Contingency Reserve Cost Allocation – Stakeholder Comments on Straw Proposal

Northern California Power Agency ........................................................................................................ 1
  Self-Provision of Operating Reserves ................................................................................................. 1

PG&E ..................................................................................................................................................... 2
  1. PG&E seeks more clarity on the allocation calculation that CAISO has proposed to meet the BAL-002-WECC-2 standard.¹ ........................................................................................................ 2
  2. PG&E requests the CAISO provide examples of how the revised obligation and cost allocation method would be applied ........................................................................................................ 3

Powerex Corp...................................................................................................................................... 4
  Opening Comments ........................................................................................................................... 4
  The Straw Proposal Contains Errors Regarding the Calculation of Contingency Reserve …… 5
  b. The Straw Proposal Incorrectly Implies that the Current Contingency Reserve Calculation Distinguishes Between Firm and Non-Firm Transmission Service External to the CAISO ……. 6
  2. Cost Causation Requires that Imports Be Compensated for Reducing the Contingency Reserve Requirement in the CAISO BAA ................................................................................... 8
  3. The New BAL-002-WECC-2 Standard Raises Additional Issues that CAISO Should Address through a New Stakeholder Process .........................................................................................11

Six Cities .............................................................................................................................................15
  There Is a Need for Clarification Regarding Dynamically Scheduled Resources. ....................15

Southern California Edison ..................................................................................................................15
  Settlement of excess self-provision of reserve obligation ..............................................................15
  Reserve obligations of imports ...........................................................................................................16
  EIM impact ........................................................................................................................................17

Western Power Trading Forum ..........................................................................................................18
<table>
<thead>
<tr>
<th>Company</th>
<th>Date</th>
<th>Submitted By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern California Power Agency</td>
<td>5/14/2014</td>
<td></td>
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</tbody>
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**Self-Provision of Operating Reserves**

Currently, when a Scheduling Coordinator self-provides spinning and non-spinning reserves from internal generation, such self-provided reserves are treated as a negative obligation for settlement purposes and are paid the respective system wide reserve price; therefore from a settlements perspective self-provided reserves supplied from internal generation are effectively treated as a credit against a Scheduling Coordinator’s reserve obligation. To the extent the amount of self-provided spinning and non-spinning reserves are greater than the Scheduling Coordinator’s reserve obligation, the Scheduling Coordinator receives a net payment for such excess self-provided reserves priced at the respective system wide rate.

CAISO states the following in its straw proposal:

In addition, the reserve obligation for an SC can be reduced through self-provision. The ISO is not proposing to change the rules of self-provision for ancillary services, but the ISO proposes to clarify that an SC cannot obtain credit beyond its hourly reserve obligation. If an SC self-provides more than its reserve obligation, the excess self-provision will result in a lowering of the ancillary services product rate to the benefit of all SCs.

Does this statement mean that CAISO is proposing that all self-provided reserves (including self-provided reserves supplied from internal generation) that are provided in excess of a Scheduling Coordinator’s reserve obligation will capped at the reserve obligation and therefore not compensated, or does this statement mean that only self-provided reserves supplied from imports (which offset a Scheduling Coordinator’s obligation) that are in excess of a Scheduling Coordinator’s reserve obligation will be effectively capped at the Scheduling Coordinator’s reserve obligation? NCPA requests that CAISO provide additional language in its next draft proposal to clarify this because if CAISO is proposing to effectively cap all self-provided reserves, that would be a change to the rules of self-provision for ancillary services that are in place today.
ISO Response

The ISO has clarified in the Draft Final Proposal, that if an SC self-provides more reserves than its initial obligation and after Inter-SC trades, the final obligation will be capped at zero. This seeks to minimize excess self-provision which results in a payment through the cost allocation. The resources will still be compensated at the ASMP, but the SC cannot receive an additional payment through a negative obligation.

