

## **806 KAR 6:075. Valuation of life insurance policies.**

RELATES TO: KRS 304.2-290, 304.6-130-304.6-180, 304.15-410

STATUTORY AUTHORITY: KRS 304.2-110, 304.6-130

NECESSITY, FUNCTION, AND CONFORMITY: EO 2004-731, signed July 9, 2004, created the Office of Insurance. KRS 304.2-110 authorizes the Commissioner of Insurance to promulgate reasonable administrative regulations necessary for or as an aid to the effectuation of the Kentucky Insurance Code as defined in KRS 304.1-010. KRS 304.6-130 requires the commissioner to annually value the reserve liabilities for all outstanding life insurance policies and annuity and pure endowment contracts, as shown in the National Association of Insurance Commissioners Life and Accident and Health Annual Statement Form whether or not itemized in Exhibit 5 of that statement. This administrative regulation establishes the use of new select mortality factors, mortality tables, and minimum reserving requirements for life insurance policies with nonlevel premiums and benefits or secondary guarantees. The new select mortality factors, mortality tables, and minimum reserving requirements are necessary to ensure that insurers maintain adequate reserves for nonlevel premium and benefit policies and policies with secondary guarantees.

### **Section 1. Definitions.**

- (1) "1980 CSO valuation tables" means the Commissioners 1980 Standard Ordinary Mortality Table (1980 CSO Table) without ten (10) 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.
- (2) "2001 CSO Mortality Table" means a mortality table, consisting of separate rates of mortality for male and female lives, developed by the American Academy of Actuaries CSO Task Force from the Valuation Basic Mortality Table developed by the Society of Actuaries Individual Life Insurance Valuation Mortality Task Force, and adopted by the NAIC in December 2002.
- (3) "Basic reserves" means reserves calculated in accordance with KRS 304.6-150.
- (4) "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 to the end of the latest policy year as determined by section 2(1)
- (5) "Deficiency reserves" means the excess, if greater than zero, of minimum reserves calculated in accordance with KRS 304.6-180 over basic reserves.
- (6) "Guaranteed gross premiums" means the premiums under a policy of life insurance that are guaranteed and determined at issue.
- (7) "Maximum valuation interest rates" means the interest rates defined in KRS 304.6-145 that are to be used in determining the minimum standard for the valuation of life insurance policies.
- (8) "Scheduled gross premium" means the smallest illustrated gross premium set forth at issue for each policy year.
- (9) "Segmented reserves" means reserves, calculated pursuant to Section 2(2).
- (10) "Tabular cost of insurance" means the net single premium at the beginning of a policy year for one (1) year term insurance in the amount of the guaranteed death benefit in that policy year.
- (11) "Ten (10) year select factors" means the select factors adopted with the 1980 amendments to the NAIC Standard Valuation Law.
- (12) "Unitary reserves" means the reserves calculated pursuant to Section 2(3).
- (13) "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 2. Calculations

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

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 (1) percent in any policy year, at the company's option, but  $R_t$  shall not be less than one (1);

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 5(2)(b) if Section 5(2)(c) of this administrative regulation 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.

(1) Calculations for contract segmentation method: All calculations shall be made using the 1980 CSO valuation tables, or any other valuation mortality table adopted by the National Association of Insurance Commissioners after the effective date of this administrative regulation and promulgated by administrative regulation by the commissioner for this purpose, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in Section 5(2). The length of a particular contract segment shall be set equal to the minimum of the value "t" for which  $G_t$  is greater than  $R_t$ . If  $G_t$  never exceeds  $R_t$  the segment length shall be deemed to be the number of years from the beginning of the segment to the mandatory expiration date of the policy.  $G_t$  and  $R_t$  shall be defined as follows:

(2)

(a) Segmented reserves shall be 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 shall be, at the beginning of the segment, the present value of the net premiums within the segment equals the present value of the death benefits within the segment, plus the present value of any unusual guaranteed cash value as described in Section 6(4) of this administrative regulation occurring at the end of the segment, less any unusual guaranteed cash value occurring at the start of the segment, plus for the first segment only, the excess of the net level annual premium over a net one (1) year term premium for the benefits provided for in the first policy year. The net level annual premium shall be 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 (1) 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 (19) year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one (1) year higher than the age at issue of the policy.

(b) The length of each segment shall be determined by the contract segmentation method.

(c) The interest rates used in the present value calculations for any policy shall 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.

