Actuarial
Board
for
Counseling
and
Discipline

December 29, 2010

Ethan Kra
Vice President, Pension Practice Council
American Academy of Actuaries
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Dear Mr. Kra,

The Pension Practice Council has asked the ABCD for its guidance regarding whether the actions of a consulting actuary in the use of certain actuarial assumptions and practices in the valuation of defined benefit pension plans would not constitute material breaches of the Code of Professional Conduct. A copy of your request is attached for convenient reference.

A finding of a material breach of the Code can be made only after a detailed investigation of a particular situation and depends greatly on the facts and circumstances of the specific situation. Hypothetical scenarios, such as you describe, cannot contain sufficient detail to support clear findings in any actual case. However, they can be informative since they enable the ABCD to articulate the issues that are involved and the analysis we are likely to use in arriving at a finding. It is possible that in some cases, depending on the particular facts of those cases, that an actuary's use and good communication of validly supported assumptions would not appear to violate the Code of Conduct in either of the two scenarios described. However, our response cannot provide an unqualified yes or no answer to the scenarios as applied to specific, actual cases. Instead, our response discusses the factors we would likely consider in analyzing a complaint involving these issues.

We do have a few global comments on this subject:

- It is not the job of the ABCD to interpret actuarial standards of practice (ASOPs) globally.
- The ABCD does consider how an ASOP applies to a particular actuary's work based on applicable facts and circumstances.
- It is important that the actuary produces sufficient disclosure/description within their Actuarial Report such that any other actuary qualified in the same practice area could understand the imbedded application of all actuarial assumptions and methodologies and reasonably appraise the valuation results.
- If the responsible actuary uses assumptions that are applied unusually or methods that are applied in a way other than could be reasonably expected by another actuary qualified in the same practice area, he or she should make it clear that he or she is doing so and why.

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Summary of Hypothetical Scenarios
You have presented two actuarial assumption setting and associated practice scenarios with variations. The salient facts are set forth below.

Scenario 1: The actuary is faced with a circumstance in which the software available to him or her or other resources are not designed so as to permit an explicit method, assumption, or plan provision to be valued. The actuary chooses to make adjustments to their valuation to be able to use the software to indirectly arrive at a reasonable valuation result. Such adjustment practices might be to eliminate or offset actuarial assumptions and/or simplifying complex benefit provisions. This scenario includes the expectation that ASOPs, especially ASOP 4 Section 3.17 and 4.1(o), are followed and disclosures and analysis as to the possible variations of the results had other methods been used are explained in the report.

Scenario 2: Seven specific assumption and methods selection techniques are posed.

The remainder of this letter outlines how the ABCD would address these questions. Below each question is an outline of the analysis the ABCD would go through before arriving at a decision.

Before looking at an individual scenario, the ABCD would consider which Precepts of the Code and which ASOPs might apply, since the role of the ABCD in investigating a complaint is to determine whether there was a material breach of the Code. The likely applicable Precepts are paraphrased below:

- Precept 1, which requires that an actuary act honestly, with integrity and competence, and perform actuarial services with skill and care clearly applies.
- Precept 2, requiring the actuary to only perform work for which qualified, may apply. The Qualifications Standards salient sections would be carefully reviewed for applicability.
- Precept 3, which requires that services be performed in accordance with ASOPs, clearly applies. The current set of applicable ASOPs to these scenarios appears to be:
  - 4. Measuring Pension Obligations (Doc. No. 107; September 2007) **Note:** This revised document is effective for any work performed on or after March 15, 2008
  - 27. Selection of Economic Assumptions for Measuring Pension Obligations (Doc. No. 109; September 2007) **Note:** This revised document is effective for any work performed on or after March 15, 2008
  - 35. Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations (Doc. No. 118; September 2010) **Note:** This revised document is effective for any valuation with a measurement date on or after June 30, 2011
  - 41. Actuarial Communications (Doc. No. 086; March 2002)

Scenario 1: Did the actuary materially violate the Code in the use of simplified methods or assumptions in the preparation of their actuarial valuation?