PG&E
5/13/2014
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1. PG&E seeks more clarity on the allocation calculation that CAISO has proposed to meet the BAL-002-WECC-2 standard.¹

¹ 6%(metered load + exports) – 3%(imports)

- Will the CAISO’s procurement of Contingency Reserves normally match the WECC requirement, and in what circumstances would it not? If the CAISO’s procurement of Contingency Reserves differs from the standard, would the proposed allocation calculation still reflect cost causation principles?
- How are “metered load” and “exports” defined for these purposes? Can the CAISO provide more details or examples of how demand response, storage, and pumped hydro fit into this category? Also whether exports includes optimization in the five minute market between the CAISO and an EIM entity?
- The current allocation (BAL-STD-002) differentiates between firm, non-firm, and unit contingent imports/exports. The new proposed allocation no longer includes these distinctions. As proposed , SCs would no longer have an obligation to procure contingency reserves to cover non-firm imports. What impact does the CAISO expect this to have on the flow of firm vs. non-firm energy into its BAA? Has the CAISO considered the pros and cons of allocating costs to imports to create different
ISO Response

The ISO will procure contingency reserves consistent with WECC requirement.

Metered load and exports are defined terms in the tariff. Demand response, storage and pumped hydro are modeled as generators in the ISO. EIM transfers are tagged as dynamic transfers – exports out of the ISO will have a 3% obligation payment and imports into the ISO will have a 3% obligation credit.

The ISO is maintaining the current market design principles for allocating contingency reserves to measured demand while considering the WECC procurement requirements. The discussion of firm versus non-firm energy is outside the scope of this initiative. A new initiative will be considered through the ISO market initiatives catalog process.

2. PG&E requests the CAISO provide examples of how the revised obligation and cost allocation method would be applied

- How would imports and exports from Energy Imbalance Market (EIM) entities be treated under the proposed Contingency Reserve Cost Allocation? How would this change the obligations to procure contingency reserves in both the EIM areas and CAISO?
- How would imports and exports in the day-ahead versus 15 minute markets be treated for costs allocation and obligation purposes from both EIM and non-EIM areas?
- How does redispatch (imports/exports) between CAISO/EIM entities in the 5 minute timeframe get considered by this obligation/cost allocation.

ISO Response

The ISO has posted an illustrative spreadsheet.

EIM transfers are tagged as dynamic transfers – exports out of the ISO will have a 3% obligation credit and imports into the ISO will have a 3% obligation payment.
obligation payment and imports into the ISO will have a 3% obligation credit.

The obligation for imports and exports is based upon the final tagged energy. For example if an import was decremented in the real-time market from its day-ahead schedule its obligation credit would be based upon the real-time market energy. The same is true if the import is incremented.

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<tr>
<td>Powerex Corp.</td>
<td>5/14/2014</td>
<td>Mike Benn 604-891-6074</td>
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**Opening Comments**

Powerex appreciates the opportunity to provide these comments on the CAISO’s April 29, 2014 “Contingency Reserve Cost Allocation Straw Proposal” (“Straw Proposal”). The new BAL-002-WECC-2 standard, which will go into effect October 1, 2014, changes the calculation of the contingency reserves that CAISO must maintain. Powerex agrees the CAISO Tariff needs to be modified to reflect the new standard.

Powerex’s comments are focused on three broad topics. 

*First*, the Straw Proposal appears to contain two notable errors. It makes a mathematical error, which results in the proposed cost allocation being inconsistent with the new WECC standard. And the Straw Proposal also appears to misstate both the currently-effective WECC standard and the current CAISO Tariff by implying that the use of firm rather than non-firm transmission service external to the CAISO is relevant to the determination of required contingency reserves. It is not, and the suggestion in the Straw Proposal is contradicted by prior CAISO statements, statements on the stakeholder call, and the CAISO Tariff itself.

*Second*, the Straw Proposal appears to eliminate the existing provisions that directly compensate Scheduling Coordinators that import energy for the beneficial effect of reducing the CAISO’s need to procure contingency reserves. The cost allocation for contingency reserves must be consistent with cost causation, which requires both charges and credits consistent with each SC’s impact on the CAISO’s total required contingency reserves and the associated procurement costs.

