Notes on Regulation Methodology from Bart McManus:

In order to estimate potential savings in regulation, we used 10 second area load data. Area load is a calculated number, total generation minus total interchange.

In order to find the regulation requirements, we calculated the regulation needed using three time frames, 60 minute, 30 minute and 10 minute. For all of these we used the same methodology: calculate a rolling average using 60, 30 or 10 minutes and compare the average to the instantaneous area load. The 60 minute rolling average was the one used for the RTO West study, I did use this also, but upon further reflection realized that this included the load following with the regulation. Since these may or may not be broken out separately in the CCA and/or GridWest markets, I went down to 10 minutes to get the regulation while removing load following. Ten minutes is the normal time period used when load following is broken out of regulation and treated as a separate control parameter.

One caveat to all of these studies: the base numbers are much lower than we actually set aside for regulation in the BPA control area. Although I firmly believe these numbers to be an accurate depiction of our Control Area needs, they are not actually followed in the BPA Control Area. We use a base of 250 MW, 101 MW regulation and 149 MW load following. Since the calculated numbers are the minimum I would allow in BPA and therefore would work hard to make them the absolute minimum in a CCA arena, you may want to add a 'fudge factor' into the final results in order to make them more tenable to all parties.