

# Regulatory Analysis Form

(Completed by Promulgating Agency)



# IRRC

Independent Regulatory Review Commission

## SECTION I: PROFILE

(1) Agency:

**Insurance Department**

(2) Agency Number:

Identification Number: 11-247

IRRC Number:

2868

2000 AUG 24 P 12: 26

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(3) Short Title:

**Valuation of Life Insurance Policies**

(4) PA Code Cite:

**31 Pa. Code Chapter 84c**

(5) Agency Contacts (List Telephone Number, Address, Fax Number and Email Address):

Primary Contact:

**Peter J. Salvatore, Regulatory Coordinator, 1326 Strawberry Square, Harrisburg, PA 17120, (717) 787-4429.**

Secondary Contact:

(6) Primary Contact for Public Comments (List Telephone Number, Address, Fax Number and Email Address) – Complete if different from #5:

(All Comments will appear on IRRC'S website)

(7) Type of Rulemaking (check applicable box):

Proposed Regulation

Final Regulation

Final Omitted Regulation

Emergency Certification Regulation;

Certification by the Governor

Certification by the Attorney General

## Regulatory Analysis Form

(8) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

**The proposed rulemaking amends § 84c.5. (relating to general requirements for basic reserves and premium deficiency reserves) to include amendments made to Model Regulation 830 by the National Association of Insurance Commissioners (NAIC) to remove restrictions on an insurer's use of mortality adjustment factors. These amendments are proposed in conjunction with proposed amendments to Chapters 84b and 84d of Title 31 of the Pennsylvania Code. All three sets of amendments should be promulgated simultaneously in order to effectively implement the requirements set forth by the amendments to the NAIC models.**

(9) Include a schedule for review of the regulation including:

- A. The date by which the agency must receive public comments:   09/28/10
- B. The date or dates on which public meetings or hearings will be held:   N/A
- C. The expected date of promulgation of the proposed regulation as a final-form regulation:   03/01/11
- D. The expected effective date of the final-form regulation:   07/01/11
- E. The date by which compliance with the final-form regulation will be required:   07/01/11
- F. The date by which required permits, licenses or other approvals must be obtained:   N/A

(10) Provide the schedule for continual review of the regulation.

**The Department reviews each of its regulations for continued effectiveness on a triennial basis.**

## Regulatory Analysis Form

### SECTION II: STATEMENT OF NEED

(11) State the statutory authority for the regulation. Include specific statutory citation.

**Sections 206, 506, 1501 and 1502 of The Administrative Code of 1929 (71 P.S. §§ 66, 186, 411 and 412) and section 301 of The Insurance Department Act of 1921(40 P.S. § 71).**

(12) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

**No. However, this amendment will maintain consistency of this regulation with the NAIC model.**

(13) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

**Since the proposed rulemaking concerns the solvency requirements applied to insurers, the public will benefit from a financially sound insurance industry that has the ability to fulfill its contractual obligations under life insurance policies.**

(14) If scientific data, studies, references are used to justify this regulation, please submit material with the regulatory package. Please provide full citation and/or links to internet source.

N/A

(15) Describe who and how many will be adversely affected by the regulation. How are they affected?

**There will be no adverse effects. As required by current regulation, the appointed actuary will continue to opine as to whether the mortality rates resulting from the application of the X factors meet the requirements for deficiency reserves.**

## Regulatory Analysis Form

(16) List the persons, groups or entities that will be required to comply with the regulation.  
Approximate the number of people who will be required to comply.

**All life insurance companies and fraternal benefit societies doing business in the Commonwealth.**

**SECTION III: COST AND IMPACT ANALYSIS**

(17) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

**It is not possible to assess what effect the deletion of the restrictions on the mortality adjustment factors (X factors) in the deficiency reserve calculation will have on each specific company's reserves. However, the revised calculations may reduce an insurer's reserve requirements. There should be no additional costs to the regulated community associated with compliance with these amendments to the regulation.**

(18) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

**There are no costs or savings to local governments associated with this rulemaking.**

(19) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

**There are no material costs or savings to state government associated with this rulemaking.**

## Regulatory Analysis Form

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

|                             | Current FY<br>Year | FY +1<br>Year | FY +2<br>Year | FY +3<br>Year | FY +4<br>Year | FY +5<br>Year |
|-----------------------------|--------------------|---------------|---------------|---------------|---------------|---------------|
| <b>SAVINGS:</b>             | \$                 | \$            | \$            | \$            | \$            | \$            |
| <b>Regulated Community</b>  |                    |               |               |               |               |               |
| <b>Local Government</b>     |                    |               |               |               |               |               |
| <b>State Government</b>     |                    |               |               |               |               |               |
| <b>Total Savings</b>        |                    |               |               |               |               |               |
| <b>COSTS:</b>               |                    |               |               |               |               |               |
| <b>Regulated Community</b>  |                    |               |               |               |               |               |
| <b>Local Government</b>     |                    |               |               |               |               |               |
| <b>State Government</b>     |                    |               |               |               |               |               |
| <b>Total Costs</b>          |                    |               |               |               |               |               |
| <b>REVENUE LOSSES:</b>      |                    |               |               |               |               |               |
| <b>Regulated Community</b>  |                    |               |               |               |               |               |
| <b>Local Government</b>     |                    |               |               |               |               |               |
| <b>State Government</b>     |                    |               |               |               |               |               |
| <b>Total Revenue Losses</b> |                    |               |               |               |               |               |

(20a) Provide the past three year expenditure history for programs affected by the regulation.

| Program | FY -3 | FY -2 | FY -1 | Current FY |
|---------|-------|-------|-------|------------|
|         |       |       |       |            |
|         |       |       |       |            |
|         |       |       |       |            |
|         |       |       |       |            |
|         |       |       |       |            |
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|         |       |       |       |            |

## Regulatory Analysis Form

(21) Explain how the benefits of the regulation outweigh any cost and adverse effects.

