§ 4217. Valuation of insurance policies and contracts. (a) (1) The superintendent shall annually value, or cause to be valued, the reserve liabilities (hereinafter called reserves) for all outstanding insurance policies and contracts of every life insurance company doing business in this state, except that, in the case of an alien company, such valuation shall be limited to its United States business, and may certify the amount of any such reserves, specifying the mortality table or tables, rate or rates of interest and methods (net level premium method or other) used in the calculation of such reserves. In calculating such reserves, the superintendent may use group methods and approximate averages for fractions of a year or otherwise.

(2) In lieu of the valuation of the reserves herein required of any foreign or alien company, the superintendent may accept any valuation made, or caused to be made, by the insurance supervisory official of any state or other jurisdiction when such valuation complies with the minimum standard herein provided and if the official of such state or jurisdiction accepts as sufficient and valid for all legal purposes the certificate of valuation of the superintendent when such certificate states the valuation to have been made in a specified manner according to which the aggregate reserves would be at least as large as if they had been computed in the manner prescribed by the law of that state or jurisdiction.

(3) (A) The superintendent may, in his discretion, vary the standards of mortality applicable to policies of insurance on substandard lives and other extra-hazardous lives issued by any life insurance company doing business in this state.

(B) He may also, in his discretion, vary the standards of interest and mortality applicable to contracts issued by an alien insurer in countries other than the United States, if such alien insurer maintains the trusteed surplus prescribed by section one thousand three hundred twelve of this chapter.

(4) (A) Any life insurance company doing business in this state which has adopted as a basis for the valuation of its insurance policies and contracts standards producing greater reserves in the aggregate than the minimum standards herein prescribed may continue to use such higher standards as a basis of valuation.

(B) After January first, nineteen hundred forty, any life insurance

company doing business in this state may, subject to the provisions of paragraph eight of subsection (c) of this section, adopt as the basis for the valuation of its insurance policies and contracts standards producing greater reserves in the aggregate than the minimum standards herein prescribed; and any such company which shall have at any time adopted such higher standards of valuation may, with the approval of the superintendent, adopt lower standards of valuation, but in no case lower than the minimum standards herein prescribed, provided, however, that, for the purposes of this paragraph, the holding of additional reserves determined by a qualified actuary to be necessary to render the opinion required by subsection (e) of this section shall not be deemed to be the adoption of a higher standard of valuation.

(C) The superintendent may approve any such change if he finds that the proposed standards are for the best interests of the holders of the policies and contracts and annuitants of such company.

(D) Nothing contained herein shall be deemed to affect the contractual rights or obligations of the holder of any such policy or contract.

(b) (1) This subsection shall apply only to those policies and contracts issued prior to the operative date of section four thousand two hundred twenty-one of this article.

(2) Except as provided in paragraph six hereof the legal minimum standards for the valuation of life insurance contracts shall be as follows:

(A) For the valuation of all such contracts issued before the first day of January, nineteen hundred one, it shall be the Actuaries' or Combined Experience Table of Mortality with interest at four percent per annum.

(B) For the valuation of such contracts issued on or after said day, except as provided in subparagraphs (C) and (D) hereof, it shall be the American Experience Table of Mortality with Craig's extension for ages under ten years and with interest at three and one-half percent per annum.

(C) For the valuation of group term insurance policies under which premium rates are not guaranteed for a period in excess of five years, it shall be the American Men Ultimate Table of Mortality with interest at three and one-half percent per annum.

(D) Any life insurance company may, at its option, value its life

insurance contracts issued on or after the first day of January, nineteen hundred thirty, in accordance with their terms on the basis of the American Men Ultimate Table of Mortality, supplemented by such extension and modification for ages under twenty years, as may be approved by the superintendent, with interest at three and one-half percent per annum by the level net premium method or by the modified preliminary term method prescribed in paragraph four hereof.

(3) Life insurance policies issued on or after the first day of January, nineteen hundred seven, may, at the option of the insurer, be valued in accordance with their terms by the modified preliminary term method prescribed in paragraph four hereof, or in accordance with the select and ultimate method on the basis that the rate of mortality during the first five years after the issuance of said contracts respectively shall be calculated according to the following percentages of the rates shown by the American Experience Table of Mortality:

For the first insurance year, fifty percent thereof; for the second insurance year, sixty-five percent thereof; for the third insurance year, seventy-five percent thereof; for the fourth insurance year, eighty-five percent thereof; and for the fifth insurance year, ninety-five percent thereof.

(4) (A) Life insurance policies may provide for not more than one year of preliminary term insurance by incorporating in the provisions thereof specifying the premium consideration to be received by the insurer, a clause plainly showing that the first year's insurance under such policies is term insurance, purchased by the whole or a part of the premium to be received during the first policy year.

(B) Such policies may, in accordance with their terms, be valued on the basis of the mortality tables and interest rates prescribed in paragraph two hereof, by the modified preliminary term plan described as follows: If the premium charged for term insurance under a limited payment life preliminary term policy providing for the payment of all premiums thereon in less than twenty years from the date of the policy, or under an endowment preliminary term policy, exceeds that charged for like insurance under twenty payment life preliminary term policies of the same company, the reserve thereon at the end of any year, including the first, shall be not less than the reserve on a twenty payment life

preliminary term policy issued in the same year and at the same age, together with an amount which shall be equivalent to the accumulation of a level net premium sufficient to provide for a pure endowment at the end of the premium paying period equal to the difference between items (i) and (ii) hereof as follows: (i) the value at the end of such period of such a twenty payment life preliminary term policy and (ii) the full level net premium reserve at such time of such a limited payment life or endowment policy.

(C) The premium paying period referred to above is the period during which premiums are concurrently payable under such twenty payment life preliminary term policy and such limited payment life or endowment policy.

(5) (A) The legal minimum standard for the valuation of all individual annuity contracts issued on or after January first, nineteen hundred forty (including life annuities provided or available under optional modes of settlement in insurance contracts issued on or after such date) shall be the Combined Annuity Tables with age set back one year, with interest at three and one-half percent per annum.

