



Offices of the Insurance Commissioner  
Legislative Rule  
Title 114, Series 68

**VALUATION OF LIFE INSURANCE COMPANIES**

**TITLE 114, SERIES 68**

**BRIEF SUMMARY OF RULE**

The amendment to Series 68 would bring the rule into compliance with the NAIC model #830, that was recently amended in 2009. The model provides tables of select mortality factors and rules for use; rules concerning minimum standards for the valuations of plans with non-level premiums or benefits; and rules concerning minimum standards for the valuations of plans with secondary guarantees. The amendments change the general calculation requirements for premium deficiency reserves

Department of Revenue  
Agency Questionnaire

Re: Legislative Rule to be Filed

VALUATION OF LIFE INSURANCE COMPANIES

TITLE 114, SERIES 68

**Question 1: Are regulations required?**

No, this rule is not required.

**Question 2: Is the rule you are proposing controversial? If yes, what are the pros and the cons?**

This rule is not expected to be controversial.

**Question 3: Is the rule you are proposing a copy of another state's rule? A model rule? Custom-drafted?**

This rule is based upon the National Association of Insurance Commissioners' model 830, amended in 2009.

**Question 4: What are the really important things you think the Secretary of Tax and Revenue should know about this rule and the issues that surround it?**

The amendment to Series 68 would bring the rule into compliance with the NAIC model #830, that was recently amended in 2009. The model provides tables of select mortality factors and rules for use; rules concerning minimum standards for the valuations of plans with non-level premiums or benefits; and rules concerning minimum standards for the valuations of plans with secondary guarantees. The amendments change the general calculation requirements for premium deficiency reserves. The amendments to this rule address the deficiency reserve calculation that allows companies to adjust the valuation mortality to mortality that approximates the expected mortality. The restrictions prevent the use of mortality with the amount and slope similar to the expected mortality. This rule amendment will require an appointed actuary to annually opine for all policies subject to this rule as to whether the mortality rates meet the requirements for deficiency reserves. The rule amendment will require the opinion to be supported by an actuarial report.

## QUESTIONNAIRE

(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period, Proposed Rule, and if needed, Emergency and Modified Rule.)

**DATE:** July 27, 2010

**TO:** LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

**FROM:** OFFICE OF THE INSURANCE COMMISSIONER  
ATTN: Legal Division  
1124 Smith Street  
Post Office Box 50540  
Charleston, West Virginia 25305-0540

**LEGISLATIVE RULE TITLE:** VALUATION OF LIFE INSURANCE COMPANIES  
TITLE 114, SERIES 68

**1. Authorizing statute(s) citation:**

W.Va. Code §33-2-10 and 33-7-9(p) (2)

**2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:**

June 11, 2010.

**b. What other notice, including advertising, did you give of the hearing?**

N/A

**c. Date of Public Hearing(s) or Public Comment Period ended:**

July 12, 2010.

**d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.**

Attached   X   No comments received           

**e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing:  
(be exact)**

July 27, 2010

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- f. Name, title, address and phone/fax/e-mail numbers of agency person(s) to receive all written correspondence regarding this rule: (Please type)

Timothy R. Murphy, Associate Counsel  
Insurance Commission  
P.O. Box 50540  
Charleston WV 25305  
304-558-0401 Ext 1210  
304-558-1362 FAX  
Timothy.Murphy@wvinsurance.gov

- g. IF DIFFERENT FROM ITEM 'f', please give Name, title, address and phone number(s) of agency person(s) who wrote and/or has responsibility for the contents of this rule: (Please type)

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

- a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

- b. Date of hearing or comment period:

N/A

- c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

N/A

- d. Attach findings and determinations and reasons:

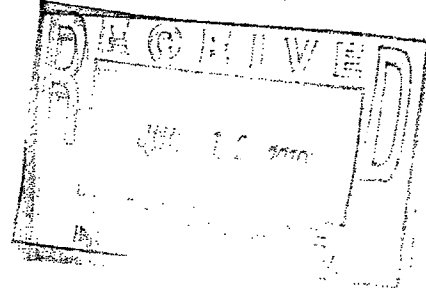
N/A



Leah J. Walters  
Regional Vice President, State Relations

July 9, 2010

Mr. Timothy R. Murphy  
Associate Counsel  
Insurance Commission  
1124 Smith Street  
P.O. Box 50540  
Charleston, WV 25305-0540



RE: Proposed Rule 114-68, Valuation of Life Insurance Policies

Dear Mr. Murphy:

This letter is submitted on behalf of the American Council of Life Insurers (ACLI), a national trade association of legal reserve life insurance companies whose 300+ member companies represent over 90% of the assets and premiums of the U.S. life insurance and annuity industry. Two hundred and fifty-six ACLI member companies are licensed to do business in West Virginia and account for 93 percent of life insurance premiums and 96 percent of annuity considerations. ACLI appreciates the opportunity to comment on the above-captioned proposed rule regarding the Valuation of Life Insurance Policies.

ACLI would like to commend the West Virginia Insurance Department for amending Rule 114-68 so that it tracks NAIC Model #830. ACLI did, however, note one deviation from the NAIC Model in Section §114-68-4.2.c.5. Subsection 4.2.c.5 of the Rule reads as follows:

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 this subdivision;

The highlighted, underlined language is additional language that was specifically deleted by the NAIC when it amended NAIC Model #830. For uniformity and consistent application practices, ACLI respectfully recommends that the highlighted, underlined language be deleted from Rule 114-68 so that the Rule tracks NAIC Model #830.

The ACLI appreciates the opportunity to provide comments on Proposed Rule 114-68. Please contact me directly at the number provided below if you have any questions regarding our comment.

Sincerely,

Leah J. Walters

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ATTACHEMENT TO QUESTION 2 (d):

Comments regarding the proposed amendments to Series 68 were received from the American Council of Life Insurers ("ACLI"). ACLI commended OIC for incorporating the latest changes to NAIC Model #830 but noted one deviation from the NAIC Model. In §114-68-4.2.c.5 of the proposed rule, ACLI points out that the underlined language was specifically deleted by the NAIC when it amended NAIC model #830 §5(B)(3)(e): "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 this subdivision." The Commissioner agrees and will amend the rule accordingly to read as follows:

4.2.c.5. 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 this subdivision.

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**VALUATION OF LIFE INSURANCE COMPANIES**

**TITLE 114, SERIES 68**

**STATEMENT OF CIRCUMSTANCES**

This amendment to Series 68 is being done due to changes made to the NAIC's "Valuation of Life Insurance Model Regulation," Model 830, that was amended in 2009. The amendments to this rule address the deficiency reserve calculation that allows companies to adjust the valuation mortality to mortality that approximates the expected mortality. The restrictions prevent the use of mortality with the amount and slope similar to the expected mortality. This rule amendment will require an appointed actuary to annually opine for all policies subject to this rule as to whether the mortality rates meet the requirements for deficiency reserves. The rule amendment will require the opinion 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.

**FISCAL NOTE FOR PROPOSED RULES**

Rule Title: Valuation of Life Insurance Companies (Title 114, Series 68)

Type of Rule: X Legislative      Interpretive      Procedural      Emergency

Agency: Insurance Commissioner

Address: Post Office Box 50540  
1124 Smith Street, Greenbrooke Building  
Charleston, West Virginia 25305-0540

Phone Number: (304) 558-0401 Email: Timothy.Murphy@wvinsurance.gov

**Fiscal Note Summary**

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

None

**Fiscal Note Detail**

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

<b>FISCAL YEAR</b>			
<b>Effect of Proposal</b>	<b>Current Increase/Decrease (use "-")</b>	<b>Next Increase/Decrease (use "-")</b>	<b>Fiscal Year (Upon Full Implementation)</b>
<b>1. Estimated Total Cost</b>	N/A	N/A	N/A
Personal Services	N/A	N/A	N/A
Current Expenses	N/A	N/A	N/A
Repairs & Alterations	N/A	N/A	N/A
Assets	N/A	N/A	N/A
Other	N/A	N/A	N/A
<b>2. Estimated Total Revenues</b>	N/A	N/A	N/A

Rule Title: Valuation of Life Insurance Companies (Title 114, Series 68)

3. **Explanation of above estimates (including long-range effect):**  
Please include any increase or decrease in fees in your estimated total revenues.

