START\_STATUTE20-510.  Standard valuation law; operative date; definitions

A.  This section may be cited as the standard valuation law.

B.  For the purposes of this section, the following definitions apply on or after the operative date of the valuation manual:

1.  "Accident and health insurance" means contracts that incorporate morbidity risk and provide protection against economic loss resulting from accident, sickness or medical conditions and as may be specified in the valuation manual.

2.  "Appointed actuary" means a qualified actuary who is appointed in accordance with the valuation manual to prepare the actuarial opinion required in subsection F of this section.

3.  "Company" means an entity that either:

(a)  Has written, issued or reinsured life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state and that has at least one such policy in force or on claim.

(b)  Has written, issued or reinsured life insurance contracts, accident and health insurance contracts or deposit-type contracts in any state and that is required to hold a certificate of authority to write life insurance, accident and health insurance or deposit-type contracts in this state.

4.  "Deposit-type contract" means contracts that do not incorporate mortality or morbidity risks and as may be specified in the valuation manual.

5.  "Life insurance" means contracts that incorporate mortality risk, including annuity and pure endowment contracts, and as may be specified in the valuation manual.

6.  "Policyholder behavior" means any action a policyholder, a contract holder or any other person with the right to elect options, such as a certificate holder, may take under a policy or contract subject to this section, including lapse, withdrawal, transfer, deposit, premium payment, loan, annuitization or benefit elections prescribed by the policy or contract but excluding events of mortality or morbidity that result in benefits prescribed in their essential aspects by the terms of the policy or contract.

7.  "Principle-based valuation" means a reserve valuation that uses one or more methods or one or more assumptions determined by the insurer and that is required to comply with subsection S of this section as specified in the valuation manual.

8.  "Qualified actuary" means an individual who is qualified to sign the applicable statement of actuarial opinion in accordance with the American academy of actuaries qualification standards for actuaries signing those statements and who meets the requirements specified in the valuation manual.

9.  "Reserves" means reserve liabilities.

10.  "Tail risk" means a risk that occurs either where the frequency of low probability events is higher than expected under a normal probability distribution or where there are observed events of very significant size or magnitude.

11.  "Valuation manual" means the manual of valuation instructions adopted by the national association of insurance commissioners as specified in this section.

C.  The following apply to reserve valuation for policies and contracts issued before the operative date of the valuation manual:

1.  The director shall annually value, or cause to be valued, the reserves for all outstanding life insurance policies and annuity and pure endowment contracts of every life insurance company doing business in this state that are issued before the operative date of the valuation manual.  In calculating reserves, the director may use group methods and approximate averages for fractions of a year or otherwise.  In lieu of the valuation of the reserves required of a foreign or alien insurer, the director may accept a valuation made, or caused to be made, by the insurance supervisory official of any state or other jurisdiction if the valuation complies with the minimum standard provided by this section.

2.  Subsections G, H, I, J, K, L, M, N, O, P and Q of this section apply to all policies and contracts, as appropriate, subject to this section issued on or after the operative date of section 20‑1231 and before the operative date of the valuation manual and subsections R, S and T of this section do not apply to those policies and contracts.

3.  The minimum standard for the valuation of policies and contracts issued before the operative date of section 20‑1231 is the standard provided by the laws in effect immediately before that date.

D.  The following apply to reserve valuation for policies and contracts issued on or after the operative date of the valuation manual:

1.  The director shall annually value, or cause to be valued, the reserves for all outstanding life insurance contracts, annuity and pure endowment contracts, accident and health contracts and deposit-type contracts of every company issued on or after the operative date of the valuation manual. In lieu of the valuation of the reserves required of a foreign or alien company, the director may accept a valuation made, or caused to be made, by the insurance supervisory official of any state or other jurisdiction if the valuation complies with the minimum standard provided by this section.

2.  Subsections R, S and T of this section apply to all policies and contracts issued on or after the operative date of the valuation manual.

E.  The following apply to actuarial opinion of reserves before the operative date of the valuation manual:

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

2.  For actuarial analysis of reserves and assets supporting reserves:

(a)  Every life insurance company, unless exempted by rule, shall annually include in the opinion required by paragraph 1 of this subsection an opinion of the same qualified actuary as to whether, if 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, the reserves and related actuarial items held in support of the policies and contracts specified by the director 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 director may provide for a transition period for establishing any higher reserves that the qualified actuary may deem necessary in order to render the opinion required by this section.

3.  The following apply to each opinion required by paragraph 2 of this subsection:

(a)  The insurance company shall prepare a memorandum to support each actuarial opinion.  The memorandum shall be in a form and substance specified by the director.

(b)  If the insurance company fails to provide a supporting memorandum on the request of the director and in the period of time specified by rule or if the director determines that the supporting memorandum does not meet the standards prescribed by rule or is otherwise unacceptable, the director may engage a qualified actuary at the expense of the insurance company to review the opinion and the basis for the opinion and to prepare any supporting memorandum that the director requires.

4.  The following apply to each opinion required by paragraph 1 of this subsection:

(a)  The company shall submit the opinion with the annual statement reflecting the valuation of the reserves for each year ending on or after December 31, 1996.

(b)  The opinion applies to all business in force, including individual and group health insurance plans, and shall be in a form and substance that the director specifies.

(c)  The opinion shall be based on standards that are adopted from time to time by the actuarial standards board and on any other additional standards that the director prescribes.

(d)  If an opinion is required to be submitted by an alien or foreign company, the director may accept the opinion that is filed by that company with the insurance supervisory official of another state if the director determines that the opinion reasonably meets the requirements applicable to a company domiciled in this state.

