

806 KAR 6:100. Actuarial opinion and memorandum.

RELATES TO: KRS 304.3-240, 304.6-070, 304.6-150, 304.6-155, 304.6-171, 304.6-180

STATUTORY AUTHORITY: KRS 304.2-110(1), 304.6-171

NECESSITY, FUNCTION, AND CONFORMITY: KRS 304.2-110(1) authorizes the Commissioner of Insurance to promulgate reasonable administrative regulations necessary for or as an aid to the effectuation of any provision of the Kentucky Insurance Code, as established in KRS 304.1-010. KRS 304.6-171 requires every life insurance company doing business in this state to annually submit the opinion of a qualified actuary as to whether or not the reserves and related actuarial items held in support of the policies and contracts established by the commissioner are computed appropriately. KRS 304.6-171 requires the commissioner to establish, by administrative regulation, the requirements of the actuarial opinion and to broaden the scope of the opinion if necessary. This administrative regulation establishes provisions for the commissioner to determine whether or not reserves and related actuarial items are computed appropriately, are based on assumptions that satisfy contractual provisions, are consistent with prior reported amounts, and comply with KRS Chapter 304.

Section 1. Definitions.

- (1) "Actuarial opinion" means the opinion of an appointed actuary regarding the adequacy of the reserves and related actuarial items based on an asset adequacy test in accordance with Section 4 of this administrative regulation and with presently accepted actuarial standards.
- (2) "Actuarial Standards Board" means the board established by the American Academy of Actuaries to develop and promulgate standards of actuarial practice.
- (3) "Annual statement" means the statement required by KRS 304.3-240.
- (4) "Appointed actuary" is defined by KRS 304.6-131(2).
- (5) "Asset adequacy analysis" means an analysis that meets the standards and other requirements of Section 4 of this administrative regulation.
- (6) "Commissioner" is defined by KRS 304.1-050(1).
- (7) "Company" is defined by KRS 304.6-131(3).

Section 2. Actuarial Qualifications. In order to be considered a qualified actuary for the purposes of this administrative regulation, a person shall:

- (1) Be a member in good standing of the American Academy of Actuaries;
- (2) Be qualified to sign a statement of actuarial opinion for a life and health insurance company annual statement in accordance with the qualification standards for actuaries established by the American Academy of Actuaries for actuaries signing those statements;
- (3) Be familiar with the valuation requirements applicable to life and health insurance companies;
- (4) Not been found by the commissioner, 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, any law in the course of his or her dealings as a qualified actuary;
 - (b) Been found guilty of fraudulent or dishonest practices;
 - (c) Demonstrated incompetence, lack of cooperation, or untrustworthiness to act as a qualified actuary;
 - (d) Submitted to the commissioner during the past five (5) years, pursuant to this administrative regulation, an actuarial opinion or memorandum that the commissioner rejected because it did not comply with this administrative regulation or standards established by the Actuarial Standards Board; or

- (e) Resigned or been removed as an actuary within the past five (5) years as a result of an act or omission indicated in any adverse report on examination or as a result of the failure to adhere to generally acceptable actuarial standards; and
- (5) Not have failed to notify the commissioner of any action taken by any commissioner of any other state if the action was based on a disqualification standard established in subsection (4) of this section.

Section 3. General Requirements.

