COMMONWEALTH OF VIRGINIA

STEVEN T. FOSTER
COMMISSIONER OF INSURANCE

Box 1157 RICHMOND, VA 23209 TELEPHONE: (804) 786-3741 TDD/VOICE: (804) 225-3806

# STATE CORPORATION COMMISSION BUREAU OF INSURANCE

November 10, 1992 Administrative Letter 1992-24

TO: All Life and Accident and Health Insurance Companies licensed under Chapter 10, Life Benefit Companies licensed under Chapter 38, Mutual Assessments Life, Accident and Sickness insurers licensed under Chapter 39, Burial Societies licensed under Chapter 40 and Fraternal Benefit Societies licensed under Chapter 41 of Title 38.2 of the Code of Virginia.

RE: Actuarial Opinion Submissions in Company Annual Statements

The purpose of this letter is to inform all licensees described above that Administrative Letter 1990-16 is being withdrawn. The Commission has adopted a new regulation pertaining to actuarial opinions filed by any company licensed to write policies or agreements providing any form of life insurance benefits or annuity benefits, or reinsurance thereof.

The regulation is entitled "Rules Governing Actuarial Opinions and Memoranda." It is sometimes referred to as Insurance Regulation No. 45 and becomes effective December 15, 1992. A copy is enclosed. All licensees addressed by this letter must file actuarial opinions for the year ended December 31, 1992, and all subsequent years, which comply with the new regulation.

If you have questions concerning this letter or the enclosed regulation, please contact:

Edward J. Buyalos, Jr., CFE, CPA, FLMI Supervisor, Financial Analysis Section Bureau of Insurance P.O. Box 1157 Richmond, Virginia 23209 (804) 786-3637

Sincerely,

Steven T. Foster

Commissioner of Insurance

A:AL92-24(11/6/92p)

DOCUMENT CONTROL

1832 1877 -5 M 8 53

AT RICHMOND, NOVEMBER 5, 1992

CASE NO. INS920377

COMMONWEALTH OF VIRGINIA

At the relation of the

v.

STATE CORPORATION COMMISSION

PORMITON COMMISSION

EX PARTE: In the matter of adopting Rules Governing Actuarial Opinions and Memoranda

# ORDER ADOPTING REGULATION

WHEREAS, by order entered herein September 16, 1992, the Commission ordered that a hearing be held in the Commission's Courtroom on November 3, 1992, for the purpose of considering the adoption of a regulation proposed by the Bureau of Insurance ("Bureau") entitled "Rules Governing Actuarial Opinions and Memoranda";

WHEREAS, the Commission conducted the aforesaid hearing where the Bureau appeared, by counsel, and recommended several technical corrections to the regulation and no interested party appeared to comment on the proposed regulation;

THE COMMISSION, having considered the record herein, the one comment filed by an interested party and the recommendation of the Bureau, is of the opinion that the regulation should be adopted, as amended;

THEREFORE, IT IS ORDERED that the regulation entitled "Rules Governing Actuarial Opinions and Memoranda" which is attached hereto and made a part hereof should be, and it is hereby, ADOPTED to be effective December 15, 1992.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to the Bureau of Insurance in care of Deputy Commissioner Alfred W. Gross, who shall forthwith give further notice of the adoption of the regulation by mailing a copy of this order together with a copy of the regulation to all fraternal benefit societies licensed pursuant to Chapter 41 of Title 38.2 and all other companies licensed pursuant to Title 38.2 of the Code of Virginia to write and reinsure policies providing for any form of life insurance or annuity benefits.

True Copy William J. Bridge
Clerk of the
State Corporation Commission

# COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION BUREAU OF INSURANCE

**INSURANCE REGULATION NO. 45** 

RULES GOVERNING ACTUARIAL OPINIONS AND MEMORANDA

Effective Date: December 15, 1992

# RULES GOVERNING ACTUARIAL OPINIONS AND MEMORANDA Insurance Regulation No. 45

# Table of Contents

Sec.	Title	Page
	D	
1.	Purpose	1
2.	Authority	1
3.	Scope	1
<b>4</b> .	Definitions	2
5.	General Requirements	2
6.	Required Opinions	5
7.	Statement of Actuarial Opinion That Does Not Include an Asset Adequacy Analysis	7
8.	Statement of Actuarial Opinion Based On Asset Adequacy Analysis	11
9.	Description of Actuarial Memorandum Issued for an Asset Adequacy	
	Analysis	18
10.	Additional Considerations for Analysis	20
11.	Opinion and Memorandum Submission Dates	21
12.	Severability	22

A:Reg45.829:11/2/50

#### Section 1. Purpose

The purpose of this regulation is to prescribe:

- A. Guidelines and standards for statements of actuarial opinion which are to be submitted in accordance with subsection B.1 of 6 38.2-3127.1 of the Code of Virginia, and for memoranda in support thereof;
- B. Guidelines and standards for statements of actuarial opinion which are to be submitted when a company is exempt from filling the actuarial opinion prescribed by subsection B.1 of 8 38.2-3127.1 of the Code of Virginia; and
- Rules applicable to the appointment of an appointed actuary.

#### Section 2. Authority

This regulation is adopted and promulgated by the Commission pursuant to Virginia Code 88 12.1-13, 38.2-223, and 38.2-3127.1. This regulation will take effect for annual statements for the year-ending December 31, 1992.

If a foreign or alien company's state of domicile makes provision in its Insurance Code or regulations for a later effective date, this later effective date will apply to the company, but under no circumstance will the effective date apply beyond December 31, 1993.