(e)  Except in cases of fraud or wilful misconduct, the qualified actuary is not liable for damages to any person other than the director and the insurance company for any act, error, omission, decision or conduct with respect to the actuary's opinion.

(f)  The director shall define by rule what disciplinary actions the director may take against an insurance company or qualified actuary.

(g)  Except as provided in subdivisions (k), (l) and (m) of this paragraph, documents, materials or other information in the possession or control of the department that are a memorandum in support of the opinion, and any other material provided by the company to the director in connection with the memorandum, are confidential by law and privileged and are not subject to public records requests, are not subject to subpoena and are not subject to discovery or admissible in evidence in any private civil action. The director is authorized to use the documents, materials or other information in the furtherance of any regulatory or legal action brought as part of the director's official duties.

(h)  The director or any person who received documents, materials or other information while acting under the authority of the director is not allowed or required to testify in any private civil action concerning any confidential documents, materials or information subject to subdivision (g) of this paragraph.

(i)  In order to assist in the performance of the director's duties, the director may:

(i)  Share documents, materials or other information, including the confidential and privileged documents, materials or information subject to subdivision (g) of this paragraph, with other state, federal and international regulatory agencies, with the national association of insurance commissioners and its affiliates and subsidiaries, and with state, federal and international law enforcement authorities, if the recipient agrees to maintain the confidentiality and privileged status of the document, material or other information.

(ii)  Receive documents, materials or information, including otherwise confidential and privileged documents, materials or information, from the national association of insurance commissioners and its affiliates and subsidiaries, and from regulatory and law enforcement officials of other foreign or domestic jurisdictions, and shall maintain as confidential or privileged any document, material or information received with notice or the understanding that it is confidential or privileged under the laws of the jurisdiction that is the source of the document, material or information.

(iii)  Enter into agreements governing sharing and use of information consistent with subdivision (g) of this paragraph and this subdivision.

(j)  No waiver of any applicable privilege or claim of confidentiality in the documents, materials or information shall occur as a result of disclosure to the director under this subsection or as a result of sharing as authorized in subdivision (i) of this paragraph.

(k)  A memorandum in support of the opinion, and any other material provided by the company to the director in connection with the memorandum, may be subject to subpoena for the purpose of defending an action seeking damages from the actuary submitting the memorandum by reason of an action required by this section or by rules adopted under this section.

(l)  The memorandum or other material may otherwise be released by the director with the written consent of the company or to the American academy of actuaries on request stating that the memorandum or other material is required for the purpose of professional disciplinary proceedings and setting forth procedures satisfactory to the director for preserving the confidentiality of the memorandum or other material.

(m)  Once any portion of the confidential memorandum is cited by the company in its marketing, is cited before a governmental agency other than a state insurance department or is released by the company to the news media, all portions of the confidential memorandum are no longer confidential.

5.  For the purposes of this subsection, "qualified actuary" means a member in good standing of the American academy of actuaries who meets the requirements set forth by the director.

F.  The following apply to actuarial opinion of reserves after the operative date of the valuation manual:

1.  Every company with outstanding life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state and subject to regulation by the director shall annually submit the opinion of the appointed actuary as to whether the reserves and related actuarial items held in support of the policies and contracts are computed appropriately, are based on assumptions that satisfy contractual provisions, are consistent with prior reported amounts and comply with applicable laws of this state. The valuation manual will prescribe the specifics of this opinion including any items deemed to be necessary to its scope.

2.  Every company with outstanding life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state and subject to regulation by the director, except as exempted in the valuation manual, shall also annually include in the opinion required by paragraph 1 of this subsection an opinion of the same appointed actuary as to whether the reserves and related actuarial items held in support of the policies and contracts specified in the valuation manual, when considered in light of the assets held by the company with respect to the reserves and related actuarial items, including 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 the benefits under and expenses associated with the policies and contracts.

3.  The following apply to each opinion required by paragraph 2 of this subsection:

(a)  A memorandum, in form and substance as specified in the valuation manual, and acceptable to the director, shall be prepared to support each actuarial opinion.

(b)  If the insurance company fails to provide a supporting memorandum at the request of the director within a period specified in the valuation manual or the director determines that the supporting memorandum provided by the insurance company fails to meet the standards prescribed by the valuation manual or is otherwise unacceptable to the director, the director may engage a qualified actuary at the expense of the company to review the opinion and the basis for the opinion and prepare the supporting memorandum required by the director.

4.  The following apply to all opinions subject to this subsection:

(a)  The opinion shall be in form and substance as specified in the valuation manual and acceptable to the director.

(b)  The opinion shall be submitted with the annual statement reflecting the valuation of the reserves for each year ending on or after the operative date of the valuation manual.

(c)  The opinion shall apply to all policies and contracts subject to this subsection, plus other actuarial liabilities as may be specified in the valuation manual.

(d)  The opinion shall be based on standards adopted from time to time by the actuarial standards board or its successor, and on any additional standards as may be prescribed in the valuation manual.

(e)  In the case of an opinion required to be submitted by a foreign or alien company, the director may accept the opinion filed by that company with the insurance supervisory official of another state if the director determines that the opinion reasonably meets the requirements applicable to a company domiciled in this state.

(f)  Except in cases of fraud or wilful misconduct, the appointed actuary is not liable for damages to any person, other than the insurance company and the director, for any act, error, omission, decision or conduct with respect to the appointed actuary's opinion.

(g)  Disciplinary action by the director against the company or the appointed actuary shall be defined by the director in rule.