None

**MEMORANDUM**

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

Date: \_\_\_\_\_

Signature of Agency Head or Authorized Representative

\_\_\_\_\_  
Jane L. Cline, Insurance Commissioner

**TITLE 114  
LEGISLATIVE RULE  
INSURANCE COMMISSIONER**

**SERIES 68  
VALUATION OF LIFE INSURANCE POLICIES**

Section

- 114-68-1. General.
  - 114-68-2. Applicability.
  - 114-68-3. Definitions.
  - 114-68-4. General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.
  - 114-68-5. Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits (Other Than Universal Life Insurance Policies).
  - 114-68-6. 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.
- Appendix A. Select Mortality Factors.

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LEGISLATIVE RULE  
INSURANCE COMMISSIONER

SERIES 68  
VALUATION OF LIFE INSURANCE POLICIES

FILED

2010 JUL 27 PM 3: 00

OFFICE WEST VIRGINIA  
SECRETARY OF STATE

**§114-68-1. General.**

1.1. Scope.

1.1.a. The purpose of this rule is to provide:

1.1.a.1. Tables of select mortality factors and rules for their use;

1.1.a.2. Rules concerning a minimum standard for the valuation of plans with nonlevel premiums or benefits; and

1.1.a.3. Rules concerning a minimum standard for the valuation of plans with secondary guarantees.

1.1.b. The method for calculating basic reserves defined in this rule will constitute the commissioner's reserve valuation method for policies to which this rule is applicable.

1.1.c. This rule is based upon the National Association of Insurance Commissioners' "Valuation of Life Insurance Model Regulation," Model 830, as amended in 2009.

1.2. Authority. -- W. Va. Code §§33-2-10 and 33-7-9(p)(2).

1.3. Filing Date. -- ~~May 6, 2005.~~

1.4. Effective Date. -- ~~May 6, 2005.~~

**§114-68-2. Applicability.**

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

2.2. Exceptions.

2.2.a. This rule shall not apply to any individual life insurance policy issued on or after the effective date of this rule if the policy is issued in accordance with and as a result of the

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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 rule, that guarantees the premium rates of the new policy. This rule 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.

2.2.b. This rule shall not apply to any universal life policy that meets all the following requirements:

2.2.b.1. Secondary guarantee period, if any, is five (5) years or less;

2.2.b.2. 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 subsection 3.6 of this rule and the applicable valuation interest rate; and

2.2.b.3. The initial surrender charge is not less than one hundred percent (100%) of the first year annualized specified premium for the secondary guarantee period.

2.2.c. This rule 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.

2.2.d. This rule 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.

2.2.e. This rule 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.

2.3. Conditions.

2.3.a. Calculation of the minimum valuation standard for policies with guaranteed nonlevel gross premiums or guaranteed nonlevel benefits (other than universal life insurance policies), or both, shall be in accordance with the provisions of section 5 of this rule.

2.3.b. 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 6 of this rule.

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**§114-68-3. Definitions.**

3.1. "Basic reserves" means reserves calculated in accordance with the principles of W.Va. Code §33-7-9(g).

3.2. "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 3.6 of this rule, or any other valuation mortality table adopted by the National Association of Insurance Commissioners (NAIC) after the effective date of this rule and promulgated by rule by the ~~commissioner~~ Commissioner for this purpose, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in subsection 4.2 of this rule. 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:

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

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;

$G_{x+k+t-1}$  = 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.

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

where:

$x$ ,  $k$  and  $t$  are as defined above, and

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$q_{x+k+t-1}$  = valuation mortality rate for deficiency reserves in policy year  $k+t$  but using the mortality of subdivision b of subsection 4.2 of this rule if subdivision c of subsection 4.2 of this rule 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.