#### Section 3. Scope

A:Reg45.656: 11/2/98

- A. This regulation shall apply to all companies subject to the provisions of Virginia Code 8 38.2-3127.1, including fraternal benefit societies licensed under Chapter 41 of Title 38.2 and all other companies licensed under Title 38.2 of the Code of Virginia to write and reinsure policies or agreements providing any form of life, life insurance, or annuity benefits as those terms are defined in Virginia Code 88 38.2-102 through 38.2-107.1. This regulation shall be applicable to all annual statements filed with the Commission after the effective date of this regulation. Except with respect to companies which are exempted pursuant to Section 6 of this regulation, a statement of opinion on the adequacy of the reserves and related actuarial items based on an asset adequacy analysis in accordance with Section 8 of this regulation, and a memorandum in support thereof in accordance with Section 9 of this regulation, shall be required each year. Any company so exempted must file a statement of actuarial opinion pursuant to Section 7 of this regulation.
- B. Notwithstanding the foregoing, the Commission may require any company otherwise exempt pursuant to this regulation to submit a statement of actuarial opinion and to prepare a memorandum in support thereof in accordance with Sections 8 and 9 of this regulation if, in the opinion of the Commission, an asset adequacy analysis is necessary with respect to the company.

# Section 4. Definitions

#### A. Actuarial Standards Board

"Actuarial Standards Board" is the board established by the American Academy of Actuaries to develop and promulgate standards of actuarial practice.

#### B. Annual Statement

"Annual Statement" means that statement required by 8 38.2-1300 of the Code of Virginia to be filled by the company with the Commission annually.

#### C. Appointed Actuary

"Appointed Actuary" means any individual who is appointed or retained in accordance with the requirements set forth in Section 5C of this regulation to provide the actuarial opinion and supporting memorandum as required by 8 38.2-3127.1 of the Code of Virginia.

## D. Asset Adequacy Analysis

"Asset Adequacy Analysis" means an analysis that meets the standards and other requirements referred to in Section 5D of this regulation. It may take many forms, including, but not limited to, cash flow testing, sensitivity testing or applications of risk theory.

#### E. Commission

"Commission" means the Virginia State Corporation Commission.

# F. Commissioner

"Commissioner" means the Insurance Commissioner, Director, Superintendent or other supervising regulatory official of a given state who is responsible for administering the insurance laws of said state.

#### G. Company

"Company" means a life insurer, company or fraternal benefit society subject to the provisions of this regulation.

#### H. Non-Investment Grade Bonds

"Non-Investment Grade Bonds" are those which are (i) rated 3, 4, 5 or 6 by the NAIC Securities Valuation Office, or (ii) if not rated by the Securitles Valuation Office, are rated in an equivalent grade by a national rating agency recognized by the Commission.

#### Qualified Actuary

"Qualified Actuary" means any individual who meets the requirements set forth in Section 5B of this regulation.

# Section 5. General Requirements

A. Submission of Statement of Actuarial Opinion

- (1) There is to be included on or attached to Page 1 of the annual statement for each year beginning with the year in which this regulation becomes effective the statement of an appointed actuary, entitled "Statement of Actuarial Opinion," setting forth an opinion relating to reserves and related actuarial items held in support of policies and contracts, in accordance with Section 8 of this regulation; provided, however, that any company exempted pursuant to Section 6 of this regulation from submitting a statement of actuarial opinion in accordance with Section 8 of this regulation shall include on or attach to Page 1 of the annual statement a statement of actuarial opinion rendered by an appointed actuary in accordance with Section 7 of this regulation.
- (2) If in the previous year a company provided a statement of actuarial opinion in accordance with Section 7 of this regulation, and in the current year fails the exemption criteria of Sections 6C(1), 6C(2) or 6C(5) to again provide an actuarial opinion in accordance with Section 7, the statement of actuarial opinion in accordance with Section 8 shall not be required until August 1 following the date of the annual statement. In this instance, the company shall provide a statement of actuarial opinion in accordance with Section 7 with appropriate qualification noting the intent to subsequently provide a statement of actuarial opinion in accordance with Section 8.
- (3) In the case of a statement of actuarial opinion required to be submitted by a foreign or alien company, the Commissioner may accept the statement of actuarial opinion filed by such company with the commissioner of another state if the Commission determines that the opinion reasonably meets the requirements applicable to a company domiciled in Virginia.
- (4) Upon written request by the company, the Commission may grant an extension of the date for submission of the statement of actuarial opinion.

#### B. Qualified Actuary

A: Aug46. 820: 11/2/98

A "qualified actuary" is an individual who:

- (1) Is a member in good standing of the American Academy of Actuaries; and
- (2) Is qualified to sign statements of actuarial opinion for life and health insurance company annual statements in accordance with the American Academy of Actuaries qualification standards for actuaries signing such statements; and
- (3) Is familiar with the valuation requirements applicable to life and health insurance companies; and
- (4) Has not been found by the Commission (or if so found has subsequently been reinstated as a qualified actuary), following appropriate notice and hearing, to have:
  - (a) Violated any provision of, or any obligation imposed by Title 38.2 of the Code of Virginia or other law in the course of his or her dealings as a qualified actuary; or
  - (b) Been found guilty of fraudulent or dishonest practices; or
  - (c) Demonstrated his or her incompetency, lack of cooperation, or untrustworthiness to act as a qualified actuary; or
  - (d) Submitted to the Commission during the past five (5) years, pursuant to this regulation, an actuarial opinion or memorandum that the Commission rejected

because it did not meet the provisions of this regulation, including standards set by the Actuarial Standards Board; or

- (e) Resigned or been removed as an actuary within the past five (5) years as a result of acts or omissions indicated in any adverse report on examination or as a result of failure to adhere to generally acceptable actuarial standards; and
- (5) Has not failed to notify the Commission of any action taken by the commissioner of any other state similar to that under Paragraph (4) above.

# C. Appointed Actuary

An "appointed actuary" is a qualified actuary who is appointed or retained to prepare the Statement of Actuarial Opinion required by this regulation, either directly by or by the authority of the board of directors through an executive officer of the company. The company shall give the Commission timely written notice of the name, title (and, in the case of a consulting actuary, the name of the firm) and manner of appointment or retention of each person appointed or retained by the company as an appointed actuary and shall state in such notice that the person meets the requirements set forth in Section 5B. Once notice is furnished, no further notice is required with respect to this person, provided that the company shall give the Commissioner timely written notice in the event the actuary ceases to be appointed or retained as an appointed actuary or to meet the requirements set forth in Section 5B. If any person appointed or retained as an appointed actuary replaces a previously appointed actuary, the notice shall so state and give the reasons for replacement.