(B) The legal minimum standard for the valuation of all individual annuity contracts issued prior to January first, nineteen hundred forty (including annuities provided or available under optional modes of settlement in insurance contracts issued prior to such date) shall be in accordance with the provisions of law applicable thereto as of the date of issuance.

(C) Except as otherwise provided in paragraphs three and four of subsection (c) hereof for group annuity and pure endowment contracts, the legal minimum standard for the valuation of all group annuity contracts shall be the 1971 Group Annuity Mortality Table, or any modification of this table approved by the superintendent, and five percent interest.

(D) Annuities, annuity benefits and guaranteed interest contracts to which this subsection applies shall be subject to item (vi) of subparagraph (B) of paragraph four of subsection (c) of this section.

(6) (A) The legal minimum standard for the valuation of all industrial life insurance policies issued on or after January first, nineteen hundred forty shall, at the option of the company, be either (i) the 1941 Standard Industrial Mortality Table or the 1941 Substandard

Industrial Mortality Table, with interest at three and one-half percent per annum by the net level premium method, or (ii) either of the tables specified in item (i) hereof, by the modified preliminary term method prescribed in paragraph four hereof, in accordance with the terms of the policy, or (iii) in the case of policies issued on the monthly premium plan, the New York Standard Intermediate Table of Mortality (1907 Table) with interest at three and one-half percent per annum. In lieu of such tables, at the option of the company, the Standard Industrial Mortality Table (1907) or the Substandard Industrial Mortality Table (1907) may be used with respect to such policies issued prior to January first, nineteen hundred forty-two.

(B) The legal minimum standard for the valuation of all industrial life insurance policies issued prior to January first, nineteen hundred forty shall be the minimum standard required by the law of this state in force at the date of issuance.

(7) The legal minimum standard for the valuation of all accidental death benefits and disability benefits, provided in connection with or supplemental to life insurance policies or annuity contracts shall be such tables as the superintendent may prescribe.

(c) (1) This subsection shall apply only to policies and contracts issued on or after the operative date of section four thousand two hundred twenty-one of this article, except as otherwise provided in paragraphs three and four of this subsection for group annuity and pure endowment contracts issued prior to such operative date.

(2) Except as otherwise provided in paragraphs three, four and ten of this subsection, the minimum standard for the valuation of all such policies and contracts shall be the commissioners reserve valuation method defined in paragraph six of this subsection and in section four thousand two hundred eighteen of this article, three percent interest for all life insurance policies issued prior to January first, nineteen hundred sixty-six and for all individual annuity and pure endowment contracts issued prior to January first, nineteen hundred sixty, or three and one-half percent interest for all life insurance policies issued on or after January first, nineteen hundred sixty-six and prior to June thirteenth, nineteen hundred seventy-four and for all individual annuity and pure endowment contracts issued on or after January first, nineteen hundred sixty, and prior to the operative date of paragraph

three of this subsection, or four percent interest for all life insurance policies issued on or after June thirteenth, nineteen hundred seventy-four and prior to January first, nineteen hundred seventy-nine, or four and one-half percent interest for all life insurance policies, issued on or after January first, nineteen hundred seventy-nine, or five percent interest for all annuities purchased or to be purchased under group annuity contracts, and the following tables:

(A) For all ordinary policies of life insurance issued on the standard basis, excluding any disability and accidental death benefits in such policies, the Commissioners 1941 Standard Ordinary Mortality Table for such policies issued prior to the operative date of subsection (h) of section four thousand two hundred twenty-one of this article, the Commissioners 1958 Standard Ordinary Mortality Table for such policies issued on or after such operative date and prior to the operative date of subsection (k) of such section; provided that for any category of such policies issued on female risks all modified net premiums and present values may be calculated according to an age not more than six years younger than the actual age of the insured, and for such policies issued on or after the operative date of such subsection, and, at the option of the company, for such policies not providing for nonforfeiture benefits which are issued on or after nineteen hundred eighty-one and prior to the operative date of such subsection, (i) the Commissioners 1980 Standard Ordinary Mortality Table, or (ii) at the election of the company for any one or more specified plans of life insurance, the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors, or (iii) any ordinary mortality table, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that is approved by the superintendent for use in determining the minimum standard of valuation for such policies, or (iv) any other ordinary mortality table, or any modification of any of the foregoing tables, approved by the superintendent for any specified class or classes of risks.

(B) For all industrial life insurance policies issued on the standard basis, excluding any disability and accidental death benefits in such policies, the 1941 Standard Industrial Mortality Table for such policies issued prior to the operative date of subsection (i) of section four thousand two hundred twenty-one of this article, and for such policies

issued on or after such operative date (i) the Commissioners 1961 Standard Industrial Mortality Table, or (ii) any industrial mortality table, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that is approved by the superintendent for use in determining the minimum standard of valuation for such policies, or (iii) any other industrial mortality table, or any modification of any of the foregoing tables, approved by the superintendent for any specified class or classes of risks.

(C) For individual annuity and pure endowment contracts, excluding any disability and accidental death benefits in such contracts,--the 1937 Standard Annuity Mortality Table or, at the option of the company, the Annuity Mortality Table for 1949, Ultimate, or any modification of either of these tables approved by the superintendent.

(D) For group annuity and pure endowment contracts, excluding any disability and accidental death benefits in such contracts,--the 1971 Group Annuity Mortality Table or any modification of this table approved by the superintendent.

(E) For total and permanent disability benefits in or supplementary to ordinary policies or contracts--for policies or contracts issued on or after January first, nineteen hundred sixty-six, the tables of Period 2 disablement rates and the 1930 to 1950 termination rates of the 1952 Disability Study of the Society of Actuaries, with due regard to the type of benefits or any tables of disablement rates and termination rates, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that are approved by the superintendent for use in determining the minimum standard of valuation for such policies or any other tables of disablement rates and termination rates, or any modification of any of the foregoing tables, approved by the superintendent for any specified class or classes of risks; for policies or contracts issued prior to January first, nineteen hundred sixty-six, either such tables or, at the option of the company, the Class (3) Disability Table (1926). Any such table shall, for active lives, be combined with a mortality table permitted for calculating the reserves for life insurance policies.