G.  Except as otherwise provided in subsections H, I, J and Q of this section, the minimum standard for the valuation of all policies and contracts that were issued before the operative date of section 20‑1231 is that provided by the laws in effect immediately before January 1, 1955. Except as otherwise provided in subsections H, I, J and Q of this section, the minimum standard for the valuation of all policies and contracts that are issued on or after January 1, 1955 is the commissioners reserve valuation methods defined in subsections K, L, O and P of this section, three and one‑half per cent interest or, in the case of life insurance policies and contracts, other than annuity and pure endowment contracts, that are issued on or after July 1, 1974, four per cent interest for those policies that are issued before January 1, 1979, five and one‑half per cent interest for single premium life insurance policies and four and one‑half per cent interest for all other policies that are issued on and after January 1, 1979, and the following tables:

1.  For all ordinary policies of life insurance that are issued on the standard basis, excluding any disability and accidental death benefits in those policies, the commissioners 1941 standard ordinary mortality table for those policies issued before the operative date of section 20‑1231, subsection F, paragraph 5, subdivision (b) and the commissioners 1958 standard ordinary mortality table for those policies that are issued on or after the operative date of section 20‑1231, subsection F, paragraph 5, subdivision (b) and before the operative date as provided in section 20‑1231.01.  If any category of these policies is issued on female risks, modified net premiums and present values referred to in this section may be calculated according to an age not more than six years younger than the actual age of the insured.  For policies that are issued on or after the operative date of section 20‑1231.01, the following tables may be used:

(a)  The commissioners 1980 standard ordinary mortality table.

(b)  At the election of the insurer for any one or more specified plans of life insurance, the commissioners 1980 standard ordinary mortality table with ten year select mortality factors.

(c)  Any ordinary mortality table that is adopted after 1980 by the national association of insurance commissioners and that is approved by the director for use in determining the minimum standard of valuation for those policies.

2.  For all industrial life insurance policies that are issued on the standard basis, excluding any disability and accidental death benefits in those policies, the 1941 standard industrial mortality table for those policies that are issued before the operative date of section 20‑1231, subsection F, paragraph 5, subdivision (d) and for those policies that are issued on or after the operative date of section 20‑1231, subsection F, paragraph 5, subdivision (d) the commissioners 1961 standard industrial mortality table or any industrial mortality table that is adopted after 1980 by the national association of insurance commissioners and that is approved by the director for use in determining the minimum standard of valuation for those policies.

3.  For individual annuity and pure endowment contracts, excluding any disability and accidental death benefits in those policies, the 1937 standard annuity mortality table or, at the option of the insurer, the annuity mortality table for 1949, ultimate, or any modification of either of these tables that the director approves.

4.  For group annuity and pure endowment contracts, excluding any disability and accidental death benefits in those policies, the group annuity mortality table for 1951, any modification of the group annuity mortality table that is approved by the director or, at the option of the insurer, any of the tables or modifications of tables that are specified for individual annuity and pure endowment contracts.

5.  For total and permanent disability benefits in or supplementary to ordinary policies or contracts:

(a)  For policies or contracts that are issued on or after January 1, 1966, 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 benefit or any tables of disablement rates and termination rates, adopted after 1980 by the national association of insurance commissioners, that are approved by the director for use in determining the minimum standard of valuation for those policies.

(b)  For policies or contracts that are issued on or after January 1, 1961 and before January 1, 1966, either of the tables that are specified in subdivision (a) of this paragraph, or at the option of the insurer, the class three disability table (1926).

(c)  For policies or contracts that are issued before January 1, 1961, the class three disability table (1926).

(d)  For active lives, any table that is used pursuant to subdivision (a), (b) or (c) of this paragraph shall be combined with a mortality table that is allowed for calculating the reserves for life insurance policies.

6.  For accidental death benefits in or supplementary to policies:

(a)  For policies that are issued on or after January 1, 1966, the 1959 accidental death benefits table or any accidental death benefits table that was adopted after 1980 by the national association of insurance commissioners and that the director approves for use in determining the minimum standard of valuation for those policies.

(b)  For policies that are issued on or after January 1, 1961 and before January 1, 1966, either table provided by subdivision (a) of this paragraph or, at the option of the insurer, the intercompany double indemnity mortality table.

(c)  For policies that are issued before January 1, 1961, the intercompany double indemnity mortality table.

(d)  A table that is allowed under subdivision (a), (b) or (c) of this paragraph shall be combined with a mortality table that is allowed for calculating the reserves for life insurance policies.

7.  For group life insurance, life insurance issued on the substandard basis and other special benefits, any tables that the director approves as sufficient with relation to the benefits provided by those policies.

H.  Except as provided in subsection I of this section, the minimum standard for the valuation for individual annuity and pure endowment contracts issued on or after the operative date of this subsection and annuities and pure endowments purchased on or after the operative date of this subsection under group annuity and pure endowment contracts shall be the commissioners reserve valuation methods defined in subsections K and L of this section and the following tables and interest rates:

1.  For individual annuity and pure endowment contracts that are issued before January 1, 1979, excluding any disability and accidental death benefits in those contracts, the 1971 individual annuity mortality table or any modification of the table that the director approves, and six per cent interest for single premium immediate annuity contracts, and four per cent interest for all other individual annuity and pure endowment contracts.

2.  For individual single premium immediate annuity contracts that are issued on or after January 1, 1979, excluding any disability and accidental death benefits in those contracts, the 1971 individual annuity mortality table or any individual annuity mortality table adopted after 1980 by the national association of insurance commissioners and that the director approves for use in determining the minimum standard valuation for those contracts, or any modification of these tables that the director approves, and seven and one‑half per cent interest.

