



AMERICAN ACADEMY *of* ACTUARIES

February 5, 2001

Mr. Kevin McCarty

Florida Department of Insurance
200 East Gaines Street
Tallahassee, FL 32399-0300

Dear Mr. McCarty:

We are writing to you on behalf of the American Academy of Actuaries' Catastrophe Management Working Group to comment on actuarial issues in the NAIC Voluntary Tax-Deferred Pre-Event Catastrophe Reserve Proposal. We are submitting this letter to you in your capacity as the Chairperson of the NAIC's Catastrophe Insurance Working Group. Our comments are quite similar to the comments we provided to the NAIC Catastrophe Reserve Sub-Group in July 1999 regarding the Probable Maximum Loss Cap Proposal.

The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the profession. The Academy is non-partisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice, and the Code of Professional Conduct for all actuaries practicing in the United States.

We offer our comments on two aspects of the Proposal:

- Can an individual insurer's Net Probable Maximum Loss Exposure ("Net PMLE") be determined with reasonable accuracy, and
- Are actuaries professionally qualified to render an Opinion on the Net Probable Maximum Loss Exposure .

Our comments are as follows:

1) We believe an individual insurer's Net PMLE can be determined with reasonable accuracy:

Insurers routinely assess their exposure to catastrophic risk and management relies on these assessments in meeting their fiduciary responsibilities. Assessment of these exposures is necessary for the following reasons: a) management of the accumulation of catastrophe exposures within the company and for setting pricing and underwriting strategies; b) determination of amounts and structure of reinsurance programs or alternative catastrophe management resources, and; c) compilation of information on catastrophe exposures and underwriting considerations for submissions to reinsurers or other providers of catastrophe management resources.

Frequently, insurers and actuaries rely on models in determining their exposures to catastrophic loss. Several professional catastrophe modeling firms have models that are in wide spread use within the insurance and reinsurance industries. An actuary may choose to rely on such models in evaluating a company's exposure to catastrophic risk, depending on the insurer's portfolio and risk characteristics. In some cases the actuary or company may have developed a proprietary model. Determining the Net Probable Maximum Loss Exposure and providing an Opinion on the Net PMLE would require the NAIC to allow the use of such models for this purpose, as is envisioned in the Proposal.

We do not believe the NAIC needs to list or certify in some way the various commercial models that an actuary may choose to rely on in determining the Probable Maximum Loss Cap. However, the actuary would need to comply with Actuarial Standard No. 38, which involves understanding the model and its appropriateness for the insurer, the inputs to the model and their quality, including exposure and reinsurance data, and the results from the model. We believe use and selection of a model that is appropriate for the insurer's portfolio and risk characteristics is an appropriate and necessary area for judgment, with the actuary's reasoning being documented as required by Actuarial Standard No. 38.

The NAIC proposal lists eight specific types of events and ten lines of business for determining the Catastrophe Reserve. For some of these lines and event combinations, models are not available and the actuary's estimates may require significant judgement. Similarly, potential exposures to catastrophic loss, such as workers compensation losses following an earthquake, are not contemplated and could also have a significant bearing on an insurer's ability to withstand a catastrophic event. While we don't believe these issues would prevent an actuary from rendering a meaningful determination of the Net PMLE, we want the NAIC to be aware of these limitations.

2) Actuaries are professionally qualified to render an opinion on the Net PMLE:

An actuary's training in both pricing and reserving is relevant to determining the Net PMLE. The Statement of Principles Regarding Property and Casualty Insurance Ratemaking of the Casualty Actuarial Society states that consideration should be given to the impact of catastrophes and that procedures should be developed to include an allowance for the catastrophe exposure in the rate. In this regard, actuaries are trained in: data analysis, including identifying and assessing the quality of historical insurance data; the applicability of such data for an insurer's class, coverage and geographic distributions; adjustments that might be necessary to reflect future conditions; and the use of non-insurance data where historical data does not provide sufficient information to reflect the broad range of catastrophic events that need to be anticipated. The actuary's expertise in pricing is relevant to the PMLE determination as it makes provision for future contingent events.

The actuary's expertise in reserving, is relevant in three important areas: understanding and quantifying an insurer's reinsurance programs or other catastrophe management resources; analyses of data profiling an insurer's book of business; and selection of statistical techniques and interpretation of relevant models, including determination of appropriate parameters. These areas are critical to determining an individual insurer's actual catastrophic risk exposure, net of reinsurance.

We therefore concur that the NAIC adopt signatory requirements for rendering an Opinion on the Net PMLE similar to the current professional requirements for the Loss and Loss Adjustment Expense (LAE) Reserve Opinions. We recommend that individual insurers should provide a separate Opinion, however, as the nature of the analysis is different (e.g., retrospective and prospective) and the actuary providing the Opinion may be different. We also recommend that comparable standards for documentation of methodology and assumptions be developed, and the Academy would be pleased to provide assistance to the NAIC in developing generally accepted standards and principles. In this regard, given the nature of these estimates and the inherent uncertainty, the NAIC may want to consider allowing the Opinion to provide a range of probable outcomes while still demonstrating that the catastrophe management resources make a reasonable provision for future catastrophic risk exposure for qualified catastrophes in qualified lines of business.

The NAIC Risk Based Capital factors implicitly include a provision for catastrophe risk as a function of the variability of results. If the NAIC adopts a Catastrophe Reserve, consideration will need to be given to the Interaction of the Reserve and RBC to ensure the catastrophe component is not double-counted. This will be increasingly important as the catastrophe reserve increases in the years after implementation.

Thank you again for the opportunity to provide these comments. The Academy is available for further discussion if that would be of benefit to the Subgroup. Please contact Tom Wilder, Director of Public Policy (202 785-7875 or wilder@actuary.org) to facilitate further discussion of this issue.

Sincerely,

Wayne H. Fisher
Co-Chairpersons,
Catastrophe Management Working Group

Frederick O. Kist

CC: Susan Taylor, NAIC
Natalai Hughes, NAIC