Kelly
Since I will not be on the call tomorrow, I am sending in a preliminary report:

I have not been able to get our subcommittee together to hash this out in consensus, but I have communicated with them all.
I tried to simplify the options by first assuming 3 different levels of completeness:
1. Develop provisions immediately which would only apply to wood diaphragms in one story RWFD buildings and would include limitations on configuration.
2. Assuming some of the configuration limitations could be eliminated and/or multiple stories could be accommodated by work from the TS (perhaps a big assumption), a second level of completeness could be assumed, still limited to wood but applying to more buildings.
3. Assuming steel diaphragms are shown eventually to comply with the requirements of the methodology, the most complete level of completeness applying to both wood and steel diaphragms and most RWFD buildings

I further defined the characteristics of potential provisions by suggesting that any of the 3 levels above could be incorporated into the Provisions as either an Alternative methodology, or as Mandatory provisions (essentially eliminating the traditional design process for RWFD buildings). This gave 6 options for proceeding.

On a preliminary basis, I can make some observations based on discussion of these alternatives:
A. No one thought that incorporation into the Provisions as a mandatory procedure had a high chance of success. The highest chance of success of this alternative would occur if the methodology would apply to most, if not all RWFD buildings.
B. The chances of incorporation into the Provisions of an alternative procedure increases as more and more buildings become eligible (ie level 1 the lowest and level 3 the highest chance)
C. There was some optimism of success (but not consensus) with an alternative procedure with the present level of completeness (ie level 1 above).

Interjecting some of my own thoughts:
It should be remembered that smaller wood diaphragm RWFD buildings and most all of steel diaphragm RWFD buildings failed P695 using current design procedures (R based on the vertical LFRS). If an alternative procedure is pursued, it is possible that the PUC will recognize that current procedures don’t work well in all cases, and will want to revise current design practice (lower R’s I imagine). In other words, the two alternates: 1) traditional design, and 2) the proposed methodology, are not equivalent.

The goal of the group behind the RWFD study was to develop a procedure which considered the obvious contribution of the diaphragm to the response period (and also to test the idea of using unique provisions for a narrow building type). I think that group demonstrated the original premise that using the period (and R) of only the vertical LFRS was not appropriate. The most logical use of this research is to replace the current design procedure for this building type with the proposed methodology. I agree with this subcommittee that replacement of traditional design methods of RWFD is not likely until the new procedure will apply to most if not all of these buildings.

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