STATE OF CONNECTICUT

Senate Bill No. 185

Public Act No. 14-195

AN ACT CONCERNING CHANGES TO THE STANDARD VALUATION AND NONFORFEITURE LAWS, AND THE USE OF THE NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS' VALUATION MANUAL.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 38a-78 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) (1) (A) The provisions of this subdivision shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act. As used in this section, "Valuation Manual" means the manual of valuation instructions adopted by NAIC as set forth in section 2 of this act and as amended from time to time.

(B) The commissioner shall annually value, or cause to be valued, the reserve liabilities, hereinafter called reserves, for all outstanding life insurance policies and annuity and pure endowment contracts of every life insurance company doing business in this state except that in the case of an alien company, the 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, including net level premium method or other, used in the calculation of such reserves.**]** In calculating such reserves, **[**he**]** the commissioner may use group methods and approximate averages for fractions of a year or otherwise. In lieu of the valuation of the reserves **[**herein**]** required of any foreign or alien company, **[**he**]** the commissioner may accept any valuation made, or caused to be made, by the insurance **[**supervisory**]** regulatory 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 commissioner 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**]** in subsection (d) of this section.

(2) (A) The provisions of this subdivision shall apply to policies and contracts issued on or after the operative date of the Valuation Manual, as set forth in section 2 of this act. The provisions of this subdivision shall not apply to a society subject to section 38a-614, unless such society elects to use the standards pursuant to subdivision (9) of subsection (a) of section 38a-614.

(B) As used in this subdivision, subsections (c), (m) and (n) of this section and section 2 of this act:

(i) "Accident and health insurance contract" means a policy or contract that incorporates morbidity risk and provides protection against economic loss resulting from accident, sickness or medical conditions as may be specified in the Valuation Manual;

(ii) "Appointed actuary" means a qualified actuary who is appointed in accordance with the Valuation Manual to prepare the actuarial opinion required under subsection (c) of this section;

(iii) "Company" means an entity that has written, issued or reinsured life insurance contracts, accident and health insurance contracts or deposit-type contracts (I) in this state and has at least one such contract in force or on claim, or (II) in any state and holds a certificate of authority to write life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state;

(iv) "Deposit-type contract" means a policy or contract that does not incorporate mortality or morbidity risk and as may be specified in the Valuation Manual and NAIC Accounting Practices and Procedures Manual;

(v) "Life insurance contract" means a policy or contract that incorporates mortality risk and as may be specified in the Valuation Manual. "Life insurance contract" includes annuity and pure endowment contracts;

(vi) "NAIC" means the National Association of Insurance Commissioners;

(vii) "Policyholder behavior" means any action a policyholder, contract holder, certificate holder or any other person with the right to elect options may take under a policy or contract subject to this section. "Policyholder behavior" includes, but is not limited to, lapse, withdrawal, transfer, deposit, premium payment, loan, annuitization or benefit elections prescribed by the policy or contract, except that "policyholder behavior" does not include events of mortality or morbidity that result in benefits prescribed in their essential aspects by the terms of the policy or contract;

(viii) "Principle-based valuation" means a reserve valuation that uses one or more methods or one or more assumptions determined by a company and is required to comply with subsection (c) of section 2 of this act;

(ix) "Qualified actuary" means a member in good standing of the American Academy of Actuaries who is qualified in accordance with the standards of the American Academy of Actuaries to prepare and sign the actuarial opinion required under subsection (c) of this section and who meets the requirements specified in the Valuation Manual;

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

(C) The commissioner shall annually value, or cause to be valued, the reserve liabilities, hereinafter called reserves, for all outstanding life insurance contracts, accident and health contracts and deposit-type contracts of every company. In lieu of the valuation of the reserves required of any foreign or alien company, the commissioner may accept a valuation made, or caused to be made, by the insurance regulatory official of any state or other jurisdiction when such valuation complies with the minimum standard provided in subsection (c) of section 2 of this act.

(b) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to opinions submitted by and supporting memoranda prepared and provided by qualified actuaries prior to the operative date of the Valuation Manual, as set forth in section 2 of this act, for policies and contracts issued prior to said operative date.

[(1)**]** (2) 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 commissioner by **[**regulation**]** regulations adopted in accordance with the provisions of chapter 54 are computed appropriately, are based on assumptions **[**which**]** that satisfy contractual provisions, are consistent with prior reported amounts and comply with applicable laws of this state. The commissioner **[**by regulation**]** shall define by regulation the specifics of **[**this**]** such opinion and add any other items **[**deemed to be**]** the commissioner deems necessary to its scope. For the purposes of this subsection and subsection (i) of this section, "qualified actuary" means a member in good standing of the American Academy of Actuaries who meets the requirements set forth in regulations adopted in accordance with the provisions of chapter 54.

(3) (A) Every life insurance company shall also include in the opinion required under subdivision (2) of this subsection, unless exempted by regulations adopted in accordance with the provisions of chapter 54, an opinion of the same qualified actuary as to whether the reserves and related actuarial items held by the company in support of such policies and contracts, 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 such policies and contracts, make adequate provision for the company's obligations under such policies and contracts, including, but not limited to, the benefits under and expenses associated with such policies and contracts.

(B) Every qualified actuary that provides an opinion under this subsection shall prepare and provide to the life insurance company a memorandum that supports such opinion. If a life insurance company fails to provide a supporting memorandum at the request of the commissioner or the commissioner determines that a supporting memorandum provided by a life insurance company fails to meet the standards prescribed by the commissioner or is otherwise unacceptable to the commissioner, the commissioner may engage the services by employment or by contract of a qualified actuary at such company's expense to review such opinion and the basis for such opinion and to prepare the supporting memorandum required under this subdivision. The commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to specify (i) the form and substance of and standards for the supporting memorandum, and (ii) the time period for a life insurance company to provide a supporting memorandum after the commissioner has requested such memorandum.

(4) The commissioner may adopt regulations, in accordance with the provisions of chapter 54, to provide for a transition period for a life insurance company to establish any higher reserves that the qualified acteem necessary in order to render the opinion required under this subsection.

(5) Every opinion required under this subsection shall:

[(2) The opinion shall be**]** (A) Be submitted with the annual statement reflecting the valuation of such **[**reserve liabilities**]** reserves for each year ending on or after December 31, 1991; **[**.**]**

[(3) The opinion shall apply**]** (B) Apply to all business in force including individual and group health insurance plans, in form and substance acceptable to the commissioner as specified by regulation; **[**.**]** and

[(4) The opinion shall be**]** (C) Be based on standards adopted from time to time by the **[**actuarial standards board**]** Actuarial Standards Board and on such additional standards as the commissioner may **[**by regulation**]** prescribe by regulations adopted in accordance with the provisions of chapter 54.