**No costs or adverse effects are anticipated as a result of this regulation.**

(22) Describe the communications with and input from the public and any advisory council/group in the development and drafting of the regulation. List the specific persons and/or groups who were involved.

**The insurance industry, working with the NAIC, provided input regarding the amendments to this regulation.**

(23) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

**No other nonregulatory alternatives were considered because the standards for calculation of deficiency reserves are currently established by regulation. Therefore, amendment to Chapter 84c is necessary to maintain consistency with NAIC standards and nonregulatory alternatives are not feasible.**

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

**No.**

## Regulatory Analysis Form

(25) How does this regulation compare with those of other states? How will this affect Pennsylvania's ability to compete with other states?

**The rulemaking will not put Pennsylvania at a competitive disadvantage with other states.**

(26) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

**No.**

(27) Submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

**N/A**

(28) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

**N/A**



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FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE  
BUREAU

(Pursuant to Commonwealth Documents Law)

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200 AUG 24 P 12: 26

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Copy below is hereby approved as to  
form and legality. Attorney General

By *Angela M. Elliott*  
(Deputy Attorney General)

AUG 18 2010

Date of Approval

→ Check if applicable.  
Copy not approved, Objections  
attached.

Copy below is hereby certified to be a true and correct  
copy of a document issued, prescribed or promulgated  
by:

Insurance Department

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 11-247

DATE OF ADOPTION: \_\_\_\_\_

BY: *Joel Ario*

Insurance Commissioner

TITLE: \_\_\_\_\_  
(EXECUTIVE OFFICER, CHAIRMAN OR  
SECRETARY)

Copy below is hereby approved as to form and  
legality. Executive or Independent Agencies

BY: *Andrew C. Clark*  
JUL 20 2010

DATE OF APPROVAL

(DEPUTY GENERAL COUNSEL)  
(~~CHIEF COUNSEL, INDEPENDENT AGENCY~~)  
(STRIKE INAPPLICABLE TITLE)

→ Check if applicable. No Attorney General  
approval or objection within 30 days after  
submission.

NOTICE OF PROPOSED RULEMAKING

INSURANCE DEPARTMENT

31 Pa. Code, Chapter 84c, Sections 84c.5

VALUATION OF LIFE INSURANCE POLICIES

## **PREAMBLE**

The Insurance Department (Department) proposes to amend Chapter 84c (relating to valuation of life insurance policies), to read as set forth in Annex A, under the authority of sections 206, 506, 1501 and 1502 of The Administrative Code of 1929 (71 P. S. §§ 66, 186, 411 and 412) and section 301(c) of The Insurance Department Act of 1921 (40 P. S. § 71(c)).

### ***Purpose***

The purpose of the proposed rulemaking is to amend § 84c.5. (relating to General requirements for basic reserves and premium deficiency reserves) to include amendments made to Model Regulation 830 by the National Association of Insurance Commissioners (NAIC) to remove restrictions on mortality adjustment factors. These amendments are proposed in conjunction with amendments to Chapters 84b and 84d of Title 31 of the Pennsylvania code. A copy of the copyrighted NAIC model regulation was provided to the Legislative Standing Committees, the Independent Regulatory Review Commission (IRRC), the Governor's Office of Policy and Planning, the Governor's Office of General Counsel and the Attorney General to assist in their analysis of this proposed rulemaking. Copies of NAIC model regulations are available to the general public by contacting the NAIC.

### ***Explanation of Regulatory Requirements***

The following is a description of the changes contained in the proposed rulemaking:

Section 84c.5 (relating to general requirements for basic reserves and premium deficiency reserves ) is being amended to delete restrictions on the mortality adjustment factors (X factors) in the deficiency reserve calculation required by the regulation. Additionally, the proposed amendments require an appointed actuary to annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of the X factors meet the regulation's requirements for deficiency reserves. Further, this regulation requires that such opinion 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.

### ***Affected Parties***

The proposed rulemaking will apply to insurers issuing life insurance coverage in this Commonwealth.

### ***Fiscal Impact***

#### ***State Government***

There will be no increase in cost to the Department due to the amendments proposed. The Department currently reviews valuation filings submitted by domestic life insurance companies and fraternal benefit societies for compliance with the minimum standards of valuation.

### *General Public*

It is possible that the cost of insurance will be reduced for consumers who purchase life insurance coverage due to these amendments to the requirements for the calculation of reserves.

### *Political Subdivisions*

There will be no fiscal impact on political subdivisions as insurers will continue to maintain adequate reserves.

### *Private Sector*

The model regulation requires the appointed actuary to annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of the X factors meet the requirements of this Chapter for deficiency reserves. This opinion must be supported by an actuarial report.