3.  For individual annuity and pure endowment contracts that are issued on or after January 1, 1979, other than single premium immediate annuity contracts and excluding any disability and accidental death benefits in those contracts, the 1971 individual annuity mortality table or any individual annuity mortality table that is adopted after 1980 by the national association of insurance commissioners and that the director approves for use in determining the minimum standard of valuation for those contracts, or any modification of these tables that the director approves, and five and one‑half per cent interest for single premium deferred annuity and pure endowment contracts and four and one‑half per cent interest for all other individual annuity and pure endowment contracts.

4.  For all annuities and pure endowments that are purchased before January 1, 1979 under group annuity and pure endowment contracts, excluding any disability and accidental death benefits in those contracts, the 1971 group annuity mortality table, or any modification of this table that the director approves, and six per cent interest.

5.  For all annuities and pure endowments that are purchased on or after January 1, 1979 under group annuity and pure endowment contracts, excluding any disability and accidental death benefits that are purchased under those contracts, the 1971 group annuity mortality table or any group annuity mortality table that is adopted after 1980 by the national association of insurance commissioners and that the director approves for use in determining the minimum standard of valuation for those annuities and pure endowments, or any modification to these tables that the director approves, and seven and one‑half per cent interest.

I.  After July 1, 1974, any insurer may file with the director a written notice of its election to comply with subsection H of this section on a specified date before January 1, 1979, which shall be the operative date of subsection H of this section for that insurer if the insurer elects a different operative date for individual annuity and pure endowment contracts from the date that is elected for group annuity and pure endowment contracts.  If an insurer does not make an election pursuant to this subsection, the operative date of subsection L of this section shall be January 1, 1979.

J.  The minimum standard by calendar year of issue shall be computed as follows:

1.  The interest rates that are used in determining the minimum standard for the valuation of the following shall be the calendar year statutory valuation interest rates as defined in this subsection:

(a)  All life insurance policies that are issued in a particular calendar year on or after the operative date of section 20‑1231.01.

(b)  All individual annuity and pure endowment contracts that are issued in a particular calendar year on or after January 1, 1983.

(c)  All annuities and pure endowments that are purchased in a particular calendar year on or after January 1, 1983 under group annuity and pure endowment contracts.

(d)  The net increase, if any, in a particular calendar year after January 1, 1983 in the amounts that are held under guaranteed interest contracts.

2.  As used in this paragraph:

(a)  R1 is the lesser of R and 0.09, R2 is the greater of R and 0.09, R is the reference interest rate defined in this subsection and W is the weighting factor defined in this subsection, the calendar year statutory valuation interest rates, or I, shall be determined as follows and the results shall be rounded to the nearer one‑quarter of one per cent:

(i)  For life insurance:

I = .03 + W(R1 ‑ .03) + W/2 (R2 ‑ .09).

(ii)  For single premium immediate annuities and for annuity benefits involving life contingencies arising from other annuities with cash settlement options and from guaranteed interest contracts with cash settlement options:

I = .03 + W(R ‑ .03).

(iii)  Except pursuant to item (ii) of this subdivision, for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options that are valued on an issue year basis, the formula for life insurance under item (i) of this subdivision applies to annuities and guaranteed interest contracts with guarantee durations of more than ten years and the formula for single premium immediate annuities under item (ii) of this subdivision applies to annuities and guaranteed interest contracts with guarantee durations of ten years or less.

(iv)  For other annuities with no cash settlement options and guaranteed interest contracts with no cash settlement options, the formula for single premium immediate annuities under item (ii) of this subdivision applies.

(v)  For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options that are valued on a change in fund basis, the formula for single premium immediate annuities under item (ii) of this subdivision applies.

(b)  If the calendar year statutory valuation interest rate for any life insurance policies issued in any calendar year determined without reference to this subdivision differs from the corresponding actual rate for similar policies issued in the immediately preceding calendar year by less than one‑half of one per cent, the calendar year statutory valuation interest rate for those life insurance policies shall be equal to the corresponding actual rate for the immediately preceding calendar year.  For the 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 1980 using the reference interest rate defined in 1979 and shall be determined for each subsequent calendar year regardless of the operative date of section 20‑1231.01.

3.  For the purposes of this subsection, the weighting factors referred to in the formulas stated above are given in the following tables:

(a)  Weighting factors for life insurance:

Guarantee

Duration Weighting

(Years) Factors

Ten years or less .50

More than ten years, but not more than 20 years .45

More than twenty years .35

(b)  For life insurance under subdivision (a) 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, that are guaranteed in the original policy.

(c)  The weighting factor for single premium immediate annuities and for annuity benefits involving life contingencies arising from other annuities with cash settlement options and guaranteed interest contracts with cash settlement options: .80

(d)  Except pursuant to subdivision (c) of this paragraph, weighting factors for other annuities and for guaranteed interest are as specified and in accordance with this subdivision:

(i)  For annuities and guaranteed interest contracts valued on an issue year basis:

Guarantee Weighting Factor

Duration for plan type

(Years) A     B     C

Five years or less .80   .60   .50

More than five years, but not more than ten years .75   .60   .50

More than ten years, but not more than twenty years .65   .50   .45

More than twenty years .45   .35   .35

(ii)  For annuities and guaranteed interest contracts valued on a change in fund basis, the factors listed in item (i) of this subdivision increased by

 Plan type

 A B C

 .15   .25   .05

(iii)  For annuities and guaranteed interest contracts valued on an issue year basis other than those with no cash settlement options that 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 that do not guarantee interest rates on considerations received more than twelve months after the valuation date, the factors shown in item (i) of this subdivision or derived in item (ii) of this subdivision increased by

 Plan type

 A  B C

 .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 contract guarantees interest rates in excess of the calendar year statutory valuation interest rate for life insurance policies with guarantee duration of more than 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 begin.