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

[(6) For the purposes of this section, "qualified actuary" means a member in good standing of the American Academy of Actuaries who meets the requirements set forth in regulations the commissioner may prescribe.**]**

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

[(8) Disciplinary action by the commissioner against the company or the qualified actuary shall be as defined in such regulations by the commissioner.

(9) A memorandum, in form and substance acceptable to the commissioner as specified by regulation, shall be prepared to support each actuarial opinion.

(10) If the insurance company fails to provide a supporting memorandum at the request of the commissioner within a period specified by regulation or the commissioner determines that the supporting memorandum provided by the insurance company fails to meet the standards prescribed by the regulations or is otherwise unacceptable to the commissioner, the commissioner 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 commissioner.

(11) Any memorandum in support of the opinion, and any other material provided by the company to the commissioner in connection therewith, shall be kept confidential by the commissioner and shall not

be made public and shall not be subject to subpoena, other than for the purpose of defending an action seeking damages from any person by reason of any action required by this section or by regulations adopted under this section provided the memorandum or other material may otherwise be released by the commissioner (A) with the written consent of the company or (B) upon the request of the American Academy of Actuaries stating that the memorandum or other material is required for the purpose of professional disciplinary proceedings and setting forth procedures satisfactory to the commissioner for preserving the confidentiality of the memorandum or other material. Once any portion of the confidential memorandum is referred to by the company in its marketing or is referred to before any governmental agency other than a state insurance department or is released by the company to the news media, all portions of the confidential memorandum shall no longer be confidential.

(12) Any regulation adopted by the commissioner under the provisions of this subsection shall be adopted in accordance with the provisions of chapter 54.

(c) (1) Every life insurance company, except as exempted by or pursuant to regulation, shall annually include in the opinion required by subdivision (1) of subsection (b) of this section, 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 commissioner 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.

(2) The commissioner may provide by regulation for a transition period for establishing any higher reserves which the qualified actuary may deem necessary in order to render the opinion required by this section.**]**

(8) (A) Except as provided in subparagraphs (C) to (E), inclusive, of this subdivision, any memorandum submitted pursuant to subparagraph (B) of subdivision (3) of this subsection and all documents, materials or other information in the possession or control of the Insurance Department relating to such memorandum shall (i) be confidential by law and privileged, (ii) not be subject to disclosure under section 1-210, (iii) not be subject to subpoena, and (iv) not be subject to discovery or admissible in evidence in any civil action in this state. The commissioner may use such memorandum, documents, materials or other information in the furtherance of any regulatory or legal action brought as part of the commissioner's official duties.

(B) Neither the commissioner nor any person who receives such memorandum or documents, materials or other information relating to such memorandum while acting under the authority of the commissioner shall be permitted or required to testify in any civil action in this state concerning such memorandum, documents, materials or other information.

(C) A supporting memorandum submitted pursuant to subparagraph (B) of subdivision (3) of this subsection and any documents, materials or other information in the possession or control of the Insurance Department relating to such memorandum may be subject to subpoena for the purpose of defending an action for damages from the qualified actuary who prepared such memorandum by reason of an action required by this subsection or any regulations adopted thereunder.

(D) The commissioner may release such memorandum or documents, materials or other information in the possession or control of the Insurance Department relating to such memorandum (i) with the written consent of the life insurance company, or (ii) to the American Academy of Actuaries upon request from said academy that such memorandum, documents, materials or other information are required for the purpose of professional disciplinary proceedings, if such request sets forth procedures satisfactory to the commissioner for preserving the confidentiality of the memorandum and documents, materials or other information relating to such memorandum.

(E) If any portion of such memorandum is (i) referred to by the life insurance company in such company's marketing, (ii) referred to by the life insurance company before a governmental agency other than a state insurance department, or (iii) released by such company to the news media, all portions of the memorandum shall no longer be confidential.

(9) To assist the commissioner in the performance of the commissioner's duties, the commissioner may:

(A) Share documents, materials or other information, including documents, materials or other information deemed confidential and privileged pursuant to subdivision (8) of this subsection, with (i) other state and federal regulatory officials and international supervisory officials, (ii) the National Association of Insurance Commissioners and its affiliates and subsidiaries, and (iii) state, federal and international law enforcement officials, provided the recipient of any such documents, materials or other information agrees, in writing, to maintain the confidentiality and privileged status of any such documents, materials and other information;

(B) Receive documents, materials or other information, including confidential and privileged documents, materials or other information, from (i) the National Association of Insurance Commissioners or its affiliates or subsidiaries, and (ii) regulatory and law enforcement officials of other states or jurisdictions. The commissioner shall maintain as confidential and privileged any documents, materials or other information received with notice or the understanding that such documents, materials or other information are confidential and privileged under the laws of the jurisdiction that is the source of the documents, materials or other information; and

(C) Enter into written agreements governing the sharing and use of documents, materials and other information that are consistent with the provisions of this subdivision and subdivision (8) of this subsection.

(10) No waiver of any applicable privilege or claims of confidentiality in any documents, materials or other information shall occur as a result of disclosure to the commissioner or sharing authorized under subdivision (9) of this subsection.

(c) (1) The provisions of this subsection shall apply to opinions submitted by and supporting memoranda prepared and provided by appointed actuaries for policies and contracts in force on or after the operative date of the Valuation Manual, as set forth in section 2 of this act. The provisions of this subsection shall not apply to a society subject to section 38a-614, unless such society elects to use the standards pursuant to subdivision (9) of subsection (a) of section 38a-614.

(2) Every company with outstanding life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state shall annually submit the opinion of the appointed actuary as to whether the reserves and related actuarial items held in support of such 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 shall prescribe the specifics of such opinion and add any other items deemed to be necessary to its scope.

(3) (A) Every company with outstanding life insurance contracts, accident and health insurance contracts or deposit-type contracts in this state shall also include in the opinion required under subdivision (2) of this subsection, unless exempted by the Valuation Manual, an opinion of the same appointed actuary as to whether the reserves and related actuarial items held by the company in support of such policies and contracts, 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 such policies and contracts, make adequate provision for the company's obligations under such policies and contracts, including, but not limited to, the benefits under and expenses associated with such policies and contracts.

(B) Every appointed actuary that provides an opinion under this subsection shall prepare and provide to the company a memorandum that supports such opinion, in such form and substance as may be specified in the Valuation Manual and acceptable to the commissioner. If a company fails to provide a supporting memorandum at the request of the commissioner within the time period specified in the Valuation Manual or the commissioner determines that a supporting memorandum provided by a company fails to meet the standards prescribed by the Valuation Manual or is otherwise unacceptable to the commissioner, the commissioner may engage the services by employment or by contract of a qualified actuary at such company's expense to review such opinion and the basis for such opinion and to prepare the supporting memorandum required under this subdivision.

