Date: September 30, 2013

To: The Actuarial Standards Board
From: Ron Harasym FSA, CERA, MAAA

Re: Modeling – Exposure Draft – June 2013

I am pleased to provide comments on the exposure draft of the proposed actuarial standard of practice, Modeling. I appreciate the time and effort spent by the Modeling Task Force of the General Committee of the Actuarial Standards Board to produce the exposure draft.

Responses to questions posed are as follows:

1. Does the proposed standard provide sufficient guidance to actuaries working with models?

   The proposed standard provides a reasonable level of guidance. However, I feel there are a number of areas where guidance could be added. For example, the standard does not seem to address model maintenance or the interaction between different models.

6. Does the use of bold font to identify defined terms improve the readability and clarity of the standard? If not, what suggestions do you have to improve the recognition of defined terms in the standard?

   I do not feel that the bold font as used in the exposure draft enhances readability. In fact, I found the bold font somewhat distracting. Perhaps the use of a different font (italic) would improve the recognitions of defined terms.

Other comments are as follows:

Section 1 Purpose, Scope, Cross References, and Effective Date

Section 1.1 Purpose

To be more specific, “professional services” should be changed to “professional actuarial services”.

Section 1.2 Scope

To be more specific, “professional services” should be changed to “professional actuarial services”. Similarly, “models” should be changed to “actuarial models”. In addition, the following should be added to the end of the third paragraph: “for the appropriate disclosure”.

Section 1.3 Cross References

In the last sentence, replace “the actuary should consider” with “the actuary should apply” and replace “to the extent it is applicable” with “to the extent it remains applicable”.

Section 2 Definitions

Section 2.1 Assumption – Replace “based on professional judgment” with “based on data and/or professional judgment.

Section 2.3 Granularity – Replace “a model contains” with “inputs contain”. Also replace “or assumptions that vary by cell or time intervals” with “or assumptions that vary by demographic or product groupings or time-step intervals”.

Section 2.8 Margin – Margins are added to assumptions. Accordingly, replace “such as that caused by a lack of full credibility of the data” with “such as that caused by a lack of full credibility of the data on which the assumptions were based, or as a provision for adverse deviation (if the data is fully credible)”.

Section 2.9 Model – The terms "specification," "implementation," and "realization" are not in common use in the industry. The construct of inputs, processing and outputs is cleaner and better conforms to industry nomenclature.

Section 2.11 Model Risk – The definition appears to refer only to sources of risk that result from errors, as indicated by the use of the terms "flawed," "inappropriate," and "misapplication." However, even in the case where a model is constructed with appropriate assumptions and methods, there is residual model risk that arises because, by definition, a model is a representation that is necessarily imperfect.

A more complete definition of model risk is important to provide clarity to users of the ASOP as well as to reinforce the idea that there will always be some model risk that cannot be completely mitigated away.

Section 3 Analysis of Issues and Recommended Practices

Section 3.1 Application of ASOP Guidance – To be more specific, "models" should be changed to "actuarial models".

Section 3.1.1 Model Reliance and Financial Importance – Replace "where the results are either not heavily relied upon or do not have material financial effect" with "where the results are not heavily relied upon". It is possible that the work is not relied upon because it is approximate even if the results are material.

Section 3.1.2 Models Developed by Others – In subsection (a), replace "the basic workings of the model" with "the intended application of the model".

Section 3.2.1 Designing, Building, or Developing the Model for the Intended Application – The actuary should also consider the model's ability to meet regulatory requirements. Model scalability is also another consideration. For example, the model should be developed with adequate flexibility such that it is easy to adapt and expand.

Section 3.2.5 Model Structure – In subsection (d), documentation should include the methodology as well as the rationale.

Section 3.3.1 Validation, Checking, and Analysis – To mitigate model risk, the actuary could also consider carrying out an independent check using a different modeling platform.

Once again, I appreciate the efforts of the Modeling Task Force of the General Committee of the Actuarial Standards Board to produce the exposure draft.

Please do not hesitate to contact me if you have any questions regarding my comments.

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