(v)  A company may elect to value guaranteed interest contracts with cash settlement options and 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 shall be valued on an issue year basis.  As used in this subsection, "issue year basis" means a valuation basis under which the interest rate used to determine the minimum valuation standard for the entire duration of the annuity or guaranteed interest contract is the calendar year valuation interest rate for the year of issue or year of purchase of the annuity or guaranteed interest contract and "change in fund basis" means 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 annuity or guaranteed interest contract is the calendar year valuation interest rate for the year of the change in the fund.

4.  "Plan type" as used in paragraph 3, subdivision (d) of this subsection means:

(a)  Plan type A:  A policyholder may withdraw funds at any time only with an adjustment to reflect changes in interest rates or asset values since the insurance company received the funds, without an adjustment but in installments over a period of five years or more, as an immediate life annuity, or a policyholder may not withdraw funds.

(b)  Plan type B:  Before the interest rate guarantee expires, a policyholder may withdraw funds only with an adjustment to reflect changes in interest rates or asset values since the insurance company received the funds, without an adjustment but in installments over a period of five years or more, or a policyholder may not withdraw funds.  At the end of the interest rate guarantee, a policyholder may withdraw funds without an adjustment in a single sum or in installments over a period of less than five years.

(c)  Plan type C:  A policyholder may withdraw funds before the interest rate guarantee expires in a single sum or in installments over a period of less than five years either without an adjustment to reflect changes in interest rates or asset values since the insurance company received the funds or subject only to a fixed surrender charge that is stipulated in the contract as a percentage of the fund.

5.  For the purposes of this subsection, "reference interest rate" means:

(a)  For all life insurance, the lesser of the average over a period of thirty‑six months and the average over a period of twelve months, ending on June 30 of the calendar year next preceding the year of issue, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

(b)  For single premium immediate annuities and for annuity benefits involving life contingencies arising from other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, the average over a period of twelve months, ending on June 30 of the calendar year of issue or year of purchase, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

(c)  Except pursuant to subdivision (b) of this paragraph, for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options that are valued on an issue year basis, with guarantee duration of more than 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 30 of the calendar year of issue or purchase, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

(d)  Except pursuant to subdivision (b) of this paragraph, for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options that are valued on a year of issue basis, with guaranteed duration of ten years or less, the average over a period of twelve months, ending on June 30 of the calendar year of issue or purchase, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

(e)  For other annuities with no cash settlement options and guaranteed interest contracts with no cash settlement options, the average over a period of twelve months, ending on June 30 of the calendar year of issue or purchase, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

(f)  Except pursuant to subdivision (b) of this paragraph, for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options that are valued on a change in fund basis, the average over a period of twelve months, ending on June 30 of the calendar year of the change in the fund, of the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's investors service, incorporated.

6.  If Moody's investors service, incorporated no longer publishes the monthly average of the composite yield on seasoned corporate bonds or if the national association of insurance commissioners determines that the monthly average of the composite yield on seasoned corporate bonds as published by Moody's investor service, incorporated is no longer appropriate for the determination of the reference interest rate, an alternative method for determination of the reference interest rate that the national association of insurance commissioners adopts and the director approves may be substituted.

K.  The reserve valuation method for life insurance and endowment benefits shall be determined as follows:

1.  Except as otherwise provided in subsections L, O and Q of this section, 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, are the excess, if any, of the present value, at the date of valuation, of the future guaranteed benefits provided for by those policies, over the present value of any future modified net premiums.  The modified net premiums for any one policy shall be the uniform percentage of the respective contract premiums for the benefits that the present value, at the date of issue of the policy, of all the modified net premiums shall be equal to the sum of the then present value of the benefits provided for by the policy and the excess of subdivision (a) over subdivision (b) of this paragraph as follows:

(a)  A net level annual premium equal to the present value, at the date of issue, of the benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one per annum payable on the first and each subsequent anniversary of the policy on which a premium falls due, provided however that the 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.

(b)  A net one year term premium for the benefits that are provided for in the first policy year.

2.  Any life insurance policy that is issued on or after January 1, 1986 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 the excess and that provides an endowment benefit or a cash surrender value or a combination thereof in an amount greater than the 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 for the purposes of this paragraph as the first policy anniversary on which the sum of any endowment benefit and any cash surrender value then available is greater than the excess premium, except as otherwise provided in subsection O of this section, shall be the greater of the reserve as of the policy anniversary calculated as described in paragraph 1 of this subsection and the reserve as of the policy anniversary calculated as described in that paragraph, but with:

(a)  The value defined in paragraph 1, subdivision (a) of this subsection being reduced by fifteen per cent of the amount of the excess first year premium.

(b)  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.

(c)  The policy being assumed to mature on the date as an endowment.

(d)  The cash surrender value provided on the date being considered as an endowment benefit.

In making the above comparison the mortality and interest bases stated in subsections G and J of this section shall be used.

3.  Reserves according to the commissioners reserve valuation method for:

(a)  Life insurance policies providing for a varying amount of insurance or requiring the payment of varying premiums.

(b)  Group annuity and pure endowment contracts purchased under a retirement plan or plan of deferred compensation that is established or maintained by an employer, including a partnership or sole proprietorship, or by an employee organization, or by both, other than a plan providing individual retirement accounts or individual retirement annuities under section 408 of the internal revenue code, as amended.