*Third*, the Straw Proposal would eliminate distinctions between “firm”, “non-firm” and “unit
contingent” imports for purposes of determining the CAISO’s total required contingency reserves and each SC’s allocation of costs. Eliminating the principal financial incentive to deliver firm energy to the CAISO should be expected to result in a significant increase in interruptible imports, with increased real-time curtailment of those deliveries. To protect against non-delivery of interruptible imports, CAISO will likely need to procure additional capacity—such as through additional residual unit commitment and/or flexible ramping constraint levels. Under the current design, these increased costs will be borne primarily by loads. Powerex therefore recommends that CAISO convene a new stakeholder process to address this imminent issue.

ISO Response

The obligation formula has been modified to 6% Load + 3% Exports – 3% Imports.

The ISO is maintaining the current market design principles for allocating contingency reserves to measured demand while considering the WECC procurement requirements. The discussion of firm versus non-firm energy is outside the scope of this initiative. A new initiative will be considered through the ISO market initiatives catalog process.

The Straw Proposal Contains Errors Regarding the Calculation of Contingency Reserve

a. The Straw Proposal Does not Correctly Apply the New WECC Standard

The Straw Proposal correctly states that the new BAL-002-WECC-2 standard requires BAs to maintain contingency reserves equal to the greater of (a) the most severe single contingency; or (b) “the sum of three percent of hourly integrated Load (generation minus net actual interchange) plus three percent of hourly integrated generation (generation minus station service.)”¹

The Straw Proposal cites the CAISO design principle of allocating the cost of reserves to measured demand, and thus “the proposed calculation of an SC’s reserve obligation will be 6% of (metered load + exports) minus 3% of imports.”²

This is an incorrect application of the CAISO design principle, however, and will lead to excessive levels of contingency reserve costs being allocated. While it may be that costs
attributable to generation are *allocated* to load and exports, it is not the case that
generation is *equal to* load plus exports, which is the arithmetic identity used in the Straw
Proposal. Instead, generation is equal to load plus exports minus imports.\(^3\)
The corrected formulation of the BAL-002-WECC-2 requirements, expressed in terms of
metered load, imports and exports, is as follows:

\[
\text{Contingency Reserve} = 3\% \text{ (Generation)} + 3\% \text{ (Load)}
\]
\[
= 3\% \text{ (Load + Exports − Imports)} + 3\% \text{ (Load)}
\]
\[
= 6\% \text{ (Load)} + 3\% \text{ (Exports)} − 3\% \text{ (Imports)}
\]

Powerex requests that CAISO modify its proposed formula for the allocation of
contingency reserve costs in the next version of the proposal.

\(^1\) Straw Proposal at 4.
\(^2\) Straw Proposal at 4.
\(^3\) This assumes losses are ignored. If they are not ignored, then an additional term equal to 3\% of losses may need to
be added to the final equation.

**ISO Response**

The formula has been modified in the draft final proposal.

**b. The Straw Proposal Incorrectly implies that the Current Contingency Reserve
Calculation Distinguishes Between Firm and Non-Firm Transmission Service External to
the CAISO**

The Straw Proposal observes that “[t]he new standard does not require distinctions for the
fuel source of generation serving the load or whether imports/exports are utilizing firm/non-
firm transmission external to the ISO.”\(^4\) Powerex agrees that the new standard does not
require such a distinction, but the statement suggests that the current standard does draw
that distinction. This suggestion is misleading and ultimately incorrect, as recognized by
CAISO itself on multiple occasions.

First, the Straw Proposal is plainly contradicted by CAISO’s prior statement, in another
stakeholder process, that “[t]he ISO only requires firm transmission for imports or exports of
ancillary services.”\(^5\)
Second, CAISO staff recognized on the stakeholder conference call on May 6, 2014 that the calculation of contingency reserves has nothing to do with the firmness of transmission. Third, the CAISO Tariff makes no reference to the firmness of transmission service in its description of the calculation of contingency reserve obligations. Under the existing CAISO Tariff, the required contingency reserves increase by “one hundred (100) percent of any Interruptible Imports.” The Tariff defines Interruptible Import as “Non-firm Energy sold into the CAISO Balancing Authority Area from a resource located outside the CAISO Balancing Authority Area which by contract can be interrupted or reduced at the discretion of the seller. Interruptible Imports must be submitted through Self-Schedules in the Day-Ahead Market.” Nothing in the definition of Interruptible Import refers to the firmness of transmission service, and hence transmission service is irrelevant to the Tariff’s determination of contingency reserve obligations.

