SUBCHAPTER Q. ACTUARIAL OPINION AND MEMORANDUM REGULATION
28 TAC §3.1607

SUBCHAPTER EE. VALUATION OF LIFE INSURANCE POLICIES
28 TAC §3.4504 and §3.4505

1. INTRODUCTION. The Commissioner of Insurance (Commissioner) adopts amendments to §§3.1607, 3.4504, and 3.4505, concerning the minimum reserve standards for life insurance. The amendments are adopted without changes to the proposed text published in the April 30, 2010 issue of the *Texas Register* (35 TexReg 3413).

2. REASONED JUSTIFICATION. The amendments to §3.1607, relating to actuarial opinion and memorandum regulation, are necessary to provide an example that an insurance company's appointed actuary must consider when providing disclosure in the regulatory asset adequacy issues summary for asset adequacy interim results of concern. The example cites a situation in which assets may be insufficient to support the payment of benefits and expenses and the establishment of reserves during one or more interim periods. The amendments to §3.1607 are also necessary to: (i) modify the filing requirements under existing §3.1607(a)(5) for filing the regulatory asset adequacy issues summary with the Commissioner; (ii) update obsolete statutory citations to the Insurance Code as a result of the enactment of the non-substantive revision of the Insurance Code; and (iii) correct rule citation style errors. The amendments to §3.4504 and §3.4505, relating to valuation of life insurance policies, are necessary to: (i) replace a graphic in existing §3.4504(2) to be consistent with §7.18; (ii) refine the optional minimum mortality standard for deficiency reserves stipulated in §3.4505 by removing certain constraints and allowing for more flexibility in the calculation of deficiency reserves; (iii) require additional disclosure in the regulatory asset adequacy issues summary required under existing §3.1607 with regard to the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods; (iv) update obsolete statutory citations to the Insurance Code as a result of the enactment of the non-substantive revision of the Insurance Code; (v) correct citations to erroneously cross-referenced rules; (vi) clarify the definition of and calculation for the term *segmented reserves* in §3.4505(9); and (vii) make several other minor text changes to correct grammatical errors or to conform with current *Texas Register* or agency citation style. The amendments to §3.1607 and §3.4505 are modeled after and consistent with the National Association of Insurance Commissioner's (NAIC's) currently adopted Model Regulations 822 and 830. The amendments are expected to align reserve mortality to expected mortality for certain policies issued by life insurance companies, while retaining reasonable conservatism in reserves for these policies. As a result, the amendments are expected to reduce reserves not needed to support benefits.

The following provides an overview of and explains additional reasoned justification for the amendments.

The amendments to §3.1607(a)(5) are necessary to modify the requirements for a life insurance company to file the regulatory asset adequacy issues summary with the Commissioner. Under the amendments to §3.1607(a)(5), only domestic life insurance companies are required to file the regulatory asset adequacy issues summary with the Department's Actuarial Division/Financial Program, no later than March 15 of the year following the year for which a statement of actuarial opinion based on asset adequacy is required. Nondomestic life insurance companies are not required to file the regulatory asset adequacy issues summary under the amendments to §3.1607(a)(5), unless requested by the Commissioner. Under the amendments to §3.1607(c)(1)(D), the life insurance company's appointed actuary is required to consider the newly-specified example when providing disclosure in the regulatory asset adequacy issues summary for asset adequacy interim results of concern. The example and the required disclosure of any concern is also addressed in the amendments to §3.4505(b)(3). The purpose of the example and required disclosure of any concern is to support financial monitoring efforts by detecting and addressing any such interim deficiencies.

An amendment to §3.4504(2) is necessary to replace a graphic in the definition of "Contract segmentation method" for consistency with §7.18. The new graphic contains the correct formula to calculate for segments using the contract segmentation method. Insurance companies have been required to use the correct formula contained in the graphic due to the Department's adoption by rule of the NAIC Accounting Practices and Procedures Manual in §7.18, concerning Statements of Statutory Accounting Principles. The amendment makes this graphic and formula consistent with the requirements in §7.18. An amendment to §3.4504(8) replaces incorrect references to §3.14007(a)(3) and (4) with the correct references to §3.4507(a)(3) and (4), concerning calculation of minimum valuation standard for flexible premium and fixed premium universal life insurance policies that contain provisions resulting in the ability of a policy owner to keep a policy in force over a secondary guarantee period. An amendment to §3.4504(8) also is necessary to delete a reference to a rule title in this subsection because the rule's title already is referenced in §3.4504, to conform to current Department citation style. The amendment to §3.4504(9)(A) adds the phrase "and endowment benefits" to clarify the definition of and calculation for the term *segmented reserves* in §3.4504(9).