- (1) Every company doing business in this state shall annually submit the opinion of an appointed actuary stating an opinion relating to reserves and related actuarial items held in support of policies and contracts, in accordance with Section 4 of this administrative regulation. The actuarial opinion shall be:
 - (a) Included on or attached to Page 1 of the annual statement for each year;
 - (b) Entitled "Statement of Actuarial Opinion"; and
 - (c) The statement of an appointed actuary stating an opinion relating to reserves and related actuarial items held in support of policies and contracts in accordance with Section 4 of this administrative regulation.
- (2) The commissioner shall accept the statement of actuarial opinion filed by a foreign or alien company with the insurance supervisory regulator of another state if the commissioner determines that the opinion meets the requirements applicable to a company domiciled in this state.
- (3) The commissioner shall grant an extension of the date for submission of the statement of actuarial opinion upon written request by the company.
- (4) The company shall give the commissioner timely written notice:
 - (a) If an actuary is appointed or retained and the notice shall state:
 - 1. The name of the appointed actuary;
 - 2. The title of the appointed actuary;
 - 3. If the actuary is a consulting actuary, the name of the firm;
 - 4. The manner of appointment or retention by the company of each appointed actuary; and
 - 5. That the person appointed or retained by the company meets the requirements of a qualified actuary pursuant to Section 2 of this administrative regulation;
 - (b) If the actuary ceases to be appointed or retained as an appointed actuary or to meet the requirements of a qualified actuary; or
 - (c) If that any person appointed or retained as an appointed actuary replaces a previously appointed actuary, which notice shall state the reason for replacement.
- (5) The asset adequacy analysis required by Section 4 of this administrative regulation shall:
 - (a) Conform to the Standards of Practice as promulgated by the Actuarial Standards Board and available at <http://www.actuarialstandardsboard.org/standards-of-practice/> to this administrative regulation, which standards shall form the basis of the statement of actuarial opinion in accordance with this administrative regulation; and
 - (b) Be based on methods of analysis that shall be appropriate for those purposes based on standards established by the Actuarial Standards Board.
- (6) Pursuant to KRS 304.6-171, the statement of actuarial opinion shall apply to all in force business on the statement date, whether directly issued or assumed, regardless of when or where issued.
- (7) If the appointed actuary determines as the result of the asset adequacy analysis that a reserve in addition to the aggregate reserve held by the company and calculated in accordance with the methods established in KRS 304.6-171 is necessary, the company shall establish the additional reserve.
- (8)

- (a) Additional reserves established under subsection (7) of this section and determined by an actuary to not be necessary in subsequent years may be released as reserves on the company's financial statement.
- (b) Any amounts released shall be disclosed in the actuarial opinion for the applicable year.
- (c) The release of reserves shall not result in the adoption of a lower standard of valuation.

Section 4. Statement of Actuarial Opinion Based on an Asset Adequacy Analysis.

(1) The statement of actuarial opinion required by this section shall contain an opening paragraph, which shall:

- (a) Identify the name and title of the appointed actuary;
- (b) Identify the name of the consulting firm, if applicable;
- (c) Identify the name of the company;
- (d) Identify the qualifications of the appointed actuary;
- (e) Identify the manner in which the actuary was appointed or retained to render the actuarial opinion; and
- (f) Include language identical or substantially similar to the following:
 1. For a company actuary: "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 commissioner 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."; or
 2. For a consulting actuary: "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 commissioner 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 statement of actuarial opinion shall contain a scope paragraph, which shall:

- (a) Identify the subjects on which an opinion is to be expressed;
- (b) Describe the scope of the work of the appointed actuary;
- (c) Include a tabulation delineating the reserves and related actuarial items that have been analyzed for asset adequacy and the method of analysis;
- (d) Identify the reserves and related actuarial items covered by the opinion that have not been analyzed; and
- (e) Include language identical or substantially similar to 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, (year). Tabulated below in the Table of Reserves and Liabilities are those reserves and related actuarial items that have been subjected to asset adequacy analysis."

(3) If the appointed actuary has relied on other experts to develop portions of the analysis, the statement of actuarial opinion shall contain a reliance paragraph, which shall:

- (a) Describe each situation in which the appointed actuary has deferred to another expert in developing data, procedures, or assumptions; and
- (b) Include a statement identical or substantially similar to the following and be accompanied by a statement in accordance with subsection (10) of this section:
 1. "I have relied on (name), (title) for (for example, anticipated cash flows from currently owned assets, including variations in cash flows according to economic

scenarios) and, as certified in the attached statement,..."; or

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

(4) If the appointed actuary has examined the underlying asset and liability records, the statement of actuarial opinion shall include a statement identical or substantially similar to the following: "My examination included review of the actuarial assumptions and actuarial methods and of the underlying basic asset and liability records and tests of the actuarial calculations as I considered necessary."; and

(5) If the appointed actuary has not examined the underlying records, but has relied upon listings and summaries of policies in force or asset records prepared by the company or a third party, the statement of actuarial opinion required shall include a statement identical or substantially similar to the following and be accompanied by a statement in accordance with subsection (10) of this section: "In forming my opinion on (specify types of reserves) I relied upon data prepared by (name and title of company officer certifying in-force records) as certified in the attached statement. I evaluated that data for reasonableness and consistency. I also reconciled that data to (exhibits and schedules to be listed as applicable) of the company's current annual 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."