### *Paperwork*

The adoption of this proposed rulemaking would not impose additional paperwork on the Department.

### *Effectiveness/Sunset Date*

The rulemaking will become effective \_\_\_\_\_ (Editor's Note: the rulemaking will become effective by the first of the month following 60 days from the publication date of this regulation in final form.). The Department continues to monitor the effectiveness of regulations on a triennial basis; therefore no sunset date has been assigned.

### *Contact Person*

Questions or comments regarding the proposed rulemaking may be addressed in writing to Peter J. Salvatore, Regulatory Coordinator, Insurance Department, 1326 Strawberry Square, Harrisburg, PA 17120, within 30 days following the publication of this notice in the *Pennsylvania Bulletin*. Questions and comments may also be e-mailed to [psalvatore@state.pa.us](mailto:psalvatore@state.pa.us) or faxed to (717) 705-3873.

Under the Regulatory Review Act (act) (71 P. S. §§ 745.1--745.15), the Department is required to write to all commentators, requesting whether or not they wish to receive a copy of the final-form rulemaking. To better serve our stakeholders, the Department has made a determination that all commentators will receive a copy of the final-form rulemaking when it is made available to IRRC and the legislative standing committees.

### *Regulatory Review*

Under section 5(a) of the act (71 P. S. § 745.5(a)), on August 24, 2010, the Department submitted a copy of this proposed rulemaking to IRRC and to the Chairpersons of the Senate Banking and Insurance Committee and the House Insurance Committee. In addition to the

submitted proposed rulemaking, the Department has, as required by the act, provided IRRC and the committees with a copy of a detailed Regulatory Analysis Form prepared by the Department. A copy of that material is available to the public upon request.

IRRC will notify the Department of any objections to any portion of the proposed rulemaking within 30 days of the close of the public comment period. The notification shall specify the regulatory review criteria that have not been met by that portion. The act specifies detailed procedures for the Department, the Governor, and the General Assembly to review these objections before final publication of the regulations.

JOEL ARIO  
Insurance Commissioner

**CONTINUATION SHEET FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE BUREAU  
Pursuant to Commonwealth Documents Law**

**ANNEX A**

**TITLE 31. INSURANCE. PART VI. LIFE INSURANCE. CHAPTER 84c.  
VALUATION OF LIFE INSURANCE POLICIES**

Sec.

|        |  |
|--------|--|
| 84c.5. | General requirements for basic reserves and premium deficiency reserves. |
|--------|--|

**§ 84c.5. General requirements for basic reserves and premium deficiency reserves.**

\* \* \* \* \*

(b) *Deficiency reserves minimum standard.* 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 (or any other valuation mortality table adopted by the NAIC after May 6, 2000, and promulgated by regulation by the Commissioner for the purpose of calculating deficiency reserves) with select mortality factors. If select mortality factors are elected, they may be one of the following:

(1) The 10-year select mortality factors.

(2) The select mortality factors in Appendix A.

(3) For durations in the first segment, X% of the select mortality factors in Appendix A, subject to the following:

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

[(ii) X may not be less than 20%.]

(iii) X may not decrease in any successive policy years.]

(ii) [(iv)] X is such that, when using the valuation interest rate used for basic reserves, the actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X, is greater than or equal to the actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date.

(iii) [(v)] 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 5 years after the valuation date.

(iv) [(vi)] The appointed actuary shall increase X at any valuation date when it is necessary to continue to meet all the requirements of paragraph (3).

(v) [(vii)] The appointed actuary may decrease X at any valuation date as long as X [does not decrease in any successive policy years and as long as it] continues to meet all the requirements of paragraph (3).

(vi) [(viii)] 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.

(vii) [(ix)] If X is less than 100% at any duration for any policy, the following requirements shall be met:

(A) The appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with § 84b.8 (relating to statement of actuarial opinion based on an asset adequacy analysis).

**(B) The appointed actuary shall disclose, in the Regulatory Asset Adequacy Issues Summary, 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.**

(C) [(B)] The appointed actuary shall annually opine for all policies subject to this chapter as to whether the mortality rates resulting from the application of X meet the requirements of paragraph (3). 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 May 6, 2000, and promulgated by regulation by the Commissioner for the purpose of calculating deficiency reserves.

\* \* \* \* \*

Draft: 3/15/09  
Revisions to Model 830  
Adopted by the Life and Health Actuarial Task Force, 6/3/09

**VALUATION OF LIFE INSURANCE POLICIES MODEL REGULATION**  
(Including the Introduction and Use of New Select Mortality Factors)

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**Section 1. Purpose**

- A. The purpose of this regulation is to provide:
- (1) Tables of select mortality factors and rules for their use;
  - (2) Rules concerning a minimum standard for the valuation of plans with nonlevel premiums or benefits; and
  - (3) Rules concerning a minimum standard for the valuation of plans with secondary guarantees.
- B. The method for calculating basic reserves defined in this regulation will constitute the Commissioners' Reserve Valuation Method for policies to which this regulation is applicable.

**Section 2. Authority**

This regulation is issued under the authority of Section [insert applicable section] of the Insurance Laws of [insert state].

**Section 3. Applicability**

This regulation shall apply to all life insurance policies, with or without nonforfeiture values, issued on or after the effective date of this regulation, subject to the following exceptions and conditions.