(4) Every opinion required under this subsection shall:

(A) Be submitted with the annual statement reflecting the valuation of such reserves for each year ending on or after December thirty-first of the year of the operative date of the Valuation Manual;

(B) Apply to all policies and contracts subject to subparagraph (A) of subdivision (3) of this subsection and any other actuarial liabilities as may be specified in the Valuation Manual; and

(C) Be based on standards adopted from time to time by the Actuarial Standards Board or its successor and on such additional standards as may be prescribed in the Valuation Manual.

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

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

(7) (A) For the purposes of this subdivision:

(i) "Confidential information" includes:

(I) A supporting memorandum submitted pursuant to subparagraph (B) of subdivision (3) of this subsection or subparagraph (B) of subdivision (3) of subsection (b) of this section and all workpapers, documents, materials, data and other information and copies thereof created, produced or obtained by or disclosed to the commissioner or any other person in connection with such memorandum;

(II) Except as provided in subparagraph (B)(iii) of this subdivision, all workpapers, documents, materials, data and other information and copies thereof created, produced or obtained by or disclosed to the commissioner or any other person in the course of an examination under subparagraph (B) of subdivision (2) of subsection (c) of section 2 of this act;

(III) All reports, workpapers, documents, materials, data and other information developed by a company in support of or in connection with the annual certification required under subparagraph (B) of subdivision (3) of subsection (m) of this section and all workpapers, documents, materials, data and other information and copies thereof created, produced or obtained by or disclosed to the commissioner or any other person in connection with such certification;

(IV) Any principle-based valuation report developed pursuant to subparagraph (C) of subdivision (3) of subsection (m) of this section and all workpapers, documents, materials, data and other information and copies thereof created, produced or obtained by or disclosed to the commissioner or any other person in connection with such report; and

(V) All workpapers, documents, materials, data and other information submitted pursuant to subsection (n) of this section and all workpapers, documents, materials, data and other information created or produced in connection with such submission, in each case that includes any potentially company-identifying or personally-identifiable information, that is obtained by or provided to the commissioner, and all workpapers, documents, materials, data and other information created, produced or obtained by or disclosed to the commissioner or any other person in connection with such submission.

(ii) "NAIC" and "regulatory agency" include their employees, agents, consultants and contractors.

(B) (i) Except as provided in subparagraphs (B)(iii) to (B)(vi), inclusive, of this subdivision, a company's confidential information shall (I) be confidential by law and privileged, (II) not be subject to disclosure under section 1-210, (III) not be subject to subpoena, and (IV) not be subject to discovery or admissible in evidence in any civil action in this state. The commissioner may use such confidential information in the furtherance of any regulatory or legal action brought as part of the commissioner's official duties.

(ii) Neither the commissioner nor any person who receives confidential information while acting under the authority of the commissioner shall be permitted or required to testify in any civil action concerning such confidential information.

(iii) If an examination report or other materials prepared in connection with an examination under section 38a-14 or 38a-14a are not held as confidential under said sections, an examination report under subparagraph (B) of subdivision (2) of subsection (c) of section 2 of this act or workpapers, documents, materials, data and other information and copies set forth in subparagraph (A)(i)(II) of this subdivision shall not be confidential information to the same extent as if such examination report under subparagraph (B) of subdivision (2) of subsection (c) of section 2 of this act or workpapers, documents, materials, data and other information and copies set forth in subparagraph (A)(i)(II) of this subdivision had been prepared under section 38a-14 or 38a-14a.

(iv) Any confidential information specified in subparagraph (A)(i)(I) or (A)(i)(IV) of this subdivision in the possession or control of the Insurance Department may be subject to subpoena for the purpose of defending an action for damages from the appointed actuary who prepared such supporting memorandum or principle-based valuation report by reason of an action required by this section or any regulations adopted thereunder.

(v) The commissioner may release any confidential information specified in subparagraph (A)(i)(I) or (A)(i)(IV) of this subdivision in the possession or control of the Insurance Department with the written consent of the company.

(vi) If any portion of a supporting memorandum submitted pursuant to subparagraph (B) of subdivision (3) of this subsection or a principle-based valuation report filed pursuant to subparagraph (C) of subdivision (3) of subsection (m) of this section is (I) referred to by the company in such company's marketing, (II) referred to by the company before a governmental agency other than a state insurance department, (III) publicly volunteered by such company, or (IV) released by such company to the news media, all portions of the memorandum or report shall no longer be confidential.

(C) To assist the commissioner in the performance of the commissioner's duties, the commissioner may:

(i) Share confidential information with (I) other state, federal and international regulatory agencies, (II) NAIC and its affiliates and subsidiaries, and (III) in the case of confidential information specified in subparagraphs (A)(i)(I) and (A)(i)(IV) of this subdivision, the Actuarial Board for Counseling and Discipline or its successor upon request from said board that such confidential information is required for the purpose of professional disciplinary proceedings, and state, federal and international law enforcement officials. The recipient of any such confidential information shared pursuant to this subparagraph shall agree, in writing, and shall have the legal authority to agree, to maintain the confidentiality and privileged status of any such confidential information in the same manner and to the same extent as required for the commissioner;

(ii) Receive workpapers, documents, materials, data and other information, including confidential and privileged workpapers, documents, materials, data and other information, from (I) NAIC or its affiliates or subsidiaries, (II) the Actuarial Board for Counseling and Discipline or its successor, and (III) regulatory and law enforcement officials of other states or jurisdictions. The commissioner shall maintain as confidential and privileged any workpapers, documents, materials, data or other information received with notice or the understanding that such workpapers, documents, materials, data or other information are confidential and privileged under the laws of the jurisdiction that is the source of the workpapers, documents, materials, data or other information; and

(iii) Enter into written agreements governing the sharing and use of workpapers, documents, materials, data and other information, that are consistent with the provisions of this subdivision.

(D) No waiver of any applicable privilege or claims of confidentiality in any confidential information shall occur as a result of disclosure to the commissioner or sharing authorized under subparagraph (C) of this subdivision.

(E) A privilege established under the law of any state or jurisdiction that is substantially similar to a privilege established under subparagraph (B) of this subdivision shall be available and enforced in any proceeding in, and in any court of, this state.

