

Section	Party	Comment/Redline	ISO Response
29.7(j)(2)(D)	Six Cities	Section 29.7 (D) includes what appears to be a typo that should be corrected by the ISO. Specifically, this section states that the CAISO may “ . . . establish an Administrative Price in the Real-Time Market in accordance with Section 7.7.49 . . .” The Six Cities believe that the reference to Section 7.7.49 is incorrect, and the referenced section should be either 7.7.4 or 7.7.9. The Six Cities request clarification with regard to the appropriate reference in Section 29.7 (D).	As noted in the posted draft tariff language, these changes will be made concurrent with the ISO’s filing of the updated administrative pricing policy adopted by the ISO board. Here we tried to preview that amendment as it pertains to EIM and anticipate what reference may be used for that purpose. Section 7.7.9 is currently not used. We apologize for any confusion this may have caused stakeholders in their review. That said, there does not appear any objection to the proposed tariff language to implement this year one enhancement.
29.7(j)(2)(D)	SCE	References Section 7.7.9 which is not used.	See note above.
29.7(j)(2)(E)	Six Cities	Section 29.7 (E) should be revised to remove the second “or” in the following statement: “in additional or as an alternative, or take any of the actions . . .”	The ISO will correct this drafting error.
29.7(j)(2)(E)	PacifiCorp	(E); in addition or as an alternative, <del>or</del> take any of the actions specified in Section 7.7.15 with respect to the Real-Time Market.	The ISO will correct this drafting error.
29.11(b)(1)(A)(i)	SCE	Section 11.5.1.1 identifies various types of energy included in FMM IIE that will be settled at FMM LMP. Manual Dispatch Energy is not identified in Section 11.5.1.1. Should this section reference that the FMM Manual Dispatch Energy is settled at FMM LMP?	The tariff language includes EIM Manual Dispatch Energy in Section 29.11 (b)(1)(A)(i).
29.11(b)(1)(A)(ii)	SCE	Section 11.5.1.1 identifies various types of energy included in FMM IIE that will be settled at FMM LMP. Manual Dispatch Energy is not identified in Section 11.5.1.1. Should this section reference that the FMM Manual Dispatch Energy is settled at FMM LMP?	The tariff language includes EIM Manual Dispatch Energy in Section 29.11 (b)(1)(A)(i).
29.11(b)(1)(A)(ii)	PSE	There appear to be two drafting errors in this section. Specifically,	The CASIO will correct the tariff

