PROPOSED REPLACEMENT RESERVE PROCUREMENT CRITERIA

SUMMARY

The ISO proposes to establish "deviation" Replacement Reserve requirements based on the estimated difference between the ISO demand forecast, and the estimated aggregate final Hour Ahead schedules, net of estimated Supplemental Energy supplies. The ISO may procure a portion of that requirement, taking into consideration self provision, under criteria which partially defer procurement to the Hour Ahead market.

The criteria described below relate to expected upper limits on "deviation" Replacement Reserve procurement. The ISO may elect to procure less "deviation" Replacement Reserve in either or both the Day Ahead and Hour Ahead markets. The ISO may, however, establish additional Replacement Reserve requirements based on other criteria, as provided in ASRP 6.1.2.

In contrast to the requirement for Regulation or Operating Reserve, the requirement for deviation Replacement Reserve is directly affected by the amount of Energy that is scheduled in the Hour Ahead market. As a result, it is reasonable to use criteria that allow for greater reliance on the Hour Ahead market for procurement of Replacement Reserve. With less Replacement Reserve procured in the Day Ahead market, increased supply will be available for Hour Ahead energy schedules, or to bid into the ISO's Hour Ahead A/S markets, or to self-provide Replacement Reserve in Hour Ahead schedules. These criteria also reduce the risk that the ISO will over-procure deviation Replacement Reserve in the Day Ahead market.

Zonal requirements may be established, depending on the distribution of resources.

REPLACEMENT RESERVE REQUIREMENT

The ISO will publish an estimate of the deviation Replacement Reserve requirement by 6:00 am the day before the Operating Day, in accordance with SP 3.2.2. The ISO will establish a deviation Replacement Reserve Requirement (*DevReplResReqtMW)* after the close of the Day Ahead Market[1] which shall not exceed the following:

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[1] It is assumed that *DevReplResReqtMW* is calculated based on Day Ahead schedules, and so may not be published prior to the Day Ahead Market.

Where:

$$ISOEstAvailMW = \begin{bmatrix} EnergySchedDA + ISOEstEnergySchedHA + \\ ISOEstSuppEnergy + UnscheduledRMR - UnavailSchedMW \end{bmatrix}$$

ISOLoadForecastDA is the ISO's best estimate of the load for the next Operating Day.

EnergySchedDA is the aggregate Energy Schedules by Scheduling Coordinators in the DA market.

ISOEstEnergySchedHA is the ISO's estimate of Energy that will be scheduled in the Hour Ahead market. This estimate will be based on experience.

ISOEstSuppEnergy is the ISO's best estimate of the amount of Supplemental Energy that will be bid and available in the BEEP stack. This estimate will be based on experience.

UnscheduledRMR is the aggregate amount of Energy associated with RMR Dispatch Notices that is not reflected in final Day Ahead Schedules.

UnavailSchedMW is the aggregate amount of scheduled resources which the ISO expects to be unavailable due to a scheduled or forced outage of generation or transmission facilities.

REPLACEMENT RESERVE PROCUREMENT – DAY AHEAD

The ISO expects to procure in the Day Ahead market an amount of deviation Replacement Reserve that does not exceed *ISOProcureDAMW*, determined as follows:

$$ISOProcureDAMW = ISO\_DAProcure\% * \begin{bmatrix} DevReplResReqtMW - \\ (SelfProvDAMW + ISOEstSelfProvHAMW) \end{bmatrix}$$

Where:

ISO_DAProcure% is the percentage of total expected Replacement Reserve requirement, net of self-provision, that the ISO expects to procure in the DA market. The value of *ISO_DAProcure%* may be changed based on experience.

SelfProvDAMW is the aggregate self-provided Replacement Reserve schedules.

ISOEstSelfProvHAMW is the ISO's best estimate of the incremental amount of self-provided Replacement Reserve in Hour Ahead Schedules. This estimate will be based on experience.

REPLACEMENT RESERVE PROCUREMENT – HOUR AHEAD

The ISO will revise the Replacement Reserve requirement for the Hour Ahead Market (*DevReplResReqtMW*) based on the difference between the ISO's updated load forecast and *ISOEstAvailMW*, updated to reflect the amount of scheduled Energy after final Hour Ahead schedules, and any change in the ISO's estimate of *UnscheduledRMR, UnavailSchedMW* and *ISOEstSuppEnergy*.

The ISO may procure an amount of "deviation" Replacement Reserve in the Hour Ahead that is not expected to exceed the difference between the updated *DevReplResReqtMW* and the sum of: 1) deviation Replacement Reserve procured in the Day Ahead market (*ISOProcureDAMW*); and 2) the amount of self-provided Replacement Reserve scheduled in final Hour Ahead Schedules.