(c)  Disability and accidental death benefits in all policies and contracts.

(d)  All other benefits, except life insurance and endowment benefits in life insurance policies and benefits provided by all other annuity and pure endowment contracts, shall be calculated by a method consistent with the principles of paragraphs 1 and 2 of this subsection.

L.  The reserve valuation method for annuity and pure endowment benefits shall be determined as follows:

1.  This subsection applies to all annuity and pure endowment contracts other than group annuity and pure endowment contracts purchased under a retirement plan or plan of deferred compensation that is established or maintained by an employer, including a partnership or sole proprietorship, or by an employee organization, or by both, other than a plan providing individual retirement accounts or individual retirement annuities under section 408 of the internal revenue code, as amended.

2.  Reserves according to the commissioners annuity reserve method for benefits under annuity or pure endowment contracts, excluding any disability and accidental death benefits in those contracts, shall be the greatest of the respective excesses of the present values, at the date of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits that are provided for by the contracts at the end of each respective contract year, over the present value, at the date of valuation, of any future valuation considerations derived from future gross considerations, required by the terms of the contract, that become payable before the end of the respective contract year.  The future guaranteed benefits shall be determined by using the mortality table, if any, and the interest rate or rates specified in the contracts for determining guaranteed benefits.  The valuation considerations are the portions of the respective gross considerations applied under the terms of the contracts to determine nonforfeiture values.

M.  A company's aggregate reserves for all life insurance policies, excluding disability and accidental death benefits, that are issued on or after the operative date of section 20‑1231, shall not be less than the aggregate reserves calculated in accordance with the methods set forth in subsections K, L, O and P of this section and the mortality table or tables and rate or rates of interest used in calculating nonforfeiture benefits for the policies.  The aggregate reserves for all policies, contracts and benefits shall not be less than the aggregate reserves determined by the qualified actuary to be necessary to render the opinion required by subsection E of this section.

N.  Optional reserves may be calculated as follows:

1.  At the option of the insurer, reserves for all policies and contracts that are issued before the operative date of section 20‑1231 may be calculated according to any standards that produce greater aggregate reserves for all the policies and contracts than the minimum reserves required by the laws in effect immediately before that date.

2.  At the option of the insurer, reserves for any category of policies, contracts or benefits that the director establishes and that are issued on or after the operative date of section 20‑1231 may be calculated according to any standards that produce greater aggregate reserves for that category than those calculated according to the minimum standard provided in this section, but the rate or rates of interest used for policies and contracts, other than annuity and pure endowment contracts, shall not be greater than the corresponding rate or rates of interest used in calculating any nonforfeiture benefits provided for in the policy or contract.

3.  An insurer that at any time has adopted any standard of valuation producing greater aggregate reserves than those calculated according to the minimum standard provided by this section, with the director's approval, may adopt any lower standard of valuation, but not lower than the minimum provided by this section.  For the purposes of this section, the holding of additional reserves previously determined by the appointed 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.

O.  Reserves when the valuation net premium exceeds the gross premium charged shall be calculated as follows:

1.  If in any contract year the gross premium charged by a company on any policy or contract is less than the valuation net premium for the policy or contract calculated by the method used in calculating the reserve but using the minimum valuation standards of mortality and rate of interest, the minimum reserve required for the policy or contract shall be the greater of either the reserve calculated according to the mortality table, rate of interest, and method actually used for the policy or contract, or the reserve calculated by the method actually used for the policy or contract but using the minimum valuation standards of mortality and rate of interest and replacing the valuation net premium by the actual gross premium in each contract year for which the valuation net premium exceeds the actual gross premium.  The minimum valuation standards of mortality and rate of interest referred to in this subsection are those standards stated in subsections G and J of this section.

2.  For any life insurance policy that is issued on or after January 1, 1986, for which the gross 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 that excess and that provides an endowment benefit or a cash surrender value or a combination in an amount greater than the excess premium, this subsection applies as if the method actually used in calculating the reserve for the policy was the method described in subsection K, paragraphs 1 and 3 of this section.  The minimum reserve at each policy anniversary of such a policy shall be the greater of the minimum reserve calculated in accordance with subsection K of this section, including paragraph 2 of that subsection, and the minimum reserve calculated in accordance with this subsection.

P.  If a plan of life insurance provides for future premium determination, the amounts of which are to be determined by the insurer based on then estimates of future experience, or if the minimum reserves of a plan of life insurance or annuity cannot be determined by the methods described in subsections K, L and O of this section, the reserves that are held under any plan must:

1.  Be appropriate in relation to the benefits and the pattern of premiums for that plan.

2.  Be computed by a method that is consistent with the principles of this section, as determined by rules adopted by the director related to the minimum standards applicable to the valuation of health plans.

Q.  For accident and health insurance contracts issued on or after the operative date of the valuation manual, the standard prescribed in the valuation manual is the minimum standard of valuation required under subsection D, paragraph 1 of this section. For disability insurance contracts issued on or after the operative date of section 20‑1231 and before the operative date of the valuation manual, the minimum standard of valuation is the standard adopted by the director by rule.

R.  The following apply to the valuation manual for policies issued on or after the operative date of the valuation manual:

1.  For policies issued on or after the operative date of the valuation manual, the standard prescribed in the valuation manual is the minimum standard of valuation required under subsection D, paragraph 1 of this section, except as provided under paragraph 5 or 7 of this subsection.