(F) For accidental death benefits in or supplementary to policies--for policies issued on or after January first, nineteen hundred sixty-six, the 1959 Accidental Death Benefits Table or any accidental

death benefits table, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that is approved by the superintendent for use in determining the minimum standard of valuation for such policies or any other accidental death benefits table, or any modification of any of the foregoing tables, approved by the superintendent for any specified class or classes of risks; for policies issued prior to January first, nineteen hundred sixty-six, either such table or, at the option of the company, the Inter-Company Double Indemnity Mortality Table. Any such table shall be combined with a mortality table permitted for calculating the reserves for life insurance policies.

(G) For group life insurance, life insurance issued on the substandard basis, annuities involving life contingencies provided or available under optional modes of settlement in life insurance policies or annuity contracts and other special benefits--such tables as may be approved by the superintendent.

(3) Except as provided in paragraph four hereof, the minimum standard for the valuation of all individual annuity and pure endowment contracts issued on or after the operative date of this paragraph, as defined herein, and for all annuities and pure endowments purchased or to be purchased on or after the operative date under group annuity and pure endowment contracts, shall be the commissioners reserve valuation method defined in paragraph six hereof and the following tables and interest rates:

(A) For individual annuity and pure endowment contracts issued prior to January first, nineteen hundred seventy-nine, excluding any disability and accidental death benefits in such contracts and excluding any annuities, purchased under individual deferred annuity contracts, to which the company has elected to have subparagraph (B) hereof apply--the 1971 Individual Annuity Mortality Table, or any modification of this table approved by the superintendent, and six percent interest for single premium immediate annuity contracts, and four percent interest for all other individual annuity and pure endowment contracts, or such higher rate or rates of interest for any of such contracts as may be approved from time to time by the superintendent.

(B) For individual annuity and pure endowment contracts issued on or after January first, nineteen hundred seventy-nine, excluding any

disability and accidental death benefits in such contracts, and, at the election of the company, for annuities purchased on or after such date under individual deferred annuity contracts--the 1971 Individual Annuity Mortality Table, or any individual annuity mortality table, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that is approved by the superintendent for use in determining the minimum standard of valuation for such contracts, or any other individual annuity mortality table, or any modification of any of the foregoing tables, approved by the superintendent, and seven and one-half percent interest for all single premium individual immediate annuity contracts and all annuities, purchased under individual deferred annuity contracts, to which the company has elected to have this subparagraph apply and five and one-half percent interest for all other individual annuity and pure endowment contracts, excluding any annuities, purchased under deferred annuity contracts, for which the interest rate is seven and one-half percent or such higher rate or rates of interest for any of such contracts or annuities purchased under deferred annuity contracts as may be approved from time to time by the superintendent.

(C) For all annuities and pure endowments purchased or to be purchased prior to January first, nineteen hundred seventy-seven under group annuity and pure endowment contracts, excluding any disability and accidental death benefits purchased under such contracts,--the 1971 Group Annuity Mortality Table, or any modification of this table approved by the superintendent, and six percent interest, or such higher rate or rates of interest for any of such annuities and pure endowments as may be approved from time to time by the superintendent.

(D) For all annuities and pure endowments purchased or to be purchased on or after January first, nineteen hundred seventy-seven under group annuity and pure endowment contracts, excluding any disability and accidental death benefits purchased under such contracts--the 1971 Group Annuity Mortality Table, or any group annuity mortality table, adopted after nineteen hundred eighty by the National Association of Insurance Commissioners, that is approved by the superintendent for use in determining the minimum standard of valuation for such annuities and pure endowments, or any other group annuity mortality table, or any modification of any of the foregoing tables, approved by the

superintendent, and seven and one-half percent interest, or such higher rate or rates of interest for any such annuities and pure endowments as may be approved from time to time by the superintendent.

(E) After June thirteenth, nineteen hundred seventy-four, any company may file with the superintendent a written notice of its election to comply with the provisions of this paragraph after a specified date before January first, nineteen hundred seventy-nine, which shall be the operative date of this paragraph for such company, provided that an insurer may elect a different operative date for individual annuity and pure endowment contracts from that elected for group annuity and pure endowment contracts. If a company makes no such election, the operative date of this paragraph for such company shall be January first, nineteen hundred seventy-nine.

(F) Annuities, annuity benefits and guaranteed interest contracts to which this subsection applies shall be subject to item (vi) of subparagraph (B) of paragraph four of this subsection.

(4) (A) The interest rates used in determining the minimum standard for the valuation of:

(i) all life insurance policies issued in a particular calendar year, on or after January first, nineteen hundred eighty-two,

(ii) all individual annuity and pure endowment contracts issued in a particular calendar year on or after January first, nineteen hundred eighty-two, and, at the option of the company, all annuities purchased in a particular calendar year on or after such date under individual deferred annuity contracts issued prior thereto,

(iii) all annuities and pure endowments purchased in a particular calendar year on or after January first, nineteen hundred eighty-two under group annuity and pure endowment contracts, and

(iv) the net increase, if any, in a particular calendar year after January first, nineteen hundred eighty-two, in amounts held under guaranteed interest contracts,

shall be the calendar year statutory valuation interest rates as defined in this subsection, or such higher rate or rates of interest for any of such policies, contracts or annuities as may be approved from time to time by the superintendent.