# D. Standards for Asset Adequacy Analysis

The asset adequacy analysis required by this regulation:

- (1) Shall conform to the Standards of Practice as promulgated from time to time by the Actuarial Standards Board and on any additional standards under this regulation, which standards are to form the basis of the statement of actuarial opinion in accordance with Section 8 of this regulation; and
- (2) Shall be based on methods of analysis as are deemed appropriate for such purposes by the Actuarial Standards Board.

# E. Liabilities to be Covered

- (1) Under authority of Virginia Code 8 38.2-3127.1, the statement of actuarial opinion shall apply to all in-force business on the statement date regardless of when or where issued, e.g., reserves reported in Exhibits 8, 9 and 10 of the NAIC annual statement for life insurers, and claim liabilities reported in Exhibit 11, Part I of such statement, and equivalent items in the separate account statement(s) or other annual financial statements filed pursuant to Virginia Code 86 38.2-1300, 38.2-1301 or 38.2-4126.
- (2) If the appointed actuary determines as the result of asset adequacy analysis that a reserve should be held in addition to the aggregate reserve held by the company and calculated in accordance with methods set forth for policies providing life insurance, annuity or endowment benefits in Virginia Code 86 38.2-3137, 38.2-3138, 38.2-3141, and 38.2-3142; for policies providing disability, accident and sickness benefits in the Commission's Rules Governing Reserve Standards for Accident and Sickness Insurance Policies (Insurance Regulation 15) and any supplemental and related rules and regulations; and, for certain other companies affected by this regulation, in Virginia Code 86 38.2-1311, 38.2-3816, 38.2-3923, 38.2-4010, 38.2-4011 and 38.2-4125; the

company shall establish such additional reserve.

(3) For years ending prior to December 31, 1994, the company may, in lieu of establishing the full amount of the additional reserve in the annual statement for that year, set up an additional reserve in an amount not less than the following:

December 31, 1992: The additional reserve divided by three.

December 31, 1993: Two times the additional reserve divided by three.

(4) Additional reserves established under Paragraphs (2) or (3) above and deemed not necessary in subsequent years may be released. Any amounts released must be disclosed in the actuarial opinion for the applicable year. The release of such reserves would not be deemed an adoption of a lower standard of valuation.

#### Section 6. Required Opinions

#### A. General

In accordance with 8 38.2-3127.1 of the Code of Virginia, every company doing business in Virginia shall annually submit the opinion of an appointed actuary as provided for by this regulation. The type of opinion submitted shall be determined by the provisions set forth in this Section 6 and shall be in accordance with the applicable provisions in this regulation.

## B. Company Categories

For purposes of this regulation, companies shall be classified as follows based on the admitted assets as of the end of the calendar year for which the actuarial opinion is applicable:

- Category A shall consist of those companies whose admitted assets do not exceed \$20 million;
- (2) Category B shall consist of those companies whose admitted assets exceed \$20 million but do not exceed \$100 million:
- (3) Category C shall consist of those companies whose admitted assets exceed \$100 million but do not exceed \$500 million; and
- (4) Category D shall consist of those companies whose admitted assets exceed \$500 million.

#### C. Exemption Eligibility Tests

- (1) Any Category A company that, for any year beginning with the year in which this regulation becomes effective, meets all of the following criteria shall be eligible for exemption from submission of a statement of actuarial opinion in accordance with Section 8 of this regulation for the year in which these criteria are met. The ratios in (a), (b) and (c) below shall be calculated based on amounts as of the end of the calendar year for which the actuarial opinion is applicable.
  - (a) The ratio of the sum of capital and surplus to the sum of cash and invested assets is at least equal to 0.10.

- (b) The ratio of the sum of the reserves and liabilities for annuities and deposits to the total admitted assets is less than 0.30.
- (c) The ratio of the book value of the non-investment grade bonds to the sum of capital and surplus is less than 0.50.
- (d) The company has not been designated by the National Association of Insurance Commissioners (NAIC) as a first priority company in any of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or a second priority company in each of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or the company has resolved the first or second priority status to the satisfaction of the commissioner of the state of domicile and said commissioner has so notified the chair of the NAIC Life and Health Actuarial Task Force and the NAIC Staff and Support Office.
- (2) Any Category B company that, for any year beginning with the year in which this regulation becomes effective, meets all of the following criteria shall be eligible for exemption from submission of a statement of actuarial opinion in accordance with Section 8 of this regulation for the year in which the criteria are met. The ratios in (a), (b) and (c) below shall be calculated based on amounts as of the end of the calendar year for which the actuarial opinion is applicable.
  - (a) The ratio of the sum of capital and surplus to the sum of cash and invested assets is at least equal to 0.07.
  - (b) The ratio of the sum of the reserves and liabilities for annuities and deposits to the total admitted assets is less than 0.40.
  - (c) The ratio of the book value of the non-investment grade bonds to the sum of capital and surplus is less than 0.50.
  - (d) The company has not been designated by the National Association of Insurance Commissioners (NAIC) as a first priority company in any of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or a second priority company in each of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or the company has resolved the first or second priority status to the satisfaction of the commissioner of the state of domicile and said commissioner has so notified the chair of the NAIC Life and Health Actuarial Task Force and the NAIC Staff and Support Office.
- (3) Any Category A or Category B company that meets all of the criteria set forth in Paragraph (1) or (2) of this subsection, whichever is applicable, is exempted from submission of a statement of actuarial opinion in accordance with Section 8 of this regulation unless the Commission specifically indicates to the company that the exemption is not to be taken.
- (4) Any Category A or Category B company that, for any year beginning with the year in which this regulation becomes effective, is not exempted under Paragraph (3) of this subsection shall be required to submit a statement of actuarial opinion in accordance with Section 8 of this regulation for the year for which it is not exempt.
- (5) Any Category C company that, after submitting an opinion in accordance with Section

8 of this regulation, meets all of the following criteria shall not be required, unless required in accordance with Paragraph (6) below, to submit a statement of actuarial opinion in accordance with Section 8 of this regulation more frequently than every third year. Any Category C company which fails to meet all of the following criteria for any year shall submit a statement of actuarial opinion in accordance with Section 8 of this regulation for that year. The ratios in (a), (b) and (c) below shall be calculated based on amounts as of the end of the calendar year for which the actuarial opinion is applicable.