2.  The operative date of the valuation manual is January 1 of the first calendar year following the first July 1 as of which all of the following have occurred:

(a)  The valuation manual has been adopted by the national association of insurance commissioners by an affirmative vote of at least forty‑two members, or three‑fourths of the members voting, whichever is greater.

(b)  The standard valuation law, as amended by the national association of insurance commissioners in 2009, or legislation including substantially similar terms and provisions, has been enacted by states representing greater than seventy‑five per cent of the direct premiums written as reported in the following annual statements submitted for 2008:  life, accident and health annual statements, health annual statements, or fraternal annual statements.

(c)  The standard valuation law, as amended by the national association of insurance commissioners in 2009, or legislation including substantially similar terms and provisions, has been enacted by at least forty‑two of the following fifty‑five jurisdictions:

(i)  The fifty states of the United States.

(ii)  American Samoa.

(iii)  The United States Virgin Islands.

(iv)  The District of Columbia.

(v)  Guam.

(vi)  The Commonwealth of Puerto Rico.

3.  Unless a change in the valuation manual specifies a later effective date, changes to the valuation manual shall be effective on January 1 following the date when all of the following have occurred:

(a)  The change to the valuation manual has been adopted by the national association of insurance commissioners by an affirmative vote representing the following:

(i)  At least three‑fourths of the members of the national association of insurance commissioners voting, but not less than a majority of the total membership.

(ii)  Members of the national association of insurance commissioners representing jurisdictions totaling greater than seventy‑five per cent of the direct premiums written as reported in the following annual statements most recently available before the vote in item (i) of this subdivision:  life, accident and health annual statements, health annual statements, or fraternal annual statements.

(b)  The valuation manual becomes effective pursuant to an order of the director.

4.  The valuation manual must specify all of the following:

(a)  Minimum valuation standards for and definitions of the policies or contracts subject to subsection D, paragraph 1 of this section. The minimum valuation standards shall include all of the following:

(i)  The director's reserve valuation method for life insurance contracts, other than annuity contracts, subject to subsection D, paragraph 1 of this section.

(ii)  The director's annuity reserve valuation method for annuity contracts subject to subsection D, paragraph 1 of this section.

(iii)  Minimum reserves for all other policies or contracts subject to subsection D of this section.

(b)  Which policies or contracts or types of policies or contracts that are subject to the requirements of a principle‑based valuation in subsection S of this section and the minimum valuation standards consistent with those requirements.

(c)  For policies and contracts subject to a principle‑based valuation under subsection S of this section:

(i)  Requirements for the format of reports to the director under subsection T, paragraph 3 of this section and that shall include information necessary to determine if the valuation is appropriate and in compliance with this section.

(ii)  Assumptions shall be prescribed for risks over which the company does not have significant control or influence.

(iii)  Procedures for corporate governance and oversight of the actuarial function and a process for appropriate waiver or modification of the procedures.

(d)  For policies not subject to a principle‑based valuation under subsection S of this section the minimum valuation standard shall either:

(i)  Be consistent with the minimum standard of valuation before the operative date of the valuation manual.

(ii)  Develop reserves that quantify the benefits and guarantees, and the funding, associated with the contracts and their risks at a level of conservatism that reflects conditions that include unfavorable events that have a reasonable probability of occurring.

(e)  Other requirements, including 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.

(f)  The data and form of the data required under subsection T of this section, with whom the data must be submitted, and other requirements including data analyses and reporting of analyses.

5.  In the absence of a specific valuation requirement or if a specific valuation requirement in the valuation manual is not, in the opinion of the director, in compliance with this section, the company, with respect to the requirements, shall comply with minimum valuation standards prescribed by the director by rule.

6.  The director may engage a qualified actuary, at the expense of the company, to perform an actuarial examination of the company and opine on the appropriateness of any reserve assumption or method used by the company, or to review and opine on a company's compliance with any requirement of this section. The director may rely on the opinion, regarding provisions contained in this section, of a qualified actuary engaged by the director of another state, district or territory of the United States. For the purposes of this paragraph, engage includes employment and contracting.

7.  The director may require a company to change any assumption or method that in the opinion of the director is necessary in order to comply with the requirements of the valuation manual or this section, and the company shall adjust the reserves as required by the director. The director may take other disciplinary action as allowed pursuant to section 20‑152.

S.  A company must establish reserves using a principle‑based valuation that meets the following conditions for policies or contracts as specified in the valuation manual:

1.  Quantify the benefits and guarantees, and the funding, associated with the 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 contracts, and for policies or contracts with significant tail risk, that reflects conditions appropriately adverse to quantify the tail risk.

2.  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.

3.  Incorporate assumptions that are derived in one of the following manners:

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

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

(i)  Be established utilizing the company's available experience to the extent it is relevant and statistically credible.

(ii)  To the extent that company data is not available, relevant or statistically credible, be established utilizing other relevant, statistically credible experience.

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

T.  A company using a principle‑based valuation for one or more policies or contracts subject to this section as specified in the valuation manual shall:

1.  Establish procedures for corporate governance and oversight of the actuarial valuation function consistent with those described in the valuation manual.

2.  Provide to the director and the board of directors an annual certification of the effectiveness of the internal controls with respect to the principle‑based valuation. The controls shall be designed to ensure that all material risks inherent in the liabilities and associated assets subject to the 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.

3.  Develop, and file with the director on request, a principle‑based valuation report that complies with standards prescribed in the valuation manual.  A principle‑based valuation may include a prescribed formulaic reserve component.

U.  A company shall submit mortality, morbidity, policyholder behavior or expense experience and other data as prescribed in the valuation manual.