- A. Exceptions
- (1) This regulation shall not apply to any individual life insurance policy issued on or after the effective date of this regulation if the policy is issued in accordance with and as a result of the exercise of a reentry provision contained in the original life insurance policy of the same or greater face amount, issued before the effective date of this regulation, that guarantees the premium rates of the new policy. This regulation also shall not apply to subsequent policies issued as a result of the exercise of such a provision, or a derivation of the provision, in the new policy.
  - (2) This regulation shall not apply to any universal life policy that meets all the following requirements:

- (a) Secondary guarantee period, if any, is five (5) years or less;
- (b) Specified premium for the secondary guarantee period is not less than the net level reserve premium for the secondary guarantee period based on the CSO valuation tables as defined in Section 4F and the applicable valuation interest rate; and
- (c) The initial surrender charge is not less than 100 percent of the first year annualized specified premium for the secondary guarantee period.

**Drafting Note:** Policies with a secondary guarantee are described in Section 7.

- (3) This regulation shall not apply to any variable life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.
- (4) This regulation shall not apply to any variable universal life insurance policy that provides for life insurance, the amount or duration of which varies according to the investment experience of any separate account or accounts.
- (5) This regulation shall not apply to a group life insurance certificate unless the certificate provides for a stated or implied schedule of maximum gross premiums required in order to continue coverage in force for a period in excess of one year.

**B. Conditions**

- (1) Calculation of the minimum valuation standard for policies with guaranteed nonlevel gross premiums or guaranteed nonlevel benefits (other than universal life policies), or both, shall be in accordance with the provisions of Section 6.
- (2) Calculation of the minimum valuation standard for flexible premium and fixed premium universal life insurance policies, that contain provisions resulting in the ability of a policyholder to keep a policy in force over a secondary guarantee period shall be in accordance with the provisions of Section 7.

**Section 4. Definitions**

For purposes of this regulation:

- A. "Basic reserves" means reserves calculated in accordance with Section [cite section of state law comparable to Section 5 of the NAIC Standard Valuation Law].
- B. "Contract segmentation method" means 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 Subsection F of this section, (or any other valuation mortality table adopted by the National Association of Insurance Commissioners (NAIC) after the effective date of this regulation and promulgated by regulation by the commissioner for this purpose), and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in Section 5B of this regulation.

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:



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

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 level for the premium paying period of the policy.

$$R_t = \frac{q_{x+k+t}}{q_{x+k+t-1}},$$

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 Section 5B(2) if Section 5B(3) 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.

**Drafting Note:** The purpose of the one percent tolerance in the R factor is to prevent irrational segment lengths due to such things as premium rounding. For example, consider a plan in which gross premiums are designed at some point to be a ratio times the underlying ultimate mortality rates, where the ratio varies by issue age. The resulting segments may be greater than one year, because the guaranteed gross premiums are not expressed in fractional cents. The tolerance factor allows the creation of one year segments for a plan in which premiums parallel the underlying valuation mortality table.

- C. "Deficiency reserves" means the excess, if greater than zero, of
  - (1) Minimum reserves calculated in accordance with Section [cite section of the state law comparable to Section 8 of the NAIC Standard Valuation Law] over
  - (2) Basic reserves.
- D. "Guaranteed gross premiums" means the premiums under a policy of life insurance that are guaranteed and determined at issue.
- E. "Maximum valuation interest rates" means the interest rates defined in Section [cite section of state law comparable to Section 4b of the NAIC Standard Valuation Law] (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.
- F. "1980 CSO valuation tables" means 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.

**Drafting Note:** This regulation defines the 1980 CSO Tables without the existing ten -year select mortality factors to assure that, if select mortality factors are elected, only one set of factors may be applied to the base valuation mortality table.

- G. “Scheduled gross premium” means 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 Section 7A(3), if any, or else the minimum premium described in Section 7A(4).
- H. (1) “Segmented reserves” means 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 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 within the segment, plus
  - (b) The present value of any unusual guaranteed cash value (see Section 6D) 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 the Item (i) over Item (ii), 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.
- (2) The length of each segment is determined by the “contract segmentation method,” as defined in this section.
- (3) 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.
- (4) For both basic reserves and deficiency reserves computed by the segmented method, present values shall include future benefits and net premiums in the current segment and in all subsequent segments.

**Drafting Note:** The segmentation requirement should not be limited to plans with no cash surrender values; otherwise companies could avoid segmentation entirely by designing policies with minimal (positive) cash values. Segmentation for plans with cash surrender values should be based solely upon gross premium levels. Basing segmentation upon the level of cash surrender values introduces complications because of the inter-relationship between minimum cash surrender values and gross premium patterns. The requirements of this regulation relating to reserves for plans with unusual cash values and to reserves if cash values exceed calculated reserves serve to link required reserves and cash surrender values. The calculation of segmented reserves shall not be linked to the occurrence of a positive unitary terminal reserve at the end of a segment. The requirement of this regulation to hold the greater of the segmented reserve or the unitary reserve eliminates the need for any linkage.

- I. “Tabular cost of insurance” means 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.
- J. “Ten-year select factors” means the select factors adopted with the 1980 amendments to the NAIC Standard Valuation Law.
- K. (1) “Unitary reserves” means 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 Item (i) over Item (ii), 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.
- (2) 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.

