



Proposed 2011-2012 Methodology for Determining Ancillary Service Requirements

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- **Inputs for determining the monthly Regulation Service requirements include the following:**
 - Last 30 days of Regulation Service deployments
 - 5 minute net-load changes from the last 30 days and from the same month of the previous year
 - Regulation Service requirement for the same month of the previous year divided by 2
 - The division by 2 is intended to account for the fact that Regulation moved from a 10-minute product in Zonal to a 5-minute product in Nodal

Regulation Service – Proposed Methodology Changes

- **A number of changes made during the last iteration of the document were done in preparation for the market transition**
 - Historical data from the Zonal Market would not necessarily be relevant or appropriate for the Nodal Market
- **The proposed changes are as follows:**
 - The Regulation Service deployments from the same month of the previous year will be considered along with the deployments from the last 30 days
 - The Regulation Service requirement for the same month of the previous year divided by 2 will no longer be used as an input

Non-Spin Reserve Service – Review of Current Methodology

- **For determining the monthly requirement:**
 - Break up the hours of the day into groups
 - Calculate the 95th percentile of the day ahead net-load forecast error
 - Set the requirement such that the combination of Non-Spin and Regulation Up Service will cover 95% of the net-load forecast error
 - If it has been determined that the forecasts have shown a tendency to be conservative, that bias will be removed from the load forecast and added to the NSRS requirement
 - This attempts to remove bias from forecasts while ensuring that reliability is maintained
 - Both a floor and ceiling are placed on the requirement
 - Floor during on-peak hours of single largest unit
 - Ceiling of 2000 MW during all hours

- **Under the Nodal Market, Market Participants are more easily able to self commit Resources closer to Real-Time**
 - Because of this it may not be necessary to procure Non-Spin to protect against 1600 day ahead forecast error
- **Proposal is to use net-load forecast error from midnight instead of the 1600 day ahead error**
 - This should better align the ancillary service requirements with Nodal timelines
 - The Regulation Up requirement will continue to be subtracted from the forecast error to determine the Non-Spin requirement

Effects of Proposed Methodology on NSRS Requirement

Month	Average Change in Non-Spin Requirement (*)	Average Change in Value Subtracted from the MTLF (**)
February 2011	-6.67	0.00
March 2011	54.00	-49.17
April 2011	-231.50	55.33
May 2011	38.83	30.83
June 2011	-190.33	147.67
July 2011	-108.00	-42.17
August 2011	105.50	-126.00

*	A positive number means that more Non-Spin would be procured under the proposed methodology
**	A positive number means that a larger number would be subtracted from the MTLF under the proposed methodology

- **The overall effect is that slightly less NSRS would be procured on average**
 - This varied by month
 - The average effect on the value subtracted from the MTLF was insignificant