(6) The statement of actuarial opinion required by this section shall contain an opinion paragraph, which shall:

(a) Express the opinion of the appointed actuary with respect to the adequacy of the supporting assets to mature the liabilities that reserves and related actuarial values concerning the identified statement items:

1. Are computed in accordance with presently accepted actuarial standards consistently applied and are fairly stated, in accordance with sound actuarial principles;

2. Are based on actuarial assumptions that 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;

3. Meet the requirements of KRS Chapter 304, 201 KAR Chapter 1, and KAR Title 806 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;

4. 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 exception noted; and

5. Include provision for all actuarial reserves and related statement items established;

(b) Express an opinion as to the adequate provision for the anticipated cash flow by including language identical or substantially similar to the following: "The reserves and related items, considered in light of the assets held by the company with respect to reserves and related actuarial items including, but not limited to, the investment earnings on assets, and the considerations anticipated to be received and retained under applicable 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.";

(c) State that the actuarial methods, considerations, and analyses used in forming the actuarial opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis of the statement of opinion;

(d) State whether or not there has been a material change from the applicable date of the annual statement to the date of the rendering of the actuarial opinion which should

be considered in reviewing the opinion and include language identical or substantially similar to one (1) of the following:

1. "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

2. "The following material change(s) that 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.)";

(e) Include a statement regarding unanticipated events which is identical or substantially similar to the following: "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"; and

(f) Contain the signature, address, and telephone number of the appointed actuary.

(7) A change in actuarial assumptions shall not include the adoption for a new issue, a new claim, or other new liability of an actuarial assumption which differs from a corresponding assumption used for a prior new issue, new claim, or other new liability.

(8) If the appointed actuary is unable to form an opinion, the actuary shall refuse to issue a statement of actuarial opinion.

(9) If the opinion of the appointed actuary is adverse or qualified, the actuary shall issue an adverse or qualified actuarial opinion explicitly stating the reason for the opinion. This statement shall follow the scope paragraph and precede the opinion paragraph.

(10) If the appointed actuary relies on the certification of others on matters concerning the accuracy or completeness of any data underlying the actuarial opinion, or the appropriateness of any other information used by the appointed actuary in forming the actuarial opinion, the actuarial opinion shall:

- (a) Indicate the persons the actuary is relying upon and a precise identification of the items subject to reliance; and

- (b) Provide a certification from the persons on whom the appointed actuary relied that:

1. Precisely identifies the items on which the person is providing information;

2. Includes a statement as to the accuracy, completeness, or reasonableness, as applicable, of the items; and

3. Includes the following information for the person rendering the certification:

- a. Signature and date signed;

- b. Title;

- c. Company;

- d. Address; and

- e. Telephone number.

(11) Except as established in subsection (12) of this administrative regulation and as an alternative to the requirements of subsection 4(6)(a)3. of this section, the commissioner may make one (1) or more of the following alternatives available to the opining actuary:

(a)

- 1.

- a. A statement that the reserves meet the requirements of the insurance laws and administrative regulations of the insurer's state of domicile; and

- b. A formal written list of the standards and conditions for filing an opinion based on the law of the insurer's state of domicile.

2. If an insurer uses this alternative, the standards and conditions in effect on July 1 of a calendar year shall apply to statements for that calendar year, and they shall remain in effect until they are revised or revoked.

3. If no formal written list of the standards and conditions is available, the commissioner shall not offer this alternative;

(b)

1.

- a. A statement that the reserves meet the requirements of the insurance laws and administrative regulations of the insurer's state of domicile;
- b. Verification that the actuary's request to file an opinion based on the law of the insurer's state of domicile has been approved; and
- c. A statement that any conditions required by the commissioner for approval of that request have been met.