- (a) The ratio of the sum of capital and surplus to the sum of cash and invested assets is at least equal to 0.05.
- (b) The ratio of the sum of the reserves and liabilities for annuities and deposits to the total admitted assets is less than 0.50.
- (c) The ratio of the book value of the non-investment grade bonds to the sum of the capital and surplus is less than 0.50.
- (d) The company has not been designated by the National Association of Insurance Commissioners (NAIC) as a first priority company in any of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or a second priority company in each of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or the company has resolved the first or second priority status to the satisfaction of the commissioner of the state of domicile and said commissioner has so notified the chair of the NAIC Life and Health Actuarial Task Force and the NAIC Staff and Support Office.
- (6) Any company which is not required by this Section 6 to submit a statement of actuarial opinion in accordance with Section 8 of this regulation for any year shall submit a statement of actuarial opinion in accordance with Section 7 of this regulation for that year unless as provided for by the second paragraph of Section 3 of this regulation the Commission requires a statement of actuarial opinion in accordance with Section 8 of this regulation.

#### D. Large Companies

Every Category D company shall submit a statement of actuarial opinion in accordance with Section 8 of this regulation for each year beginning with the year in which this regulation becomes effective.

# Section 7. Statement of Actuarial Opinion That Does Not Include an Asset Adequacy Analysis

#### A. General Description

The statement of actuarial opinion required by this section shall consist of a paragraph identifying the appointed actuary and his or her qualifications; a regulatory authority paragraph stating that the company is exempt pursuant to this regulation from submitting a statement of actuarial opinion based on an asset adequacy analysis and that the opinion, which is not based on an asset adequacy analysis, is rendered in accordance with Section 7 of this regulation; a scope paragraph identifying the subjects on which the opinion is to be expressed and describing the scope of the appointed actuary's work; and an opinion paragraph expressing the appointed actuary's opinion as required by 8 38.2-3127.1 of the Code of Virginia.

#### B. Recommended Language

The following language provided is that which in typical circumstances would be included in a statement of actuarial opinion in accordance with this section. The language may be modified as needed to meet the circumstances of a particular case, but the appointed actuary should use language which clearly expresses his or her professional judgment. However, in any event the opinion shall retain all pertinent aspects of the language provided in Section 7.

- (1) The opening paragraph should indicate the appointed actuary's relationship to the company. For a company actuary, the opening paragraph of the actuarial opinion should read as follows:
  - "I, [name of actuary], am [title] of [name of company] and a member of the American Academy of Actuaries. I was appointed by, or by the authority of, the Board of Directors of said insurer to render this opinion as stated in the letter to the Commission dated [insert date]. I meet the Academy qualification standards for rendering the opinion and am familiar with the valuation requirements applicable to life and health companies."

For a consulting actuary, the opening paragraph of the actuarial opinion should contain a sentence such as:

- "I, [name and title of actuary], a member of the American Academy of Actuaries, am associated with the firm of [insert name of consulting firm]. I have been appointed by, or by the authority of, the Board of Directors of [name of company] to render this opinion as stated in the letter to the Commission dated [insert date]. I meet the Academy qualification standards for rendering the opinion and am familiar with the valuation requirements applicable to life and health insurance companies."
- (2) The regulatory authority paragraph should include a statement such as the following: "Said company is exempt pursuant to Regulation [insert designation] of the [name of state] Insurance Department from submitting a statement of actuarial opinion based on an asset adequacy analysis. This opinion, which is not based on an asset adequacy analysis, is rendered in accordance with Section 7 of the regulation."
- (3) The scope paragraph should contain a sentence such as the following: "I have examined the actuarial assumptions and actuarial methods used in determining reserves and related actuarial items listed below, as shown in the annual statement of the company, as prepared for filing with state regulatory officials, as of December 31, [ ]."

The paragraph should list items and amounts with respect to which the appointed actuary is expressing an opinion. The list should include but not be necessarily limited to:

- (a) Aggregate reserve and deposit funds for policies and contracts included in Exhibit 8 of the NAIC annual statement for life insurers,
- (b) Aggregate reserve and deposit funds for policies and contracts included in Exhibit 9 of the NAIC annual statement for life insurers,;
- (c) Deposit funds, premiums, dividend and coupon accumulations and supplementary contracts not involving life contingencies included in Exhibit 10 of the NAIC annual statement for life insurers; and

- (d) Policy and contract claims—liability end of current year included in Exhibit 11, Part I of the NAIC annual statement for life insurers.
- (4) If the appointed actuary has examined the underlying records, the scope paragraph should also include the following:

"My examination included such review of the actuarial assumptions and actuarial methods and of the underlying basic records and such tests of the actuarial calculations as I considered necessary."

(5) If the appointed actuary has not examined the underlying records, but has relied upon listings and summaries of policies in-force prepared by the company or a third party, the scope paragraph should include a sentence such as one of the following:

"I have relied upon listings and summaries of policies and contracts and other liabilities in-force prepared by [name and title of company officer certifying in-force records] as certified in the attached statement. (See accompanying affidavit by a company officer.) In other respects my examination included review of the actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary."

OR

A100m45, 020111/2/98

"I have relied upon [name of accounting firm] for the substantial accuracy of the inforce records inventory and information concerning other liabilities, as certified in the attached statement. In other respects my examination included review of the actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary."

The statement of the person certifying should follow the form indicated by Section 7B(10).