**Drafting Note:** The purpose of this subsection is to define as specifically as possible what has become commonly called the unitary method. The NAIC Standard Valuation Law does not define the term “unitary” for policies with nonlevel premiums or benefits; its requirement for reserves “computed by a method that is consistent with the principles of the NAIC Standard Valuation Law” has not been uniformly interpreted.

- L. “Universal life insurance policy” means 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.

**Section 5. 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 regulation 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 into the 1980 amendments to the NAIC Standard Valuation Law;
- (2) The select mortality factors in the Appendix; or

**Drafting Note:** The select mortality factors for duration 1 through 15 in the Appendix of this regulation reflect the Society of Actuaries' data for the years 1983 through 1986, split by sex and smoking status, with fifteen years of mortality improvement, based on Society of Actuaries' Projection Scale A applied. A 50% margin was added. The factors were then graded to the 1980 CSO Tables over the next five durations. A 50% margin was deemed appropriate to provide a reasonable margin, with little likelihood that actual experience for significant blocks of business would exceed it.

- (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 incorporated into the 1980 amendments to the NAIC Standard Valuation Law;
- (2) The select mortality factors in the Appendix of this regulation;

**Drafting Note:** The select mortality factors in the Appendix of this regulation do not reflect the underwriting risk classes that have evolved since the period of the underlying experience. In light of this consideration and the recent recognition of the regulatory value of actuarial opinions, this regulation allows actuarial judgment to be used for deficiency reserves.

- (3) For durations in the first segment, X percent of the select mortality factors in the Appendix , 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 shall not be less than twenty percent (20%);~~

- ~~(c) X shall not decrease in any successive policy years;~~

- ~~(d)~~ X is such that, when using the valuation interest rate used for basic reserves, Item (i) is greater than or equal to Item (ii);

- (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;
- (ec) 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 (5) years after the valuation date;
- (fd) The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of Subsection B(3);
- (ge) The appointed actuary may decrease X at any valuation date as long as X does not decrease in any successive policy years and as long as it continues to meet all the requirements of Subsection B(3); and
- (hf) 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.
- (ig) 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 Section [insert applicable section for asset adequacy opinion requirement of the Actuarial Opinion and Memorandum Regulation]; and
  - (ii) The appointed actuary shall disclose, in the Regulatory Asset Adequacy Issues Summary, 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 Subsection B(3). 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 (10) years, the appropriate ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law may be used thereafter through the tenth policy year from the date of issue.

**Drafting Note:** This regulation does not allow the use of select mortality factors beyond the first segment. The rationale is that the result of a premium increase that is sufficient to require a new segment will be increased lapsation, leading to mortality deterioration after the increase. Also, for policies that have reentry provisions, select mortality factors shall not be used in segments beginning after reentry unless a new policy is actually issued. However, this regulation allows the use of the ten-year select mortality factors incorporated into the 1980 amendments of the NAIC Standard Valuation Law beyond the first segment (but in no case beyond the tenth policy year) in recognition that the mortality deterioration is unlikely to occur to a significant degree within the first ten (10) years.

- 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 regulation. 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 Section [insert applicable section of asset adequacy opinion requirement of the Actuarial Opinion and Memorandum Regulation].

**Section 6. Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits (Other than Universal Life Policies)**

**A. Basic Reserves**

Basic reserves shall be calculated as the greater of the segmented reserves and the unitary reserves. Both the segmented reserves and the unitary reserves for any policy shall use the same valuation mortality table and selection factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the adjustments described in Paragraph (1) or (2) below may be made:

- (1) Treat the unitary reserve, if greater than zero, applicable at the end of each segment as a pure endowment and subtract the unitary reserve, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment.
- (2) Treat the guaranteed cash surrender value, if greater than zero, applicable at the end of each segment as a pure endowment; and subtract the guaranteed cash surrender value, if greater than zero, applicable at the beginning of each segment from the present value of guaranteed life insurance and endowment benefits for each segment.

**B. Deficiency Reserves**

- (1) The deficiency reserve at any duration shall be calculated:
  - (a) On a unitary basis if the corresponding basic reserve determined by Subsection A is unitary;
  - (b) On a segmented basis if the corresponding basic reserve determined by Subsection A is segmented; or
  - (c) On the segmented basis if the corresponding basic reserve determined by Subsection A is equal to both the segmented reserve and the unitary reserve.
- (2) This subsection shall apply to any policy for which the guaranteed gross premium at any duration is less than the corresponding modified net premium calculated by the method used in determining the basic reserves, but using the minimum valuation standards of mortality (specified in Section 5B) and rate of interest.

- (3) Deficiency reserves, if any, shall be calculated for each policy as the excess if greater than zero, for the current and all remaining periods, of the quantity A over the basic reserve, where A is obtained as indicated in Section 5B.
- (4) For deficiency reserves determined on a segmented basis, the quantity A is determined using segment lengths equal to those determined for segmented basic reserves.

C. Minimum Value

Basic reserves may not be less than the tabular cost of insurance for the balance of the policy year, if mean reserves are used. Basic reserves may not be less than the tabular cost of insurance for the balance of the current modal period or to the paid-to-date, if later, but not beyond the next policy anniversary, if mid-terminal reserves are used. The tabular cost of insurance shall use the same valuation mortality table and interest rates as that used for the calculation of the segmented reserves. However, if select mortality factors are used, they shall be the ten-year select factors incorporated into the 1980 amendments of the NAIC Standard Valuation Law. In no case may total reserves (including basic reserves, deficiency reserves and any reserves held for supplemental benefits that would expire upon contract termination) be less than the amount that the policyowner would receive (including the cash surrender value of the supplemental benefits, if any, referred to above), exclusive of any deduction for policy loans, upon termination of the policy.