The amendments to §3.4505(a)(2) and (3) are necessary to change the word "The" to "the" and the word "Any" to "any" respectively for purposes of consistency and to conform with current agency style The amendments to §3.4505(a)(2) are also necessary to make clarifying changes to punctuation and grammar within the paragraph, by replacing a period with a semicolon and adding the word "or" to the end of the paragraph. The amendments to §3.4505(b)(3) remove certain "X factor" constraint provisions and allow for more flexibility in the calculation of deficiency reserves to reflect anticipated mortality. Deficiency reserves are in addition to initially calculated minimum reserves when actual premiums and reserve assumptions are less than statutory net premiums and assumptions used in minimum reserve calculations. Anticipated mortality is approximated from applying an "X factor" to statutory mortality. An "X factor" is an experience factor that allows insurance companies to reflect their actual anticipated mortality experience in calculating deficiency reserves. Specifically, these amendments to §3.4505(b)(3) remove the constraint that the “X factor” cannot go below 20 percent and also remove the constraint that “X factors” cannot decrease in the future. Also, current requirements in existing §3.4505 require the appointed actuary to opine annually on the reasonableness of the resulting “X factor” and to adjust as necessary. The amendments to §3.4505(b)(3) also will require additional disclosure in the regulatory asset adequacy issues summary provided in existing §3.1607. This additional disclosure requires the appointed actuary to disclose the impact of insufficiency of assets to support payment of benefits and expenses during one or more interim periods over the asset adequacy analysis projection. An amendment to §3.4505(b)(3) also is necessary to delete a reference to a rule title in this subsection because the rule’s title already is referenced in §3.4505, to conform to current Department citation style. An amendment to §3.4505(b)(3) is further necessary to replace “%” with the word “percent” to conform to current *Texas Register* citation style. Amendments to §3.4505(b)(3)(G)(i) and (f) replace incorrect references to §3.1608, concerning statement of actuarial opinion based on asset adequacy analysis, with correct references to §3.1607, concerning description of actuarial memorandum including an asset adequacy analysis and regulatory asset adequacy issues summary.

Amendments are also necessary to update obsolete statutory citations to the Insurance Code as a result of the enactment of the non-substantive revision of the Insurance Code. This will result in easier use and readability of the rules. Amendments to §§3.1607(a)(1) and (5) and (c)(3), 3.4504(1), (3), (5) and (11), and 3.4505(a)(1) and (b)(1) are necessary to update statutory citations to conform with the non-substantive revised Insurance Code. The amendment to §3.1607(c)(3) replaces the statutory reference to “Article 1.15” with “Chapter 401.” Article 1.15 was repealed in the nonsubstantive Insurance Code revision, Acts 2005, 79th Legislature, Chapter 727, §1, effective April 1, 2007. Article 1.15 was re-adopted as Chapter 401 in the same nonsubstantive Insurance Code revision. Amendments to §§3.1607(a)(1) and (5), 3.4504(1), (3), (5) and (11), and 3.4505(a)(1) and (b)(1) replace statutory references to provisions in “Article 3.28” with statutory references to provisions in “Chapter 425.” Article 3.28 was repealed in the nonsubstantive Insurance Code revision, Acts 2005, 79th Legislature, Chapter 727, §1, effective April 1, 2007. Article 3.28 was re-adopted as Chapter 425 in the same nonsubstantive Insurance Code revision.

3. HOW THE SECTIONS WILL FUNCTION. Amendments to §3.1607(a)(1) and (5), and (c)(3) update citations which have changed due to non-substantive revision of the Insurance Code. Amendments to §3.1607(a)(1) – (3) and (5), and (c)(3) also update provisions to conform to current Department or *Texas Register* style or to correct citation errors. Amendments to §3.1607(a)(5) and (c)(1)(D) require additional disclosure in the regulatory asset adequacy issues summary required under existing §3.1607 with regard to the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods.

