

ALLOCATION OF REPLACEMENT RESERVE TO UNDER-SCHEDULED LOAD AND OVER-SCHEDULED GENERATION

The purpose of this paper is to briefly explain ISO Management's proposal on how the cost of Replacement Reserve would be allocated based on under-scheduled load and over-scheduled Generation.

The ISO expects to procure Replacement Reserve to make up the deficiency between the ISO demand forecast and the resources the ISO reasonably expects to be available to serve load in real time. (See Replacement Reserve Procurement Criteria).

SUMMARY

The ISO would assign one MW of Replacement Reserve obligation to each MW of difference between final Hour Ahead Load Schedule and metered Demand based on the amount of under-scheduled load in its zonal portfolio. (If the ISO does not procure zonally, then the Control Area portfolio is used.) The ISO would also assign one MW of Replacement Reserve obligation to each MWh of net undelivered scheduled Generation in each Scheduling Coordinator's portfolio, thereby recognizing that "over-scheduled" Generation also contributes to the ISO's need to procure Replacement Reserve.

If the cumulative under-scheduled load and over-scheduled Generation is greater than the total additional Replacement Reserve requirement specified by the ISO, then each Scheduling Coordinator will receive a pro rata allocation of the obligation. If the cumulative under-scheduled load and over-scheduled Generation is less than the total additional Replacement Reserve requirement specified by the ISO, then the excess obligation will be assigned to all Scheduling Coordinators in proportion to metered Demand. In no event will the Scheduling Coordinator receive an allocation of Replacement Reserve that exceeds the amount of unscheduled Load or over-scheduled Generation.

DETAILS

Replacement Reserve requirement will be allocated as follows:

$$DevReplResReq_{xjt} = \left[\text{Max} \left(0, \sum_i GenDev \right) - \text{Min} \left(0, \sum_i LoadDev \right) \right]$$

The obligation for Replacement Reserve procured by the ISO will be assigned as follows:

$$DevReplResOblig_{ijt} = Max(0, DevReplResReqt_{ijt} - SelfProvReplRes_{ijt})$$

The difference between the total Replacement Reserve procured, and the sum of $DevReplResOblig_{ijt}$ for all Scheduling Coordinators, will be billed based on metered Demand.