V.  The following apply to confidentiality:

1.  For the purposes of this subsection, "confidential information" means:

(a)  A memorandum in support of an opinion submitted under subsection F of this section and any other documents, materials and other information, including all working papers, and copies thereof, created, produced or obtained by or disclosed to the director or any other person in connection with the memorandum.

(b)  All documents, materials and other information, including all working papers, and copies thereof, created, produced or obtained by or disclosed to the director or any other person in the course of an examination made under subsection R of this section. If an examination report or other material prepared in connection with an examination made under section 20‑156 is not held as private and confidential information under section 20‑156, an examination report or other material prepared in connection with an examination made under subsection R, paragraph 6 of this section is not confidential information to the same extent as if the examination report or other material had been prepared under section 20‑156.

(c)  Any reports, documents, materials and other information developed by a company in support of or in connection with an annual certification by the company under subsection T, paragraph 2 of this section evaluating the effectiveness of the company's internal controls with respect to a principle‑based valuation and any other documents, materials and other information, including all working papers, and copies thereof, created, produced or obtained by or disclosed to the director or any other person in connection with the reports, documents, materials and other information.

(d)  Any principle‑based valuation report developed under subsection T, paragraph 3 of this section and any other documents, materials and other information, including all working papers, and copies thereof, created, produced or obtained by or disclosed to the director or any other person in connection with the report.

(e)  Any documents, materials, data and other information submitted by a company under subsection U of this section (collectively, "experience data") and any other documents, materials, data and other information, including all working papers, and copies thereof, created or produced in connection with the experience data, in each case that include any potentially company‑identifying or personally identifiable information that is provided to or obtained by the director (together with any "experience data", the "experience materials") and any other documents, materials, data and other information, including all working papers, and copies thereof, created, produced or obtained by or disclosed to the director or any other person in connection with the experience materials.

2.  The following apply to the privilege for and confidentiality of confidential information:

(a)  Except as provided in this subsection, a company's confidential information is confidential by law and privileged, and is not subject to public records requests or subpoenas and shall not be subject to discovery or admissible in evidence in any private civil action.  The director is authorized to use the confidential information in the furtherance of any regulatory or legal action brought against the company as a part of the director's official duties.

(b)  Neither the director nor any person who received confidential information while acting under the authority of the director shall be allowed or required to testify in any private civil action concerning any confidential information.

(c)  In order to assist in the performance of the director's duties, the director may share confidential information:

(i)  With other state, federal and international regulatory agencies and with the national association of insurance commissioners and its affiliates and subsidiaries.

(ii)  In the case of confidential information specified in paragraph 1, subdivisions (a) and (d) of this subsection only, with the actuarial board for counseling and discipline or its successor on request stating that the confidential information is required for the purpose of professional disciplinary proceedings and with state, federal and international law enforcement officials.

(iii)  In the case of items (i) and (ii) of this subdivision, if the recipient agrees, and has the legal authority to agree, to maintain the confidentiality and privileged status of the documents, materials, data and other information in the same manner and to the same extent as required for the director.

(d)  The director may receive documents, materials, data and other information, including otherwise confidential and privileged documents, materials, data or information, from the national association of insurance commissioners and its affiliates and subsidiaries, from regulatory or law enforcement officials of other foreign or domestic jurisdictions and from the actuarial board for counseling and discipline or its successor and shall maintain as confidential or privileged any document, material, data or other information received with notice or the understanding that it is confidential or privileged under the laws of the jurisdiction that is the source of the document, material or other information.

(e)  The director may enter into agreements governing sharing and use of information consistent with this paragraph.

(f)  No waiver of any applicable privilege or claim of confidentiality in the confidential information shall occur as a result of disclosure to the director under this section or as a result of sharing as authorized in subdivision (c) of this paragraph.

(g)  Privilege established under the law of any state or jurisdiction that is substantially similar to the privilege established under this paragraph shall be available and enforced in any proceeding in and in any court of this state.

3.  Notwithstanding paragraph 2 of this subsection, any confidential information specified in paragraph 1, subdivisions (a) and (d) of this subsection:

(a)  May be subject to subpoena for the purpose of defending an action seeking damages from the appointed actuary submitting the related memorandum in support of an opinion submitted under subsection F, paragraph 1 of this section or principle‑based valuation report developed under subsection T, paragraph 3 of this section by reason of an action required by this section or by rules adopted under this section.

(b)  May otherwise be released by the director with the written consent of the company.

(c)  Once any portion of a memorandum in support of an opinion submitted under subsection F, paragraph 1 of this section or a principle‑based valuation report developed under subsection T, paragraph 3 of this section is cited by the company in its marketing or is publicly volunteered to or before a governmental agency other than a state insurance department or is released by the company to the news media, all portions of the memorandum or report are no longer confidential.

4.  For the purposes of this subsection, "regulatory agency", "law enforcement agency" and "national association of insurance commissioners" include the employees, agents, consultants and contractors of those entities.

W.  The following apply to single state exemption:

1.  The director 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 subsection R of this section if:

(a)  The director has issued an exemption in writing to the company and has not subsequently revoked the exemption in writing.

(b)  The company computes reserves using assumptions and methods used before the operative date of the valuation manual in addition to any requirements established by the director and adopted by rule.

2.  For any company granted an exemption under this section, subsections D, E, F, G, H, I, J, K, L, M, N, O, P and Q of this section apply. For any company applying this exemption, any reference to subsection R found in subsections D, E, F, G, H, I, J, K, L, M, N, O, P and Q of this section does not apply. END\_STATUTE