- Did the actuary's advice satisfy Precept 3 of the Code and applicable ASOPs from the list above?

    - The actuary may or may not have violated ASOPs depending on the specific facts. If the advice did not apply the applicable ASOPs appropriately, there was a breach of Precept 3. Investigation of the applicable valuation assumptions, methods and actuarial communications would be required for this determination.

- Did the actuary act with integrity and competence?
  - Were the actuary's valuation results and advice appropriate and complete? Were they based on an approximation method that was expected to produce a result not significantly different from the result expected from a more precise method? How was that variance determined and explained? Were assumptions selected for the actuary's valuation consistent with corresponding assumptions used in any sister plan, such as a retiree medical plan covering a very similar participant group?
  - If the advice or the methodology was inappropriate, did the actuary know that the advice or methodology was inappropriate under the ASOPs?
    - If the actuary did know, then the actuary may have breached the Precept 1 requirement to perform services with integrity.
    - If the actuary did not know, should the actuary have known?
      - If the actuary is not reasonably expected to have known the methodology was inappropriate, then there was no breach of Precept 1 or 2.
      - If the actuary should have known, there would have been a breach of Precept 1, performing work with competence.
- Was the actuary qualified to do the work?
    - If the actuary performed work using methodology the actuary did not know but should have known was inappropriate, there might have been a breach of Precept 2, performing work only when qualified to do so.
    - Was the knowledge about the appropriateness of the methodology something that a qualified actuary was expected to know?
    - Is there any other evidence that the actuary is unqualified to perform the work?
- Was any breach that occurred material? Did it significantly affect the results? Whether the breach is material is based on the facts and circumstances which includes the actual numbers. For example, a small percentage change in the liabilities of one plan may be immaterial whereas the same percentage change for another plan may be material, depending upon the financial circumstances of the plan sponsor.

Scenario 2: Did the actuary materially violate the Code in each of the seven listed valuation techniques and disclosure of these techniques?

- Actuarial liabilities and valuation reports were produced with one or more of these methods or assumptions techniques under the particular conditions specified in your attached letter:
  - the use of a turnover assumption that reflects only non-vested turnover and no additional cost of termination benefits is calculated or no turnover assumption was applied
  - the use of no pre-retirement mortality assumption or pre-retirement mortality probabilities were subsumed into another pre-retirement decrement assumption

— 100% probability at a single retirement age instead of a series of retirement age probabilities
— 100% probability that the normal form of benefit will be selected
— the use of an age-based aggregate turnover assumption and not a select and ultimate set of turnover assumptions
— the use of a static mortality table instead a mortality table that varies by year
— substituting the past thorough checking of each facet of a valuation program with individual test case checking in each valuation

Are the above reasonable and in satisfaction of the Code of Conduct?

For each of the techniques:

- the actuary disclosed and adequately described the assumptions in the actuarial communications and reports.
- the basis and reasons for each of the actuary's selections are as described in your attached letter
- the occasions when each simplified assumption might no longer be reasonable are also described in your attached letter

Thus, based on the facts in the two scenarios, the actuary's use and good communication of validly supported assumptions does not appear to violate the Code of Conduct.

Summary
As these scenarios show, even a seemingly straightforward aspect of actuarial practice, assumption setting and methodology choices or simplifications, involves the application of several Precepts of the Code of Professional Conduct and associated ASOPs. In addition to the general requirement that the actuary perform services with competence and integrity, the Code and ASOPs provide that any advice given to the client concerning the valuation results achieved with such choices needs to be disclosed and clear enough that another actuary qualified in the same practice area could objectively appraise the valuation results. Using simplified assumptions or methods or any of the techniques described in your letter is not in and of itself unreasonable if properly supported. However, the use of or defending inappropriate assumptions or methods because of a lack of resources or software may be a breach of the Code. Additionally, ignorance of the formulas or calculation formulas may not be a defense and it may be an indication that the actuary is performing services without being qualified to do so.

Sincerely,

Carol Sears

Carol Sears
ABCD Chairperson