

**Comment #7 – 10/20/16 – 2:27 p.m.**

My comments focus on 3.4.7.b and c., and I think they are more editorial than substantive:

3.4.7.b. says

“Experience Reflected in Setting Assumptions and Parameters – When setting assumptions and parameters, the actuarial should consider using the following: Margins—The actuary may consider whether adjusting the assumption or parameter to include a margin having a material effect would be appropriate, given the model’s intended purpose. Possible reasons for a margin include a) experience data that are not fully reliable, b) conservatism, c) an adjustment for the cost of bearing risk or d) future unpredictability.”

Comment 1: We have both “should consider” and “may consider” above. I suggest choosing one – my choice would be “may consider.”

Comment 2: I suggest adding reasons for avoiding margins, which might include a) explicit risk or cost-of-capital provisions elsewhere in the model or outside the model, and b) an intended purpose that involves avoiding bias in the model output.

Comment 3: I am not sure what the general practice should be regarding disclosure of margins that are built into assumptions and parameters, but it seems like something intended users should be told.

3.4.7.c. says

“Range of Assumptions and Parameters—The actuary should consider whether the range of assumptions and parameters used and the number of model runs analyzed reflect a range of conditions consistent with the intended purpose.”

Comment: I suggest generalizing this to recognize the possibility of a deterministic model:

“Range of Assumption and Parameters—The actuary should consider whether a range of assumptions and parameters should be used, and if so, whether the number of model runs analyzed reflects a range of conditions consistent with the intended purpose.”

Regarding the specific questions:

1. Does the proposed standard provide sufficient and appropriate guidance to actuaries working with models? If not, what suggestions do you recommend for improving the guidance?

Yes, other than suggestions above

2. Does the proposed standard provide sufficient and appropriate guidance to actuaries working with all types of models, including financial projection models, predictive models, and statistical models?

Yes, although the notion that periodic updates are “model runs” is unfamiliar.

3. The scope of the proposed ASOP excludes “simple” models, which are defined in section 2.13. Is this definition appropriate and sufficiently clear?

The definition of “model,” extended to specify components and a life cycle, requires the reader to stop and think about how “simple models” are a strict subset of “models.” For a simple model the input,

processing and output components may be present but indistinct, and the life cycle may not exhibit phases such as specification, implementation and production. The absence of such formal components and phases might cause some “simple models” to be deemed not models at all under the “model” definition. I’m not sure that’s a problem, since neither non-models nor simple models would be subject to the ASOP.

4. Section 3.2 requires the actuary to make practical efforts to comply with applicable sections of this standard with respect to models designed or built by someone else, such as a vendor or a colleague, when the actuary has a limited ability to obtain information about the model or to understand the underlying workings of the model. Is this guidance appropriate and clear? Yes.

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