3.3. "Deficiency reserves" means the excess, if greater than zero, of

3.3.a. Minimum reserves calculated in accordance with the principles of W. Va. Code §33-7-9(k) over

3.3.b. Basic reserves.

3.4. "Guaranteed gross premiums" means the premiums under a policy of life insurance that are guaranteed and determined at issue.

3.5. "Maximum valuation interest rates" means the interest rates defined in W. Va. Code §33-7-9(f)(2) that are to be used in determining the minimum standard for the valuation of life insurance policies.

3.6. "1980 CSO valuation tables" means the National Association of Insurance Commissioners' 1980 standard ordinary mortality table (1980 CSO Table), without ten-year select mortality factors, incorporated into the 1980 amendments to the NAIC standard valuation law and referred to in W. Va. Code §33-7-9(d)(1)(C), and variations of the 1980 CSO Table approved by the NAIC, such as the smoker and nonsmoker versions approved in December 1983.

3.7. "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 subdivision c of subsection 6.1 of this rule, if any, or else the minimum premium described in subdivision d of subsection 6.1 of this rule.

3.8. "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 gross premiums within the segment.

3.8.a. The uniform percentage for each segment is such that, at the beginning of

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the segment, the present value of the net premiums within the segment equals:

3.8.a.1. The present value of the death benefits within the segment; plus

3.8.a.2. The present value of any unusual guaranteed cash surrender value (see subsection 5.4 of this rule) occurring at the end of the segment; less

3.8.a.3. Any unusual guaranteed cash value occurring at the start of the segment; plus

3.8.a.4. For the first segment only, the excess of the quantity described in subparagraph A of this paragraph over the quantity described in subparagraph B of this paragraph.

3.8.a.4.A. 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.

3.8.a.4.B. A net one-year term premium for the benefits provided for in the first policy year.

3.8.b. The length of each segment is determined by the contract segmentation method, as defined in this section.

3.8.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 sum of the lengths of all segments of the policy.

3.8.d. 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.

3.9. "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.

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3.10. "Ten-year select factors" means the select factors adopted with the 1980 amendments to the NAIC standard valuation law and referred to in W. Va. Code §33-7-9(d)(1)(C)(ii).

3.11. "Unitary reserves" means the present value of all future guaranteed benefits less the present value of all future modified net premiums, where:

3.11.a. Guaranteed benefits and modified net premiums are considered to the mandatory expiration of the policy; and

3.11.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 the quantity described in paragraph 1 of this subdivision over the quantity described in paragraph 2 of this subdivision.

3.11.b.1. 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.

3.11.b.2. A net one-year term premium for the benefits provided for in the first policy year.

3.11.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.

3.12. "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.

**§114-68-4. General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.**

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4.1. 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 rule and promulgated by rule by the commissioner for this purpose. If select mortality factors are elected, they may be:

4.1.a. The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law and referred to in W. Va. Code §33-7-9(d)(1)(C)(ii);

4.1.b. The select mortality factors in Appendix A of this rule; or

4.1.c. Any other table of select mortality factors adopted by the NAIC after the effective date of this rule and promulgated by rule by the commissioner for the purpose of calculating basic reserves.

4.2. 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 rule and promulgated by rule by the commissioner. If select mortality factors are elected, they may be:

4.2.a. The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law and referred to in W. Va. Code §33-7-9(d)(1)(C)(ii);

4.2.b. The select mortality factors in Appendix A of this rule;

4.2.c. For durations in the first segment, X percent of the select mortality factors in Appendix A of this rule, subject to the following:

4.2.c.1. X may vary by policy year, policy form, underwriting classification, issue age, or any other policy factor expected to affect mortality experience;

~~2. X shall not be less than twenty percent (20%);~~

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~~3. X shall not decrease in any successive policy years;~~

4.2.c.42. X is such that, when using the valuation interest rate used for basic reserves, subparagraph A of this paragraph is greater than or equal to subparagraph B of this paragraph;