(B) The calendar year statutory valuation interest rates ("I") shall be determined in accordance with the following formulae (where R is the

reference interest rate, and W is the weighting factor, defined in this paragraph) and the results rounded to the nearer one-quarter of one percent:

(i) For life insurance, except as otherwise provided in this subparagraph,

$$I = .03 + W(R1 - .03) + W/2 (R2 - .09);$$

where R1 is the lesser of R and .09,

R2 is the greater of R and .09,

(ii) For single premium immediate annuities and for annuity benefits arising from life insurance policies and annuity and guaranteed interest contracts with cash settlement options,

$$I = .03 + W(R - .03)$$

(iii) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, valued on an issue year basis, except as stated in item (ii), the formula for life insurance stated in item (i) shall apply to annuities and guaranteed interest contracts with guarantee durations in excess of ten years and the formula for single premium immediate annuities stated in item (ii) shall apply to annuities and guaranteed interest contracts with guarantee durations of ten years or less, and to single premium life insurance policies of the kind referred to in item (vi) valued on a year of issue basis with guarantee durations of ten years or less,

(iv) For other annuities with no cash settlement options and for guaranteed interest contracts with no cash settlement options, the formula for single premium immediate annuities stated in item (ii) shall apply,

(v) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, and for single premium life insurance policies of the kind referred to in item (vi), valued on a change in fund basis, the formula for single premium immediate annuities stated in item (ii) shall apply,

(vi) Single premium life insurance policies of the kind referred to in this item are all single premium life insurance policies, issued on or after January first, nineteen hundred eighty-two, which provide for the crediting of additional amounts pursuant to subsection (b) of section four thousand two hundred thirty-two of this article and under which interest rates provided in, or declared pursuant to, the policy are, for

some period, guaranteed to exceed the greater of (I) six percent per annum and (II) the calendar year statutory valuation interest rate for other life insurance policies with guarantee durations in excess of twenty years.

(C) If the calendar year statutory valuation interest rate for any life insurance policies, other than single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, issued in any calendar year determined without reference to this sentence differs from the corresponding actual rate for similar policies issued in the immediately preceding calendar year by less than one-half of one percent the calendar year statutory valuation interest rate for such life insurance policies shall be equal to the corresponding actual rate for the immediately preceding calendar year. For purposes of applying the immediately preceding sentence, the calendar year statutory valuation interest rate for life insurance policies issued in a calendar year shall be determined for nineteen hundred eighty, (using the reference interest rate defined for nineteen hundred seventy-nine) and shall be determined for each subsequent calendar year regardless of when subsection (k) of section four thousand two hundred twenty-one of this article becomes operative.

(D) The weighting factors referred to in the formulas stated above are given in the following tables:

(i) Weighting factors for life insurance:

Guarantee Duration (Years)	Weighting Factors
10 or less	.50
More than 10, but not more than 20	.45
More than 20	.35

except that the factors shown above shall be increased for single premium policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph valued on an issue year basis by .05 and for single premium policies of such kind valued on a change in fund basis by ..10.

For life insurance, other than single premium policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, the guarantee duration is the maximum number of years the life insurance can remain in force on a basis guaranteed in the policy or under options to

convert to plans of life insurance with premium rates or nonforfeiture values or both which are guaranteed in the original policy; for such single premium policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, the guarantee duration is the number of years for which interest rates provided in, or declared pursuant to, the policy are guaranteed to exceed the greater of (I) six percent per annum and (II) the calendar year statutory valuation interest rate for life insurance policies, other than such single premium policies, with guarantee durations in excess of twenty years;

(ii) Weighting factor for single premium immediate annuities, and for annuity benefits arising from life insurance policies and annuity and guaranteed interest contracts with cash settlement options: .80

(iii) Weighting factors for other annuities and for guaranteed interest contracts, except as stated in item (ii), shall be as specified in tables (I), (II), (III), according to the rules and definitions in tables (IV) and (V):

Guarantee Duration (Years)	Weighting Factor for Plan Type A	B	C
(I) For annuities and guaranteed interest contracts valued on an issue year basis:			
5 or less:	.80	.60	.50
More than 5, but not more than 10:	.75	.60	.50
More than 10, but not more than 20:	.65	.50	.45
More than 20:	.45	.35	.35
(II) For annuities and guaranteed interest contracts valued on a change in fund basis, the factor shown in table (I) above increased by:	.15	.25	.05
(III) For annuities and guaranteed interest contracts valued on an issue year basis (other than those with no cash settlement options) which do not guarantee interest on considerations received more than one year after issue or purchase and for annuities and guaranteed interest contracts valued on			

a change in fund basis which do not guarantee interest rates on considerations received more than twelve months beyond the valuation date, the factors shown in table (I) or derived in table (II) increased by: .05 .05 .05

(IV) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, the guarantee duration is the number of years for which the interest rates provided in, or declared pursuant to, the contract are guaranteed to exceed the calendar year statutory valuation interest rate for life insurance policies other than single premium policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, with guarantee durations in excess of twenty years.

For other annuities with no cash settlement options and for guaranteed interest contracts with no cash settlement options, the guarantee duration is the number of years from the date of issue or date of purchase to the date annuity benefits are scheduled to commence.

(V) Plan type as used in the above tables is defined as follows:

Plan Type A: The policyholder may withdraw funds only (i) with an adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (ii) without such adjustment but in installments over five years or more, or (iii) as an immediate life annuity.

Plan Type B: The policyholder may not withdraw funds before the expiration of the interest rate guarantee or, if withdrawals are permitted before the expiration of such guarantee, may withdraw funds only (i) with an adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (ii) without such adjustment but in installments over five years or more. At the end of the interest rate guarantee, funds may be withdrawn without such adjustment in a single sum or installments over less than five years.

Plan Type C: The policyholder may withdraw funds before the expiration of the interest rate guarantee in a single sum or installments over less than five years either (i) without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (ii) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

(E) A company may elect to value single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, guaranteed interest contracts with cash settlement options or other annuities with cash settlement options on either an issue year basis or on a change in fund basis. Guaranteed interest contracts with no cash settlement options and other annuities with no cash settlement options must be valued on an issue year basis. As used in this paragraph, and except as otherwise permitted by the superintendent, an issue year basis of valuation refers to a valuation basis under which the interest rate used to determine the minimum valuation standard for the entire duration of the life insurance policy, annuity contract or guaranteed interest contract is the calendar year valuation interest rate for the year of issue or year of purchase of the policy or contract, and the change in fund basis of valuation refers to a valuation basis under which the interest rate used to determine the minimum valuation standard applicable to each change in the fund held under the policy or contract is the calendar year valuation interest rate for the year of the change in the fund.