(6) The opinion paragraph should include the following:

"In my opinion the amounts carried in the balance sheet on account of the actuarial items identified above:

- (a) Are computed in accordance with presently accepted actuarial standards consistently applied and are fairly stated in accordance with sound actuarial principles;
- (b) Are based on actuarial assumptions which produce reserves at least as great as those called for in any contract provision as to reserve basis and method, and are in accordance with all other contract provisions;
- (c) Meet the requirements of Title 38.2 of the Code of Virginia, and related rules, regulations and administrative promulgations [OR: of the Insurance Law and regulations of the company's state of domicile] and are at least as great as the minimum aggregate amounts required by the state in which this statement is filed.
- (d) Are computed on the basis of assumptions consistent with those used in computing the corresponding items in the annual statement of the preceding

year-end with any exceptions as noted below; and

 (e) Include provision for all actuarial reserves and related statement items which ought to be established.

The actuarial methods, considerations and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis of this statement of opinion."

(7) The concluding paragraph should document the eligibility for the company to provide an opinion as provided by this Section 7. It shall include the following:

'This opinion is provided in accordance with Section 7 of the NAIC Actuarial Opinion and Memorandum Regulation. As such it does not include an opinion regarding the adequacy of reserves and related actuarial items when considered in light of the assets which support them.

Eligibility for Section 7 is confirmed as follows:

- (a) The ratio of the sum of capital and surplus to the sum of cash and invested assets is [insert amount], which equals or exceeds the applicable criterion based on the admitted assets of the company (Section 6C).
- (b) The ratio of the sum of the reserves and liabilities for annuities and deposits to the excess of the total admitted assets is [insert amount], which is less than the applicable criteria based on the admitted assets of the company (Section 6C).
- (c) The ratio of the book value of the non-investment grade bonds to the sum of capital and surplus is [insert amount], which is less than the applicable criteria of 0.50.
- (d) To my knowledge, the company has not been designated by the NAIC as a first priority company in any of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable, or a second priority company in each of the two (2) calendar years preceding the calendar year for which the actuarial opinion is applicable or the company has resolved the first or second priority status to the satisfaction of the commissioner of the state of domicile and said commissioner has so notified the chair of the NAIC Life and Health Actuarial Task Force and the NAIC Staff and Support Office.

(e)	To my knowledge there is not a specific request from any commissioner
	requiring an asset adequacy analysis opinion.

Signature of Appointed Actuary	•
Address of Appointed Actuary	•
Telephone Number of Appointed Actuary	•

(8) If there has been any change in the actuarial assumptions from those previously employed, that change should be described in the annual statement or in a paragraph of the statement of actuarial opinion, and the reference in Section 7B(6)(d) above to

m45. 620 r 1 1 / 3 / 91

consistency should read as follows:

"... with the exception of the change described on Page [ ] of the annual statement (or in the preceding paragraph)."

The adoption for new issues or new claims or other new liabilities of an actuarial assumption which differs from a corresponding assumption used for prior new issues or new claims or other new liabilities is not a change in actuarial assumptions within the meaning of this paragraph.

- (9) If the appointed actuary is unable to form an opinion, he or she shall refuse to issue a statement of actuarial opinion. If the appointed actuary's opinion is adverse or qualified, he or she shall issue an adverse or qualified actuarial opinion explicitly stating the reason(s) for such opinion. This statement should follow the scope paragraph and precede the opinion paragraph.
- (10) If the appointed actuary does not express an opinion as to the accuracy and completeness of the listings and summaries of policies in-force, there should be attached to the opinion, the statement of a company officer or accounting firm who prepared such underlying data similar to the following:

"I [name of officer], [title] of [name and address of company or accounting firm], hereby affirm that the listings and summaries of policies and contracts in-force as of December 31, [ ], prepared for and submitted to [name of appointed actuary], were prepared under my direction and, to the best of my knowledge and belief, are substantially accurate and complete.

Signature of the Officer of the Company or Accounting Firm

Address of the Officer of the Company or Accounting Firm

Telephone Number of the Officer of the Company or Accounting Firm

# Section 8. Statement of Actuarial Opinion Based On an Asset Adequacy Analysis

#### A. General Description

The statement of actuarial opinion submitted in accordance with this section shall consist of:

- (1) A paragraph identifying the appointed actuary and his or her qualifications (see Section 8B(1));
- (2) A scope paragraph identifying the subjects on which an opinion is to be expressed and describing the scope of the appointed actuary's work, including a tabulation delineating the reserves and related actuarial items which have been analyzed for asset adequacy and the method of analysis, (see Section 8B(2)) and identifying the reserves and

related actuarial items covered by the opinion which have not been so analyzed;

- (3) A reliance paragraph describing those areas, if any, where the appointed actuary has deferred to other experts in developing data, procedures or assumptions, (e.g., anticipated cash flows from currently owned assets, including variation in cash flows according to economic scenarios (see Section 8B(3)), supported by a statement of each such expert in the form prescribed by Section 8E; and
- (4) An opinion paragraph expressing the appointed actuary's opinion with respect to the adequacy of the supporting assets to mature the liabilities (see Section 8B(6)).
- (5) One or more additional paragraphs will be needed in individual company cases as follows:
  - (a) If the appointed actuary considers it necessary to state a qualification of his or her opinion;
  - (b) If the appointed actuary must disclose the method of aggregation for reserves of different products or lines of business for asset adequacy analysis;
  - (c) If the appointed actuary must disclose reliance upon any portion of the assets supporting the Asset Valuation Reserve (AVR), Interest Maintenance Reserve (IMR) or other mandatory or voluntary statement reserves for asset adequacy analysis.
  - (d) If the appointed actuary must disclose an inconsistency in the method of analysis or basis of asset allocation used at the prior opinion date with that used for this opinion.
  - (e) If the appointed actuary must disclose whether additional reserves of the prior opinion date are released as of this opinion date, and the extent of the release.
  - (f) If the appointed actuary chooses to add a paragraph briefly describing the assumptions which form the basis for the actuarial opinion.