D. Unusual Pattern of Guaranteed Cash Surrender Values

**Drafting Note:** This requirement is independent of both the segmentation process and the unitary process. After the greater of the segmented or the unitary reserve has been determined, then this subsection imposes an additional floor on the ultimate reserve. The purpose of this subsection is to assure adequate funding of significant increases in guaranteed cash surrender values.

- (1) For any policy with an unusual pattern of guaranteed cash surrender values, the reserves actually held prior to the first unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the first unusual guaranteed cash surrender value as a pure endowment and treating the policy as an  $n$  year policy providing term insurance plus a pure endowment equal to the unusual cash surrender value, where  $n$  is the number of years from the date of issue to the date the unusual cash surrender value is scheduled.
- (2) The reserves actually held subsequent to any unusual guaranteed cash surrender value shall not be less than the reserves calculated by treating the policy as an  $n$  year policy providing term insurance plus a pure endowment equal to the next unusual guaranteed cash surrender value, and treating any unusual guaranteed cash surrender value at the end of the prior segment as a net single premium, where
  - (a)  $n$  is the number of years from the date of the last unusual guaranteed cash surrender value prior to the valuation date to the earlier of:
    - (i) The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or
    - (ii) The mandatory expiration date of the policy; and
  - (b) The net premium for a given year during the  $n$  year period is equal to the product of the net to gross ratio and the respective gross premium; and
  - (c) The net to gross ratio is equal to Item (i) divided by Item (ii) as follows:

- (i) The present value, at the beginning of the  $n$  year period, of death benefits payable during the  $n$  year period plus the present value, at the beginning of the  $n$  year period, of the next unusual guaranteed cash surrender value, if any, minus the amount of the last unusual guaranteed cash surrender value, if any, scheduled at the beginning of the  $n$  year period.
  - (ii) The present value, at the beginning of the  $n$  year period, of the scheduled gross premiums payable during the  $n$  year period.
- (3) For purposes of this subsection, a policy is considered to have an unusual pattern of guaranteed cash surrender values if any future guaranteed cash surrender value exceeds the prior year's guaranteed cash surrender value by more than the sum of:
- (a) One hundred ten percent (110%) of the scheduled gross premium for that year;
  - (b) One hundred ten percent (110%) of one year's accrued interest on the sum of the prior year's guaranteed cash surrender value and the scheduled gross premium using the nonforfeiture interest rate used for calculating policy guaranteed cash surrender values; and
  - (c) Five percent (5%) of the first policy year surrender charge, if any.

E. Optional Exemption for Yearly Renewable Term Reinsurance. At the option of the company, the following approach for reserves on YRT reinsurance may be used:

**Drafting Note:** Traditional reserves for yearly renewable term (YRT) reinsurance, the calculations of which this section describes, are already adequate and sufficient. However, without this option in the regulation, YRT reinsurance would be subject to the more complex segmentation calculations.

- (1) Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.
- (2) Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in Subsection C.
- (3) Deficiency reserves.
  - (a) For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.
  - (b) Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with Subparagraph (a) above.
- (4) For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO mortality tables with or without ten-year select mortality factors, or any other table adopted after the effective date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose.
- (5) A reinsurance agreement shall be considered YRT reinsurance for purposes of this subsection if only the mortality risk is reinsured.
- (6) If the assuming company chooses this optional exemption, the ceding company's reinsurance reserve credit shall be limited to the amount of reserve held by the assuming company for the affected policies.



- F. Optional Exemption for Attained-Age-Based Yearly Renewable Term Life Insurance Policies. At the option of the company, the following approach for reserves for attained-age-based YRT life insurance policies may be used:

**Drafting Note:** Traditional reserves for attained-age-based YRT policies, the calculations of which this subsection describes, are already adequate and sufficient. However, without this option in the regulation, these policies would be subject to the more complex segmentation calculations.

- (1) Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.
- (2) Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in Subsection 6C.
- (3) Deficiency reserves.
  - (a) For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.
  - (b) Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses determined in accordance with Subparagraph (a) above.
- (4) For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten-year select mortality factors, or any other table adopted after the effective date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose.
- (5) A policy shall be considered an attained-age-based YRT life insurance policy for purposes of this subsection if:
  - (a) The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are based upon the attained age of the insured such that the rate for any given policy at a given attained age of the insured is independent of the year the policy was issued; and
  - (b) The premium rates (on both the initial current premium scale and the guaranteed maximum premium scale) are the same as the premium rates for policies covering all insureds of the same sex, risk class, plan of insurance and attained age.
- (6) For policies that become attained-age-based YRT policies after an initial period of coverage, the approach of this subsection may be used after the initial period if:
  - (a) The initial period is constant for all insureds of the same sex, risk class and plan of insurance; or
  - (b) The initial period runs to a common attained age for all insureds of the same sex, risk class and plan of insurance; and
  - (c) After the initial period of coverage, the policy meets the conditions of Paragraph (5) above.
- (7) If this election is made, this approach shall be applied in determining reserves for all attained-age-based YRT life insurance policies issued on or after the effective date of this regulation.