		<p>sub-sections 29.11(b)(1)(A)(ii) and 29.11(b)(2)(A)(ii) are both captioned “Non-Participating Resources”, but contain identical language indicating that “CAISO will include any Energy from an EIM Manual Dispatch of the EIM <i>Participating Resource</i>...” PSE suggests that CAISO change the language to “<i>Non-Participating Resource</i>.”</p>	<p>language to read as follows.</p> <p>Section 29.11 (b)(1)(A)(ii):</p> <p>CAISO will calculate the FMM Instructed Imbalance Energy of non-participating resources in an EIM Entity Balancing Authority Area in the same manner as it calculates FMM Instructed Imbalance Energy under Section 11.5.1.1, except that references to the Day-Ahead Schedule in the relevant Appendix A definitions shall be deemed references to the EIM Base Schedule and that the CAISO will include any Energy from an EIM Manual Dispatch of the <b>EIM non-participating resource</b> in the FMM that is identified by the EIM Entity Scheduling Coordinator prior to the start of the FMM</p> <p>Section 29.11 (b)(2)(A)(ii):</p> <p>The CAISO will calculate the RTD Instructed Imbalance Energy of non-participating resources in an EIM Entity Balancing Authority Area in the same manner in which it calculates <b>RTD</b> Instructed Imbalance</p>
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			Energy under Section 11.5.1.2, except that the CAISO will include any Energy from an EIM Manual Dispatch of the EIM non-participating resource in the RTD that is identified by the EIM Entity Scheduling Coordinator.
29.11(b)(2)(A)(i)	SCE	Reference to “FMM” should be “RTD”	The ISO will correct this drafting error.
29.11(b)(2)(A)(i)	SCE	<p>“Identified by the EIM Entity Scheduling Coordinator” Prior to the start of RTD?</p> <p>The tariff section that identifies the settlement price for RTD Manual Dispatch Energy to be RTD LMP?</p>	This language was not amended and is correct as drafted. That the settlement would apply in the next applicable interval is self-evident. There is no need to specify that it must be prior to the RTD interval. EIM Manual Dispatches are known only after the market has run.
29.11(b)(2)(A)(ii)	SCE	Reference to “FMM” should be “RTD”	The ISO will correct this drafting error.
29.11(b)(2)(A)(ii)	SCE	<p>Same comment as above on FMM Manual Dispatch.</p> <p>RTD Manual Dispatch Energy is not identified in Section 11.5.1.2 because it is only applicable to EIM, but the settlement price for RTD Manual Dispatch Energy needs to be specified.</p>	The settlement price for Energy associated with an EIM Manual Dispatch will be the same as the RTD Instructed Imbalance Energy Price that results from the calculation in Section 11.5.1.2. This is consistent with the year one enhancements policy. There is no further need to specify the price.
29.11(b)(2)(A)(ii)	PSE	There appear to be two drafting errors in this section. Specifically, sub-sections 29.11(b)(1)(A)(ii) and 29.11(b)(2)(A)(ii) are both captioned “Non-Participating Resources”, but contain identical	The CASIO will correct the tariff language as noted above.

		language indicating that “CAISO will include any Energy from an EIM Manual Dispatch of the EIM <i>Participating Resource</i> ...” PSE suggests that CAISO change the language to “ <i>Non-Participating Resource</i> .”	
29.11(b)(3)(B)(i)	SCE	If a non-participating resource has received a manual dispatch, the Uninstructed Imbalance Energy would be the difference between the EIM Base Schedule plus the Manual Dispatch. In Section 11.5.2 – the definition of Dispatch Instruction would need to be expanded to include EIM Manual Dispatch Energy.	The ISO will include a narrow limitation to exclude EIM Manual Dispatch for the purpose of calculating settlement of Energy in accordance with these provisions.
29.11(b)(3)(B)(ii)	PacifiCorp	<b>Settlement.</b> The CAISO will settle the Uninstructed Imbalance Energy for non-participating resources in an EIM Entity Balancing Authority Area at the applicable RTD Locational Marginal Price or Default LAP Hourly Real-Time <a href="#">LAP-Price</a> in accordance with Section 11.5.2.1 and 11.5.2.2 with the applicable EIM Entity Scheduling Coordinator.	<p>The ISO will correct this drafting error. The correct reference is to the “Default LAP Hourly Real-Time LAP Price”, which is the hourly price that is applied within a Default LAP.</p> <p>The ISO will consider whether it may be necessary to include an update to 11.5.2.2 or whether to reference that settlement here. “The Default LAP Hourly Real-Time Price will apply to CAISO Demand, <b>EIM Balancing Authority Area Demand</b>, and MSS Demand under net Settlement of Imbalance Energy, except for CAISO Demand not settled at the Default LAP as provided in Section 30.5.3.2.”</p>
29.11(i)(2)	PacifiCorp	(2) <b>EIM Market Services Charge.</b> The EIM Market Services Charge shall be the product of the Market Services Charge for each Scheduling Coordinator as calculated according to the formula in Appendix F, Schedule 1, Part A, the Real-Time Market Percentage as	The ISO will correct this drafting error.