#### B. Recommended Language

The following paragraphs are to be included in the statement of actuarial opinion in accordance with this section. Language is that which in typical circumstances should be included in a statement of actuarial opinion. The language may be modified as needed to meet the circumstances of a particular case, but the appointed actuary should use language which clearly expresses his or her professional judgment. However, in any event the opinion shall retain all pertinent aspects of the language provided in this section.

- (1) The opening paragraph should generally indicate the appointed actuary's relationship to the company and his or her qualifications to sign the opinion. For a company actuary, the opening paragraph of the actuarial opinion should read as follows:
  - "I, [name], am [title] of [insurance company name] and a member of the American Academy of Actuaries. I was appointed by, or by the authority of, the Board of Directors of said insurer to render this opinion as stated in the letter to the Commission dated [insert date]. I meet the Academy qualification standards for rendering the opinion and am familiar with the valuation requirements applicable to life and health insurance companies."

For a consulting actuary, the opening paragraph should contain a sentence such as:

- "I, [name], a member of the American Academy of Actuaries, am associated with the firm of [name of consulting firm]. I have been appointed by, or by the authority of, the Board of Directors of [name of company] to render this opinion as stated in the letter to the Commission dated [insert date]. I meet the Academy qualification standards for rendering the opinion and am familiar with the valuation requirements applicable to life and health insurance companies."
- (2) The scope paragraph should include a statement such as the following:

"I have examined the actuarial assumptions and actuarial methods used in determining reserves and related actuarial items listed below, as shown in the annual statement of the company, as prepared for filing with state regulatory officials, as of December 31, 19[]. Tabulated below are those reserves and related actuarial items which have been subjected to asset adequacy analysis."

[CONTINUED AT NEXT PAGE]

A:Reg46.890:11/2/92

## Table of Reserves and Liabilities

**Asset Adequacy Tested Amounts** Formula Additional Analysis Other Total Reserves Actuarial Method (b) Amount **Amount** Reserves (a) (1) + (2) + (3)Statement Item (1) (2) (3) (4) Exhibit 8 Life insurance **Annuities** Supplementary Contracts Involving Life Contingencies D **Accidental Death** Benefit Ε Disability - Active Disability - Disabled Miscellaneous **TOTAL (Exhibit 8** Item 1, page 3) Exhibit 9 Active Life Reserve Claim Reserve **TOTAL (Exhibit 9** Item 2, Page 3) Exhibit 10 Premiums and Other Deposit Funds Policyholder Premiums (Page 3, Line 10.1) 1.2 Guaranteed Interest Contracts (Page 3, Line 10.2) 1.3 Other Contract Deposit Funds (Page 3, Line 10.3) Supplementary Contracts Not Involving Life Contingencies (Page 3, Line 3) Dividend and Coupon Accumulations (Page 3, Line 5) TOTAL (Exhibit 10) Exhibit 11 Part 1 Life (Page 3, Line 4.1) Health (Page 3, Line 4.2) TOTAL (Exhibit 11, Part 1) Separate Accounts (Page 3, Line 27) TOTAL (Sep Acct) **TOTAL RESERVES** IMR (Page\_\_\_, Line AVR (Page\_\_\_, Line\_ (c)

Notes: (a) the additional actuarial reserves are the reserves established under Paragraphs (2) or (3) of Section 5E of this regulation; (b) the appointed actuary should indicate the method of analysis, determined in accordance with the standards for asset adequacy analysis referred to in Section 5D of this regulation, by means of symbols which should be defined in footnotes to the table; (c) allocated amounts.

(3) If the appointed actuary has relied on other experts to develop certain portions of the analysis, the reliance paragraph should include a statement such as the following:

"I have relied on [name], [title] for [e.g., anticipated cash flows from currently owned assets, including variations in cash flows according to economic scenarios] and, as certified in the attached statement, ..."

OR

"I have relied on personnel as cited in the supporting memorandum for certain critical aspects of the analysis in reference to the accompanying statement."

Such a statement of reliance on other experts should be accompanied by a statement by each of such experts of the form prescribed by Section 8E.

(4) If the appointed actuary has examined the underlying asset and liability records, the reliance paragraph should also include the following:

"My examination included such review of the actuarial assumptions and actuarial methods and of the underlying basic asset and liability records and such tests of the actuarial calculations as I considered necessary."

(5) If the appointed actuary has not examined the underlying records, but has relied upon listings and summaries of policies in-force and/or asset records prepared by the company or a third party, the reliance paragraph should include a sentence such as:

"I have relied upon listings and summaries [of policies and contracts, of asset records] prepared by [name and title of company officer certifying in-force records] as certified in the attached statement. In other respects my examination included such review of the actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary."

OR

A180045.820111/2/95

"I have relied upon [name of accounting firm] for the substantial accuracy of the inforce records inventory and information concerning other liabilities, as certified in the attached statement. In other respects my examination included review of the actuarial assumptions and actuarial methods and tests of the actuarial calculations as I considered necessary."

Such a section must be accompanied by a statement by each person relied upon of a form substantially similar to that prescribed by Section 8E.

(6) The opinion paragraph should include the following:

"In my opinion the reserves and related actuarial values concerning the statement items identified above:

- (a) Are computed in accordance with presently accepted actuarial standards consistently applied and are fairly stated, in accordance with sound actuarial principles;
- (b) Are based on actuarial assumptions which produce reserves at least as great as those called for in any contract provision as to reserve basis and method, and are in accordance with all other contract provisions;

- (c) Meet the requirements of Title 38.2 of the Code of Virginia and related rules, regulations and administrative promulgations [OR: the Insurance Law and regulation of the state of domicile] and are at least as great as the minimum aggregate amounts required by the state in which this statement is filed.
- (d) Are computed on the basis of assumptions consistent with those used in computing the corresponding items in the annual statement of the preceding year-end (with any exceptions noted below);
- (e) Include provision for all actuarial reserves and related statement items which ought to be established.