It is regrettable that the Straw Proposal would contribute to confusion on this topic. Powerex requests that CAISO set the record straight in the next version of the proposal by clarifying that the calculation of CAISO’s required contingency reserves both today, and under the CAISO’s application of the new BAL-002-WECC-2 standard is not affected by whether an import or export utilizes firm rather than non-firm transmission service external to the CAISO. Powerex requests that the CAISO also clarify that the appropriate use of any of the CAISO’s three energy products is not affected by the firmness of the transmission service external to the CAISO.

ISO Response

The ISO agrees that non-firm and firm energy are not relevant to the existing standard or new standard. The draft final proposal includes these clarifications.

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4 Straw proposal at 4.
5 CAISO response to comments on the Full Network Model Expansion Third Revised Straw Proposal, at 20 (emphasis added).
6 ISO Tariff at § 11.10.3.2.
7 ISO Tariff, Appendix A (“Master Definition Supplement”), definition of “Interruptible Import” (emphasis added).
2. Cost Causation Requires that Imports Be Compensated for Reducing the Contingency Reserve Requirement in the CAISO BAA

The Straw Proposal describes the current determination of an SC’s obligation of contingency reserves as follows:

An SC’s reserve obligation is 7% of (metered load + firm exports – firm imports + non-firm imports) minus 2% of (hydro generation + unit contingent imports from hydro generation – unit contingent exports from hydro generation). *The obligation cannot be less than zero.*

The new formula proposed in the Straw Proposal also contains the provision that “[t]he obligation cannot be less than zero,” giving the appearance that this is merely a continuation of the existing Tariff. Such an appearance is misleading, however, as the Straw Proposal misstates the current Tariff. Sections 11.10.3 and 11.10.4 of the CAISO Tariff address Spinning and Non-Spinning Reserve, respectively. Both sections contain the following provision:

If the Scheduling Coordinator’s Operating Reserve Obligation … is negative, the SC may be entitled to a credit rather than a charge.

The Straw Proposal therefore conceals that it is proposing a major change to the current Tariff through its requirement that “[t]he obligation cannot be less than zero” under the new standard.

Under both the currently-effective and the new WECC standards, and also under the current CAISO Tariff, imports of energy into the CAISO can reduce the total contingency reserves that CAISO must procure. This is most easily seen using the new BAL-002-WECC-2 requirement:

\[
\text{Contingency Reserve} = 3\% \text{ (Generation)} + 3\% \text{ (Load)}
\]

Since imports reduce the need for generation within the CAISO BAA, they consequently reduce the required contingency reserves within the CAISO BAA. While the formula is different, this same general relationship exists under the current WECC standard and the current CAISO Tariff. The current CAISO rules appropriately compensate imports for reducing the required contingency reserves, and the Straw Proposal offers no justification for eliminating that compensation.
To achieve efficient market outcomes, the existing framework that permits SCs’ contingency reserve obligation to be less than zero, and hence receive compensation for reducing the CAISO’s contingency reserve requirement, must be retained. If importers are not compensated for reducing the CAISO’s contingency reserve requirement, then the CAISO’s markets will not lead to the least cost commitment and dispatch of physical resources.