- G. Exemption from Unitary Reserves for Certain *n*-Year Renewable Term Life Insurance Policies. Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met:

**Drafting Note:** Without this exemption, companies issuing certain  $n$ -year renewable term policies could be forced to hold reserves higher than  $n$ -year term reserves, even though in many cases gross premiums are well above valuation mortality rates.

- (1) The policy consists of a series of  $n$ -year periods, including the first period and all renewal periods, where  $n$  is the same for each period, except that for the final renewal period,  $n$  may be truncated or extended to reach the expiry age, provided that this final renewal period is less than 10 years and less than twice the size of the earlier  $n$ -year periods, and for each period, the premium rates on both the initial current premium scale and the guaranteed maximum premium scale are level;
- (2) The guaranteed gross premiums in all  $n$ -year periods are not less than the corresponding net premiums based upon the 1980 CSO Table with or without the ten-year select mortality factors; and
- (3) There are no cash surrender values in any policy year.

H. Exemption from Unitary Reserves for Certain Juvenile Policies

Unitary basic reserves and unitary deficiency reserves need not be calculated for a policy if the following conditions are met, based upon the initial current premium scale at issue:

- (1) At issue, the insured is age twenty-four (24) or younger;
- (2) Until the insured reaches the end of the juvenile period, which shall occur at or before age twenty-five (25), the gross premiums and death benefits are level, and there are no cash surrender values; and
- (3) After the end of the juvenile period, gross premiums are level for the remainder of the premium paying period, and death benefits are level for the remainder of the life of the policy.

**Drafting Note:** The jumping juvenile policy described has traditionally been valued in two segments. This exemption will allow that practice to continue without requiring the calculation of reserves on a unitary basis. However, within each segment, both basic and deficiency reserves shall comply with the segmented reserve requirements.

**Section 7. 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**

A. General

- (1) Policies with a secondary guarantee include:
  - (a) A policy with a guarantee that the policy will remain in force at the original schedule of benefits, subject only to the payment of specified premiums;
  - (b) A policy in which the minimum premium at any duration is less than the corresponding one year valuation premium, calculated using the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten-year select mortality factors, or any other table adopted after the effective date of this regulation by the NAIC and promulgated by regulation by the commissioner for this purpose; or
  - (c) A policy with any combination of Subparagraph (a) and (b).

**Drafting Note:** Universal life and variable universal life policies with secondary guarantees that meet the requirements of Section 3A(2) are not subject to this regulation.

- (2) A secondary guarantee period is the period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. When a policy contains more than one secondary guarantee, the minimum reserve shall be the greatest of the respective minimum reserves at that valuation date of each unexpired secondary guarantee, ignoring all other secondary guarantees. Secondary guarantees that are unilaterally changed by the insurer after issue shall be considered to have been made at issue. Reserves described in Subsections B and C below shall be recalculated from issue to reflect these changes.
- (3) Specified premiums mean the premiums specified in the policy, the payment of which guarantees that the policy will remain in force at the original schedule of benefits, but which otherwise would be insufficient to keep the policy in force in the absence of the guarantee if maximum mortality and expense charges and minimum interest credits were made and any applicable surrender charges were assessed.
- (4) For purposes of this section, the minimum premium for any policy year is the premium that, when paid into a policy with a zero account value at the beginning of the policy year, produces a zero account value at the end of the policy year. The minimum premium calculation shall use the policy cost factors (including mortality charges, loads and expense charges) and the interest crediting rate, which are all guaranteed at issue.
- (5) The one-year valuation premium means the net one-year premium based upon the original schedule of benefits for a given policy year. The one-year valuation premiums for all policy years are calculated at issue. The select mortality factors defined in Section 5B(2), (3), and (4) may not be used to calculate the one-year valuation premiums.
- (6) The one-year valuation premium should reflect the frequency of fund processing, as well as the distribution of deaths assumption employed in the calculation of the monthly mortality charges to the fund.

**B. Basic Reserves for the Secondary Guarantees**

Basic reserves for the secondary guarantees shall be the segmented reserves for the secondary guarantee period. In calculating the segments and the segmented reserves, the gross premiums shall be set equal to the specified premiums, if any, or otherwise to the minimum premiums, that keep the policy in force and the segments will be determined according to the contract segmentation method as defined in Section 4B.

**C. Deficiency Reserves for the Secondary Guarantees**

Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in Section 6B with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

**D. Minimum Reserves**

The minimum reserves during the secondary guarantee period are the greater of:

- (1) The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or
- (2) The minimum reserves required by other rules or regulations governing universal life plans.

**Section 8. Effective Date**

This regulation shall become effective January 1, 2000.

## PROJECT HISTORY

### VALUATION OF LIFE INSURANCE POLICIES MODEL REGULATION

**1. Description of the Project, Issues Addressed, etc.**

The project was to remove the restrictions on the mortality adjustment factors (X factors) in the deficiency reserve calculation required by the Valuation of Life Insurance Policies Model Regulation. The deficiency reserve calculation allows companies to adjust the valuation mortality to mortality that approximates the expected mortality by use of the X factors. The arbitrary restrictions in the model regulation prevent the use of mortality with the amount and slope similar to the expected mortality. The model regulation requires the appointed actuary shall annually opine for all policies subject to this regulation as to whether the mortality rates resulting from the application of the X factors meet the requirements for deficiency reserves. This opinion has to 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 reduction in deficiency reserve requirements that would result from the changes to the limitations on the use of X factors could result in reserves not being sufficient to provide for the payment of benefits and expenses and the establishment of statutory reserves during interim periods prior to the end of the projection period used in the asset adequacy analysis. Therefore, the Task Force, as part of the Regulatory Asset Adequacy Issues Summaries required of life insured companies each year, required the appointed actuary to make a statement as 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.