(F) The reference interest rate referred to above shall be defined as follows:

(i) For all life insurance, except single premium policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, the lesser of the average over a period of thirty-six months and the average over a period of twelve months, ending on June thirtieth of the calendar year next preceding the year of issue, of Moody's Corporate Bond Yield Average - Monthly Average Corporates, as published by Moody's Investors Service, Inc.

(ii) For single premium immediate annuities and for annuity benefits arising from life insurance policies and annuity and guaranteed interest contracts with cash settlement options, the average over a period of twelve months, ending on June thirtieth of the calendar year of issue or

year of purchase, of Moody's Corporate Bond Yield Average - Monthly Average Corporates, as published by Moody's Investors Service, Inc.

(iii) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, and for single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, valued on a year of issue basis, except as stated in item (ii) hereof, with guarantee durations in excess of ten years, the lesser of the average over a period of thirty-six months and the average over a period of twelve months ending on June thirtieth of the calendar year of issue or purchase, of Moody's Corporate Bond Yield Average - Monthly Corporates, as published by Moody's Investors Service, Inc.

(iv) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, and for single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, valued on a year of issue basis, except as stated in item (ii) hereof, with guarantee durations of ten years or less, the average over a period of twelve months, ending on June thirtieth of the calendar year of issue or purchase, of Moody's Corporate Bond Yield Average - Monthly Average Corporates, as published by Moody's Investors Service, Inc.

(v) For other annuities with no cash settlement options and for guaranteed interest contracts with no cash settlement options, the average over a period of twelve months, ending on June thirtieth of the calendar year of issue or purchase, of Moody's Corporate Bond Yield Average - Monthly Average Corporates, as published by Moody's Investors Service, Inc.

(vi) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, and for single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of this paragraph, valued on a change in fund basis, except as stated in item (ii) hereof, the average over a period of twelve months, ending on June thirtieth of the calendar year of the change in the fund, of Moody's Corporate Bond Yield Average - Monthly Average Corporates, as published by Moody's Investors Service, Inc.

(G) In the event that Moody's Corporate Bond Yield Average - Monthly Average Corporates is no longer published by Moody's Investors Service,

Inc., or in the event that the National Association of Insurance Commissioners determines that Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc., is no longer appropriate for the determination of the reference interest rate, then an alternative method for determination of the reference interest rate, which is adopted by the National Association of Insurance Commissioners and approved by the superintendent, may be substituted.

(H) The provisions of this subparagraph shall apply to any life insurance company which has life insurance policies or annuity or pure endowment contracts in effect which were issued in a foreign country and under which premiums and benefits, and the assets supporting reserves in respect thereof, are denominated in the currency of a foreign country which is rated in one of the two highest rating categories by an independent, nationally recognized United States rating agency. For the purpose of determining the reference interest rate to be used in valuing such policies and contracts, the superintendent may permit any such company, or may by regulation require all such companies (except as exempted pursuant to such regulation), to adjust the yield average of the applicable index published by Moody's Investors Service, Inc. (or the yield average determined on the basis of any substitute method applicable to such policies or contracts and approved by the superintendent in accordance with subparagraph (G) of this paragraph) in accordance with a method approved by the superintendent, or to substitute an alternative method approved by the superintendent in place of the applicable index published by Moody's Investors Service, provided that any such substitute or alternative method shall produce year-to-year consistency in reserving methods and shall appropriately reflect the difference between the yield average on corporate bonds issued in the United States and the yield average on corporate bonds issued in such foreign country. Any company which adjusts yield averages in accordance with a method approved by the superintendent pursuant to this subparagraph shall continue to use such method with respect to the valuation of such policies and contracts until the superintendent permits or requires such company to cease using such method.

(6) (A) Except as otherwise provided in section four thousand two hundred eighteen of this article, reserves according to the

commissioners reserve valuation method for the life insurance and endowment benefits of policies providing for a uniform amount of insurance and requiring the payment of uniform premiums shall be the excess, if any, of the present value, at the date of valuation, of such future guaranteed benefits provided for by such policies, over the then present value of any future modified net premiums therefor. The modified net premiums for any such policy shall be such uniform percentage of the respective contract premiums for such benefits that the present value, at the date of issue of the policy, of all such modified net premiums shall be equal to the sum of the then present value of such benefits provided for by the policy and the excess of item (i) over item (ii), as follows:

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

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

(B) Provided that for any life insurance policy issued on or after January first, nineteen hundred eighty-six for which the contract premium in the first policy year exceeds that of the second year and for which no comparable additional benefit is provided in the first year for such excess and which provides an endowment benefit or a cash surrender value or a combination thereof in an amount greater than such excess premium, the reserve according to the commissioners reserve valuation method as of any policy anniversary occurring on or before the assumed ending date defined herein as the first policy anniversary on which the sum of any endowment benefit and any cash surrender value then available is greater than such excess premium shall, except as otherwise provided in section four thousand two hundred eighteen of this article, be the greater of the reserve as of such policy anniversary calculated as described in the preceding paragraph and the reserve as of such policy anniversary calculated as described in that paragraph, but with (i) the

value defined in item (i) of subparagraph (A) hereof being reduced by fifteen percent of the amount of such excess first year premium, (ii) all present values of benefits and premiums being determined without reference to premiums or benefits provided for by the policy after the assumed ending date, (iii) the policy being assumed to mature on such date as an endowment, and (iv) the cash surrender value provided on such date being considered as an endowment benefit. In making the above comparison, the mortality and interest bases stated in paragraphs two and four shall be used.

(C) Reserves according to the commissioners reserve valuation method for (i) life insurance policies providing for a varying amount of insurance or requiring the payment of varying premiums, (ii) disability and accidental death benefits in all policies and contracts, and (iii) all other benefits, except life insurance and endowment benefits in life insurance policies and benefits in annuity, pure endowment and guaranteed interest contracts, shall be calculated by a method consistent with the principles of this paragraph, except that any extra premiums charged because of impairments or special hazards shall be disregarded in the determination of modified net premiums.