Consider the typical market scenario in which CAISO receives energy bids from both internal generation and from imports. CAISO selects which bids to accept based on, among other factors, their bid price. But an import and an internal generator with identical bids do not impose identical costs to the grid if they are selected. If the generator is selected, it will increase the CAISO’s contingency reserve requirement by 3% (with the costs allocated to SCs with load and/or exports). If the import is selected, however, there will be no increase in generation, and hence no increase in the contingency reserves that CAISO must procure and pay for. Indeed, the impact on contingency reserve requirements would make it optimal for CAISO to accept imports even if they are more expensive than internal generation bids; how much more expensive will be generally determined by the savings of not having to procure additional contingency reserve. Making the efficient selection between internal generation (which increases contingency reserve requirements) and imports (which do not) is currently achieved by the CAISO market design, which “unbundles” energy and the requirement to procure reserves. Loads, for example, pay both the LMP at their location and also are charged separately for the cost of contingency reserve (and other costs related to reliability, such as for residual unit commitment and the cost of the flexible ramping constraint). The LMP in the CAISO design is an “energy-only” price, with contingency reserve obligations unbundled. An import is not an “energy-only” product, however. As explained above, under both the current and new WECC standards, imports and exports affect the CAISO’s requirement for carrying contingency reserves. Is it therefore both appropriate and necessary for efficiency that imports and exports both be respectively credited and charged for their impact on CAISO’s contingency reserve costs, separate and apart from LMP-based settlements for the energy that flows under the transaction.
Returning to the example of choosing between an import bid and an internal generator bid, this choice can be efficiently made on the basis of bids alone if – and only if – the SC offering the import knows it will be compensated separately for reducing the CAISO’s cost of contingency reserves.\(^1\) This will allow the SC to reduce the bid price for the import, thus reflecting the “energy-only” component, since the contingency reserve attribute will be compensated separately. This outcome cannot be achieved, however, if an SC is denied compensation for imports that reduce CAISO’s contingency reserve carrying obligations, as appears to be contemplated in the Straw Proposal.

Powerex requests that CAISO clarify in the next version of the Straw Proposal that an SC’s hourly requirement for operating reserves can be negative, consistent with the current tariff.

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8 Straw Proposal at 4 (emphasis added).
9 CAISO Tariff at 11.10.3 and 11.10.4.

10 As explained in the Straw Proposal, the contingency reserve requirement is based on the larger of two criteria: (a) the loss of the most severe single contingency; and (b) the calculation based on generation and load. It is Powerex’s understanding that, for the CAISO BAA, the second criterion is generally larger, and hence determines the contingency reserve requirements.

11 The Straw Proposal does provide that a Scheduling Coordinator “can submit inter-SC trades for ancillary services obligations,” suggesting that a negative obligation credit could be sold, on a bilateral basis, to another SC with a positive obligation. This would be similar to the framework that existed before MRTU. In order for an out-of-state supplier to realize compensation for the contingency reserves it holds at its source BAA, the supplier will first need to find an SC with a liability for contingency reserve costs (i.e., principally an SC serving load within the CAISO), and then negotiate a price for the transfer of the contingency reserve obligation credit. The negotiated price will inevitably be below the cost of the avoided contingency reserve requirement to incent a counterparty to enter into the transaction. The CAISO has provided no justification as to why it would want to revert to this pre-MRTU process which is both cumbersome and inefficient.

12 The Straw Proposal would deny direct settlement compensation to imports, but appears to permit inter-SC trades, which could conceivably be used to monetize the import’s reductions to contingency reserve requirements. Such a design introduces significant uncertainty regarding the compensation that an import will actually obtain, or if it will be able to find a willing counterparty in the first place. This uncertainty undermines the unbundling of compensation discussed above, and hence undermines market efficiency.
A similar design was in place prior to MRTU, and should not be resurrected.

**ISO Response**

The ISO has modified the proposal and has posted an illustrative spreadsheet. The ISO proposes to cap the final obligation at zero after consideration of interSC trades. The result is that an SC cannot self-provide more that its initial obligation less interSC trades. This would allow an import into the ISO to receive a credit through the reserve obligation.

3. The New BAL-002-WECC-2 Standard Raises Additional Issues that CAISO Should Address through a New Stakeholder Process

Under the current CAISO market design, Scheduling Coordinators offering imported energy into the CAISO markets identify the energy as “Firm,” “Non-Firm,” or “Unit Contingent.” These different energy products currently result in different operating reserve obligations, and thus are settled differently. In practice, this different settlement treatment results in “Non-Firm” imports being paid less than “Unit Contingent” imports, which in turn are paid less than “Firm” imports.