(d) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(d)**]** (2) Except as otherwise provided in subsections (e), (f) and (l) of this section, the minimum standard for the valuation of all such policies and contracts issued prior to the effective date specified in accordance with the provisions of subsection (h) of section 38-130e of the general statutes, revision of 1958, revised to 1981, shall be that provided by the laws in effect immediately prior to such date, except that the minimum standard for the valuation of annuities and pure endowments purchased prior to January 1, 1973, under group annuity and pure endowment contracts shall be the 1971 Group Annuity Mortality Table, or any modification of this table approved by the commissioner, and an interest rate of five per cent per annum. Except as otherwise provided in subsections (e), (f) and (l) of this section, the minimum standard for the valuation of all such policies and contracts issued on and after such effective date shall be the **[**commissioner's**]** commissioners' reserve valuation methods defined in subsections (g), (h) and (j) of this section, with four and one-half per cent interest **[**for all other such policies and contracts,**]** and the following tables: **[**(1)**]** (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' 1958 Standard Ordinary Mortality Table for such policies issued prior to the compliance date established by subdivision (11) of subsection (e) of section 38a-439, as amended by this act, provided that for any category of such policies issued on female risks, all 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 and for such policies issued on or after the compliance date established by subdivision (11) of subsection (e) of section 38a-439, **[**(A)**]** as amended by this act, (i) the Commissioners' 1980 Standard Ordinary Mortality Table, **[**or (B)**]** (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 (C)**]** (iii) on or after January 1, 2005, until January 1, 2009, at the election of the company for any one or more specified plans of life insurance issued on or after January 1, 2004, on the basis of the Commissioners' 2001 Standard Ordinary Mortality Table, except that with respect to such plans issued before April 1, 2005, such mortality table shall be used solely for the basis of valuation and nonforfeiture and shall not be used to increase the previously agreed required premium, **[**or (D)**]** (iv) issued on or after January 1, 2009, the Commissioners' 2001 Standard Ordinary Mortality Table, or **[**(E)**]** (v) any ordinary mortality table, adopted after 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such policies; **[**(2)**]** (B) for all industrial life insurance policies issued on the standard basis, excluding any disability and accidental death benefits in such policies, the Commissioners' 1961 Standard Industrial Mortality Table or any industrial mortality table, adopted after 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such policies; **[**(3)**]** (C) for total and permanent disability benefits in or supplementary to ordinary policies or contracts, 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 regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such policies. These tables shall, for active lives, be combined with a mortality table permitted for calculating the reserves for life insurance policies; **[**(4)**]** (D) for accidental death benefits in or supplementary to policies, the 1959 Accidental Death Benefits Table or any accidental death benefits table, adopted after 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such policies. These tables shall be combined with a mortality table permitted for calculating the reserves for life insurance policies; and **[**(5)**]** (E) for group life insurance, life insurance issued on the substandard basis and other special benefits, such tables as may be approved by the commissioner.

(e) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(e)**]** (2) Except as otherwise provided in subsection (f) of this section, the minimum standard for the valuation of all individual annuity and pure endowment contracts issued on or after the effective date as specified in accordance with the provisions of subsection (h) of section 38-130e of the general statutes, revision of 1958, revised to 1981, and for all annuities and pure endowments purchased on or after such effective date under group annuity and pure endowment contracts, shall be the **[**commissioners**]** commissioners' reserve valuation methods defined in subsections (g) and (h) of this section and the following tables and interest rates: **[**(1)**]** (A) For individual single premium immediate annuity contracts issued on or after such effective date, excluding any disability and accidental death benefits in such contracts, the 1971 Individual Annuity Mortality Table or any individual annuity mortality table, adopted after 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such contracts, or any modification of these tables approved by the commissioner, and seven and one-half per cent interest; **[**(2)**]** (B) for individual annuity and pure endowment contracts issued on or after such effective date, other than single premium immediate annuity contracts, excluding any disability and accidental death benefits in such contracts, the 1971 Individual Annuity Mortality

Table or any individual annuity mortality table, adopted after 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such contract, or any modification of these tables approved by the commissioner, 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 such annuity and pure endowment contracts; [(3)] (C) for all annuities and pure endowments purchased on or after such effective date 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 1980 by the National Association of Insurance Commissioners, that is approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54 for use in determining the minimum standard of valuation for such annuities and pure endowments, or any modification of these tables approved by the commissioner, and seven and one-half per cent interest.

(f) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(f) (1)] (2) The interest rates used in determining the minimum standard for the valuation of [(A) all life] the following shall be the calendar year statutory valuation interest rates as defined in this subsection: (A) Life insurance policies issued in a particular calendar year, on or after the compliance date established by subdivision (11) of subsection (e) of section 38a-439, [(B) all] as amended by this act; (B) individual annuity and pure endowment contracts issued in a particular calendar year on or after January 1, 1982; **[**, (C) all**]** (C) annuities and pure endowments purchased in a particular calendar year on or after January 1, 1982, under group annuity and pure endowment contracts; **[**,**]** and (D) the net increase, if any, in a particular calendar year after January 1, 1982, in amounts held under guaranteed interest contracts. **[**shall be the calendar year statutory valuation interest rates as defined in this subsection;**]**

[(2)**]** (3) The calendar year statutory valuation interest rates, I, shall be determined as follows and the results rounded to the nearest one-quarter of one per cent:

(A) For life insurance,

$$I = .03 + W(R_1 - .03) + \frac{W}{2}(R_2 - .09);$$

(B) 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,

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

Where R_1 is the lesser of R and .09,

R_2 is the greater of R and .09,

R is the reference interest rate defined in subdivision **[**(4)**]** (5) of this subsection and

W is the weighting factor defined in subdivision **[**(3)**]** (4) of this subsection.

(C) 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 subparagraph (B) of this subdivision, the formula for life insurance stated in subparagraph (A) of this subdivision 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 subparagraph (B) of this subdivision shall apply to annuities and guaranteed interest contracts with guarantee durations of ten years or less.

(D) 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 subparagraph (B) of this subdivision shall apply.

(E) For other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, valued on a change in fund basis, the formula for single premium immediate annuities stated in subparagraph (B) of this subdivision shall apply.

(F) 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 such life insurance policies shall be equal to the corresponding actual rate for the immediately preceding calendar year. For purposes of applying the foregoing, 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 for 1979 and shall be determined for each subsequent calendar year regardless of the compliance date established by subdivision (11) of subsection (e) of section 38a-439, as amended by this act;

[(3)**]** (4) The weighting factors referred to in the formulas stated in subdivision **[**(2)**]** (3) of this subsection are given in the following tables:

(A) 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

For life insurance, 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.