The reserves and related items, when considered in light of the assets held by the company with respect to such reserves and related actuarial items including, but not limited to, the investment earnings on such assets, and the considerations anticipated to be received and retained under such policies and contracts, make adequate provision, according to presently accepted actuarial standards of practice, for the anticipated cash flows required by the contractual obligations and related expenses of the company.

The actuarial methods, considerations and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis of this statement of opinion."

#### AND ONE OF THE FOLLOWING TWO PARAGRAPHS, WHICHEVER IS APPLICABLE:

"This opinion is updated annually as required by statute. To the best of my knowledge, there have been no material changes from the applicable date of the annual statement to the date of the rendering of this opinion which should be considered in reviewing this opinion."

OR:

"The following material change(s) which occurred between the date of the statement for which this opinion is applicable and the date of this opinion should be considered in reviewing this opinion:" [Describe the change or changes.]

AND:

The impact of unanticipated events subsequent to the date of this opinion is beyond the scope of this opinion. The analysis of asset adequacy portion of this opinion should be viewed recognizing that the company's future experience may not follow all the assumptions used in the analysis.

Signature of Appointed Actuary	
Address of Appointed Actuary	_
Telephone Number of Appointed Actuary*	-

# C. Assumptions for New issues

The adoption for new issues or new claims or other new liabilities of an actuarial assumption which differs from a corresponding assumption used for prior new issues or new claims or other new liabilities is not a change in actuarial assumptions within the meaning of this Section 8.

# D. Adverse Opinions

If the appointed actuary is unable to form an opinion, then he or she shall refuse to issue a statement of actuarial opinion. If the appointed actuary's opinion is adverse or qualified, then he or she shall issue an adverse or qualified actuarial opinion explicitly stating the reason(s) for such opinion. This statement should follow the scope paragraph and precede the opinion paragraph.

# E. Reliance on Data Furnished by Other Persons

if the appointed actuary does not express an opinion as to the accuracy and completeness of the listings and summaries of policies in-force and/or asset oriented information, there shall be attached to the opinion the statement of a company officer or accounting firm who prepared such underlying data similar to the following:

"I [name of officer], [title], of [name of company or accounting firm], hereby affirm that the listings and summaries of policies and contracts in force as of December 31, 19[], and other liabilities prepared for and submitted to [name of appointed actuary] were prepared under my direction and, to the best of my knowledge and belief, are substantially accurate and complete.

Signature of the Officer of the Company or Accounting Firm
Address of the Officer of the Company or Accounting Firm
Telephone Number of the Officer of the Company or Accounting Firm*

# AND/OR

"I, [name of officer], [title] of [name of company, accounting firm, or security analyst], hereby affirm that the listings, summaries and analyses relating to data prepared for and submitted to [name of appointed actuary] in support of the asset-oriented aspects of the opinion were prepared under my direction and, to the best of my knowledge and belief, are substantially accurate and complete.

Signature of the Officer of the Company, Accounting Firm or the Security Analyst Address of the Officer of the Company, Accounting Firm or the Security Analyst

Telephone Number of the Officer of the Company, Accounting Firm or the Security Analyst\*

#### Section 9. Description of Actuarial Memorandum Issued for an Asset Adequacy Analysis

#### A. General

- (1) In accordance with Virginia Code 6 38.2-3127.1, 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 a Section 8 opinion. The memorandum shall be made available for examination by the Commission upon its 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 Commission.
- (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 Section 5B of this regulation, with respect to the areas covered in such memoranda, and so state in their memoranda.
- (3) If the Commission requests a memorandum and no such memorandum exists or if the Commission 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 regulation, the Commission 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 the independent review shall be paid by the company but shall be directed and controlled by the Commission.
- (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 the reviewing actuary shall be retained by the Commission; provided, however, that any information provided by the company to the reviewing actuary and included in the work papers shall be considered as material provided by the company to the Commission 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 Commission pursuant to the statute governing this regulation. 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 this regulation for any one of the current year or the preceding three (3) years.
- B. Details of the Memorandum Section Documenting Asset Adequacy Analysis (Section 8)

When an actuarial opinion under Section 8 is provided, the memorandum shall demonstrate that the analysis has been done in accordance with the standards for asset adequacy referred to in Section 5D of this regulation and any additional standards under this regulation. It shall

SDECITY:	SDe	clfv:
----------	-----	-------

- (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.
- (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.
- (3) For the analysis basis:
  - (a) Methodology;
  - (b) Rationale for 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;
  - (d) Criteria for determining asset adequacy;
  - (e) Effect of federal income taxes, reinsurance and other relevant factors.
- (4) A Summery of Results
- (5) Conclusion(s)

A: 80g45 . 820: 11/2/92

C. Conformity to Standards of Practice

The memorandum shall include a statement:

"Actuarial methods, considerations and analyses used in the preparation of this memorandum conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis for this memorandum."

## Section 10. Additional Considerations for Analysis

#### A. Aggregation

For the asset adequacy analysis for the statement of actuarial opinion provided in accordance with Section 8 of this regulation, reserves and assets may be aggregated by either of the following methods:

- (1) Aggregate the reserves and related actuarial items, and the supporting assets, for different products or lines of business, before analyzing the adequacy of the combined assets to mature the combined liabilities. The appointed actuary must be satisfied that the assets held in support of the reserves and related actuarial items so aggregated are managed in such a manner that the cash flows from the aggregated assets are available to help mature the liabilities from the blocks of business that have been aggregated.
- (2) Aggregate the results of asset adequacy analysis of one or more products or lines of business, the reserves for which prove through analysis to be redundant, with the results of one or more products or lines of business, the reserves for which prove through analysis to be deficient. The appointed actuary must be satisfied that the asset adequacy results for the various products or lines of business for which the results are so aggregated:
  - (a) Are developed using consistent economic scenarios, or
  - (b) Are subject to mutually independent risks, i.e., the likelihood of events impacting the adequacy of the assets supporting the redundant reserves is completely unrelated to the likelihood of events impacting the adequacy of the assets supporting the deficient reserves.

In the event of any aggregation, the actuary must disclose in his or her point that such reserves were aggregated on the basis of method (1), (2)(a) or (2)(b) above, whichever is applicable, and describe the aggregation in the supporting memorandum.