(D) The superintendent may, by regulation, issue guidelines for the application of the reserve valuation provisions of this section to such policies and contracts as the superintendent deems appropriate. Such guidelines may provide that the minimum standard for the valuation of single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of paragraph four of this subsection may be based on interest rates determined in accordance with paragraph four of subsection (c) of this section for the first ten years following the date of valuation and thereafter on interest rates determined in accordance with the formula stated in item (i) of subparagraph (B) of paragraph four of this subsection. Such guidelines may permit recognition of surrender charges in determining reserves to the extent and under the conditions specified in the regulation. With respect to annuity, pure endowment, or guaranteed interest contracts providing allocation of assets to a separate account which qualifies under item (iii) of paragraph five of subsection (a) of section four thousand two hundred forty of this article and in which the assets are valued at their market value in accordance with the terms of such contracts, such

guidelines may provide for the valuation of the reserves for such contracts in a consistent manner.

(7) In no event shall a company's aggregate reserves for all life insurance policies, excluding disability and accidental death benefits, be less than the aggregate reserves calculated in accordance with the methods set forth in paragraphs six and nine hereof and the mortality table or tables and rate or rates of interest used in calculating nonforfeiture benefits for such policies, nor less than the aggregate reserves calculated in accordance with section four thousand two hundred eighteen of this article. This paragraph shall not apply to single premium life insurance policies of the kind referred to in item (vi) of subparagraph (B) of paragraph four of this subsection nor to life insurance policies that provide for the crediting of additional amounts pursuant to subsection (b) of section four thousand two hundred thirty-two of this article if the aggregate reserves for all such policies are at least equal to the greatest of present values, at the date of valuation, of the future guaranteed cash surrender values at any time under all such policies, assuming no future premiums and the mortality tables and interest rates prescribed under paragraphs two and four of this subsection.

(8) Notwithstanding the provisions of subsection (a) hereof and notwithstanding the provisions of subsection (g) of section four thousand two hundred twenty-one of this article, after a life insurance company has established reserves for participating life insurance policies in accordance with a method consistent with the provisions of this chapter, it may calculate such reserves according to a rate of interest lower than the rate of interest previously used in calculating reserves for the same policies only with the consent of the superintendent, subject to such conditions, if any, as he may impose.

(9) In the case of any plan of life insurance which provides for future premium determination, the amounts of which are to be determined by the insurance company based on then estimates of future experience, or in the case of any plan of life insurance or annuity which is of such a nature that the minimum reserves cannot be determined by the methods described in paragraph six hereof and section four thousand two hundred eighteen of this article, the reserves which are held under any such plan must:

(A) be appropriate in relation to the benefits and the pattern of premiums for that plan, and

(B) be computed by a method which is consistent with the principles of such paragraph and such section as determined by the superintendent.

(10) (A) The superintendent shall, by regulation, issue guidelines for the determination of the minimum reserve value required by this section for any plan or plans of life insurance policies under which cash surrender values and policy loan values are adjusted in accordance with a market-value adjustment formula.

(B) The regulation may require any company issuing or delivering such policies in this state to submit to the superintendent with each annual report an opinion, in form and substance satisfactory to the superintendent, of a qualified actuary that the reserves for all such policies in force at the end of the year, and the assets held by the company in support of such reserves, make adequate provision for the liabilities of the company with respect thereto, such opinion to be accompanied by a memorandum, also in form and substance satisfactory to the superintendent, of the qualified actuary describing the calculations made in support of such opinion and the assumptions used in the calculations. The regulation may prescribe the calculations required to support such opinions and may provide that if the company has designated particular assets primarily to support reserves for a class or classes of policies, including reserves for policies determined in accordance with the regulation, the opinion of the company's qualified actuary may apply to the policies whose reserves are supported by such assets. For purposes hereof, "qualified actuary" has the meaning ascribed to it by subparagraph (E) of paragraph four of subsection (e) of this section.

(C) With respect to any policies covered by the regulation that provide for the allocation of assets to a separate account which qualifies under item (iii) of paragraph five of subsection (a) of section four thousand two hundred forty of this article and in which assets are valued at their market value in accordance with the terms of such policies, the regulation may provide for the valuation of the reserves for such policies in a consistent manner.

(d) The company shall maintain reserves for all individual and group accident and health insurance policies which reserves shall reflect a sound value placed on its liabilities under such policies and shall be

not less than the reserves required by regulations which the superintendent shall promulgate.

(e) Actuarial opinion of reserves.

(1) General. Every life insurance company doing business in this state shall annually submit the opinion of a qualified actuary as to whether the reserves and related actuarial items held in support of the policies and contracts specified by the superintendent by regulation are computed appropriately, are based on assumptions which satisfy contractual provisions, are consistent with prior reported amounts and comply with applicable laws of this state. The superintendent by regulation shall define the specifics of this opinion and add any other items deemed to be necessary to its scope.

(2) (A) Actuarial analysis of reserves and assets supporting such reserves. Every life insurance company, except as exempted by or pursuant to regulation, shall also annually include in the opinion required by paragraph one of this subsection, an opinion of the same qualified actuary as to whether the reserves and related actuarial items held in support of the policies and contracts specified by the superintendent by regulation, when considered in light of the assets held by the company with respect to the reserves and related actuarial items, including but not limited to the investment earnings on the assets and the considerations anticipated to be received and retained under the policies and contracts, make adequate provision for the company's obligations under the policies and contracts, including but not limited to the benefits under and expenses associated with the policies and contracts.

(B) The superintendent may provide by regulation for a transition period for establishing any additional reserves which the qualified actuary may deem necessary in order to render the opinion required by this paragraph.