4.2.c.2.A. The actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X;

4.2.c.2.B. The actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date;

4.2.c.53. 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;

4.2.c.64. The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of this subdivision;

4.2.c.75. 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 this subdivision;~~

4.2.c.86. 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;

4.2.c.97. If X is less than one hundred percent (100%) at any duration for any policy, the following requirements shall be met:

4.2.c.7.A. The appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of WV 114CSR41; and

4.2.c.7.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; and

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4.2.c.7.BC. The appointed actuary shall annually opine for all policies subject to this rule as to whether the mortality rates resulting from the application of X meet the requirements of this subdivision. 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.

4.2.d. Any other table of select mortality factors adopted by the NAIC after the effective date of this rule and promulgated by rule by the commissioner for the purpose of calculating deficiency reserves.

4.3. 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 and referred to in W. Va. Code §33-7-9(d)(1)(C)(ii) may be used thereafter through the tenth policy year from the date of issue.

4.4. 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.

4.5. 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:

4.5.a. Reserves calculated ignoring the guarantee;

4.5.b. Reserves assuming the guarantee was made at issue; and

4.5.c. Reserves assuming that the policy was issued on the date of the guarantee.

4.6. 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 rule. 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 W.Va. Code of

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State Rules §114CSR41.

**§114-68-5. Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits (Other Than Universal Life Insurance Policies).**

5.1. 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 select factors. At the option of the insurer, in calculating segmented reserves and net premiums, either of the adjustments described in subdivisions a and b of this subsection may be made:

5.1.a. 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.

5.1.b. 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.

5.2. Deficiency Reserves.

5.2.a. The deficiency reserve at any duration shall be calculated:

5.2.a.1. On a unitary basis if the corresponding basic reserve determined by subsection 5.1 of this rule is unitary;

5.2.a.2. On a segmented basis if the corresponding basic reserve determined by subsection 5.1 of this rule is segmented; or

5.2.a.3. On a segmented basis if the corresponding basic reserve determined by subsection 5.1 of this rule is equal to both the segmented reserve and the unitary reserve.

5.2.b. 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 subsection 4.2 of this rule) and rate of interest.

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5.2.c. 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 quantity A is obtained as indicated in subsection 4.2 of this rule.

5.2.d. For deficiency reserves determined on a segmented basis, the quantity A is determined using segment lengths equal to those determined for segmented basic reserves.

5.3. 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 and referred to in W. Va. Code §33-7-9(d)(1)(C)(ii). 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.

**5.4. Unusual Pattern of Guaranteed Cash Surrender Values.**

5.4.a. 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.

5.4.b. 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, and treating any unusual guaranteed cash surrender value at the end of the prior segment as a net single premium, where:

5.4.b.1. 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:

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5.4.b.1.A. The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or

5.4.b.2.B. The mandatory expiration date of the policy; and

5.4.b.2. 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

5.4.b.3. The net to gross ratio is equal to the quantity described in subparagraph A of this paragraph divided by the quantity described in subparagraph B of this paragraph.

5.4.b.3.A. 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.

5.4.b.3.B. The present value, at the beginning of the n-year period, of the scheduled gross premiums payable during the n-year period.

5.4.c. For purposes of this subsection, a policy is considered to have an unusual pattern or guaranteed cash surrender values if any future guaranteed cash surrender value exceeds the prior years guaranteed cash surrender value by more than the sum of:

5.4.c.1. One hundred ten percent (110%) of the scheduled gross premium for that year; and

5.4.c.2. 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

5.4.c.3. Five percent (5%) of the first policy year surrender charge, if any.

5.5. Optional Exemption for Yearly Renewable Term (YRT) Reinsurance. -- At the option of the company, the following approach for reserves on YRT reinsurance may be used.

5.5.a. Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

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5.5.b. Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection 5.3 of this rule.

5.5.c. Deficiency reserves.

5.5.c.1. For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.

5.5.c.2. 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 paragraph 1 of this subdivision.

