

Section number	Party	Comment	ISO Response
11.8.2.5.1	PG&E	<p>Step 3: If the absolute value of the result of the resource's Metered Energy less its Regulation Energy less the total Expected Energy, is less than or equal to the Performance Metric Tolerance Band, then the Day-Ahead Metered Energy Adjustment Factor will be set to one (1). Otherwise, the calculation will proceed to step four.</p> <p>Step 4: If the resource's Effective Day-Ahead Scheduled Energy less its Day-Ahead Minimum Load Energy is less than or equal to zero, then the Day-Ahead Metered Energy Adjustment Factor will be set to one (1). Otherwise, the calculation will proceed to step five.</p>	<p>We do not accept the change. The ISO is proposing to adopt a new defined term Effective Day-Ahead Scheduled Energy. This makes the first proposed change no longer appropriate. Note also that the tariff defined term Expected Energy is the "total" expected energy, therefore there is no need to add the term total.</p> <p>We do not accept the second proposed change because it is not necessary in light of Step 1. Step 1 captures the less than zero requirement because if the day-ahead schedule energy is less than the day-ahead minimum load energy, then step 1 requires you to go to step 6, which means we never get to step 4.</p> <p>With regards to the comment regarding the possibility of the small mathematical difference, consistent with its current procedures, the CAISO applies a procedure where if the difference is approaching zero (i.e., a very small mathematical difference), the MEAF will be set to 1.</p>

118.2.5.1	PG&E	<p><u>b) Participating Load Pumped-Storage Hydro Units and Pumping Load</u> <u>scheduled by CAISO to pump in the Day-Ahead Market</u></p> <p><u>Step 1. If the resource's Day-Ahead Pumping Energy is negative and its Expected Energy is negative, then its Day-Ahead Metered Energy Adjustment Factor will be the minimum of: (A) the number one (1); or (B) the maximum of (i) the number zero (0) and (ii) the ratio of the resource's Metered Energy and its Expected Energy. Otherwise, proceed to step two.</u></p>	Accept
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118.2.5.1	PG&E	<p>c) Energy Storage Resources using the Non-Generating Resource Model</p> <p><u>Step 1. If the absolute value of the result of the resource's Metered Energy less its Regulation Energy less its Total Expected Energy, is less than or equal to the Performance Metric Tolerance Band, then the Day-Ahead Metered Energy Adjustment Factor will be set to one (1). Otherwise, the calculation will proceed to step two.</u></p> <p><u>Step 2: The resource's Day-Ahead Metered Energy Adjustment Factor will be the minimum of: (A) the number one (1); or (B) the maximum of (i) the number zero (0), and (ii) the ratio of the resource's (a) Metered Energy less the Day-Ahead Minimum Load Energy and less the Regulation Energy, and (b) the Effective Day-Ahead Scheduled Energy, less the Day-Ahead Minimum Load Energy.</u></p> <p>We are requesting the introduction of NGR-specific language to address the unique operating abilities of existing battery storage resources currently bidding into the CAISO wholesale market. We agree that it is unlikely that an NGR resource would be eligible to receive Day-Ahead BCR payments, but suggest that market revenue inadequacy could result in the event of significant changes in the relevant Day-Ahead prices through the price correction process, or through similar updates.</p> <p>Likewise, while sections a) and b) above the specific processes necessary for first conventional resources, and then Pump Storage, we do not believe that they allow for accurate MEAF calculations, especially when such a resource is scheduled to charge and is also providing regulation down support.</p> <p>Example using the process from section a: With the Day-Ahead Minimum Load Energy = 0 And Resource PMIN = -2 MW</p>	<p>The CAISO does not accept this proposal because at this time the CAISO does not apply DA MEAF to NGR at all. In order to apply this to NRGs the CAISO will have to develop new rules that apply to those resources specifically. We will consider these proposed changes when these rules are developed in a subsequent stakeholder process.</p>
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Effective Day-Ahead Scheduled Energy	PG&E	<p>Effective Day-Ahead Scheduled Energy</p> <p>The minimum of a Resource's Total Expected Energy and its Day-Ahead Scheduled Energy for a given Settlement Interval.</p>	Accept part of this definition. The appropriate defined term is Expected Energy, which refers to total expected Energy. Therefore, there is no need to define a new term for total expected energy.
General	SCE	<p>The CAISO has inadequately defined and identified Residual Imbalance Energy (RIE) The CAISO's proposal renders obsolete, the meaning of RIE. Effectively, it has created three new types of RIE: (1) RIE due to residual economic dispatch from prior periods for non-VER resources, (2) RIE due to residual economic dispatch from prior periods for VER resources, and (3) RIE due to forecast change for VER resources. SCE strongly recommends the CAISO:</p>	This proposed change requires a complete reconfiguration of the expected energy calculations. The CAISO does not see the need for creating a new set of expected energy types that would be based on the bid or LMP on which

		<p>1. clearly define and identify the new types of RIE as proposed in the Draft Final Proposal² and distinguish them from the existing RIE.</p> <p>2. apply such identification throughout the tariff and clearly differentiate the settlement treatment for different types of RIE.</p> <p>3. clearly define the classification of energy for self-scheduled VER where the self-scheduled VER quantity does not equal to CAISO’s forecasted VER quantity and there is no economic dispatch.</p> <p>4. provide transparency of relevant Dispatch Interval(s) and Bid(s) that led to the formation of the RIE in the referenced interval.</p> <p>There are numerous references to RIE in the existing tariff. The proposed tariff language posted by the CAISO does not address most of them. SCE has compiled a non-exhaustive list of these and lists them at the end of these comments.</p>	<p>the resource will be settled. Rather, the definition of the settlement rule changes based on the existing expected energy types is sufficient for implementing this change and does not require a comprehensive change in the CAISO’s rules as recommended by Southern California Edison.</p>
Residual Imbalance Energy	CAISO	<p>Upon further review the ISO determined it is necessary to clarify the definition of Residual Imbalance Energy and refer to the appropriate sections of the tariff that describe the settlements.</p>	

Bid cost recovery and variable energy resource settlements – Stakeholder Comment Matrix on Draft Tariff Language
California Independent System Operator Corp.