(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) The Unitary reserves shall be the present value of all future guaranteed benefits less the present value of all future modified net premiums where guaranteed benefits and modified net premiums are considered to the mandatory expiration of the policy. Modified net premiums are a uniform percentage of the respective guaranteed gross premiums, where the uniform percentage is, 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 net level annual premium over a net one (1) year term premium for the benefits provided for in the first policy year. The net level annual premium is 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 (1) 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 (19) year premium whole life plan of insurance of the same renewal year equivalent level amount at an age one (1) year higher than the age at issue of the policy. The interest rates used in the present value calculations for any policy shall 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.

### Section 3. Applicability.

(1) This administrative regulation shall apply to all life insurance policies, with or without nonforfeiture values, issued on or after August 14, 2000, subject to the following exceptions and conditions.

(2) This administrative regulation shall not apply to any individual life insurance policy issued on or after August 14, 2000 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 administrative

regulation, that guarantees the premium rates of the new policy. This administrative regulation also shall not apply to subsequent policies issued as a result of the exercise of a reentry provision, or a derivation of the provision, in the new policy.

(3) This administrative regulation shall not apply to any universal life policy that meets the following requirements:

- (a) Secondary guarantee period, if any, of 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 1980 CSO valuation tables 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.

(4) This administrative 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.

(5) This administrative 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.

(6) This administrative 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 (1) year.

(7) Exception for universal life insurance policies. Scheduled gross premium shall be the smallest specified premium for each policy year described in Section 7(1)(e), if any, or else the minimum premium described in Section 7(1)(f) of this administrative regulation set forth at issue.

#### Section 4. Conditions.

(1) Calculation of the minimum valuation standard for policies, other than universal life policies, with guaranteed nonlevel gross premiums or guaranteed nonlevel benefits, 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 5. General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves.

(1) At the election of the company for any one (1) 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 approved by the commissioner and promulgated by administrative regulation for this purpose. If select mortality factors are elected, they may be the following:

- (a) The ten (10) year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law;
- (b) The select mortality factors incorporated by reference by this administrative regulation; or
- (c) Any other table of select mortality factors adopted by the NAIC, approved by the commissioner, and promulgated by administrative regulation for the purpose of calculating basic reserves.

(2) Deficiency reserves, if any, shall be calculated for each policy as the excess, if greater than zero, of the quantity A over the basic reserve. The quantity A shall be 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 (1) 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, approved by the commissioner, and promulgated by administrative regulation. If select mortality factors are elected, they may be the following:

- (a) The ten (10) year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law;
  - (b) The select mortality factors incorporated by reference by this administrative regulation;
  - (c) For durations in the first segment, X percent of the select mortality factors incorporated by reference by this administrative regulation, subject to the following:
    - 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 (20) percent;
    - 3. X shall not decrease in any successive policy years;
    - 4. 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;
    - 5. 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;
    - 6. The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of this subsection;
    - 7. The appointed actuary may decrease X at any valuation date if X does not decrease in any successive policy years and as long as it continues to meet all the requirements of this Section 5(2)(c) of this administrative regulation;
    - 8. 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; and
    - 9. If X is less than 100 percent at any duration for any policy, then the appointed actuary shall annually prepare an actuarial opinion and memorandum for the company in conformance with the requirements of KRS 304.6-171 and 806 KAR 6:100, Section 6, and the appointed actuary shall annually opine for all policies subject to this administrative regulation as to whether the mortality rates resulting from the application of X meet the requirements of this subsection. This opinion shall be supported by an actuarial report, subject to appropriate Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries. The X factors shall reflect anticipated future mortality, without recognition of mortality improvement beyond the valuation date, taking into account relevant emerging experience; or
  - (d) Any other table of select mortality factors adopted by the National Association of Insurance Commissioners approved by the commissioner, and promulgated by administrative regulation for the purpose of calculating deficiency reserves.
- (3) Any set of select mortality factors may be used only for the first segment. This applies to both basic reserves and deficiency reserves. However, if the first segment is less than ten (10) years, the appropriate ten (10) 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.

(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.

(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 (1) year after the date of the change shall be the greatest of the following:

- (a) Reserves calculated ignoring the guarantee;
- (b) Reserves assuming the guarantee was made at issue; or
- (c) Reserves assuming that the policy was issued on the date of the guarantee.

(6) The commissioner may require that the company document the extent of the adequacy of reserves for specific blocks, including policies issued prior to the effective date of this administrative regulation. This documentation may include a demonstration of the extent to which aggregation with other nonspecified blocks of business is relied upon in the formation of the appointed actuary opinion pursuant to and consistent with the requirements of KRS 304.6-171 and 806 KAR 6:100, Section 6.

#### Section 6. Calculation of Minimum Valuation Standard for Policies with Guaranteed Nonlevel Gross Premiums or Guaranteed Nonlevel Benefits that are Not Universal Life Policies.