Amendments to §3.4504(1), (3), (5) and (11) update statutory citations to conform with the non-substantive revised Insurance Code. Amendments to §3.4504(1)

– (3), (5), (8), (9)(B), and (11) update provisions to conform to current Department or *Texas Register* style or to correct citation errors. An amendment to §3.4504(2) also replaces a graphic in the definition of "Contract segmentation method" for consistency with §7.18, concerning the NAIC Accounting Practices and Procedures Manual. An amendment to §3.4504(8) replaces incorrect references to §3.14007(a)(3) and (4) with the correct references to §3.4507(a)(3) and (4), concerning calculation of minimum valuation standard for flexible premium and fixed premium universal life insurance policies that contain provisions resulting in the ability of a policy owner to keep a policy in force over a secondary guarantee period. An amendment to §3.4504(8) also deletes a reference to a rule title in this subsection because the rule's title already is referenced in §3.4504, to conform to current Department citation style. The amendment to §3.4504(9)(A) adds the phrase "and endowment benefits" to clarify the definition of and calculation for the term *segmented reserves* in §3.4504(9).

Amendments to §3.4505(a)(1) and (b)(1) update statutory citations to conform with the non-substantive revised Insurance Code. Amendments to §3.4505(a)(1) - (3) and (b)(1) – (3) and (f) update provisions to conform to current Department or *Texas Register* style, to reflect reorganization, or to correct citation, form, grammatical, or punctuation errors. The amendments to §3.4505(b)(3) also remove certain "X factor" constraint provisions and allow for more flexibility in the calculation of deficiency reserves to reflect anticipated mortality. The amendments to §3.4505(b)(3) also will require additional disclosure in the regulatory asset adequacy issues summary provided in existing §3.1607. An amendment to §3.4505(b)(3) also deletes a reference to a rule title in this subsection because the rule's title already is referenced in §3.4505, to conform to current Department citation style. Amendments to §3.4505(b)(3)(G)(i) and (f) also replace incorrect references to §3.1608, concerning statement of actuarial opinion based on asset adequacy analysis, with correct references to §3.1607, concerning description of actuarial memorandum including an asset adequacy analysis and regulatory asset adequacy issues summary.

4. SUMMARY OF COMMENTS. The Department did not receive any comments on the published proposal.

5. STATUTORY AUTHORITY. The amendments are adopted under the Insurance Code §§421.001(c), 425.054, 425.058(c)(3), and 36.001. Section 421.001(c) requires the Commissioner to adopt each current formula recommended by the National Association of Insurance Commissioners for establishing reserves for each line of insurance. Section 425.054(c) provides the Commissioner by rule shall specify the requirements of an actuarial opinion including any matters considered necessary to the opinion's scope. Section 425.058(c) provides that for an ordinary life insurance policy issued on the standard basis, excluding any disability or accidental death benefits in the policy and to which Subchapter B, Chapter 1105, applies, the applicable mortality table is the Commissioners' 1980 Standard Ordinary Mortality Table; at the insurer's option for one or more specified life insurance plans, the Commissioners' 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors; or any ordinary mortality table adopted after 1980 by the National Association of Insurance Commissioners that is approved by Commissioner rule for use in determining the minimum standard valuation for a policy to which this subdivision applies. Section 36.001 provides that the Commissioner may adopt any rules necessary and appropriate to implement the powers and duties of the Texas Department of Insurance under the Insurance Code and other laws of this state.

6. TEXT.

SUBCHAPTER Q. ACTUARIAL OPINION AND MEMORANDUM REGULATION

§3.1607. Description of Actuarial Memorandum Including an Asset Adequacy Analysis and Regulatory Asset Adequacy Issues Summary.

(a) General. Any actuarial memorandum required by the provisions of this subchapter shall be prepared in accordance with and subject to the provisions and qualifications of paragraphs (1) - (5) of this subsection.

(1) In accordance with the Insurance Code §§425.054 - 425.057, 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 the opinion. The memorandum shall be made available for examination by the commissioner upon his or her request.

(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 §3.1604 of this subchapter

(relating to Definitions), with respect to the areas covered in such memoranda, and so state in their memoranda.

(3) If the commissioner requests a memorandum and no such memorandum exists or if the commissioner finds that the analysis described in the memorandum fails to meet the standards of the Actuarial Standards Board as required by §3.1605 of this subchapter (relating to General Requirements), or the standards and requirements of this subchapter, the commissioner may designate a qualified actuary to review the opinion and prepare such supporting memorandum as is required for review. The reasonable and necessary expense of the independent review shall be paid by the company but shall be directed and controlled by the commissioner.

