Contingency Reserve Cost Allocation
Straw Proposal

Table of Contents

1 Introduction .......................................................................................................................... 3
2 Plan for Stakeholder Engagement ..................................................................................... 3
3 Proposed Change to Cost Allocation .................................................................................. 4
4 Next Steps .......................................................................................................................... 5
1 Introduction

On November 13, 2013, the Federal Energy Regulatory Commission (FERC) approved regional reliability standard BAL-002-WECC-2 (Contingency Reserve), which was submitted by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC). The regional reliability standard applies to balancing authorities and reserve sharing groups in the WECC region and specifies the quantity and types of contingency reserves required to ensure reliability under normal and abnormal conditions. FERC’s order approving regional reliability standard BAL-002-WECC-2 (Order 789) became effective on January 28, 2014. The procurement requirements in regional reliability standard BAL-002-WECC-2 will become effective on October 1, 2014.

The ISO currently aligns contingency reserve obligations for a Scheduling Coordinator (SC) with the requirements calculation outlined in the existing WECC standard BAL-STD-002 - Operating Reserves. Given the changes in the requirement calculation outlined in the new standard, the ISO proposes to align the calculation of contingency reserve obligations with the new requirements calculation. This will modify the ISO’s cost allocation of contingency reserves. However, the ISO proposes to maintain the existing design principles of the current cost allocation which allocates contingency reserves costs based upon an SC’s measured demand with adjustments for self-provision and inter-SC trades. The ISO is not proposing any changes to the payment rescission or the substitution rules for ancillary services. The ISO plans to implement the revised cost allocation in the Fall software release on October 1, 2014.

2 Plan for Stakeholder Engagement

<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Straw Proposal</td>
<td>April 29, 2014</td>
</tr>
<tr>
<td>Stakeholder Conference Call</td>
<td>May 6, 2014</td>
</tr>
<tr>
<td>Stakeholder Comments Due</td>
<td>May 13, 2014</td>
</tr>
<tr>
<td>Post Draft Final Proposal</td>
<td>May 27, 2014</td>
</tr>
<tr>
<td>Stakeholder Meeting</td>
<td>June 3, 2014</td>
</tr>
<tr>
<td>Stakeholder Comments Due</td>
<td>June 10, 2013</td>
</tr>
<tr>
<td>Board of Governors Decision</td>
<td>July 17-18, 2014</td>
</tr>
</tbody>
</table>
3 Proposed Change to Cost Allocation

The current cost allocation of spinning and non-spinning reserves considers the Resource and Demand Balancing standard reserve requirements calculation in determining an SC’s obligation. The following compares the minimum contingency reserve calculation as between the existing and new standards.

The contingency reserve requirement is based on the greater of:

Per current standard (BAL-STD-002):

(a) The loss of generating capacity due to forced outages of generation or transmission equipment that would result from the most severe single contingency; or
(b) The sum of five percent of the load responsibility served by hydro generation and seven percent of the load responsibility served by thermal generation.

Per proposed standard (BAL-002-WECC-2):

(a) The amount of Contingency Reserve equal to the loss of the most severe single contingency;
(b) The amount of Contingency Reserve equal to the sum of three percent of hourly integrated Load (generation minus station service minus net actual interchange) plus three percent of hourly integrated generation (generation minus station service).

Under the current standard, an SC’s hourly obligation is based upon criteria (b). 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 standard simplifies the calculation of the SC’s obligation using criteria (b). Since, the current design principle is to allocate the costs to measured demand (metered demand and exports) and not generation, the ISO proposes to allocate the integrated generation requirement to 3% of metered load + 3% of exports. The integrated load requirement will be allocated to 3% of metered load + 3% of exports – 3% of imports. When the integrated generation and integrated load requirements are combined, the proposed calculation of an SC’s reserve obligation will be 6% of (metered load + exports) minus 3% of imports. The obligation cannot be less than zero. The 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. The new standard also does not differentiate if the import or export is a dynamic schedule.

If the actual contingency reserves procured pursuant to criteria (a), the ISO currently allocates the higher obligation on a pro-rata basis using the calculations based upon criteria (b). The ISO is not proposing a change to this market design element under the new standard.

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 that its reserve obligation, the excess self-provision will result in a lowering of the ancillary services product rate to the benefit of all SCs.

SCs can submit inter-SC trades for ancillary services obligations, but an SC cannot trade more than its obligation. This functionality is unchanged.

If payment to SCs providing ancillary services does not equal the cost allocation to SCs with reserve obligations neutrality will result. The ISO is not proposing any change to the allocation
of the combined upward ancillary services neutrality adjustment, which is allocated based upon
the SC’s pro-rata share of reserve obligations.

The ISO does not propose to change the rules for substituting higher quality reserves for lower
quality reserves when it is economic to do so. However, the ISO believes that the tariff requires
additional clarity on how self-provision interacts with ancillary services substitution. The ISO
calculates a rate for each ancillary service that reflects both bid-in costs but also any additional
ancillary services capacity that SCs self-provide beyond the ISO’s requirements. The rate for
each ancillary service reflects an average of all substituted ancillary services in order to reflect
the procurement of higher quality ancillary services that is performed optimally in day-ahead and
real-time market. 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. This outcome achieves an equitable cost allocation to SCs that self-provide more
capacity than their ancillary service obligation, since their obligation for each ancillary service
cannot be less than zero. The ISO, therefore, proposes to clarify the tariff to state that self-
provided ancillary services capacity can satisfy a lower quality ancillary service requirement as
part of the market optimization.

4 Next Steps

The ISO plans to discuss this straw proposal with stakeholders during a conference call to be
held on May 6. The ISO requests comments from stakeholders on the proposed market design
described in this straw proposal. Stakeholders should submit written comments by May 13 to
CRCA@caiso.com.