The CAISO Tariff includes a definition of “Non-Firm” or “Interruptible Imports”, discussed above, whereby the seller has discretion to not deliver on the award. Unfortunately, the Tariff does not define either “Firm” or “Unit Contingent” energy, though the usage of those terms indicates that the circumstances under which a seller may fail to deliver on those awards are much narrower. This is broadly consistent with the general use of similar terms in the industry.

The Straw Proposal explains that the new WECC standard removes references to whether imports or exports are firm or non-firm. Consequently, the existing settlement difference between the three current CAISO energy products, which is based on differing operating reserve costs, will be eliminated, and all three products will be paid the same. Critically, there will therefore no longer be any reason for a market participant to supply firm energy to the CAISO, as the additional costs associated with providing firm energy will not result in additional compensation.
The CAISO should therefore expect significant deterioration in the delivery performance of import awards. Simply put, there are real costs associated with setting aside sufficient generating capacity to ensure a firm import can be delivered. Under a market design that pays firm and non-firm energy the same price, as the Straw Proposal contemplates, it would be irrational for a seller to incur those costs. By failing to differentiate between firm and non-firm energy imports, CAISO will inevitably attract only the lesser product, and must be prepared to experience significant delivery failures on import awards. To protect system reliability, CAISO will need to commit additional capacity in its residual unit commitment process, and likely also need to increase its flexible ramping capacity requirements (through procurement of additional flexible ramping constraint and/or flexible ramping product). Both of these measures will increase costs, which under the existing market design will be borne almost entirely by load.

Therefore, while this stakeholder process can be concluded upon (i) correcting the contingency reserve formula; and (ii) continuing to permit an individual SC’s reserve obligation to be less than zero, the implementation of the new BAL-002-WECC-2 standard materially changes the incentives for the delivery performance of imports, raising additional issues that CAISO will need to address. Powerex strongly recommends that CAISO promptly convene a new stakeholder process to address these issues.

In particular, the new stakeholder process will need to address the critical interaction between delivery performance of imports and the costs that CAISO will incur to ensure reliable service. Either CAISO must require a high degree of delivery performance by imports, or it must ensure that the cost of integrating frequently-curtailed imports is allocated appropriately. The current market design does neither of these things. There are several approaches that CAISO should consider:

First, CAISO could eliminate the undefined “firm” and “unit contingent” energy product categories, leaving all imports to be offered as non-firm. CAISO would then ensure imports, consistent with their ability to not delivery, are allocated a portion of the CAISO’s costs associated with reliability commitments, consistent with cost causation.
CAISO already recognizes that virtual supply—which is known to not deliver physical energy and hence will not be available to meet load—may economically displace physical supply sources, and consequently increase the additional capacity committed by CAISO through its RUC process. CAISO appropriately allocates a portion of the RUC costs to virtual supply, consistent with cost causation. CAISO has similarly recognized that uncertainty regarding whether a resource will physically perform is a driver of its flexible ramping constraint costs, and allocates 25% of those costs to gross negative deviations of resources (i.e., supply shortfalls). It would be entirely consistent and appropriate to extend these cost allocation principles to allocate the costs associated with all actions that the CAISO takes to accommodate imports that fail to deliver according to their awards.

Second, CAISO could, alternatively, ensure imports do not increase the need for additional internal capacity or flexibility commitments by requiring high levels of delivery performance. This would require CAISO to set out clear performance requirements for imported energy, develop administrative charges or penalties to encourage compliance with those requirements, and make persistent or deliberate failures to perform subject to enforcement action or referral. The experience of NYISO is instructive in this regard. NYISO expressly requires that imports into its BAA be firm energy backed by capacity at the source BAA.17 If an import fails to be delivered other than for circumstances outside the seller’s control, the seller is subject to a so-called “financial impact charge.”18

By requiring that Scheduling Coordinators selling imported energy into the CAISO markets have sufficient resources to support delivery and also lack the discretion to interrupt that delivery, CAISO can avoid the need to incur and allocate additional reliability-related costs for these imports. This option does, however, require CAISO to clearly define what is required in terms of delivery performance, and to monitor and enforce compliance with those requirements.