2. If the commissioner offers this alternative, a formal written statement of the allowance shall be issued no later than March 31 of the year it is first effective.

3. Subsequent to that statement being issued, if an insurer wants to use this alternative, the insurer shall file a request with the commissioner, along with justification for its use, no later than April 30 of the year of the opinion to be filed. The request shall be deemed approved on October 1 of that year if the commissioner has not denied the request by that date; and

(c)

1.

- a. A statement that the reserves meet the requirements of the insurance laws and administrative regulations of the insurer's state of domicile; and
- b. A statement that the actuary has submitted the required comparison as established by the insurer's state of domicile.

2. If the commissioner offers this alternative, a formal written list of products for which the required comparison shall be provided shall be published on the department's Web site, <http://insurance.ky.gov>.

3. If a company uses this alternative, the formal written list of products in effect on July 1 of a calendar year shall apply to statements for that calendar year, and it shall remain in effect until it is revised or revoked.

4. If a formal written list of products for which the required comparison shall be provided is not available, this alternative shall not be allowed.

5.

a. If a company desires to use this alternative, the appointed actuary shall provide a comparison of the gross nationwide reserves held to the gross nationwide reserves that would be held under National Association of Insurance Commissioners' codification standards, as established in KRS 304.6-171.

b. Gross nationwide reserves shall equal the total reserves calculated for the total company in force business directly sold and assumed, indifferent to the state in which the risk resides, without reduction for reinsurance ceded.

c. The comparison shall include the following:

- (i) Product type;
- (ii) Death benefit or account value;
- (iii) Reserves held;
- (iv) Codification reserves; and
- (v) Codification standard.

d. The comparison shall include all products identified by either the state of filing or any other states that accept this alternative.

e. If there is no codification standard for the type of product or risk in force or if the codification standard does not directly address the type of product or risk in force, the appointed actuary shall provide detailed disclosure of the specific method and assumptions used in determining the reserves held.

f. The comparison provided by the company shall be kept confidential in accordance with KRS 304.6-171.

(12)

(a) The commissioner may reject an opinion based on the laws and administrative regulations of the state of the insurer's domicile and require an opinion based on the laws of the Commonwealth of Kentucky.

(b) If an insurer is unable to provide the opinion within sixty (60) days of the request or other period of time determined by the commissioner after consultation with the insurer, the commissioner may contract an independent actuary at the company's expense to prepare and file the opinion.

Section 5. Description of Actuarial Memorandum Including an Asset Adequacy Analysis.

(1) In accordance with KRS 304.6-171, the appointed actuary shall prepare a memorandum to the company that shall describe the analysis done in support of the actuary's opinion regarding the reserves.

(2) The memorandum shall:

(a) Be made available to the commissioner, upon request, for examination;

(b) Be returned to the company after an examination by the commissioner; and

(c) Not be considered a record of the insurance department or subject to automatic filing with the commissioner.

(3) The commissioner may designate a qualified actuary to review the actuarial opinion and prepare a supporting memorandum, which reasonable and necessary expense of the independent review shall be paid by the company but shall be directed and controlled by the commissioner, if:

(a) The commissioner requests a memorandum and no memorandum exists;

(b) The commissioner finds that the analysis stated in the memorandum fails to meet the standards of the Actuarial Standards Board; or

(c) The commissioner finds that the analysis stated in the memorandum fails to meet the standards of this administrative regulation.

(4) In preparing the memorandum, the appointed actuary may rely on, and include as a part of the actuarial memorandum, memoranda prepared and signed by another actuary who is qualified in accordance with Section 2 of this administrative regulation with respect to the subjects covered in the memorandum.

(5) The reviewing actuary shall have the same status as an examiner for the purposes of obtaining data from the company and the work papers and documentation of the reviewing actuary shall be retained by the commissioner.

(6) 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 commissioner and shall be kept confidential to the same extent as other material provided by the company to the commissioner pursuant to KRS 304.6-171.

(7) 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 administrative regulation for any one (1) of the current year or the preceding three (3) years.