(3) Requirement for actuarial memorandum. (A) Except as exempted by or pursuant to regulation, a memorandum, in form and substance acceptable to the superintendent as specified by regulation, shall be prepared to support each actuarial opinion submitted pursuant to subparagraph (A) of paragraph two of this subsection. Each company required to prepare such memorandum shall submit such memorandum to the superintendent as part of its submission of the opinion of the qualified actuary pursuant to such

subparagraph (A), except as otherwise provided in subparagraph (B) of this paragraph and except that if a foreign or alien company has submitted a memorandum in support of an opinion of a qualified actuary for the prior year to the commissioner of a state accredited by the National Association of Insurance Commissioners and if that memorandum was in form and substance acceptable to the commissioner and was in support of an opinion of a qualified actuary that was required by laws or regulations of that state to meet standards adopted from time to time by the Actuarial Standards Board and such additional standards as the superintendent has prescribed, the foreign or alien company need submit the memorandum required by this subparagraph only at the request of the superintendent or as the superintendent may by regulation require.

(B) In lieu of preparing a memorandum as required by subparagraph (A) of this paragraph, a company may increase its reserves in the manner provided by the superintendent by regulation. If a company that has not so increased its reserves fails to file a supporting memorandum as required by subparagraph (A) of this paragraph or fails to provide a supporting memorandum at the request of the superintendent within a period specified by regulation or the superintendent determines that the supporting memorandum provided by the company fails to meet the standards prescribed by the regulations or is otherwise unacceptable to the superintendent, the superintendent may engage a qualified actuary at the expense of the company to review the opinion and the basis for the opinion and prepare such supporting memorandum as is required by the superintendent.

(4) Requirement for all opinions. Every opinion shall be governed by the following provisions:

(A) The opinion shall be submitted with the annual statement reflecting the valuation of such reserve liabilities for each year ending on or after December thirty-first, nineteen hundred ninety-four.

(B) The opinion shall apply to all business in force including individual and group health insurance plans, in form and substance acceptable to the superintendent as specified by regulation.

(C) The opinion shall be based on standards adopted from time to time by the Actuarial Standards Board and on such additional standards as the superintendent may by regulation prescribe.

(D) In the case of an opinion required to be submitted by a foreign or

alien company, the superintendent may accept the opinion submitted by that company to the commissioner of a state accredited by the National Association of Insurance Commissioners if the superintendent determines that the opinion reasonably meets the requirements applicable to a company domiciled in this state.

(E) For the purposes of this subsection, "qualified actuary" means a member in good standing of the American Academy of Actuaries who meets the requirements prescribed by the superintendent by regulation.

(F) Except in cases of fraud, willful misconduct or gross negligence, the qualified actuary shall not be liable for damages to any person (other than the insurance company or the superintendent) for any act, error, omission, decision or conduct with respect to the actuary's opinion and memorandum. The provisions of this subparagraph shall not operate to remove, condition or limit any rights, remedies or actions at law or equity which the insurance company or the superintendent may have or take against or with respect to the qualified actuary.

(G) Disciplinary action by the superintendent against the company or the qualified actuary shall be defined in regulations by the superintendent.

(H) Non-public information (meaning information not otherwise available from public documents or records) contained in any memorandum in support of the opinion, or in any other material provided by the company to the superintendent in connection therewith, shall at the written request of the company be kept confidential by the superintendent and shall not be made public, other than for the purpose of enabling any person to defend against an action seeking damages from such person by reason of any action required by this section or by regulations promulgated hereunder; provided, however, that such non-public information may otherwise be released by the superintendent (i) with the written consent of the company or (ii) for the purpose of professional disciplinary proceedings conducted by the superintendent or by any professional body, provided that steps deemed appropriate by the superintendent are taken to preserve the confidentiality of such non-public information. Notwithstanding the foregoing, the superintendent shall release the non-public information to persons making demand therefor in a criminal proceeding pursuant to lawful subpoena, warrant or court order or in response to a subpoena from a

grand jury served upon the superintendent. Any such request by the company for confidentiality shall designate with reasonable specificity the portion of such memorandum or other material with respect to which confidentiality is requested pursuant to this subparagraph. Once such memorandum or other material, or any portion thereof containing matters with respect to which confidentiality has been requested, is cited by the company in its marketing or is cited before any governmental agency (other than a state insurance department) or is released by the company to the news media, all portions of such memorandum or other material shall be no longer confidential.

(f) (1) An insurer shall be deemed to meet the minimum standard for the valuation of life insurance, if the amount of its aggregate reserves for group life insurance, for ordinary life insurance and for industrial life insurance, whether or not held in separate accounts pursuant to section four thousand two hundred forty of this article, is in each case at least equal to the aggregate minimum standard required by this section for the respective valuation thereof.

(2) An insurer shall be deemed to meet the minimum standard for the valuation of annuities and guaranteed interest contracts if the amount of its aggregate reserves therefor, whether or not held in separate accounts pursuant to such section forty-two hundred forty of this article, is at least equal to the aggregate minimum standard required by this section for the valuation thereof.

(3) An insurer shall be deemed to meet the minimum standard for the valuation of individual and group accident and health insurance policies if the amount of its aggregate reserves therefor is at least equal to the aggregate minimum standard required by this section for the valuation thereof.

(4) Without the specific approval of the superintendent subject to such conditions as he may prescribe and as provided by regulation, an insurer shall not aggregate the reserves referred to in two or more of paragraph one, two or three of this subsection. Such regulation may prescribe the conditions under which the valuation of two or more classes of business of insurance or the valuation of all of its insurance business to which this section applies may be combined.

(5) For purposes of this subsection, the aggregate minimum standard required by this section for the valuation of any insurance policies or

contracts shall be deemed to include such additional reserves as the qualified actuary deems necessary, taking into account any transition rules provided by regulation pursuant to subparagraph (B) of paragraph two of subsection (e) of this section, in order to render the opinion required by subsection (e) of this section and such additional reserves as may be necessary to comply with regulations promulgated by the superintendent pursuant to this section.

* (g)(1) This subsection shall apply only to individual and group life insurance policies and annuity contracts issued on or after the operative date of the valuation manual as prescribed by the superintendent by regulation, provided that the operative date shall be no sooner than January first, two thousand nineteen.