Third, CAISO could consider a combination of the above approaches. This would restore the current option to import different energy products, with an appropriate allocation of the costs associated with CAISO’s use of each product. Again, clear definitions and performance requirements must be established to ensure CAISO actually receives the energy product it
pays for, since there will be an obvious incentive for importers to reduce their costs by declaring imports as “firm” that actually fall short of that term’s definition.

While addressing the above issues may be complex, a failure to address them is an open invitation for most or all imports sold into the CAISO markets as of October 1, 2014 to be declared as non-firm, with the seller having the discretion to fail to procure sufficient resources to deliver and to curtail such deliveries at the last minute for any reason, including in favor of a better market opportunity elsewhere. Under the existing market rules, the costs associated with committing additional internal capacity and flexibility to accommodate import delivery failures will not be borne by the imports at all, and instead will be borne primarily on CAISO loads. Powerex believes such an outcome would be inefficient, inequitable, and unsustainable, and looks forward to working with CAISO on the proposed new stakeholder initiative to address these issues.

14 Additional product types are “Dynamic” and “Wheel”, but are beyond the scope of these comments.

15 CAISO Tariff at Appendix A, (definition of “Interruptible Import”).

16 See, e.g., CAISO Tariff at §§ 11.10.3.2 and 11.10.4.2 (“…firm purchases from outside the CAISO [BAA]…”), § 11.10.5 (“… firm imports.”), § 30.5.2.4 (“… Energy categorized as Interruptible Imports (non-firm imports)...”), Appendix M at § 1.5.4 (“The CAISO will treat dynamically scheduled Energy as a resource contingent firm import.”), CAISO Tariff § 11.7.3 (providing a definition of “firm power”, but limited “for the purposes of this Section 11.7.3,” which relates to Metered Subsystems). A “white paper” from 2007 on the CAISO website also discusses “unit contingent” imports, though the force and effect of a “white paper” is not clear. See http://www.caiso.com/Documents/WhitePaper-CAISOe-TagRequirements-ContingencyReserveTracking.pdf


18 NYISO Tariff at § 4.5.3.2.

ISO Response

The discussion of firm versus non-firm energy is outside the scope of this initiative. A new initiative can be considered through the ISO market initiatives catalog process.
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<tr>
<td>Six Cities</td>
<td>5/13/2014</td>
<td>Bonnie S. Blair</td>
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**There Is a Need forClarification Regarding Dynamically Scheduled Resources.**

The ISO’s Straw Proposal states at page 4 that the new approach to allocation of operating reserve obligations “does not differentiate if the import or export is a dynamic schedule.” The Six Cities understand that WECC’s new standard BAL-002-WECC-2 provides that the source BAA for a dynamically scheduled resource carries the reserve obligation for that resource unless there is an agreement for assignment of the reserve obligation to the sink BAA. The Six Cities further understand that the contractual arrangements for at least some resources dynamically scheduled into the ISO BAA provide that the ISO will carry the reserves for the resource. Given the potential for different assignments of the reserve obligations for dynamically scheduled resources, the Six Cities recommend that the ISO clarify the proposed methodology for contingency reserve allocations to state that dynamically scheduled imports will be treated in the same manner as other imports (i.e., credited against reserve obligations) unless there is an agreement between the relevant BAAs assigning the reserve obligation for the dynamically scheduled resource to the ISO, in which case the credit will not apply.

**ISO Response**

The ISO has confirmed that in all existing dynamic schedules the ISO has taken on the contingency reserve obligation. In addition, existing pseudo ties agreements correctly have the reserve obligation with the receive BA. As a result, dynamic schedules are not included in the calculation of an SC’s reserve obligation.