		calculated according to the formula in Appendix F, Schedule 1, Part A, and the sum of Gross FMM Instructed Imbalance Energy (excluding FMM Manual Dispatch Energy) and Gross RTD Instructed Imbalance Energy (excluding RTD Manual Dispatch Energy Standard Ramping Deviation, Ramping Energy Deviation, Residual Imbalance Energy, and Operational Adjustments). And	
29.11(i)(3)	PacifiCorp	(3) <b>EIM System Operations Charge.</b> The EIM System Operations Charge shall be the product of the System Operations Charge for each Scheduling Coordinator, as calculated according to the formula in Appendix F, Schedule 1, Part A, <del>the</del> the Real-Time Market Percentage as calculated according to the formula in Appendix F, Schedule 1, Part A, and the absolute difference between metered energy and the EIM Base Schedules.	The ISO will correct this drafting error.
29.11(i)(4)	PacifiCorp	(4) <b>Minimum EIM Administrative Charge.</b> The CAISO will calculate the minimum EIM Administrative Charge as the product of the sum of the EIM Market Services <del>Charge</del> Charge and the EIM System Operations Charge and—	The ISO will correct this drafting error.
29.11(i)(5)	PacifiCorp	(5) <b>Withdrawing EIM Entity.</b> If the EIM Entity notifies the CAISO of its intent to terminate participation in the Energy Imbalance Market and requests suspension of the Energy Imbalance Market in its Balancing Authority Area under Section 29.4(b)(4), the CAISO will charge the EIM Entity the minimum EIM Administrative Charge calculated under Section 29.11(i)( <del>42</del> ) during the notice period.	The ISO will correct this drafting error.
29.17(f)	PSE	Sub-section 29.17(f) provides several mechanisms by which EIM Entity Scheduling Coordinators will determine the EIM Transfer limit, and must communicate that limit to CAISO. However, the tariff language does not specifically set forth how CAISO will use the transfer limit information. The CAISO should clarify the application of these transfer limits by inserting the following sentence immediately prior to section 29.17(f)(1): “The CAISO shall use the following EIM Transfer Limit determinations, as applicable, by each EIM Scheduling Coordinator for each EIM Transfer Limit.” This	The ISO agrees with this suggestion and will include an introductory “in general” section providing that the ISO shall use EIM Transfer limits for purposes of determining the available capability for EIM Transfers.

		language would make clear that CAISO will abide by the limits determined by EIM Entity Scheduling Coordinators, and would not alter the import of the rest of this section as proposed.	
29.17(f)(1)	PSE	It is PSE's understanding that EIM Transfer Availability under the interchange rights holder mechanism, described in 29.17(f)(1), includes both firm and non-firm transmission rights. As a result, 29.17(f)(1) should be revised to strike the term "firm" in both the title and text of the section; so, the title would be "Use of Transmission Rights." With this revision, the text of 29.17(f)(1) would state "The EIM Entity Scheduling Coordinator shall determine the EIM Transfer limit made available for use in the Real-time Market through transmission rights...."	The ISO recognizes the confusion the use of the term "firm" could have in this section and suggests the reference be changed to "use of interchange rights other than the available transfer capability". Subsections 1 and 2 are intended to distinguish between the PacifiCorp Interchange Rights Holder mechanism and the ATC mechanism and is interested in how best to accomplish this.
29.17(f)(3)	PG&E	The proposed Tariff language in Section 29.17(f)(3) indicates that the CAISO will use the lowest EIM Transfer limit communicated by all EIM Entity scheduling coordinators (SCs) at EIM internal interties shared among EIM Entity BAAs. If an EIM Entity communicates an EIM Transfer limit that is based on the share of the intertie that the EIM Entity can use, and not the Transfer limit available for use by all EIM Entities that may use the intertie, the EIM transfer could be constrained more than is necessary. The CAISO should clarify that it intends to use the lowest EIM Transfer limit on an intertie with multiple EIM Transfer limits only when each EIM Entity on that intertie communicates the total Transfer limit for all possible users of the intertie.	The ISO will enforce individual constraints for EIM Transfer limits submitted by each EIM Balancing Authority Area that makes capacity available on an EIM Internal Intertie. If there are two or more EIM Entity Balancing Authority Areas using the same EIM Internal Intertie, the model would enforce the individual limits for each EIM Balancing Authority Area while allowing energy to wheel through the EIM Entity Balancing Authority Areas in real-time based on the available transfer capability or interchange transmission