(4) The reviewing actuary shall have the same status as an examiner for purposes of obtaining data from the company and the work papers and documentation of the reviewing actuary shall be retained by the commissioner. 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 required by this subchapter for any one of the current year or the preceding three years.

(5) In accordance with the Insurance Code §§425.054 – 425.057, the appointed actuary shall prepare a regulatory asset adequacy issues summary, the contents of which are specified in subsection (c) of this section. Texas domestic companies shall submit the regulatory asset adequacy issues summary to the Actuarial Division, Financial Program, M.C. 302-3A, Texas Department of Insurance, 333 Guadalupe, P.O. Box 149104, Austin, Texas 78714-9104 no later than March 15 of the

year following the year for which a statement of actuarial opinion based on asset adequacy is required. Nondomestic companies shall submit the regulatory asset adequacy issues summary when requested by the commissioner.

(b) Details of the memorandum section documenting asset adequacy analysis. When an actuarial opinion under §3.1606 of this subchapter (relating to Statement of Actuarial Opinion Based on an Asset Adequacy Analysis) is provided, the memorandum shall demonstrate that the analysis has been done in accordance with the standards for asset adequacy referred to in §3.1605(c) of this subchapter and any additional standards under this subchapter. The documentation of the assumptions used in paragraphs (1) and (2) of this subsection shall be such that an actuary reviewing the actuarial memorandum could form a conclusion as to the reasonableness of the assumptions. The memorandum shall specify:

(1) for reserves:

(A) product descriptions including market description, underwriting and other aspects of a risk profile and the specific risks the appointed actuary deems significant;

(B) source of liability in force;

(C) reserve method and basis;

(D) investment reserves;

(E) reinsurance arrangements;

(F) identification of any explicit or implied guarantees made by the general account in support of benefits provided through a separate account or under a separate account policy or contract and the methods used by the appointed actuary to provide for the guarantees in the asset adequacy analysis;

(G) documentation of assumptions to test reserves for the following:

(i) lapse rates (both base and excess);

(ii) interest crediting rate strategy;

(iii) mortality;

(iv) policyholder dividend strategy;

(v) competitor or market interest rate;

(vi) annuitization rates;

(vii) commissions and expenses; and

(viii) morbidity.

(2) For assets:

(A) portfolio descriptions, including a risk profile disclosing the quality, distribution and types of assets;

(B) investment and disinvestment assumptions;

(C) source of asset data;

(D) asset valuation bases; and

(E) documentation of assumptions made for:

(i) default costs;

(ii) bond call function;

(iii) mortgage prepayment function;

(iv) determining market value for assets sold due to disinvestment strategy; and

(v) determining yield on assets acquired through the investment strategy.

(3) For the analysis basis:

(A) methodology;

(B) rationale for inclusion or exclusion of different blocks of business and how pertinent risks were analyzed;

(C) rationale for degree of rigor in analyzing different blocks of business (include in the rationale the level of "materiality" that was used in determining how rigorously to analyze different blocks of business);

(D) criteria for determining asset adequacy (include in the criteria the precise basis for determining if assets are adequate to cover reserves under "moderately adverse conditions" or other conditions as specified in relevant actuarial standards of practice); and

(E) whether the impact of federal income taxes was considered and the method of treating reinsurance in the asset adequacy analysis;

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

(5) summary of results; and

(6) conclusions.

(c) Details of the regulatory asset adequacy issues summary.

(1) The regulatory asset adequacy issues summary shall include:

(A) descriptions of the scenarios tested (including whether those scenarios are stochastic or deterministic) and the sensitivity testing done relative to those scenarios. If negative ending surplus results under certain tests in the aggregate, the actuary should describe those tests and the amount of additional reserve as of the valuation date which, if held, would eliminate the negative aggregate surplus values. Ending surplus values shall be determined by either extending the projection period until the in force and associated assets and liabilities at the end of the projection period are immaterial or by adjusting the surplus amount at the end of the projection period by an amount that appropriately estimates the value that can reasonably be expected to arise from the assets and liabilities remaining in force.

(B) the extent to which the appointed actuary uses assumptions in the asset adequacy analysis that are materially different than the assumptions used in the previous asset adequacy analysis.

(C) the amount of reserves and the identity of the product lines that had been subjected to asset adequacy analysis in the prior opinion but were not subject to analysis for the current opinion.

(D) comments on any interim results that may be of significant concern to the appointed actuary. For example, the comments shall describe the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods.

(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.

