO BAA will be registered as CAISO area resources that are pseudo-tied to the CAISO BAA, and represented by a Scheduling Coordinator. They will be modeled within the CAISO BAA, separately from the shares of the native or EIM Entity BAA where the physical resource is interconnected and any other shares. Scheduling Coordinators for owners within CAISO will submit schedules and bids using the existing market mechanisms as a pseudo-tie resource.
- The host EIM Entity will register its share of a shared pseudo-tie resource as an EIM Resource, as will other EIM Entities who have shares of the shared pseudo-tie resource. (This would not be necessary for a native BAA not participating in the EIM.)
- The EIM Entity's operations will see separate resources at the shared pseudo-tie resource's modeled location.
- The Protocol Administrator, on behalf of the Pseudo-Tie PGA owners, will provide telemetry signals to CAISO that represent separate output values for each Pseudo-Tie PGA owner, and will coordinate a logical metering procedure, discussed in section 3.2.
- The Pseudo-Tie PGA owners' Scheduling Coordinators will submit separate outage cards for their shared pseudo-tied resource, following an outage management procedure discussed in section 3.3.

An initial example for implementing shared-resource pseudo-ties is the Sutter Energy Center, which has a single owner but arrangements for sales to two BAAs that are both EIM Entities, through separate Scheduling Coordinators: the SMUD portion of BANC which participates in EIM, and the full CAISO market.¹⁰ Like CAISO's arrangements with Sutter Energy Center, a shared resource Pseudo-Tie PGA Owner will execute the *pro forma* Pseudo-Tie Participating Generator Agreement contained in Appendix B.16 to the CAISO tariff.

3.1. General Issues

General requirements for full participation as a pseudo-tie in the CAISO market include the host EIM Entity's execution or updating of the Dynamic Transfer Balancing Authority Operating Agreement, and any other associated agreements. Appendix N of the tariff (Pseudo-Tie Protocol) and various other tariff sections state further requirements. These agreements ensure incorporation of all tariff requirements associated with generating unit participation in the CAISO markets. This section describes the aspects of these agreements and tariff provisions that will need particular attention for shared pseudo-tie resources.

The Pseudo-Tie PGA must be executed prior to registering shared pseudo-tie generating units in the CAISO systems. Separating the resources prior to registration allows each independent resource to be

¹⁰ See FERC Docket No. ER20-1702.

individually treated as a generating unit according to the rules applicable to the markets in which it will participate. In the case of a resource that has multiple owners, more details must be addressed in the operating procedures than may be necessary when an entire physical generator becomes a pseudo-tie.

A Scheduling Coordinator must represent each share of the resource that participates in EIM or other CAISO markets, as required by the CAISO tariff for its participation. During the process for implementing each share of the resource, CAISO will review, among other things, the logical metering calculation for each shared pseudo-tie resource to confirm meter data accuracy for settlement purposes consistent with the requirements for Scheduling Coordinator Metered Entities.

Each Scheduling Coordinator for a Pseudo-Tie PGA owner representing an ownership share that participates in CAISO markets must assume the financial and operational responsibility, and compliance with the tariff rules, for operating its share of the pseudo tied resource, in accordance with the Shared Resource Allocation Protocol among the resource owners. CAISO may issue dispatch instructions to each share of the resource participating in EIM and separate dispatch instructions to each share that participates in the CAISO real-time market, which together require the resource to transition through what would otherwise have been a forbidden region, or a configuration change for a multi-stage generator. Because CAISO does not propose enhancements as part of this iteration that allow for modeling of joint ownership or multi-configurations of the shared resources, should this circumstance arise, the Protocol Administrator must ensure that operate the resource output is consistent with the CAISO dispatch instruction separately issued to each share of the resource, and CAISO will settle each share according to the resource's response to the dispatch instructions. CAISO cannot currently model the resource's forbidden regions and will therefore not specifically address operation within the forbidden region for the resource as a whole. If the shared pseudo-tied resource has uninstructed deviations, CAISO's share of the uninstructed energy will be limited to a proportional share based on the resource's total instructed energy, as it would be for a dynamic schedule with multiple dynamic or non-dynamic schedules.¹¹

3.2. Metering and Telemetry

The Protocol Administrator, on behalf of the Pseudo-Tie PGA owners, will provide CAISO with separate telemetry data for the entire resource and for each share of the resource, in addition to any other telemetry data that may be required for CAISO market participation. The parties will test and confirm the transmission of the specified data points, prior to the shared resources participating in CAISO markets, including ongoing testing and validation that is required for all supply resources.

¹¹ Appendix B.9 of the CAISO tariff (Dynamic Scheduling Host Balancing Authority Operating Agreement), section 6.4 (Delivery of Megawatts) states that the CAISO and the Host Balancing Authority will share in the real time deviations from the dynamic, non-regulation ancillary services and energy from the dynamic System Resource, for which the CAISO's maximum responsibility will be on a pro rata basis.