			rights. The net value of these flows for each EIM Balancing Authority Area and EIM Internal Intertie would be reported by the ISO as EIM Transfers. The ISO will modify section 29.17(f)(3) accordingly.
29.32	PSE	<p>Terms in this section are used similarly, and may cause confusion for market participants.</p> <ul style="list-style-type: none"> <li>- “EIM Greenhouse Gas Maximum Compliance Cost”, as used at 29.32(a)(2)(A);</li> <li>- “EIM Greenhouse Maximum Cost”, as used at 29.32(a)(3);</li> <li>- “Greenhouse Gas Allowance Price”, as used at 29.32(a)(3)(A); and</li> <li>- “EIM Greenhouse Gas Compliance Price”, as used at 29.32(a)(3)(C).</li> </ul> <p>“Greenhouse Gas Allowance Price” is defined in Appendix A of CAISO’s tariff, but only by reference to tariff section 39.7.1.1.1.4; the other terms are not specifically defined. CAISO should review proposed section 29.32 to ensure that standardized terminology is used throughout the section where possible, and that to the extent the terms noted above have independent meaning, they be independently defined in Appendix A of CAISO’s tariff.</p>	<p>The ISO will clarify the use of defined terms in section 29.32(a)(3) as follows:</p> <p>Each day the CAISO will determine the greenhouse gas maximum compliance cost for each EIM Participating Resource as set forth in the EIM Business Practice Manual, based on—</p> <ul style="list-style-type: none"> <li>(A) the EIM Resource’s highest incremental heat rate; the applicable Greenhouse Gas Allowance Price; and the EIM Participating Resource’s emission rate, as set forth in the applicable U.S. Environmental Protection Agency publication and registered in the Master File; or</li> <li>(B) a price determined in</li> </ul>

			<p>accordance with the negotiated rate option procedures in section 39.7.1.3.1; or,</p> <p>(C) with respect to, and only with respect to, Bids at EIM External Interties, the carbon dioxide equivalent emission rate of the resource with the highest such rate in the WECC region and the applicable Greenhouse Gas Allowance Price index.</p> <p>This also corrects the reference to “Greenhouse Gas Compliance Price” in section 29.32(a)(3)(A). It should reference the existing defined term “Greenhouse Gas Allowance Price”, which by definition incorporates the calculation performed in section 39.7.1.1.1.4 of the tariff.</p>
29.32(a)(2)(A)	PSE	<p>The indicated subsection places the EIM Participating Resource’s [greenhouse gas maximum compliance cost] as the maximum permissible price component of a GHG bid adder. While 29(a)(2)(B) explains the treatment of bids lacking any Bid Adder component, there is no comparable discussion of how a GHG bid adder <i>above</i> the [greenhouse gas maximum compliance cost] will be treated. PSE suggests that CAISO include, either as the final sentence in 29.32(a)(2)(A) or as a</p>	<p>The ISO will include an additional provision to clarify that an EIM Bid Adder above the greenhouse gas maximum compliance cost will be reduced to the maximum identified cost. The ISO will also clarify that an EIM Bid Adder without either a</p>