(F) whether the actuary has been satisfied that all options whether explicit or embedded, in any asset or liability (including but not limited to those affecting cash flows embedded in fixed income securities) and equity-like features in any investments have been appropriately considered in the asset adequacy analysis.

(2) The regulatory asset adequacy issues summary shall contain the name of the company for which the regulatory asset adequacy issues summary is being supplied and shall be signed and dated by the appointed actuary rendering the actuarial opinion.

(3) The regulatory asset adequacy issues summary will be used to examine the company's financial condition and ability to meet its liabilities. It will be considered information obtained during the course of an examination under the Insurance Code Chapter 401 and treated as confidential.

(d) Conformity to standards of practice. The memorandum shall include a statement with wording substantially similar to that of this subsection as follows: 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.

(e) Use of assets supporting the IMR and the AVR. An appropriate allocation of assets in the amount of the IMR, whether positive or negative, shall be used in any asset adequacy analysis. Analysis of risks regarding asset default may include an appropriate allocation of assets supporting the 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 shall 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 shall be disclosed in the memorandum.

(f) Documentation retention. The appointed actuary shall retain on file, for at least seven 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.

SUBCHAPTER EE. VALUATION OF LIFE INSURANCE POLICIES

§3.4504. Definitions. The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Basic reserves--reserves calculated in accordance with the principles of the Insurance Code §425.064.

(2) Contract segmentation method--the method of dividing the period from issue to mandatory expiration of a policy into successive segments, with the length of each segment being defined as the period from the end of the prior segment (from policy inception, for the first segment) to the end of the latest policy year as determined below. All calculations are made using the 1980 CSO valuation tables, as defined in

this section, (or any other valuation mortality table adopted by the NAIC after the effective date of this subchapter and promulgated by regulation by the commissioner for this purpose), and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in §3.4505(b) of this subchapter (relating to General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves).

FIGURE: 28 TAC §3.4504(2):

The length of a particular contract segment shall be set equal to the minimum of the value t for which G_t is greater than R_t (if G_t never exceeds R_t the segment length is deemed to be the number of years from the beginning of the segment to the mandatory expiration date of the policy), where G_t and R_t are defined as follows:

$G_t = GP_{x+k+t} / GP_{x+k+t-1}$

where:

x = original issue age;

k = the number of years from the date of issue to the beginning of the segment;

t = 1, 2, ...; t is reset to 1 at the beginning of each segment;

$GP_{x+k+t-1}$ = Guaranteed gross premium per thousand of face amount, for year t of the segment ignoring policy fees only if such policy fees are level for the premium paying period of the policy.

$R_t = q_{x+k+t} / q_{x+k+t-1.}$ However, R_t may be increased or decreased by one percent in any policy year, at the company's option, but R_t shall not be less than one;

where:

x, k and t are as defined above, and $q_{x+k+t-1}$ = valuation mortality rate for deficiency reserves in policy year k+t but using the mortality of §3.4505(b)(2) of this subchapter (relating to General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves) if §3.4505(b)(3) of this subchapter (relating to General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves) is elected for deficiency reserves.

However, if GP_{x+k+t} is greater than 0 and $GP_{x+k+t-1}$ is equal to 0, G_t shall be deemed to be 1000. If GP_{x+k+t} and $GP_{x+k+t-1}$ are both equal to 0, G_t shall be deemed to be 0.

(3) Deficiency reserves--the excess, if greater than zero, of the minimum reserves calculated in accordance with the principles of the Insurance Code §425.068 over the basic reserves.

(4) Guaranteed gross premiums--the premiums under a policy of life insurance that are guaranteed and determined at issue.

(5) Maximum valuation interest rates--the interest rates defined in the Insurance Code §425.061, Computation of Minimum Standard by Calendar Year of Issue, that are to be used in determining the minimum standard for the valuation of life insurance policies.

(6) NAIC--National Association of Insurance Commissioners.

(7) 1980 CSO valuation tables--the Commissioners' 1980 Standard Ordinary Mortality Table (1980 CSO Table) without ten-year selection factors, incorporated into the 1980 amendments to the NAIC Standard Valuation Law, and

variations of the 1980 CSO Table approved by the NAIC, such as the smoker and nonsmoker versions approved in December 1983.