The Protocol Administrator, through the Pseudo-Tie PGA owners, will establish a Logical Metering Settlement Quality Meter Data Plan through existing CAISO processes, which will be subject to approval by CAISO using the requirements for Scheduling Coordinator Metered Entities. The host EIM Entity will directly report its meter data for market settlements, along with the telemetry and meter data for other shared resource owners, and e-tags will report the hourly production for the other shares for interchange accounting. Meter data for other participants' shares will use the "logical metering" process documented in their SQMD plan. The SQMD Plan should reflect an expectation for partial resources that metering will reflect and follow the dispatch instruction to extent feasible, clearly explain how deviations will be handled, and account for the outage allocation methodology outlined in the next section.

3.3. Outage Management and Reporting

If the resource experiences an outage or derate, the Pseudo-Tie PGA owners' Scheduling Coordinators will be required to report an outage of each shared resource according to the CAISO tariff's outage reporting requirements, including resource adequacy substitution and availability requirements. Any allocation of planned and forced outages between each share of the resource may necessarily be complex because it must account for the specific generating unit's operational characteristics and pre-existing contractual obligations. The CAISO tariff will provide a default outage allocation methodology as stated below, but specific details may need to be developed by share owners in their Shared Resource Allocation Protocol, which would identify conditions that could lead to disproportionate outages, and describe how outages and derates will be allocated in these conditions. By default, CAISO anticipates that outages and derates will be shared proportionally (pro-rata based on each owner's share of plant output at the time of the outage) between the proposed shared resources whenever possible; i.e., not otherwise required by operational characteristics such as infeasible dispatches, or by pre-existing contractual obligations). Each share of the resource will be subject to Section 9 of the CAISO Tariff for all matters regarding the submission and approval of outages. In addition, the Shared Resource Allocation Protocol must define the procedure for the allocation of outages between the shares, which will be subject to agreement by CAISO and each owner participating in CAISO markets, prior to participation of any shared resource in the CAISO markets. For calculating the pro-rata allocation, the Shared Resource Allocation Protocol should use the MAX_GEN of each share over the total cumulative MAX_GEN of all shares using the MAX_GEN values defined in the Pseudo-Tie Participating Generator Agreements, the host EIM Entity's Dynamic Transfer Balancing Authority Operating Agreement, and the EIM Participating Resource Agreement. An illustrative formula for this preferred default allocation for maintenance and forced outages is:

$$\text{Outage allocation to Split Resource}(n) \text{ in MW} = \frac{\text{Split Resource}(n) (\text{MAX_GEN})}{\sum_1^n \text{Split Resource}(n) (\text{MAX_GEN})}$$

Where MAX_GEN values are identified in Schedule 1, Section 1 of the Pseudo-Tie Participating Generator Agreement, and EIM Participating Resource Agreement

The protocol should not duplicate resource changes that would normally be recorded as master file revisions, such as long-term changes to resource capabilities. Any modifications proposed to the Shared Resource Allocation Protocol shall only be effective following approval by CAISO. Operational experience may lead to revisions to the Shared Resource Allocation Protocol, CAISO will maintain the effective version of the Shared Resource Allocation Protocol, and the Pseudo-Tie PGA owners and Protocol Administrator shall maintain copies of the approved protocol. Among other functions, the protocol will form the basis of any necessary after the fact review or monitoring of the outage reporting. The CAISO shall have the right to require the Pseudo-Tie PGA owners or Protocol Administrator to submit documentation to demonstrate compliance with the Shared Resource Allocation Protocol.

For efficiency of the associated business processes, it will be preferable for an enforcement mechanism to include an auditable self-monitoring compliance mechanism, such as submitting a report to CAISO twice per year noting how all outages have been allocated and reported, including explanations of any non-proportional allocation of outages between the shares.

Through the Shared Resource Allocation Protocol, the Pseudo-Tie PGA owners and Protocol Administrator will need to be responsible for ensuring that the sum of the resource shares has a maximum capability that is not beyond the physical capability of the plant, and the sum of the ramp rates and any other operational characteristic of each shared resource is not beyond the capability of the plant.

