## Comment #18 – 10/31/16 – 1:33 p.m.

Comments & Observations Re: Third Exposure Draft of the Proposed ASOP, "Modeling" From: Corwin Zass, Brian Forman | Actuarial Risk Management, LTD Date: October 31, 2016

1.2 - Suggest changing "all" in the first sentence to "any"

2.1 - Definitions (Assumptions): Since a "PAD" is deemed an assumption that this definition should include "margins"

2.2 - Definitions (Data): A model "as-of-date" is a form of data thus maybe good to include "valuation date"

2.6 - Definitions (Intended Purpose): should consider saying "goal or goals" (i.e. plural)

2.7 - Definitions (Model): Second sentence should consider the inclusion of "past & future" as you can use to help explain retrospective and prospective matters

2.9 - Definitions (Model Risk): Might consider including the word "systemic" as this would reinforce the negative nature of relying solely on a model

2.12 - Definitions (Simple Model): How might the writers consider those crude representations or "back of the envelop" possible external sources...we have seen some rudimentary 'models'

3.1 - Application of ASOP Guidance: Any model should include disclaimers and caveats relating to its use or the impact of third party provided data or assumptions

3.1 - Application of ASOP Guidance: The sentence beginning with "In instances where a deviation from guidance is material,..." states "material" yet there is no discussion as to how to determine materiality.

3.2 - Models Developed by Others: In the first sentence there is a statement about "the actuary has a limited ability to obtain...". In our opinion there should be documentation that limitation exist. Furthermore, the actuary should disclose that he/she is using a model not created by that actuary. This raises whether there should be a reliance letter stating that a third party prepared and provided to the actuary the model in question.

3.4.7 - Assumptions and Parameters: In (a)(1) we believe the word "credible" be added to the list

3.4.7 - Assumptions and Parameters: In (a)(3) consider adding that the actuary should disclose any modifications

3.5.1 - Model Integrity: Suggest breaking into two clearly labeled sections - <u>Static</u> validation (which should be included and is not an option) compares relevant inputs with their equivalent model starting points. A <u>Dynamic</u> validation that accounts for (a) (3)

3.6 - Presentation of Results: The way the second sentence is written (i.e. "If appropriate, the actuary should consider...") appears weak. We see two paths of documentation deliverable: a formal actuarial report (which needs to be defined) versus an informal actuarial summary. At a minimum, in our opinion, the latter of those two must be included in every model deliverable that provides documentation as to changes from the previous model including but not limited to assumptions, methods, model platforms, computational differences, data, etc. This same summary document does not need to include all the formal disclaimers, caveats, reliances, etc. Many times a recurring exercise is to produce a valuation and the output is provided for reporting yet there is no formal actuarial report. In that case the inclusion of some actuarial documentation is paramount.

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