**2. Name of Group Responsible for Drafting the Model and States Participating**

The 2009 members of the Life and Health Actuarial Task Force are: Kansas (chair), South Carolina (Vice Chair), Alaska, Alabama, Arkansas, California, Connecticut, Florida, Hawaii, Minnesota, Missouri, Nebraska, New York, Ohio, Oklahoma, Texas and Utah.

**3. Project Authorized by What Charge and Date First Given to the Group**

The initial charge was given to the Task Force in November, 2008, by the Capital and Surplus Relief (EX) Working Group to consider the November 11, 2008, proposal from the American Council of Life Insurers. The proposal was rejected by the Executive Committee in January, 2009. At the 2009 Commissioners Conference the Task Force was again charged with reviewing the proposal.

**4. A General Description of the Drafting Process (e.g., drafted by a subgroup, interested parties, the full group, etc). Include any parties outside the members that participated**

The initial drafts were provided by the American Council of Life Insurers. A subgroup of the Task Force made changes and made a recommendation to the Task Force. The Task Force made several modifications.

**5. A General Description of the Due Process (e.g., exposure periods, public hearings, or any other means by which widespread input from industry, consumers and legislators was solicited)**

The subgroup discussed the proposal at public conference calls on this topic on the following dates: March 27, 2009; March 31, 2009; April 7, 2009; April 14, 2009; April 21, 2009; and April 28, 2009. The Task Force held a public conference call on this topic on May 4, 2009 and June 3, 2009. Notice of each of these conference calls was posted on the NAIC's home page on the Internet and e-mailed to approximately 300 interested parties. Drafts of the document were released for comment on December 23, 2008 and May 4, 2009. The Task Force voted to adopt the modifications to the model regulation on June 3, 2009. The vote was eleven in favor (Alabama, Alaska, Arkansas, California, Connecticut, Minnesota, Missouri, Nebraska, Oklahoma, South Carolina, and Texas), two abstaining (Florida and New York) and one not voting (Ohio).

6. **A Discussion of the Significant Issues (items of some controversy raised during the due process and the group's response)**
7. **Any Other Important Information (e.g., amending an accreditation standard).**

This model regulation is not an accreditation standard.

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August 24, 2010

Mr. Kim Kaufman  
Executive Director  
Independent Regulatory Review Comm.  
333 Market Street  
Harrisburg, PA 17101

RECEIVED  
IRRC  
2010 AUG 24 P 12:26

Re: Insurance Department Proposed Regulation No. 11-247, Valuation of Life Insurance Policies liabilities

Dear Mr. Kaufman:

Pursuant to Section 5(a) of the Regulatory Review Act, enclosed for your information and review is proposed regulation 31 Pa. Code, Chapter 84c.

The purpose of the proposed rulemaking is to amend § 84c.5. (relating to General requirements for basic reserves and premium deficiency reserves) to include amendments made to Model Regulation 830 by the National Association of Insurance Commissioners (NAIC) to remove restrictions on mortality adjustment factors.

If you have any questions regarding this matter, please contact me at (717) 787-4429.

Sincerely yours,

A handwritten signature in cursive script that reads "Peter J. Salvatore".

Peter J. Salvatore  
Regulatory Coordinator

**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE  
REGULATORY REVIEW ACT**

I.D. NUMBER: 11-247  
 SUBJECT: VALUATION OF LIFE INSURANCE POLICIES  
 AGENCY: DEPARTMENT OF INSURANCE

**TYPE OF REGULATION**

- X Proposed Regulation  
 Final Regulation  
 Final Regulation with Notice of Proposed Rulemaking Omitted  
 120-day Emergency Certification of the Attorney General  
 120-day Emergency Certification of the Governor  
 Delivery of Tolled Regulation  
 a. With Revisions                      b. Without Revisions

**RECEIVED  
IRRC  
2010 AUG 24 P 12:26**

**FILING OF REGULATION**

| DATE    | SIGNATURE              | DESIGNATION                                   |
|---------|------------------------|---|
| 8-24-10 | <i>Shirley Carhart</i> | HOUSE COMMITTEE ON INSURANCE                  |
| 8/24/10 | <i>Anthony Deluca</i>  | MAJORITY CHAIRMAN <u>REP. ANTHONY DELUCA</u>  |
|         | <i>Donald C. White</i> | SENATE COMMITTEE ON BANKING & INSURANCE       |
| 8/24/10 | <i>Donald C. White</i> | MAJORITY CHAIRMAN <u>SEN. DONALD C. WHITE</u> |
| 8/24/10 | <i>Cheryl York</i>     | INDEPENDENT REGULATORY REVIEW COMMISSION      |
|         |                        | ATTORNEY GENERAL                              |
| 8/24/10 | <i>n. L. White</i>     | LEGISLATIVE REFERENCE BUREAU                  |