(8) Scheduled gross premium--the smallest illustrated gross premium at issue for other than universal life insurance policies. For universal life insurance policies, scheduled gross premium means the smallest specified premium described in §3.4507(a)(3) of this subchapter (relating to Calculation of Minimum Valuation Standard for Flexible Premium and Fixed Premium Universal Life Insurance Policies That Contain Provisions Resulting in the Ability of a Policyowner to Keep a Policy in Force Over a Secondary Guarantee Period) if any, or else the minimum premium described in §3.4507(a)(4) of this subchapter.

(9) Segmented reserves--reserves, calculated using segments produced by the contract segmentation method, equal to the present value of all future guaranteed benefits less the present value of all future net premiums to the mandatory expiration of a policy, where the net premiums within each segment are a uniform percentage of the respective guaranteed gross premiums within the segment. The length of each segment is determined by the "contract segmentation method," as defined in this section. The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the sum of the lengths of all segments of the policy. For both basic reserves and deficiency reserves computed by the segmented method, present values must include future benefits and net premiums in the current segment and in all subsequent segments. The uniform percentage for each segment is such

that, at the beginning of the segment, the present value of the net premiums within the segment equals:

(A) the present value of the death benefits and endowment benefits within the segment, plus

(B) the present value of any unusual guaranteed cash value (see §3.4506(d) of this subchapter (relating to Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits (Other than Universal Life Policies)) occurring at the end of the segment, less

(C) any unusual guaranteed cash value occurring at the start of the segment, plus

(D) for the first segment only, the excess of clause (i) of this paragraph over clause (ii) of this paragraph, as follows:

(i) a net level annual premium equal to the present value, at the date of issue, of the benefits provided for in the first segment after the first policy year, divided by the present value, at the date of issue, of an annuity of one per year payable on the first and each subsequent anniversary within the first segment on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy.

(ii) a net one year term premium for the benefits provided for in the first policy year.

(10) Tabular cost of insurance--the net single premium at the beginning of a policy year for one-year term insurance in the amount of the guaranteed death benefit in that policy year.

(11) Ten-year select factors--the select factors in the Insurance Code Chapter 425, Subchapter B, The Standard Valuation Law.

(12) Unitary reserves--the present value of all future guaranteed benefits less the present value of all future modified net premiums, where:

(A) guaranteed benefits and modified net premiums are considered to the mandatory expiration of the policy; and

(B) modified net premiums are a uniform percentage of the respective guaranteed gross premiums, where the uniform percentage is such that, at issue, the present value of the net premiums equals the present value of all death benefits and pure endowments, plus the excess of clause (i) of this subparagraph over clause (ii) of this subparagraph, as follows:

(i) a net level annual premium equal to the present value, at the date of issue, of the benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one per year payable on the first and each subsequent anniversary of the policy on which a premium falls due. However, the net level annual premium shall not exceed the net level annual premium on the nineteen-year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one year higher than the age at issue of the policy.

(ii) a net one year term premium for the benefits provided for in the first policy year.

(C) The interest rates used in the present value calculations for any policy may not exceed the maximum valuation interest rate, determined with a guarantee duration equal to the length from issue to the mandatory expiration of the policy.

(13) Universal life insurance policy--any individual life insurance policy under the provisions of which separately identified interest credits (other than in connection with dividend accumulations, premium deposit funds, or other supplementary accounts) and mortality or expense charges are made to the policy.

§3.4505. General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.

(a) At the election of the company for any one or more specified plans of life insurance, the minimum mortality standard for basic reserves may be calculated using the 1980 CSO valuation tables with select mortality factors (or any other valuation mortality table adopted by the NAIC after the effective date of this subchapter and promulgated by regulation by the commissioner for this purpose). If select mortality factors are elected, they may be:

(1) the ten-year select mortality factors incorporated in the Insurance Code Chapter 425, Subchapter B, The Standard Valuation Law;

(2) the select mortality factors adopted in §3.4502 of this subchapter

(relating to Adoption of Tables of Select Mortality Factors); or

(3) any other table of select mortality factors adopted by the NAIC after the effective date of this regulation and promulgated by regulation by the commissioner for the purpose of calculating basic reserves.