5.5.d. 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 rule by the NAIC and promulgated by rule by the commissioner for this purpose.

5.5.e. A reinsurance agreement shall be considered YRT reinsurance for purposes of this subsection if only the mortality risk is reinsured.

5.5.f. 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.

5.6. Optional Exemption for Attained-Age-Based Yearly Renewable Term (YRT) 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:

5.6.a. Calculate the valuation net premium for each future policy year as the tabular cost of insurance for that future year.

5.6.b. Basic reserves shall never be less than the tabular cost of insurance for the appropriate period, as defined in subsection 5.3 of this rule.

5.6.c. Deficiency reserves.

5.6.c.1. For each policy year, calculate the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium.

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5.6.c.2. 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 paragraph 1 of this subdivision.

5.6.d. 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 rule by the NAIC and promulgated by rule by the commissioner for this purpose.

5.6.e. A policy shall be considered an attained-age-based YRT life insurance policy for purposes of this subsection if:

5.6.e.1. 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

5.6.e.2. 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.

5.6.f. For policies that become attained-age-based YRT life insurance policies after an initial period of coverage, the approach of this subsection may be used after the initial period if:

5.6.f.1. The initial period is constant for all insureds of the same sex, risk class and plan of insurance; or

5.6.f.2. The initial period runs to a common attained age for all insureds of the same sex, risk class and plan of insurance; and

5.6.f.3. After the initial period of coverage, the policy meets the conditions of subdivision e of subsection 5.6 of this rule.

5.6.g. If this election is made, this approach must be applied in determining reserves for all attained-age-based YRT life insurance policies issued on or after the effective date of this rule.

5.7. Exemption From Unitary Reserves for Certain n-Year Renewable Term Life Insurance Policies. -- Unitary basic reserves and unitary deficiency reserves need not be

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calculated for a policy if the following conditions are met:

5.7.a. 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 ten (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;

5.7.b. 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

5.7.c. There are no cash surrender value in any policy year.

5.8. 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:

5.8.a. At issue, the insured is age twenty-four (24) or younger;

5.8.b. 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

5.8.c. 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.

**§114-68-6. 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.**

6.1. General.

6.1.a. Policies with a secondary guarantee include:

6.1.a.1. 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;

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6.1.a.2. A policy in which the minimum premium at any future 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 adopted after the effective date of this rule by the NAIC and promulgated by rule by the commissioner for this purpose; or

6.1.a.3. A policy with any combination of the features described in paragraphs 1 and 2 of this subdivision.

6.1.b. 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 6.2 and 6.3 of this rule shall be recalculated from issue to reflect these changes.

6.1.c. 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.

6.1.d. For purposes of this subdivision, 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.

6.1.e. 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 subdivisions b, c and d, of subsection 4.2 of this rule may not be used to calculate the one-year valuation premiums.

6.1.f. 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.

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6.2. 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 subsection 3.2 of this rule.

6.3. 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 subsection 5.2 of this rule with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

6.4. Minimum Reserves. -- The minimum reserves during the secondary guarantee period are the greater of:

6.4.a. The basic reserves for the secondary guarantee plus the deficiency reserve, if any, for the secondary guarantees; or

6.4.b. The minimum reserves required by other rules governing universal life plans.

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**APPENDIX A**

**SELECT MORTALITY FACTORS**

This Appendix contains select mortality factors that are the bases to which the respective percentages of subdivisions b and c of subsection 4.1 of this rule and subdivisions b and c of subsection 4.2 of this rule are applied.

The six tables of select mortality factors contained herein include: (1) male aggregate, (2) male nonsmokers, (3) male smoker, (4) female aggregate, (5) female nonsmoker, and (6) female smoker.

These tables apply to both age last birthday and age nearest birthday mortality tables.

For sex-blended mortality tables, compute base select mortality factors in the same proportion as the underlying mortality. For example, for the 1980 CSO-B Table, the calculated select mortality factors are eighty percent (80%) of the appropriate male table in this Appendix, plus twenty percent (20%) of the appropriate female table in this Appendix.