(8)

(a) In accordance with KRS 304.6-171, the appointed actuary shall prepare a regulatory asset adequacy issues summary in accordance with subsection (12) of this section.

(b) 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.

(c) The regulatory asset adequacy issues summary shall be kept confidential in accordance with KRS 304.6-171(5)(h).

(9) The memorandum shall demonstrate that the analysis has been done in accordance with the standards for asset adequacy referred to in Section 3(5) of this administrative regulation.

(10) The actuarial memorandum referred to in this section shall specify:

(a) For reserves, the documentation of the assumptions made shall be in a manner to allow an actuary reviewing the actuarial memorandum to form a conclusion as to the reasonableness of the assumptions and shall include:

1. Product descriptions including a market description, underwriting and any other aspect of a risk profile and the specific risks the appointed actuary deems significant;
2. Source of liability in force;
3. Reserve method and basis;
4. Investment reserves;
5. Reinsurance arrangements;
6. 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
7. Documentation of assumptions to test reserves for the following:
 - a. Lapse rates, both base and excess;
 - b. Interest crediting rate strategy;
 - c. Mortality;
 - d. Policyholder dividend strategy;
 - e. Competitor or market interest rate;
 - f. Annuitization rates;
 - g. Commissions and expenses; and
 - h. Morbidity;

(b) For assets, the documentation of the assumptions made shall be in a manner to allow an actuary reviewing the actuarial memorandum to form a conclusion as to the reasonableness of the assumptions and shall include:

1. Portfolio descriptions, including a risk profile disclosing the quality, distribution and types of assets;
2. Investment and disinvestment assumptions;
3. Source of asset data;
4. Asset valuation bases; and
5. Documentation of assumptions made for:
 - a. Default costs;
 - b. Bond call function;
 - c. Mortgage prepayment function;
 - d. Determining market value for assets sold due to disinvestment strategy; and
 - e. Determining yield on assets acquired through the investment strategy;

(c) Analysis basis:

1. Methodology;
2. Rationale for inclusion or exclusion of different blocks of business and how pertinent risks were analyzed;
3. 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;
4. 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 established in relevant actuarial standards of practice; and

5. Effect of federal income tax, reinsurance, and any other relevant factor;

(d) Summary of material changes in methods, procedures or assumptions from prior year's asset adequacy analysis;

(e) Summary of results; and

(f) Conclusion.

(11) The memorandum shall include a statement that indicates that the memorandum conforms to the appropriate Standards of Practice and that shall include language identical or substantially similar to the following: "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."

(12) 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.

1. 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 valuate date that, if held, would eliminate the negative aggregate surplus values.

2. Ending surplus values shall be determined by:

a. Extending the projection period until the in-force and associated assets and liabilities at the end of the projection period are immaterial; or

b. 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) Comments 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 or not the actuary has been satisfied that all options, whether explicit or embedded, in any asset or liability, including 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.

(13) 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.

(14) 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 6. Additional Considerations for Analysis.

(1) An appropriate allocation of assets in the amount of the interest maintenance reserve (IMR), whether positive or negative, shall be used in any asset adequacy analysis.

(2) Analysis of risks regarding asset default may include an appropriate allocation of assets supporting the asset valuation reserve (AVR).

- (3) AVR assets shall not be applied for any other risks with respect to reserve adequacy.
- (4) 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.
- (5) The amount of the assets used for the AVR shall be disclosed in the Table of Reserves and Liabilities and in the memorandum.
- (6) The method used for selecting particular assets or allocated portions of assets shall be disclosed in the memorandum.

Section 7. Incorporation by Reference.

- (1) The "Table of Reserves and Liabilities", 5/2009, is incorporated by reference.
 - (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Department of Insurance, 500 Mero Street, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m. Forms may also be obtained on the department's internet Web site at: <http://insurance.ky.gov>.
- (24 Ky.R. 2248; Am. 2719; eff. 6-25-1998; TAm eff. 8-9-2007; 36 Ky.R. 201; 595; eff. 10-2-2009; Crt eff. 2-26-2020; 47 Ky.R. 397, 966; eff. 2-2-2021.)