(b) Deficiency reserves, if any, are calculated for each policy as the excess, if greater than zero, of the quantity A over the basic reserve. The quantity A is obtained by recalculating the basic reserve for the policy using guaranteed gross premiums instead of net premiums when the guaranteed gross premiums are less than the corresponding net premiums. At the election of the company for any one or more specified plans of insurance, the quantity A and the corresponding net premiums used in the determination of quantity A may be based upon the 1980 CSO valuation tables with select mortality factors (or any other valuation mortality table adopted by the NAIC after the effective date of this regulation and promulgated by regulation by the commissioner). If select mortality factors are elected, they may be:

(1) the ten-year select mortality factors in the Insurance Code Chapter 425, Subchapter B, The Standard Valuation Law;

(2) the select mortality factors adopted in §3.4502 of this subchapter;

(3) For durations in the first segment, X percent of the select mortality factors adopted in §3.4502 of this subchapter, subject to the following:

(A) X may vary by policy year, policy form, underwriting classification, issue age, or any other policy factor expected to affect mortality experience;

(B) X is such that, when using the valuation interest rate used for basic reserves, clause (i) of this subparagraph is greater than or equal to clause (ii) of this subparagraph:

(i) The actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X;

(ii) The actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date;

(C) X is such that the mortality rates resulting from the application of X are at least as great as the anticipated mortality experience, without recognition of mortality improvement beyond the valuation date, in each of the first five years after the valuation date;

(D) The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of paragraph (3) of this subsection;

(E) The appointed actuary may decrease X at any valuation date as long as X continues to meet all the requirements of paragraph (3) of this subsection; and

(F) The appointed actuary shall specifically take into account the adverse effect on expected mortality and lapsation of any anticipated or actual increase in gross premiums.

(G) If X is less than 100 percent at any duration for any policy, the following requirements shall be met:

(i) The appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of §3.1607 of this chapter (relating to Description of Actuarial Memorandum Including an Asset Adequacy Analysis and Regulatory Asset Adequacy Issues Summary);

(ii) In the regulatory asset adequacy issues summary prescribed under §3.1607 of this chapter, the appointed actuary shall disclose the impact of the insufficiency of assets to support the payment of benefits and expenses and the establishment of statutory reserves during one or more interim periods; and

(iii) The appointed actuary shall annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of X meet the requirements of paragraph (3) of this subsection. This opinion shall be supported by an actuarial report, subject to appropriate Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The X factors shall reflect anticipated future mortality, without recognition of mortality improvement beyond the valuation date, taking into account relevant emerging experience.

(4) Any other table of select mortality factors adopted by the NAIC after the effective date of this regulation and promulgated by regulation by the commissioner for the purpose of calculating deficiency reserves.

(c) This subsection applies to both basic reserves and deficiency reserves. Any set of select mortality factors may be used only for the first segment. However, if the first segment is less than ten years, the appropriate ten-year select mortality factors may be used thereafter through the tenth policy year from the date of issue.

(d) In determining basic reserves or deficiency reserves, guaranteed gross premiums without policy fees may be used where the calculation involves the guaranteed gross premium but only if the policy fee is a level dollar amount after the first policy year. In determining deficiency reserves, policy fees may be included in guaranteed gross premiums even if not included in the actual calculation of basic reserves.

(e) Reserves for policies that have changes to guaranteed gross premiums, guaranteed benefits, guaranteed charges, or guaranteed credits that are unilaterally made by the insurer after issue and that are effective for more than one year after the date of the change shall be the greatest of the following:

(1) reserves calculated ignoring the guarantee,

(2) reserves assuming the guarantee was made at issue, and

(3) reserves assuming that the policy was issued on the date of the guarantee.

(f) The commissioner may require that the company document the extent of the adequacy of reserves for specified blocks, including but not limited to policies issued prior to the effective date of this subchapter. This documentation may include a demonstration of the extent to which aggregation with other non-specified blocks of business is relied upon in the formation of the appointed actuary opinion pursuant to and consistent with the requirements of §3.1607 of this chapter.

CERTIFICATION. This agency hereby certifies that the adopted amendments have been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued at Austin, Texas, on August 25, 2010.

Gene C. Jarmon
Gene C. Jarmon
General Counsel and Chief Clerk
Texas Department of Insurance

IT IS THEREFORE THE ORDER of the Commissioner of Insurance that the amendments to §§3.1607, 3.4504, and 3.4505 specified herein, concerning the minimum reserve standards for life insurance, are adopted.

AND IT IS SO ORDERED.

Mike Geeslin
MIKE GEESLIN
COMMISSIONER OF INSURANCE

ATTEST:

Gene C. Jarmon
Gene C. Jarmon
General Counsel and Chief Clerk
COMMISSIONER'S ORDER NO. 10-0778
AUG 25 2010