

## 211 CMR 29.00

### 29.05: General Calculation Requirements for Basic Reserves and Premium Deficiency Reserves

(1) At the election of the carrier for anyone 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 211 CMR 29.00 and promulgated by regulation by the commissioner for this purpose). If select mortality factors are elected, they may be:

- (a) The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law;
- (b) The select mortality factors in 211 CMR 29.100: Appendix; or
- (c) Any other table of select mortality factors adopted by the NAIC after the effective date of 211 CMR 29.00 and promulgated by regulation by the commissioner for the purpose of calculating basic reserves.

(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 carrier for anyone 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 211 CMR 29.00 and promulgated by regulation by the commissioner). If select mortality factors are elected, they may be:

- (a) The ten-year select mortality factors incorporated into the 1980 amendments to the NAIC Standard Valuation Law;
- (b) The select mortality factors in 211 CMR 29.100: Appendix;
- (c) For durations in the first segment, X percent of the select mortality factors in 211 CMR 29.100: Appendix, 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 is such that, when using the valuation interest rate used for basic reserves, a. is greater than or equal to b. as follows:

- a. The actuarial present value of future death benefits, calculated using the mortality rates resulting from the application of X;
- b. The actuarial present value of future death benefits calculated using anticipated mortality experience without recognition of mortality improvement beyond the valuation date;

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

4. The appointed actuary shall increase X at any valuation date where it is necessary to continue to meet all the requirements of 211 CMR 29.05(2)(c);

5. The appointed actuary may decrease X at any valuation date as long as X continues to meet all the requirements of 211 CMR 29.05(2)(c); and

6. 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.

7. If X is less than 100 percent 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 carrier in conformance with the requirements of 211 CMR 132.08 and 211 CMR 132.09;

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

c. The appointed actuary shall annually opine for all policies subject to 211 CMR 29.00 as to whether the mortality rates resulting from the application of X meet

the requirements of 211 CMR 29.05(2)(c). 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.

(d) Any other table of select mortality factors adopted by the NAIC after the effective date of 211 CMR 29.00 and promulgated by regulation by the commissioner for the purpose of calculating deficiency reserves.

(3) 211 CMR 29.05 applies to both basic reserves and deficiency reserves. Any set of select mortality factors may be used only for the first segment. However, if the first segment is less than ten years, the appropriate ten year select mortality factors 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 carrier after issue and that are effective for more than one 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, and
- (c) reserves assuming that the policy was issued on the date of the guarantee.

(6) The commissioner may require that the carrier document the extent of the adequacy of reserves for specified blocks, including but not limited to policies issued prior to the effective date of 211 CMR 29.00. 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 211CMR 132.08.