		<p>new 29(a)(2)(B), the following language: “If the Bid Adder is above the [EIM greenhouse gas maximum compliance cost] as determined in accordance with section 29.32(a)(3), CAISO will reduce the Bid Adder to the [EIM greenhouse gas maximum compliance cost] calculated in accordance with section 29.32(a)(3).” It is PSE’s understanding that the default treatment described in 29(a)(2)(B) applies only when the megawatt component of the EIM Bid Adder is left blank. If the megawatt value is filled in, but the price component is left blank, the price component of the EIM Bid Adder would be set to the default price of the [greenhouse gas maximum compliance cost]. Section 29(a)(2)(B) should be clarified to reflect this understanding.</p> <p>The [bracketed] terms noted above be addressed and defined in accordance with its request above for terminological clarity and consistency in section 29.32.</p>	quantity or price will be rejected.
29.32(a)(3)	SCE	<p>Why does this section not reference 39.7 which covers DEB, including 39.7.1.1.1.1 (b) and 39.7.1.1.1.4 which discusses how GHG prices and adders are established. The BPM probably does not need to be referenced.</p>	<p>The reference to the BPM should remain to describe the process for the calculation based on the criteria established in the tariff. The reference was intended to incorporate the negotiated rate option process, which does not need to be expanded as DEB provisions are incorporated by other sections (see section 29.39(e)). Since the ISO uses the maximum heat rate (or the worst possible emission) this isn’t calculated the same as the DEB since the DEB is a cost curve, not a single value.</p>
29.32(a)(3)(A)	PSE	<p>In the February 15 Draft Final Proposal for Year 1 Enhancements, CAISO noted that there would “be a 10% adder to the calculated</p>	<p>The ISO will include a 10% adder when calculating the maximum</p>

		cost” of greenhouse gas emission costs. The 10% adder is not specifically incorporated in section 29.32(a)(3)(A) as part of the “applicable Greenhouse Gas Compliance Price.” The 10% adder should be specifically inserted into the methodology for EIM Greenhouse Gas Maximum Cost determination.	allowed price for the day. This will be included in a revision to section 29.32(a)(3) of the ISO tariff.
29.32(a)(3)(C)	PSE	Proposed section 29.32(a)(3)(C) provides for the formulation of “a default EIM External Intertie transaction price set to the highest EIM Greenhouse Gas Compliance Cost that has been submitted to the CAISO prior to the Trading Day.” The CAISO should clarify in what circumstances the default price would actually be used, and what impact it might have on external resources; as part of this inquiry, PSE is attempting to understand whether an external resource could enter an EIM External Intertie Bid with its own, bid-in GHG adder, or whether (in the alternative) a default GHG locational marginal price would instead be applied to Non-Participating Resources. Additional clarity from CAISO regarding circumstances in which it expects this section to apply would aid market participants in evaluating the proposal.	This provision is intended to account for the option an EIM Entity has to enable economic participation on its EIM External Interties.
29.32(a)(3)(c)	Six Cities	Section 29.32 (a)(3)(C) of the ISO’s proposed Tariff language appears to be inconsistent with the description of this provision provided in the ISO’s Energy Imbalance Market Year 1 Enhancements Draft Final Proposal (“Draft Final Proposal”). The Draft Final Proposal, at page 11, describes the hourly Greenhouse Gas MW quantity and bid price to be submitted by imports on EIM external interties. Likewise, Section 29.32(a)(3)(C) relates to an EIM External Intertie transaction price. However, beyond that similarity, the description in the Draft Final Proposal and the related Tariff language seem inconsistent or potentially even unrelated. The Six Cities request that the ISO provide additional information explaining Section 29.32 (a)(3)(C) of the proposed Tariff language and how it relates to its explanation in the Draft Final Proposal.	During the tariff drafting process the ISO realized that it needed to come up with a maximum daily allowed bid. Since the ISO does not know the underlying compliance obligation, the ISO chose the highest potential cost. The expectation is that since the actual obligation is based upon annual emission factors, that the market participant will estimate their annual cost when bidding. This is done by bidding below the maximum bid price. Assuming there are sufficient GHG bids, bidding at the cap

