Sec. 38a-78-9. Description of an actuarial memorandum including an asset adequacy analysis and a regulatory asset adequacy issues summary

- (a) General.
- (1) In accordance with subsection (b) of section 38a-78 of the Standard Valuation Law, the appointed actuary shall prepare a memorandum to the company describing the analysis done in support of his or her opinion regarding the reserves under an opinion pursuant to section 38a-78-7 the Regulations of Connecticut State Agencies. The memorandum shall be made available for examination by the commissioner upon his or her request but shall be returned to the company after such examination and shall not be considered a record of the insurance department or subject to automatic filing with the commissioner.
- (2) In preparing the memorandum, the appointed actuary may rely on, and include as a part of his or her own memorandum, memoranda prepared and signed by other actuaries who are qualified within the meaning of subsection (b) of section 38a-78-5 of the Regulations of Connecticut State Agencies with respect to the areas covered in such memoranda, and so state in their memoranda.
- (3) If the commissioner requests a memorandum and no such memorandum exists or if the commissioner finds that the analysis described in the memorandum fails to meet the standards of the Actuarial Standards Board or the standards and requirements of this section, the commissioner may designate a qualified actuary to review the opinion and prepare such supporting memorandum as is required for review. The reasonable and necessary expense of such independent review shall be paid by the company but shall be directed and controlled by the commissioner.
- (4) The reviewing actuary shall have the same status as an examiner for purposes of obtaining data from the company and the work papers and documentation of such reviewing actuary shall be retained by the commissioner; provided, however, that any information provided by the company to such reviewing actuary and included in the work papers shall be considered as material provided by the company to the commissioner and shall be kept confidential to the same extent as is prescribed by law with respect to other material provided by the company to the commissioner pursuant to section 38a-78 of the general statutes. The reviewing actuary shall not be an employee of a consulting firm involved with the preparation of any prior memorandum or opinion for the insurer pursuant to section 38a-78-5 of the Regulations of the Connecticut State Agencies for any one of the current year or the preceding three years.
- (5) In accordance with subsection (b) of section 38a-78 of the Standard Valuation Law, the appointed actuary shall prepare a regulatory asset adequacy issues summary, the contents of which are specified in subsection (c) of this section. The regulatory asset adequacy issues summary shall be submitted no later than March 15 of the year following the year for which a statement of actuarial opinion based on asset adequacy is required. The regulatory asset adequacy issues summary shall be kept confidential to the same extent and under the same conditions as the actuarial memorandum.
- (b) **Details of the Memorandum Section Documenting Asset Adequacy Analysis.** When an actuarial opinion under section 38a-78-7 of the Regulations of Connecticut State Agencies is provided, the memorandum shall demonstrate that the analysis has been done in accordance with the standards for asset adequacy analysis referred to in subsection (d)

of section 38a-78-5 of the Regulations of Connecticut State Agencies and any additional standards under this regulation. It shall specify:

- (1) for reserves:
- (A) product descriptions, including market description, underwriting and other aspects of a risk profile and the specific risks the appointed actuary deems significant;
 - (B) source of liability in force;
 - (C) reserve method and basis;
 - (D) investment reserves;
 - (E) reinsurance arrangements;
- (F) identification of any explicit or implied guarantees made by the general account in support of benefits provided through a separate account or under a separate account policy or contract and the methods used by the appointed actuary to provide for the guarantees in the asset adequacy analysis; and
 - (G) documentation of assumptions to test reserves for the following:
 - (i) lapse rates (both base and excess);
 - (ii) interest crediting rate strategy;
 - (iii) mortality;
 - (iv) policyholder dividend strategy;
 - (v) competitor or market interest rate;
 - (vi) annuitization rates;
 - (vii) commission and expenses;
 - (viii) morbidity.

The documentation of the assumptions shall be such that an actuary reviewing the actuarial memorandum could form a conclusion as to the reasonableness of the assumptions.

- (2) for assets:
- (A) portfolio descriptions, including a risk profile disclosing the quality, distribution and types of assets;
 - (B) investment and disinvestment assumptions;
 - (C) source of asset data;
 - (D) asset valuation bases; and
 - (E) documentation of assumptions made for:
 - (i) default costs;
 - (ii) bond call function;
 - (iii) mortgage prepayment function;
 - (iv) determining market value for assets sold due to disinvestment strategy; and
 - (v) determining yield on assets acquired through the investment strategy.

The documentation of the assumptions shall be such that an actuary reviewing the actuarial memorandum could form a conclusion as to the reasonableness of the assumptions.

- (3) for the analysis basis:
- (A) methodology;
- (B) rationale for the inclusion/exclusion of different blocks of business and how pertinent risks were analyzed;
- (C) rationale for degree of rigor in analyzing different blocks of business, including the level of materiality that was used in determining how rigorously to analyze different blocks

of business;

- (D) criteria for determining asset adequacy, including the precise basis for determining if assets are adequate to cover reserves under "moderately adverse conditions" or other conditions as specified in relevant actuarial standards of practice; and
- (E) whether the impact of federal income taxes was considered and the method of treating reinsurance in the asset adequacy analysis.
- (4) summary of material changes in methods, procedures, or assumptions from prior year's asset adequacy analysis;
 - (5) summary of results; and
 - (6) conclusion.
 - (c) Details of the Regulatory Asset Adequacy Issues Summary.
 - (1) The regulatory asset adequacy issues summary shall include:
- (A) descriptions of the scenarios tested, including whether those scenarios are stochastic or deterministic, and the sensitivity testing done relative to those scenarios. If negative ending surplus results under certain tests in the aggregate, the actuary shall describe those tests and the amount of additional reserve as of the valuation date which, if held, would eliminate the negative aggregate surplus values. Ending surplus values shall be determined by either extending the projection period until the in force and associated assets and liabilities at the end of the projection period are immaterial, or by adjusting the surplus amount at the end of the projection period by an amount that appropriately estimates the value that can reasonably be expected to arise from the assets and liabilities remaining in force;
- (B) the extent to which the appointed actuary uses assumptions in the asset adequacy analysis that are materially different than the assumptions used in the previous asset adequacy analysis;
- (C) the amount of reserves and the identity of the product lines that had been subjected to asset adequacy analysis in the prior opinion but were not subject to analysis for the current opinion;
- (D) comment on any interim results that may be of significant concern to the appointed actuary;
- (E) the methods used by the actuary to recognize the impact of reinsurance on the company's cash flows, including both assets and liabilities, under each of the scenarios tested; and
- (F) whether the actuary is satisfied that all options, whether explicit or embedded, in any asset or liability, including but not limited to those affecting cash flows embedded in fixed income securities, and equity-like features in any investments have been appropriately considered in the asset adequacy analysis.
- (2) The regulatory asset adequacy issues summary shall contain the name of the company for which the regulatory asset adequacy issues summary is being supplied and shall be signed and dated by the appointed actuary rendering the actuarial opinion.
- (d) **Conformity to Standards of Practice**. The memorandum shall include the following statement:

"Actuarial methods, considerations and analyses used in the preparation of this memorandum conform to the appropriate Standards of Practice as promulgated by the

Regulations of Connecticut State Agencies

Actuarial Standards Board, which standards form the basis for this memorandum."
(Effective September 28, 1993; Amended December 23, 2008)