(B) 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

(C) Weighting factors for other annuities and for guaranteed interest contracts, except as stated in subparagraph (B) of this subdivision, shall be as specified in **[**tables (i), (ii) and (iii)**]** the tables in subparagraphs (C)(i), (C)(ii) and (C)(iii) of this subdivision according to the rules and definitions in **[**(iv), (v) and (vi)**]** subparagraphs (C)(iv), (C)(v) and (C)(vi) of this subdivision:

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

Guarantee Duration (Years)	Weighting Factor For Plan Type A	B	C
5 or less	.80	.60	.50
More than 5, not more than 10	.75	.60	.50

More than 10, 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 factors shown in **[**(i)**]** subparagraph (C)(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 **[**which**]** that do not guarantee interest rates on considerations received more than twelve months beyond the valuation date, the factors shown in **[**(i)**]** subparagraph (C)(i) of this subdivision or derived in **[**(ii)**]** subparagraph (C)(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 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 tables in this subparagraph **[**(C)**]** is defined as follows:

a. Plan Type A: At any time policyholder may withdraw funds only: (1) With an adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) as an immediate life annuity, or (4) no withdrawal permitted.

b. Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw funds only: (1) With an adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) without such adjustment but in installments over five years or more, or (3) no withdrawal permitted. 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.

c. Plan Type C: Policyholder may withdraw funds before expiration of interest rate guarantee in a single sum or installments over less than five years either: (1) Without adjustment to reflect changes in interest rates or asset values since receipt of the funds by the insurance company, or (2) subject only to a fixed surrender charge stipulated in the contract as a percentage of the fund.

(vi) 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 **[**must**]** shall be valued on an issue year basis. As used in this subsection, 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 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. 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 annuity or guaranteed interest contract is the calendar year valuation interest rate for the year of the change in fund;

[(4)] (5) The reference interest rate referred to in subdivision [(2)] (3) of this subsection shall be defined as follows: [a.] (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 thirtieth of the calendar year next preceding the year of issue, of [Moody's Corporate Bond Yield Average-Monthly Average Corporates] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; [b.] (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 thirtieth of the calendar year of issue or year of purchase of [Moody's Corporate Bond Yield Average-Monthly Average Corporates] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; [c.] (C) for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, valued on a year of issue basis, except as stated in [b. above] subparagraph (B) of this subdivision, with guarantee duration 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 Average Corporates] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; [d.] (D) for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, valued on a year of issue basis, except as stated in [b. above] subparagraph (B) of this subdivision, with guarantee duration 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] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; [e.] (E) 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] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; [f.] (F) for other annuities with cash settlement options and guaranteed interest contracts with cash settlement options, valued on a change in fund basis, except as stated in [b. above] subparagraph (B) of this subdivision, 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] the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.

[(5)] (6) In the event that [Moody's Corporate Bond Yield Average-Monthly Average Corporates] the monthly average of the composite yield on seasoned corporate bonds 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] the monthly average of the composite yield on seasoned corporate bonds as published by

Moody's Investors Service, Inc. is no longer appropriate for the determination of the reference interest rate, an alternative method for determination of the reference interest rate, which is adopted by the National Association of Insurance Commissioners and approved by regulations adopted by the commissioner in accordance with the provisions of chapter 54, may be substituted.

(g) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(g)**]** (2) Except as otherwise provided in subsections (h), (j) and (l) of this section, reserves according to the **[**commissioner's**]** 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 **[**(1) over (2), as follows: (1)**]** subparagraph (A) of this subdivision over subparagraph (B) of this subdivision, as follows: (A) 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 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; [, and (2)] and (B) a net one year term premium for such benefits provided for in the first policy year provided that for any life insurance policy issued on or after January 1, 1985, 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] 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 subsection (j) of this section, be the greater of the reserve as of such policy anniversary calculated as described in this subsection and the reserve as of such policy anniversary calculated as described in this subsection but with the value defined in [subdivision (1)] subparagraph (A) of this [subsection] subdivision being reduced by fifteen per cent of the amount of such excess first year premium, 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, the policy being assumed to mature on such date as an endowment, and 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 subsections (e) and (f) of this section shall be used. Reserves according to the [commissioners] commissioners' reserve valuation method for: [(A)] (i) Life insurance policies providing for a varying amount of insurance or requiring the payment of varying premiums; [(B)] (ii) group annuity and pure endowment contracts purchased under a retirement plan or plan of deferred compensation, 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 now or hereafter amended; **[**(C)**]** (iii) disability and accidental death benefits in all policies and contracts; and **[**(D)**]** (iv) 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 this subsection.

(h) This subsection shall apply, unless otherwise provided in title 38a, to all annuity and pure endowment contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act, other than group annuity and pure endowment contracts purchased under a retirement plan or plan of deferred compensation, 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 now or hereafter amended. Reserves according to the **[**commissioners**]** commissioners' annuity reserve method for benefits under annuity or pure endowment contracts, excluding any disability and accidental death benefits in such 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, provided for by such 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 such contract, that become payable prior to the end of such 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 such contracts for determining guaranteed benefits. The valuation considerations are the portions of the respective gross considerations applied under the terms of such contracts to determine nonforfeiture values.

(i) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(i) (1)**]** (2) In no event shall a company's aggregate reserves for all life insurance policies, excluding disability and accidental death benefits, issued on or after the effective date as specified in accordance with the provisions of subsection (h) of section 38-130e of the general statutes, revision of 1958, revised to 1981, be less than the aggregate reserves calculated in accordance with the methods set forth in this subsection and subsections (f), (g) **[**, (i)**]** and (k) of this section, and the mortality table or tables and rate or rates of interest used in calculating nonforfeiture benefits for such policies. **[**;**]**

[(2) in**]** (3) In no event shall the aggregate reserves for all policies, contracts and benefits be less than the aggregate reserves determined by the qualified actuary to be necessary to render the opinion required **[**by**]** under subdivision (2) of subsection (b) of this section. **[**;**]**

[(3) reserves**]** (4) Reserves for any category of policies, contracts or benefits as established by the commissioner may be calculated, at the option of the company, according to any standards which produce greater aggregate reserves for such category than those calculated according to the minimum standard herein provided, but the rate or rates of interest used for policies and contracts, other than annuity and pure endowment contracts, shall not be **[**higher**]** greater than the corresponding rate or rates of interest used in calculating any nonforfeiture benefits provided for **[**therein;**]** in the policies or contracts.

[(4) any**]** <u>(5) Any</u> such company which at any time shall have adopted any standard of valuation producing greater aggregate reserves than those calculated according to the minimum standard herein provided may, with the approval of the commissioner, adopt any lower standard of valuation, but not lower than the minimum herein provided; provided, for the purposes of this subsection, the holding of additional reserves previously determined by a qualified actuary to be necessary to render the opinion required **[**by**]** <u>under subdivision (2) of</u> subsection (b) of this section shall not be deemed to be the adoption of a higher standard of valuation.