			could lead to lost revenue when the GHG clearing price is greater than a resource annual emission cost.
29.32(a)(4)	Six Cities	Section 29.32 (a)(4), which deals with the Minimum Bid Adder Price states: "The price included the EIM Bid Adder shall not less than \$0/MWh." It appears that this sentence is incomplete, and it is unclear as written. The Six Cities request that the ISO clarify Section 29.32 (a)(4).	This provision is intended to set the floor and preclude a negative EIM Bid Adder. Participants are not permitted to bid a negative price.
29.32(b)(1)	PSE	In proposed section 29.32(b)(1), the tariff language reflects an incomplete change from the term "EIM Resources" to "EIM <i>Participating</i> Resources." The remaining reference to "EIM Resources" should be changed to reflect only participating resources.	EIM Resources is the correct term. "EIM Resources" refers to the source of the energy, while "EIM Participating Resource" refers to the entity that owns or controls the resource. The addition of "Participating" in this section was in error. All EIM Resources are participants in the market. The ISO will review and remove erroneous references.
29.32(b)(1)-(2)	PSE	In proposed section 29.32(b), subsections (1) and (2) have captions referencing "Bid Adders." Both sections would more accurately use the term "Megawatt Bid Adders", as the specific language of those subsections contemplates units being able to make available only a specified portion of their output for delivery to CAISO. 29.32(b)(1) would then be captioned "Dispatch of EIM Participating Resources with Nonzero Megawatt Bid Adders", and 29.32(b)(2) would be captioned "Dispatch of EIM Participating Resources with Zero-Megawatt Bid Adders."	The tariff currently uses the term "EIM Bid Adder" and creation of a new defined term is unnecessary. However, the ISO will include a modifier to the defined term indicating a MW quantity is contemplated.
29.32(b)(2)	PacifiCorp	Shouldn't the same language as used in (1) above "or other EIM Entity Balancing Authority Areas in California" be used here?	The ISO will include a reference to balancing authorities embedded within the ISO balancing authority area.
PG&E	29.34(m)(4)(E)(ii)	The proposed Tariff language in Section 29.34(m)(4)(E)(ii) states that	The ISO will include the

		on a monthly basis, according to procedures set forth in the Business Practice Manual for the EIM, the CAISO will calculate for each EIM Entity BAA histograms of the percentage of the difference between imports and exports scheduled at T-40 and the final imports at T-20 and calculate additional incremental and decremental requirements for the capacity test component of the resource sufficiency evaluation. The proposed language is not sufficient to understand how the CAISO will set the additional incremental and decremental requirements based on the calculated histograms. The CAISO should include specific language on the basis for how the additional incremental and decremental requirements will be set.	additional detail in the BPM and provide further support in the tariff by including a clause that states the determination will be based upon monthly historical differences between the e-tags at T-40 and T-20.
29.34(m)(4)(E)(ii)	PSE	In section 29.34(m)(4)(E)(ii), regarding the addition of incremental requirements to an EIM Entity's flexible capacity requirement, additional detail should be supplied on how an EIM Entity would calculate the incremental requirement, resolve any questions of its propriety with CAISO, and eventually remove the need for the incremental requirement. Specifically, CAISO should explain whether the calculation will be "reset" on a monthly cycle, or make clear the process that will be used.	The ISO will include additional detail in the BPM as noted above. Also, the incremental requirement is a market operator calculation based upon base schedule and tag information from the EIM Entity.
29.34(m)(5)	Six Cities	The ISO's revision to Section 29.34 (m)(5) adds a repeated word that should be removed. Specifically, the following phrase includes the word "that" repeated twice: " . . . by reducing the total Flexible Ramping Constraint capacity requirement for each Balancing Authority Area by the total amount of EIM Internal Intertie import capability to that that Balancing Authority Area . . . "	The ISO will correct this drafting error.
29.34(m)(5)	PacifiCorp	5) <b>System Wide Constraint.</b> The CAISO shall determine the Flexible Ramping Constraint capacity requirement system wide, including requirements for individual Balancing Authority Areas in the system wide constraint, by reducing the total Flexible Ramping Constraint capacity requirement for each Balancing Authority Area by the total amount of EIM Internal Intertie import capability to that <del>that</del> Balancing Authority Area from each Balancing Authority Area in the EIM Area.	The ISO will correct this drafting error.