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<tr>
<td>Southern California Edison</td>
<td>5/13/2014</td>
<td>Aditya Chauhan – (626) 302-3764</td>
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**Settlement of excess self-provision of reserve obligation**

Will the excess self-provision be settled at the system-wide user rate? In addition to addressing this question, the CAISO should consider providing a detailed numerical example highlighting each key aspect treatment of the excess amount, including
requirement substitution\textsuperscript{2}. SCE requests that the CAISO elaborate by providing numerical examples where:

a. The system self-provision is higher than the CAISO total requirement.

b. An LSE SC’s self-provision is higher than that SC’s requirement but the system self-provision is still lower than the CAISO total requirement

\textsuperscript{2} The proposal states, “By reflecting the value of high quality substituted ancillary services in the ancillary services rate, the ISO can help eliminate neutrality differences due to ancillary service substitution.”

ISO Response

The ISO is not proposing any changes in the calculation of the ancillary services rate for purposes of settling cascaded A/S. The ISO is clarifying that an SC cannot self-provide more AS after considering inter-SC trades and receive a credit through the cost allocation. The ISO has posted an illustrative spreadsheet on the obligation calculation.

Reserve obligations of imports

SCE requests confirmation that the following matrices are correct. SCE also requests that the CAISO provided any information that may be missing to complete the understanding presented in the matrices.

Assuming SCs with only imports in their portfolios:

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<th>Proposed Change</th>
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<td>Charged by CAISO</td>
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<tr>
<td><strong>Firm</strong></td>
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<td><strong>Non-Firm\textsuperscript{a}</strong></td>
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<td><strong>Unit Contingent</strong></td>
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Contingency Reserve Cost Allocation – Stakeholder Comments on Straw Proposal
Assuming SCs with only exports in their portfolios:

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<th>Proposed Change</th>
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<tbody>
<tr>
<td>Charged</td>
<td>Paid by</td>
</tr>
<tr>
<td>by CAISO</td>
<td>CAISO</td>
</tr>
<tr>
<td><strong>Firm</strong></td>
<td><strong>7%</strong></td>
</tr>
</tbody>
</table>

Assuming SCs with only metered load in their portfolios:

<table>
<thead>
<tr>
<th>Current System</th>
<th>Proposed Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charged</td>
<td>Paid by</td>
</tr>
<tr>
<td>by CAISO</td>
<td>CAISO</td>
</tr>
<tr>
<td><strong>Any</strong></td>
<td><strong>7%</strong></td>
</tr>
</tbody>
</table>

3 “Interruptible” in CAISO tariff.
4 CAISO tariff sections 11.10.3.2, 11.10.4.2.


**ISO Response**

The ISO clarified SCE’s tables based upon the Draft Final Proposal.

An SC with only static imports will be paid 3% for all energy types. Dynamic imports will not be paid since the ISO has assumed the reserve obligation contractually.

An SC with only static exports will be charged 3%. The ISO does not have dynamic schedules at this time. The ISO does have a pseudo tie export and the reserve obligation resides with the receiving BA. The pseudo tie export will not be charged.

An SC with only metered load will be charged 6%.

**EIM impact**

Does the CAISO propose to carry reserves including the requirement for EIM? Consider only one SC in the CAISO, and that SC has 10MW of exports. Assume EIM has 10MW of exports. The SC has a requirement of 6% = 0.6MW. Will the CAISO carry 0.6MW for EIM as well, thus making the requirement a total of 1.2MW? How will the CAISO assign
ISO Response

In the Draft Final Proposal, the EIM transfer out of the ISO is charged 3% and the EIM transfer into the ISO receives a payment of 3%.

Company | Date       | Submitted By
---------|------------|---------------
Western Power Trading Forum | 5/13/2014  |               

WPTF appreciates the opportunity to provide comments in response to the CAISO’s proposed contingency reserve cost allocation approach as described in the April 29, 2014 white paper and the May 6, 2014 presentation and web meeting. WPTF supports allocation of contingency reserves to loads and exports, consistent with the historical and current policy and consistent with the presumption that the reserves are necessary for reliable service of the load and to provide firm exports. Thank you for your consideration.

ISO Response

The ISO appreciates your comment.