#### B. Selection of Assets for Analysis

The appointed actuary shall analyze only those assets held in support of the reserves which are the subject for specific analysis, hereafter called "specified reserves." A particular asset or portion thereof supporting a group of specified reserves cannot support any other group or specified reserves. An asset may be allocated over several groups of specified reserves. The annual statement value of the assets held in support of the reserves shall not exceed the annual statement value of the specified reserves, except as provided in Subsection C below. If the method of asset allocation is not consistent from year to year, the extent of its inconsistency should be described in the supporting memorandum.

C. Use of Assets Supporting the Interest Maintenance Reserve and the Asset Valuation Reserve

An appropriate allocation of assets in the amount of the Interest Maintenance Reserve (IMR), whether positive or negative, must be used in any asset adequacy analysis. Analysis of risks regarding asset default may include an appropriate allocation of assets supporting the Asset Valuation Reserve (AVR); these AVR assets may not be applied for any other risks with respect to reserve adequacy. Analysis of these and other risks may include assets supporting other mandatory or voluntary reserves available to the extent not used for risk analysis and reserve support.

The amount of the assets used for the AVR must be disclosed in the Table of Reserves and Liabilities of the opinion and in the memorandum. The method used for selecting particular assets or allocated portions of assets must be disclosed in the memorandum.

## D. Required Interest Scenarios

For the purpose of performing the asset adequacy analysis required by this regulation, the qualified actuary is expected to follow standards adopted by the Actuarial Standards Board; nevertheless, the appointed actuary must consider in the analysis the effect of at least the following interest rate scenarios:

- (1) Level with no deviation;
- (2) Uniformly increasing over ten (10) years at a haif percent per year and then level;
- (3) Uniformly increasing at one percent per year over five (5) years and then uniformly decreasing at one percent per year to the original level at the end of ten (10) years and then level;
- (4) An immediate increase of three percent (3%) and then level;
- (5) Uniformly decreasing over ten (10) years at a half percent per year and then level;
- (6) Uniformly decreasing at one percent per year over five (5) years and then uniformly increasing at one percent per year to the original level at the end of ten (10) years and then level; and
- (7) An immediate decrease of three percent (3%) and then level.

For these and other scenarios which may be used, projected interest rates for a five (5) year Treasury Note need not be reduced beyond the point where such five (5) year Treasury Note yield would be at fifty percent (50%) of its initial level.

The beginning interest rates may be based on interest rates for new investments as of the valuation date similar to recent investments allocated to support the product being tested or be based on an outside index, such as Treasury yields, of assets of the appropriate length on a date close to the valuation date. Whatever method is used to determine the beginning yield curve and associated interest rates should be specifically defined. The beginning yield curve and associated interest rates should be consistent for all interest rate scenarios.

# E. Documentation

The appointed actuary shall retain on file, for at least seven (7) years, sufficient documentation so that it will be possible to determine the procedures followed, the analyses performed, the bases for assumptions and the results obtained.

# Section 11. Opinion and Memorandum Submission Dates

The opinions and memoranda filed with the Commission pursuant to this regulation and Virginia Code 6 38.2-3127.1 shall be subject to submission and due dates as given in this regulation and summarized in Exhibit A attached to these rules and regulation.

# Section 12. Severability

A. If any provision of this rule and regulation, or its application to any person, company or circumstance, is held invalid, such determination shall not affect other provisions or applications of this regulation which can be given effect without the invalid provision or application, and to that end the provisions of this rule and regulation are severable.

# **INSURANCE REGULATION NO. 45 - EXHIBIT A**

Rules Governing Actuarial Opinions and Memoranda Section 11. Opinion and Memorandum Submission Dates

> To determine the filing requirements for the current year(\*), the insurer must identify both the provious year's required opinion(\*\*) and the current year's required opinion.

Unloss Extended by Section 5 A (4) of the Regulation. Union Extended by the Commission.

Previous Year's (N-1) Required Opinion	Current Year (N) Required Opinion	Deadline to Submit Asset Adequacy Opinion	Deadline to Submit Supporting Memorandum
ssued Asset Adequacy Opinion	Asset Adequacy Opinion Due - Already Filed		10 Days Following the Commission's Request
esued Asset Adequacy Opinion	Asset Adequacy Opinion Due - Not Filed Ye	Annual Statement Due Date	Later of: Annual Statement Due Date or 10 Days Following the Commission's Request
ssued Traditional Opinion	Asset Adequacy Opinion Due Aiready Filed		10 Days Following the Commission's Request
seued Traditional Opinion	Asset Adequacy Opinion Due – Interim Traditional Opinion Due on Annual Statement Due Date	August 1, N	Later of: August 1, N or 10 Days Following the Commission's Request
ssued Asset Adequacy Opinion	Traditional Opinion Due - Already Filed	90 Days Following the Commission's Request	90 Days Following the Commission's Request
esued Asset Adequacy Opinion	Traditional Opinion Due - Not Filed Yet	Later of: June 1, N or 90 Days Following the Commission's Request	Later of: June 1, N or 90 Days Following the Commission's Request
seued Traditional Opinion	Traditional Opinion Due - Aiready Filed	Later of: August 1, N or 1st Day Following the Completion of the 5th Month Following the Çommission's Request	Later of: August 1, N or 1st Day Following the Completion of the 6th Month Following the Commission's Request
esued Traditional Opinion	Traditional Opinion Due - Not Filed Yet	Later of: August 1, N or 1st Day Following the Completion of the 5th Month Following the Commission's Request	Later of: August 1, N or 1st Day Following the Completion of the 5th Month Following the Commission's Request

<sup>(\*) - &</sup>quot;Current Your" is the your in which the submission is to be made.

<sup>(\*\*) &</sup>quot;Provious Year's Required Opinion" means the type of opinion which would have been required if the regulation had been in effect in the provious year; otherwise, the type of opinion which was actually required and submitted to the Commission during the provious year.