<u>(j) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.</u>

[(j)**]** <u>(2)</u> If in any contract year the gross premium charged by any life insurance company on any policy or contract, in force as of or written after the effective date as specified in accordance with the provisions of subsection (h) of section 38-130e of the general statutes, revision of 1958, revised to 1981, is less than the valuation net premium for the policy or contract calculated by the method used in calculating the reserve thereon but using the most recent minimum valuation standards of mortality and rate of interest, the minimum reserve required for such 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 such policy or contract, or the reserve calculated by the method actually used for such policy or contract but using the minimum standards of mortality and rate of interest in effect in the year that the policy or contract was issued 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 (d) and (f) of this section. For any life insurance policy issued on or after January 1, 1985, 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 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 foregoing provisions of this subsection shall be applied as if the method actually used in calculating the reserve for such policy were the method described in subsection (g) of this section. The minimum reserve at each policy anniversary of such policy shall be the greater of the minimum reserve calculated in accordance with subsection (g) of this section and the minimum reserve calculated in accordance with this subsection.

(k) (1) The provisions of this subsection shall apply, unless otherwise provided in title 38a, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

[(k)**]** (2) In the case of any plan of life insurance **[**which**]** that 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**]** that is of such nature that the minimum reserves cannot be determined by the methods described in subsections (g), (h) **[**,**]** and (j) of this section, the reserves **[**which**]** that are held under any such plan **[**must**]** shall be appropriate in relation to the benefits and the pattern of premiums for that plan, and be computed by a method **[**which**]** that is consistent with the principles of this standard valuation law, as determined by regulations adopted by the commissioner in accordance with the provisions of chapter 54.

(l) The commissioner shall adopt regulations in accordance with the provisions of chapter 54 containing the minimum standards applicable to the valuation of health insurance plans issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act.

(m) (1) The provisions of this subsection shall apply to policies and contracts issued on or after the operative date of the Valuation Manual, as set forth in section 2 of this act. The provisions of this subsection shall not apply to a society subject to section 38a-614, unless such society elects to use the standards pursuant to subdivision (9) of subsection (a) of section 38a-614.

(2) For policies or contracts subject to a principle-based valuation as specified in the Valuation Manual, a company shall establish reserves using a principle-based valuation that:

(A) Quantifies the benefits, guarantees and funding associated with such 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 such policies or contracts. For policies or contracts with significant tail risk, the principle-based valuation shall reflect appropriately adverse conditions to quantify the tail risk;

(B) Incorporates assumptions, risk analysis methods, 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;

(C) Incorporates assumptions derived in one of the following ways: (i) The assumption is prescribed in the Valuation Manual; or (ii) for an assumption not prescribed in the Valuation Manual, (I) the assumption is established utilizing the company's available experience, to the extent such experience is relevant and statistically credible, or (II) to the extent company data is not available, relevant or statistically credible, the assumption is established utilizing other relevant and statistically credible experience; and

(D) Provides margins for uncertainty including adverse deviation and estimation error, such that the greater the uncertainty, the larger the margin and resulting reserves.

(3) A company using principle-based valuation for one or more policies or contracts subject to subdivision (2) of subsection (a) of this section shall:

(A) Establish procedures for corporate governance and oversight of the actuarial valuation function consistent with those described in the Valuation Manual;

(B) Provide to the commissioner and such company's board of directors an annual certification of the effectiveness of the internal controls with respect to the principle-based valuation. Such controls shall be designed to ensure that all material risks inherent in the liabilities and associated assets subject to such valuation are included in the valuation and that such valuations are made in accordance with the Valuation Manual. The certification shall be based on the internal controls in place as of the end of the preceding calendar year; and

(C) Develop and file with the commissioner upon request a principle-based valuation report that complies with standards prescribed in the Valuation Manual.

(4) A principle-based valuation may include a prescribed formulaic reserve component.

(n) (1) The provisions of this subsection shall apply to policies and contracts issued on or after the operative date of the Valuation Manual, as set forth in section 2 of this act. The provisions of this subsection shall not apply to a society subject to section 38a-614, unless such society elects to use the standards pursuant to subdivision (9) of subsection (a) of section 38a-614.

(2) A company shall submit mortality, morbidity, policyholder behavior or expense experience and other data as prescribed in the Valuation Manual.

[(m)**]** (o) (1) The provisions of sections 38a-77 and 38a-433, as amended by this act, shall apply to policies issued by a company before the date of its election to comply with section 38-130e of the general statutes, revision of 1958, revised to 1981, or January 1, 1981, whichever occurred first.

(2) The provisions of section 38-130e of the general statutes, revision of 1958, revised to 1981, shall apply to policies issued by a company on and after the date of such election or on and after January 1, 1981, whichever occurred first, and before October 1, 1981.

Sec. 2. (NEW) (*Effective from passage*) (a) (1) The operative date of the Valuation Manual, as defined in subsection (a) of section 38a-78 of the general statutes, as amended by this act, shall be January first of the first calendar year following the first July first as of which all of the following have occurred:

(A) The Valuation Manual has been adopted by NAIC, as defined in subsection (a) of section 38a-78 of the general statutes, as amended by this act, by an affirmative vote of at least forty-two NAIC members or three-quarters of NAIC members voting, whichever is greater;

(B) The Standard Valuation Law, as amended by NAIC 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 written premiums as reported in the following annual statements submitted to NAIC for 2008: Life insurance, accident and health insurance, health insurance or fraternal annual statements; and

(C) The Standard Valuation Law, as amended by NAIC in 2009, or legislation including substantially similar terms and provisions has been enacted by at least forty-two of the following fifty-five jurisdictions: The fifty states of the United States, the District of Columbia, the United States Virgin Islands, the Commonwealth of Puerto Rico, American Samoa and Guam.

(2) After all the events set forth in subdivision (1) of this subsection have occurred, the commissioner shall certify that all such events have occurred and notify companies of such certification and the effective date of the operation of the Valuation Manual.

(b) (1) Unless a later effective date has been specified, a change to the Valuation Manual shall apply on January first of the first calendar year following the date as of which both of the following have occurred:

(A) The change to the Valuation Manual has been adopted by NAIC by an affirmative vote of at least three-quarters of NAIC members voting but not less than a majority of the total NAIC membership; and

(B) The change to the Valuation Manual has been adopted by NAIC members representing jurisdictions totaling greater than seventy-five per cent of the direct written premiums, as reported in the most recent annual statements submitted to NAIC prior to the vote in subparagraph (A) of this subdivision, for the following: Life insurance, accident and health insurance, health insurance or fraternal annual statements.

(2) After both events set forth in subdivision (1) of this subsection have occurred, the commissioner shall certify that both such events have occurred and notify companies of such certification, the change to

the Valuation Manual and the effective date of such change.