(1) 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 following adjustments may be made:

- (a) The insurer may 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.
- (b) The insurer may 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.

(2)

- (a) The deficiency reserve at any duration shall be calculated as follows:
  - 1. On a unitary basis if the corresponding basic reserve determined by subsection (1) of this section is unitary;
  - 2. On a segmented basis if the corresponding basic reserve determined by subsection (1) of this section is segmented; or
  - 3. On the segmented basis if the corresponding basic reserve determined by subsection (1) of this section is equal to both the segmented reserve and the unitary reserve.
- (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 Section 5(2) and rate of interest.
- (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 A is obtained as indicated in Section 5(2).

(d) For deficiency reserves determined on a segmented basis, the quantity A shall be determined using segment lengths equal to those determined for segmented basic reserves.

(3) Basic reserves shall not be less than the tabular cost of insurance for the balance of the policy year, if mean reserves are used. Basic reserves shall 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 midterminal 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 (10) year select factors incorporated into the 1980 amendments of the NAIC Standard Valuation Law. Total reserves, including basic reserves, deficiency reserves and any reserves held for supplemental benefits that would expire upon contract termination, shall not be less than the amount that the policy owner 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.

(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 "m" year policy providing term insurance plus a pure endowment equal to the unusual cash surrender value, where "m" is the number of years from the date of issue to the date the unusual cash surrender value is scheduled.

(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 at the end of the prior segment as a net single premium, where:

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:

- a. The date of the next unusual guaranteed cash surrender value, if any, that is scheduled after the valuation date; or
- b. The mandatory expiration date of the policy; and

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

3. The net to gross ratio is equal to 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, divided by, the present value, at the beginning of the "n" year period, of the scheduled gross premiums payable during the "n" year period.

(c) For purposes of this subsection, a policy shall be 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 the following:

1. 110 percent of the scheduled gross premium for that year;
2. 110 percent of one (1) 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

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

(5) At the option of the company, the following approach for reserves on yearly renewable term reinsurance may be used:

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

(b) Basic reserves shall not be less than the tabular cost of insurance for the appropriate period, as calculated in subsection (3) of this section.

(c) Deficiency reserves may be determined by calculating for each policy year, the excess, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium. Deficiency reserves shall never be less than the sum of the present values, at the date of valuation, of the excesses.

(d) For purposes of this subsection, the calculations use the maximum valuation interest rate and the 1980 CSO mortality tables with or without ten (10) year select mortality factors, or any other table adopted by the National Association of Insurance Commissioners and approved by the commissioner for this purpose.

(e) A reinsurance agreement shall be considered yearly renewable term reinsurance for purposes of this subsection if only the mortality risk is reinsured.

(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.

(6) At the option of the company, the following approach for reserves for attained-age-based yearly renewable term life insurance policies may be used:

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

(b) Basic reserves shall not be less than the tabular cost of insurance for the appropriate period, as defined in subsection (3) of this section.

(c) To calculate deficiency reserves, calculate the excess for each policy year, if greater than zero, of the valuation net premium over the respective maximum guaranteed gross premium. Deficiency reserves shall not be less than the sum of the present values, at the date of valuation, of the excesses.

(d) For purposes of Section 5(6) of this administrative regulation, the calculations shall use the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten (10) year select mortality factors, or any other table adopted by the National Association of Insurance Commissioners, approved by the commissioner, and promulgated by administrative regulation for this purpose.

(e) A policy shall be considered an attained-age-based yearly renewable term life insurance policy for purposes of subsection (6) of this section if:

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 so 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

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.

(f) For policies that become attained-age-based yearly renewable term policies after an initial period of coverage, the approach of this subsection may be used after the initial period if:

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

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



3. After the initial period of coverage, the policy meets the conditions of paragraph (e) of this subsection.

(g) If an insurer elects this optional exemption under this subsection, the approach herein shall be applied in determining reserves for all attained-age-based yearly renewable term life insurance policies issued on or after August 14, 2004.

(7) Unitary basic reserves and unitary deficiency reserves for a yearly renewable term life insurance policy shall not be required to be calculated if the following conditions are met:

(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;

(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 (10) year select mortality factors; and

(c) There are no cash surrender values in any policy year.

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

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

(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

(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.

#### 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 Policy Owner to Keep a Policy in Force Over a Secondary Guarantee Period.