3.4. Treatment of Minimum Load and Start-up Costs

Bid cost recovery ensures that market revenues over the course of a day provide at least the revenue that the resource owners would receive if they were settled at their submitted bids. Factors that can cause a revenue shortfall include changes in real-time market conditions from the time when a start-up instruction is given, or when the most optimal solution in the market optimization does not fully compensate start-up and minimum load costs when settlements are at marginal energy prices. When a shared resource's operating conditions are like single ownership pseudo-tie arrangements, existing tariff rules are expected to provide the needed bid cost recovery. Bid cost recovery will apply separately to each pseudo-tied share, based upon each share's resource characteristics and costs, commitment, and bid in costs. If unique circumstances affect the allocation of the overall resource's costs, they should be described in the Shared Resource Allocation Protocol developed among the resource owners and submitted for CAISO approval.¹² Start-up and minimum load costs should be equitably allocated among the owners based on their shares' proportion of costs, and the sum of the shares' costs should not

¹² The cost allocation may be relatively simple in a case like two owners with equal shares of a 2x1 combined cycle generator. A different instance could be a generator where one owner has 10% of its capacity, another owns 90%, and the minimum load is 20% of the total capacity. The owners would agree and document between themselves how to allocate the start-up and minimum load costs, with a potential allocation being 100% to the majority owner and the minor owner being unable to bid unless the generator is already running.

exceed the total costs that would be represented if the shared resource were participating in the market as a single resource. CAISO recognizes that there may be additional details to be developed and addressed as this stakeholder initiative progresses.

4. EIM Governing Body Role

This initiative proposes to modify tariff rules governing resources that are pseudo-tied into the CAISO balancing authority area to enable CAISO to establish pseudo-ties to only a portion of the resource's capacity. CAISO staff believes this initiative should be classified as hybrid, with the primary driver being EIM-specific. Accordingly, before filing the tariff amendment, staff would seek approval from both the EIM Governing Body and the Board for the entire initiative.

This initiative would result in tariff amendments that are not severable, meaning that there would not be separate tariff provision for bidding into the day-ahead market as opposed to the real-time market. Rather there would be one set of tariff rules, primarily in Appendix N, that govern both market time frames.

To the extent the tariff revisions affect the real-time market, the EIM Governing Body has primary authority, because the primary driver for the initiative is an issue that is specific to EIM balancing authority areas.¹³ Namely, when balancing authority areas join EIM, resources with shared ownership are not able to continue their dynamic scheduling arrangements into the CAISO balancing authority area. The goal of this initiative is to resolve that issue, which applies only if the balancing authority area is joining EIM.

The proposed changes also affect participation in the day-ahead market, and the EIM Governing Body cannot have primary authority over changes to day-ahead market rules. The Board of Governors must approve those changes, which means the initiative is hybrid.

Because the primary driver for the initiative is to resolve an issue specific to EIM, the following rule applies: "The whole policy initiative goes first to the EIM [G]overning [B]ody for approval and then the ISO Board would consider the entirety of the proposal on a non-consent agenda basis; in other words, both bodies would need to approve the initiative" Charter for EIM Governance, § 2.2.1.

This proposed classification reflects the current state of this initiative and may change as the stakeholder process moves ahead. We encourage stakeholders to submit comments on this proposed

¹³ The EIM Governing Body has primary authority over a proposed tariff rule change if either the rule is EIM-specific or, even if the rule is generally applicable, if the primary driver for the change is an issue that is specific to EIM balancing authority areas. This initiative satisfies the latter test. The new tariff rules would not be EIM-specific, because the pseudo-tie capability would apply to resources coming into CAISO from all outside balancing authority areas, whether or not the balancing authority area had joined EIM.

classification and, if they disagree, to include an explanation of which classification would be more appropriate.

5. Stakeholder Engagement, Implementation Plan & Next Steps

The CAISO is committed to stakeholder engagement and has developed the following plan to ensure stakeholders are involved in the development of this proposal. To ensure that any implementation issues are addressed before board approval, CAISO will develop draft language *before* taking the final proposal to the Board of Governors and EIM Governing Body.¹⁴ This process change is reflected in the following table:

Stakeholder Engagement and Implementation Plan

Date	Milestone
Issue Paper and Straw Proposal	
Paper Posted	May 7, 2020
Stakeholder Call	May 14, 2020
Comments Due	May 28, 2020
Draft Final Proposal and Draft Tariff Language	
Paper Posted – <i>tentative</i>	June 16, 2020
Stakeholder Call – <i>tentative</i>	June 23, 2020
Comments Due – <i>tentative</i>	July 7, 2020
Additional Tariff Language (if needed)	
Final Proposal Posted – <i>tentative</i>	July-August 2020
Stakeholder Call – <i>tentative</i>	July-August 2020
Comments Due – <i>tentative</i>	July-August 2020
EIM Governing Body & CAISO Board of Governors	September 2020
Implementation	Q1 2021

The CAISO will discuss this issue paper and straw proposal with stakeholders during a stakeholder call on May 14, 2020. Stakeholders are asked to submit written comments by May 28, 2020 to initiativecomments@caiso.com. A comment template will be posted on the CAISO's initiative webpage, located here: <http://www.caiso.com/StakeholderProcesses/Pseudo-ties-shared-resources>.

¹⁴ The tariff changes involved in Phase 1 of this initiative do not appear to require a technology implementation, since EIM implementation has already enabled shared resources to be pseudo-tied between BAAs.