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Comment #11 - January 16, 2012

To: Actuarial Standards Board

Re: Proposed Revisions to ASOP 38

We, the undersigned, submit the following comments regarding the captioned ASOP:

The current ASOP requires (a) that the actuary "have a basic understanding of the model," and (b) "determine that appropriate validation has occurred." The actuary is explicitly permitted to rely on experts outside his/her area of expertise – including areas of expertise both inside and outside actuarial science. To paraphrase, the current standard requires that the actuary primarily vet the *expert modeler*, not the model itself.

In contrast, the proposed ASOP requires review of *the model itself* by the actuary or by another *actuary*. We believe that these requirements are inappropriate and, in some circumstances, may render some perfectly good models inaccessible to some property/casualty actuaries. The proposed standard also places actuaries in a position where they may be required to make judgments that they are by definition not qualified to make.

The current standard is practical, provides useful guidance, and we believe reflects current appropriate practice. The proposed revisions to the standard appear to us to be a solution looking for a problem.

Specific comments:

3.1.b This paragraph requires that the model be reviewed either by the actuary or by another actuary. Why, in this world of increasingly complex and interdisciplinary model building, would we as a profession explicitly exclude a review by an expert who doesn't happen to be an actuary? If the actuary needs to use a weather model produced by a climatologist, would it not be more appropriate to rely on a review of that model by one or more expert climatologists than to attempt to review – or find another actuary to review – the model? If a peer review by an expert other than the model builder is required, the standard should allow for that review by any *qualified expert* and should explicitly recognize that the expert might very well *not* be an actuary.

To provide an extreme example – can we, as property/casualty actuaries – continue to use the CPI as a general measure of inflation without reviewing whether there are significant differences of opinion among economists?

- 3.2.1.a If the model is outside the actuary's expertise, on what basis can the actuary judge the assumptions, parameters and especially the *subjective* judgments that go into the model? Contrast this requirement with the current standard, which requires that the actuary be "reasonably familiar with the basic components" of the model and then permits reliance on the expert.
- 3.2.1.b What if the model is new or novel, and therefore has undergone relatively little use? The actuary is supposed to consider this in determining whether the model is appropriate for use. And then do what? This paragraph implies that widely accepted existing models should be preferred over new products or novel developments.
- 3.2.2 Our comments here are the same as the comments concerning 3.2.1.a. If the model is outside the actuary's area of expertise, how is the actuary to make a judgment concerning whether revisions make it less appropriate for use? Perhaps it would be better to caution the actuary to ensure that the version being used is the one that has been *reviewed by the expert upon whom the actuary is relying*.
- 3.3.1 Models may include many components that range far from an (or any) actuary's area of expertise. Even the loss models cited in the examples in the proposed standard require expertise from climatologists, geologists, structural engineers, and the like. The current standard requires that the actuary be reasonably familiar with the components and understand the user input and the expected outputs of the model (current section 3.3). Revised section 3.3.1, however, now requires that the actuary *review* (new 3.3) such components and how they interrelate or have interdependence. A hydrologist's model of the potential spread of volatile organic compounds from an EPA site into the ground water over the next 20 years might have hundreds of assumptions with all kinds of interdependence. Does the actuary really need to *review* those assumptions to use the output of the model a probability distribution of groundwater contamination if the model has been peer reviewed by other hydrologists? This level of familiarity is unnecessary provided that the actuary discloses the extent of reliance on the model in the actuarial communication. How does the actuary perform such a review in the event that the model is proprietary or has some proprietary components?
- 3.3.3 This section provides appropriate guidance for the actuary in determining whether to rely on the experts, but we prefer the guidance provided in current standard Section 3.2. In particular, the emphasis (3.3.3.d) on professional credentials or "other apparent qualifications" and professional affiliation of such experts appears to imply that experts who are member of professional bodies are to be preferred over academics. The current standard, requiring that the actuary consider whether the individual is an expert, is not only sufficient, it avoids insulting implications (that may or may not be intended).
- 3.4 The actuary should be able to rely on the review of a model by *any appropriate expert*. Often the appropriate expert will *not* be another actuary, and to imply that only an actuary can review a model that is *outside the area of expertise* expresses a level of hubris and distrust of other professionals that is astonishing.

We also note that we concur fully with the comments submitted by Amy Angell and numerous other actuaries at Milliman and by Ralph Blanchard.

Sincerely,

On behalf of the actuaries at Select Actuarial Services:

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