(c) (1) The Valuation Manual shall specify:

(A) The minimum valuation standards for policies or contracts subject to subparagraph (C) of subdivision (2) of subsection (a) of section 38a-78 of the general statutes, as amended by this act, as follows: (i) For life insurance contracts, other than annuity contracts, the commissioners' reserve valuation method, and (ii) for annuity contracts, the commissioners' annuity reserve valuation method. The Valuation Manual shall specify minimum reserves for all other policies or contracts subject to subparagraph (C) of subdivision (2) of subsection (a) of section 38a-78 of the general statutes, as amended by this act;

(B) The specific policies or contracts or types of policies or contracts subject to this section that are required to establish reserves using a principle-based valuation as set forth in subdivision (2) of subsection (m) of section 38a-78 of the general statutes, as amended by this act, and the minimum valuation standards consistent with such requirements;

(C) For policies or contracts subject to a principle-based valuation, (i) requirements for the format of reports submitted to the commissioner pursuant to subparagraph (C) of subdivision (3) of subsection (m) of section 38a-78 of the general statutes, as amended by this act, including the information deemed necessary to determine if the valuation is appropriate and in compliance with this section, (ii) the assumptions prescribed for risks over which the company does not have significant control or influence, and (iii) the procedures for the corporate governance and oversight of the actuarial function and a process for appropriate waiver or modification of such procedures;

(D) For policies or contracts not subject to a principle-based valuation, the minimum valuation standard, which shall (i) be consistent with the minimum valuation standard in effect prior to the operative date of the Valuation Manual, or (ii) develop reserves that quantify the benefits, guarantees and 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;

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

(F) The data a company is required to submit under subdivision (5) of subsection (m) of section 38a-78 of the general statutes, as amended by this act, the form of such data and to whom such data shall be submitted and other information that may be required, including data analyses and reporting of such analyses.

(2) (A) 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 commissioner, in compliance with this subsection or subsection (m) of section 38a-78 of the general statutes, as amended by this act, with respect to such requirement, the commissioner shall direct a company to comply with the minimum valuation standards prescribed by regulations adopted in accordance with the provisions of chapter 54 of the general statutes.

(B) The commissioner may engage the services by employment or by contract of a qualified actuary, at a company's expense, to perform an actuarial examination of the company and provide an opinion on the appropriateness of any reserve assumption or method used by the company or to review and provide an opinion on the company's compliance with any requirement set forth in this subsection, subdivision (2) of subsection (a) of section 38a-78 of the general statutes, as amended by this act, or subsection (c), (m) or (n) of section 38a-78 of the general statutes, as amended by this act. The commissioner may rely on the opinion, regarding requirements set forth in this subsection, subdivision (2) of subsection (a) of section 38a-78 of the general statutes, as amended by this act, or subsection (c), (m) or (n) of section 38a-78 of the general statutes, as amended by this act, of a qualified actuary engaged by the insurance regulatory official of another state, district or territory of the United States.

(C) The commissioner may require a company to change any assumption or method that the commissioner deems necessary to comply with the requirements of this subsection, subdivision (2) of subsection (a) of section 38a-78 of the general statutes, as amended by this act, or subsection (c), (m) or (n) of section 38a-78 of the general statutes, as amended by this act, or the Valuation Manual, and the company shall adjust its reserves as required by the commissioner.