(1)

(a) Policies with a secondary guarantee shall include, the following:

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;

2. A policy in which the minimum premium at any duration is less than the corresponding one (1) year valuation premium, calculated using the maximum valuation interest rate and the 1980 CSO valuation tables with or without ten (10) year select mortality factors, or any other table adopted by the National Association of Insurance Commissioners, approved by the commissioner, and promulgated by administrative regulation for this purpose; and

3. A policy with any combination of paragraphs (a) and (b) of this subsection.

(b) A secondary guarantee period shall be the period for which the policy is guaranteed to remain in force subject only to a secondary guarantee. If a policy contains more than one (1) 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 (2) and (3) of this section shall be recalculated from issue to reflect these changes.

(c) Specified premiums shall mean the premiums specified in the policy or imputable by the terms of 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.

(d) For purposes of this subsection, the minimum premium for any policy year shall be 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.

(e) The one (1) year valuation premium shall mean the net one (1) year premium based upon the original schedule of benefits for a given policy year. The one (1) year valuation premiums for all policy years are calculated at issue. The select mortality factors defined in Section 5 (2)(b), (c), and (d) not be used to calculate the one (1) year valuation premiums.

(f) The one (1) year valuation premium shall 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.

(2) 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 shall be determined according to the contract segmentation method as defined in Section 2(1).

(3) Deficiency reserves, if any, for the secondary guarantees shall be calculated for the secondary guarantee period in the same manner as described in Section 6(2) with gross premiums set equal to the specified premiums, if any, or otherwise to the minimum premiums that keep the policy in force.

(4) The minimum reserves during the secondary guarantee period shall be the greater of the following:

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

(b) The minimum reserves required by other rules or administrative regulations governing universal life plans.

#### Section 8. Applicability of the 2001 CSO Mortality Table.

(1) The 2001 CSO Mortality Table may be used in the following manner, subject to the transition dates for use of the 2001 CSO Mortality Table:

(a) Section 3, subsection(3)(b): The net level reserve premium shall be based on the ultimate mortality rates in the 2001 CSO Mortality Table.

(b) Section 2, subsection (2): All calculations shall be made using the 2001 CSO Mortality Rate, and, if elected, the optional minimum mortality standard for deficiency reserves stipulated in Section 8, Subsection (1)(d) of this administrative regulation. The value of " $qx+k+t-1$ " shall be the valuation mortality rate for deficiency reserves in policy year  $k+t$ , but using the unmodified select mortality rates if modified select mortality rates are used in the computation of deficiency reserves.

(c) Section 5, subsection (1): The 2001 CSO Mortality Table shall be the minimum standard for basic reserves.

(d) Section 5, subsection (2): The 2001 CSO Mortality Table shall be the minimum standard for deficiency reserves. If select mortality rates are used, they may be multiplied by X percent for durations in the first segment, subject to the conditions specified in Subsection (2)(c)(1) – (9) of Section 5. In demonstrating compliance with those conditions, the demonstrations shall not combine the results of tests that utilize

the 1980 CSO Mortality Table with those tests that utilize the 2001 CSO Mortality Table, unless the combination is explicitly required by administrative regulation or necessary to be in compliance with relevant Actuarial Standards of Practice.

(e) Section 6, subsection (3): The valuation mortality table used in determining the tabular cost of insurance shall be the ultimate mortality rates in the 2001 CSO Mortality Table.

(f) Section 6, subsection (5): The calculations specified in Subsection (5)(d) of Section 6 shall use the ultimate mortality rates in the 2001 CSO Mortality Table.

(g) Section 6, subsection (6): The calculations specified in Subsection (6)(d) of Section 6 shall use the ultimate mortality rates in the 2001 CSO Mortality Table.

(h) Section 5, subsection (7): The calculations specified in Subsection (7)(b) of Section 6 shall use the ultimate mortality rates in the 2001 CSO Mortality Table.

(i) Section 7, subsection (1)(b): The one (1) year valuation premium shall be calculated using the ultimate mortality rates in the 2001 CSO Mortality Table.

(2) This section shall not be construed to expand the applicability of this administrative regulation to include life insurance policies exempted under Sections 2 and 3 of this administrative regulation.

#### Section 9. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) "Select Mortality Factors, Male Aggregate," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners;

(b) "Select Mortality Factors, Male Nonsmoker," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners;

(c) "Select Mortality Factors, Male Smoker," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners;

(d) "Select Mortality Factors, Female Aggregate," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners;

(e) "Select Mortality Factors, Female Nonsmoker," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners;

(f) "Select Mortality Factors, Female Smoker," (4th Quarter, 1998 Edition), National Association of Insurance Commissioners; and

(g) "2001 CSO Mortality Table (2001)."

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(26 Ky.R. 2168; Am. 27 Ky.R. 170; 510; eff. 8-14-2000; 31 Ky.R. 856; 1150; eff. 1-4-05; Crt eff. 2-26-2020; TAm eff. 3-10-2020.)