(2) For the purposes of this subsection, "NAIC" shall mean the National Association of Insurance Commissioners.

(3) For purposes of this subsection, "principle-based valuation" shall mean a reserve valuation that uses methods and assumptions required by paragraph eleven of this subsection as specified in the valuation manual.

(4) For purposes of this subsection, "qualified actuary" shall mean a member in good standing of the American Academy of Actuaries who meets the requirements prescribed by the superintendent by regulation.

(5) For purposes of this subsection, "valuation manual" shall mean the valuation manual adopted by the NAIC on December second, two thousand twelve, as subsequently amended, and as approved by the superintendent upon a finding that such manual is for the best interests of the holders of policies and contracts and annuitants of this state and which meets the requirements as set forth in this subsection.

(6) Notwithstanding subsection (c) of this section and section four thousand two hundred eighteen of this article, the minimum standard for the valuation of all such policies and contracts shall be the standard prescribed in the valuation manual.

(7) The valuation manual shall not become operative in this state unless and until the superintendent has approved of such manual and has adopted all necessary regulations to effectuate this subsection.

(8) (A) No amendment to the valuation manual shall take effect in this state unless the superintendent finds that such amendment is for the best interests of the holders of policies and contracts and annuitants

of this state.

(B) The superintendent may deviate, through regulations, from the reserve standards, valuation methods, assumptions, and related requirements in the valuation manual, including for individual companies, provided, however, that such deviation shall not result in reserve valuations that are lower than the minimum standards prescribed in the valuation manual and may be based on a percentage of the reserves being held for the policies and contracts subject to this subsection prior to the operative date of such manual.

(9) The valuation manual shall specify all of the following:

(A) Minimum valuation standards for and definitions of the policies and contracts subject to this subsection as determined by the superintendent. Such minimum valuation standards shall be:

(i) The commissioners reserve valuation method for life insurance policies subject to this subsection; and

(ii) The commissioners annuity reserve valuation method for annuity contracts subject to this subsection.

(B) Requirements for the format of reports to the superintendent under item (iii) of subparagraph (B) of paragraph eleven of this subsection and which shall include information necessary to determine if the valuation is appropriate and in compliance with this subsection;

(C) Assumptions for risks over which a company does not have significant control or influence;

(D) Procedures for corporate governance and oversight of the actuarial function, and a process for appropriate waiver or modification of such procedures;

(E) Other requirements, including, but not limited to, those relating to reserve methods, models for measuring risk, generation of economic scenarios, assumptions, margins, use of company experience, risk measurement, disclosure, certifications, reports, actuarial opinions and memorandums, transition rules and internal controls; and

(F) The data and form of the data required under paragraph twelve of this subsection, with whom the data shall be submitted, and other requirements including data analyses and reporting of analyses.

(10) The superintendent may engage a qualified actuary, at the expense of a company, to perform an actuarial examination of such company and opine on the appropriateness of any reserve assumption or method used by

such company, or to review and opine on such company's compliance with any requirement set forth in this subsection.

(11) (A) A company that issues policies and contracts subject to this subsection shall establish reserves using a principle-based valuation that meets the following conditions for such policies and contracts as specified in the valuation manual:

(i) Quantify the benefits and guarantees, and the funding, associated with the policies or contracts and their risks at a level of conservatism that reflects conditions that include unfavorable events that have a reasonable probability of occurring during the lifetime of the policies and contracts. For policies and contracts with significant tail risk, reflect conditions appropriately adverse to quantify the tail risk.

(ii) Incorporate assumptions, risk analysis methods and financial models and management techniques that are consistent with, but not necessarily identical to, those utilized within the company's overall risk assessment process, while recognizing potential differences in financial reporting structures and any prescribed assumptions or methods.

(iii) Incorporate assumptions that are derived in one of the following manners:

(I) The assumption is prescribed in the valuation manual.

(II) For assumptions that are not prescribed, the assumptions shall:

a. be established utilizing the company's available experience, to the extent it is relevant and statistically credible; or

b. to the extent that company experience is not available, relevant, or statistically credible, be established utilizing other relevant, statistically credible experience.

(iv) Provide margins for uncertainty including adverse deviation and estimation error, such that the greater the uncertainty the larger the margin and resulting reserve.

(B) A company that issues policies and contracts subject to this subsection shall:

(i) Establish procedures for corporate governance and oversight of the actuarial valuation function consistent with those described in the

valuation manual.

(ii) Provide to the superintendent, annually on or before a date as determined by the superintendent, and the board of directors of the company an annual certification of the effectiveness of the internal controls with respect to the principle-based valuation. Such controls shall be designed to assure that all material risks inherent in the liabilities and associated assets subject to such valuation are included in the valuation, and that valuations are made in accordance with the valuation manual. The certification shall be based on the controls in place as of the end of the preceding calendar year.

(iii) Develop, and file with the superintendent upon request, a principle-based valuation report that complies with standards prescribed in the valuation manual.

(C) A principle-based valuation shall include a prescribed formulaic reserve component.

(12) A company that issues policies and contracts subject to this subsection shall submit mortality, morbidity, policyholder behavior, or expense experience and other data as prescribed in the valuation manual to the superintendent annually on or before a date as determined by the superintendent.

(13) (A) The superintendent may exempt specific product forms or product lines of a domestic company that is licensed and doing business only in this state from the requirements of this subsection provided:

(i) The superintendent has issued an exemption in writing to the company and has not subsequently revoked the exemption in writing; and

(ii) The company computes reserves using assumptions and methods used prior to the operative date of the valuation manual in addition to any requirements established by the superintendent and promulgated by regulation.

(B) For any company granted an exemption under this paragraph, subsections (c), (d), (e) and (f) of this section and section four thousand two hundred eighteen of this article shall be applicable. With respect to any company applying for this exemption, any reference to subsection (g) found in subsections (c), (d), (e) and (f) of this section and section four thousand two hundred eighteen of this article shall not be applicable.

* NB Repealed December 7, 2028