Sec. 3. Subsection (e) of section 38a-439 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(e) The provisions of this subsection shall apply to all policies issued on or after the compliance date established by subdivision (11) of this subsection. (1) Except as provided in subdivision (7) of this subsection, the adjusted premiums for any policy shall be calculated on an annual basis and shall be such uniform percentage of the respective premiums specified in the policy for each policy year, excluding amounts payable as extra premiums to cover impairments or special hazards and also excluding any uniform annual contract charge or policy fee specified in the policy in a statement of the method used in calculating the cash surrender values and paid-up nonforfeiture benefits, that the present value, at the date of issue of the policy, of all adjusted premiums shall be equal to the sum of: (A) The then present value of the future guaranteed benefits provided for by the policy; (B) one per cent of either the amount of insurance, if the insurance be uniform in amount, or the average amount of insurance at the beginning of each of the first ten policy years; and (C) one hundred twenty-five per cent of the nonforfeiture net level premium as hereinafter defined, provided that in applying the percentage specified in this subparagraph, no nonforfeiture net level premium shall be deemed to exceed four per cent of either the amount of insurance, if the insurance be uniform in amount, or the average amount of insurance at the beginning of each of the first ten policy years. The date of issue of a policy for the purpose of this subsection shall be the date as of which the rated age of the insured is determined; (2) the nonforfeiture net level premium shall be equal to the present value, at the date of issue of the policy, of the guaranteed benefits divided by the present value, at such date of issue, of an annuity of one per annum payable on the date of issue of the policy and on each anniversary of such policy on which a premium becomes due; (3) in the case of policies that, on a basis guaranteed in the policy, provide for unscheduled changes in benefits or premiums, or that provide an option for changes in benefits or premiums other than a change to a new policy, the adjusted premiums and present values shall initially be calculated on the assumption that future benefits and premiums do not change from those stipulated at the date of issue of the policy. At the time of any such change in the benefits or premiums the future adjusted premiums, nonforfeiture net level premiums and present values shall be recalculated on the assumption that future benefits and premiums do not change from those stipulated by the policy immediately after the change; (4) except as otherwise provided in subdivision (7) of this subsection, the recalculated future adjusted premiums for any such policy shall be the uniform percentage of the respective future premiums specified in the policy for each policy year, excluding amounts payable as extra premiums to cover impairments and special hazards, and also excluding any uniform annual contract charge or policy fee specified in the policy in a statement of the method used in calculating the cash surrender values and paid-up nonforfeiture benefits, that the present value, at the time of change to the newly defined benefits or premiums, of all such future adjusted premiums shall be equal to the excess of (A) the sum of: (i) The then present value of the future guaranteed benefits provided for by the policy and (ii) the additional expense allowance, if any, over (B) the then cash surrender value, if any, or present value of any paid-up nonforfeiture benefit under the policy; (5) the additional expense allowance, at the time of the change to the newly defined benefits or premiums, shall be the sum of (A) one per cent of the excess, if positive, of the average amount of insurance at the beginning of each of the first ten policy years subsequent to the change over the average amount of insurance prior to the change at the beginning of each of the first ten policy years subsequent to the time of the most recent previous change, or, if there has been no previous change, the date of issue of the policy; and (B) one hundred twenty-five per cent of the increase, if positive, in the nonforfeiture net level premium; (6) the recalculated nonforfeiture net level premium shall be equal to the amount obtained by dividing (A) by (B) where (A) equals the sum of (i) the nonforfeiture net level premium applicable prior to the change, multiplied by the present value of an annuity of one per annum payable on each anniversary of the policy on or subsequent to the date of change on which a premium would have become due had the change not occurred, and (ii) the present value of the increase in future guaranteed benefits provided for by the policy, and (B) equals the present value of an annuity of one per annum payable on each anniversary of the policy on or subsequent to the date of change on which a premium becomes due; (7) notwithstanding any other provisions of this subsection, in the case of a policy issued on a substandard basis that provides reduced graded amounts of insurance so that, in each policy year, such policy has the same tabular mortality cost as an otherwise similar policy issued on the standard basis that provides higher uniform amounts of insurance, adjusted premiums and present values for such substandard policy may be calculated as if it were issued to provide such higher uniform amounts of insurance on the standard basis; (8) all adjusted premiums and present values referred to in this section shall be calculated: (A) (i) For all policies of ordinary insurance on the basis of the Commissioners' 1980 Standard Ordinary Mortality Table or at the election of the company, for any one or more specified plans of life insurance, on the basis of the Commissioners' 1980 Standard Ordinary Mortality Table with ten-year select mortality factors, or (ii) on or after January 1, 2005, until January 1, 2009, at the election of the company for any one or more specified plans of life insurance issued on or after January 1, 2004, on the basis of the Commissioners' 2001 Standard Ordinary Mortality Table, except that with respect to such plans issued before April 1, 2005, such mortality table shall be used solely for the basis of valuation and nonforfeiture and shall not be used to increase the previously agreed required premium, **[;]** or (iii) for all policies issued on or after January 1, 2009, and prior to the operative date of the Valuation Manual, as set forth in section 2 of this act, on the basis of the Commissioners' 2001 Standard Ordinary Mortality Table, or (iv) for all policies issued on or after the operative date of the Valuation Manual, as set forth in section 2 of this act, on the basis of the Commissioners' Standard Mortality Table, as defined in the Valuation Manual, to determine nonforfeiture values; (B) for all policies of industrial insurance issued (i) prior to the operative date of the Valuation Manual, as set forth in section 2 of this act, on the basis of the Commissioners' 1961 Standard Industrial Mortality Table, or (ii) on or after the operative date of the Valuation Manual, as set forth in section 2 of this act, on the basis of the Commissioners' Standard Mortality Table, as defined in the Valuation Manual, to determine nonforfeiture values. As used in this subdivision and subdivision (9) of this subsection, "Valuation Manual" has the same meaning as provided in subsection (a) of section 38a-78, as amended by this act; (C) for all policies issued in a particular calendar year, on the basis of a rate of interest not exceeding the nonforfeiture interest rate as defined in this subsection, for policies issued in that calendar year, provided, that: (i) At the option of the company, calculations for all policies issued in a particular calendar year may be made on the basis of a rate of interest not exceeding the nonforfeiture interest rate, as defined in this subsection, for policies issued in the immediately preceding calendar year; (ii) under any paid-up nonforfeiture benefit, including any paid-up dividend additions, any cash surrender value available, whether or not required by subsection (a) of this section, shall be calculated on the basis of the mortality table and rate of interest used in determining the amount of such paid-up nonforfeiture benefit and paid-up dividend additions, if any; (iii) a company may calculate the amount of any guaranteed paid-up nonforfeiture benefit including any paid-up additions under the policy on the basis of an interest rate no lower than that specified in the policy for calculating cash surrender values; (iv) in calculating the present value of any paid-up term insurance with accompanying pure endowment, if any, offered as a nonforfeiture benefit, the rates of mortality assumed may be not more than those shown in the Commissioners' 1980 Extended Term Insurance Table for policies of ordinary insurance and not more than the Commissioners' 1961 Industrial Extended Term Insurance Table for policies of industrial insurance; (v) for insurance issued on a substandard basis, the calculation of any such adjusted premiums and present values may be based on appropriate modifications of the aforementioned tables; (vi) any ordinary mortality tables, adopted after 1980 by the National Association of Insurance Commissioners that are approved by regulations adopted by the commissioner, in accordance with the provisions of chapter 54, for use in determining the minimum nonforfeiture standard may be substituted for the Commissioners' 1980 Standard Ordinary Mortality Table with or without ten-year select mortality factors or the Commissioners' 1980 Extended Term Insurance Table; (vii) any industrial mortality tables, adopted after

1980 by the National Association of Insurance Commissioners that are approved by regulations adopted by the commissioner, in accordance with the provisions of chapter 54, for use in determining the minimum nonforfeiture standard may be substituted for the Commissioners' 1961 Standard Industrial Mortality Table or the Commissioners' 1961 Industrial Extended Term Insurance Table; (9) the nonforfeiture interest rate per annum for any policy issued in a particular calendar year shall be, (A) for policies issued prior to the operative date of the Valuation Manual, as set forth in section 2 of this act, equal to one hundred twenty-five per cent of the calendar year statutory valuation interest rate for such policy as defined in the standard valuation law, rounded to the nearest one quarter of one per cent, except that for policies issued on or after January 1, 2016, such interest rate shall not be less than four per cent if the Valuation Manual is not operative as of said date, and (B) for policies issued on or after the operative date of the Valuation Manual, as set forth in section 2 of this act, as defined in the Valuation Manual; (10) notwithstanding any provision of the general statutes, any refiling of nonforfeiture values or their methods of computation for any previously approved policy form that involves only a change in the interest rate or mortality table used to compute nonforfeiture values shall not require refiling of any other provisions of such policy form; (11) on or after October 1, 1981, but prior to January 1, 1989, any company may file with the commissioner a written notice of its election to comply with the provisions of this subsection on or after a specified date and the provisions of this subsection shall apply to such company on or after such specified date, except that on or after January 1, 2005, but prior to January 1, 2009, any company may file with the commissioner a written notice of its election to comply with the provisions of this subsection on or after a specified date with respect to the Commissioners' 2001 Standard Ordinary Mortality Table and the provisions of this subsection shall apply to such company. The provisions of this subsection shall apply to policies issued by any company on or after January 1, 1989, except that the provisions of this subsection with respect to the Commissioners' 2001 Standard Ordinary Mortality Table shall apply to policies issued by any company on or after January 1, 2009, unless otherwise specified.

Sec. 4. Section 38a-79a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

Sections 38a-77, **[**and**]** 38a-78, as amended by this act, and section 2 of this act shall be known as the "Standard Valuation Law".

Sec. 5. Section 38a-433 of the general statutes is amended by adding subsection (f) as follows (*Effective from passage*):

(NEW) (f) This section shall apply to policies issued by a company before the date of its election to comply with section 38-130e of the general statutes, revision of 1958, revised to 1981, or January 1, 1981, whichever occurred first.

Approved June 12, 2014