

The Connecticut General Assembly

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Memorandum

To: Legislative Regulation Review Committee
From: Legislative Commissioners' Office
Committee Meeting Date: October 24, 2017

Regulation No:	2017-18
Agency:	Insurance Department
Subject Matter:	Synthetic Guaranteed Investment Contracts
Statutory Authority: (copy attached)	38a-8, 38a-78, 38a-433, 38a-459

	Yes or No
Mandatory	N
Federal Requirement	N
Permissive	Y

For the Committee's Information:

The statement of purpose for the proposed regulation does not meet the requirements of Committee Rule 10(b) for such a statement of purpose.

Substantive Concerns:

1. On page 2, in section 38a-459-2(12), it is unclear what is meant by "knowledgeable buyer" and "knowledgeable seller" as the term "knowledgeable" is undefined.

2. On page 3, in section 38a-459-2(18), it is unclear what is meant by "licensed fiduciary services provider" because "licensed fiduciary services provider" is an undefined term.
3. On page 8, in the third line of section 38a-459-8(f), it is unclear what is meant by "the spot rate supportable by the expected return from the segregated portfolio assets". The term "spot rate", as defined in section 38a-459-2(23), refers to three different rates: (1) A treasury-based spot rate; (2) an index spot rate; and (3) a blended spot rate. The reference to "spot rate" contained in section 38a-459-8(f), therefore, should be replaced with a specific reference to one or more of the types of spot rate defined in section 38a-459-2(23).
4. On pages 8, 10, 20 and 22, in sections 38a-459-8(g)(3), 38a-459-8(n)(5), 38a-459-14(f)(3) and 38a-459-17(h)(4), respectively, it is unclear what is meant by "prudent estimate of future plan sponsor withdrawals" as such term is not defined. It is unclear if the defined term "prudent estimate assumption" is intended to be used in said sections.
5. On page 13, in section 38a-459-11(23), it is unclear what is meant by "best estimate assumption" because "best estimate assumption" is undefined. Additionally, in said subdivision, it is unclear what is meant by "that risk." The relevant "risk" should be described in greater detail for clarity.
6. On page 13, in section 38a-459-11(23), it is unclear what is meant by "that risk." The relevant "risk" should be described in greater detail for clarity.
7. On page 15, in section 38a-459-12(d)(5), and on page 23, in section 38a-459-17(h)(5), it is unclear what is meant by "conservatively" because "conservatively" is undefined.
8. On page 20, in section 38a-459-14(f)(3), it is unclear what is meant by "The sum of these present values" because the relevant "present values" are unspecified. The relevant "present values" should be specified.

Technical Corrections:

1. Throughout the regulations, when any change is made to an existing word, the entire existing word should be bracketed and a new underlined word should be added after the closing bracket. For example, on page 10, in section 38a-459-8(n)(2), "[D] describe" should be "[Describe] describe" for proper form.
2. Throughout the regulations, a space should be inserted between a closing bracket and the immediately following underlined text for proper form. For example, on page 6, in section 38a-459-3(c)(10), "[(8)] (10)" should be "[(8)] (10)".
3. On page 1, in the introductory language for Section 1, "Sections 38a-459-2 to 38a-459-3, inclusive," should be "Sections 38a-459-2 and 38a-459-3" for proper form.

4. On page 1, in section 38a-459-2(3), "inclusive," should be inserted after "38a-459-9" for proper form. Also, in the eighth line of said section, "sections" should be "[sections] section" for proper form.
5. On page 2, throughout section 38a-459-2(12), "fair market value" should be ' "fair market value" ' for consistency.
6. On page 2, in section 38a-459-2(14)(A)(ii), "law and regulation" should be "[law] laws and regulations" for clarity.
7. On page 3, in section 38a-459-2(18), the space between the closing bracket and "licensed" should not be underlined for proper form.
8. On page 3, in section 38a-459-2(23), ' "Spot rate" ' should be bracketed, the designator "(A)" should be deleted, and ' "Treasury-based spot rate" ' should appear on the same line as designator (23) for proper form.
9. On page 3, in the seventh line of section 38a-459-2(23)(A), ' "spot rate" ' should be ' "treasury-based spot rate" ' for accuracy.
10. On page 3, in section 38a-459-2(23)(B), the designator "(B)" should be "(24)", "(x) the" should be "the (A)", an underlined comma should be inserted after "(for a given time benefit payment under one year)" and "(y) the" should be "(B)" for proper form.
11. On page 3, in section 38a-459-2(23)(C), the designator "(C)" should be "(25)", "%" should be "percent", "(i) the" should be "the (A)", "(ii) the" should be "(B)" and in the sixth and eighth lines of said section, "blended spot rate" should be ' "blended spot rate" ' for consistency.
12. On pages 3 and 4, in section 38a-459-2, designators "(24)" to "(28)", inclusive, should be "[(24)] (26)", "[(25)] (27)", "[(26)] (28)", "[(27)] (29)" and "[(28)] (30)", respectively, for consistency.
13. On page 4, in section 38a-459-2(26), "of America" should be deleted for consistency.
14. On page 4, in section 38a-459-3(a), "[to do life insurance business] as a life insurance company" should be "to do life insurance business" for accuracy.
15. On page 4, in section 38a-459-3(b), "having been deemed" should be deleted for clarity.
16. On page 5, in the first line of section 38a-459-3(c)(7), "such as" should be bracketed, and "e.g." should be inserted after the closing bracket for consistency.
17. On page 6, in section 38a-459-3(c)(8), "for contract issuance" should be "issuance of a contract to" for clarity.

18. On page 6, in section 38a-459-3(c)(9), "the" should be inserted after "of" for consistency.
19. On page 6, in the sixth line of section 38a-459-3(c)(10)(B), "and" should be deleted for proper form.
20. On page 6, in section 38a-459-3(c)(11), the brackets and underlined period should be deleted for proper form.
21. On page 6, in section 38a-459-3(c)(10), designator "(12)" should be inserted after the closing bracket for proper form; and "subsection (c) of this section" should be "[subsection] subsections (c) and (d) of this section" for accuracy.
22. On page 6, in section 38a-459-3, subsection (d) should be re-written as follows for clarity:

(d) The insurance commissioner may request that an insurance company supplement the information that the insurance company filed with the commissioner pursuant to subsection (c) of this section. The insurance company shall promptly file such supplemental information with the commissioner and such information shall be sufficiently detailed to minimize the need for any additional requests for information by the commissioner.
23. On pages 6 and 7, in section 38a-459-8(b)(1), designator "(A)" should be inserted after "(1)", the second sentence of subdivision (1) should begin a new subparagraph, designator "(B)" should be inserted before such subparagraph, "The above notwithstanding" should be "Notwithstanding the provisions of subparagraph (A) of this subdivision" and "of the" should be replaced with "of a" for clarity.
24. On page 7, in section 38a-459-8(d)(2), "At all times" should be deleted for clarity; "[T]he" should be "The" for proper form; and "at all times" should be inserted before "hedged" for clarity.
25. On page 7, in section 38a-459-8(d)(2)(B), "that" and "that are" should be deleted for consistency.
26. On page 7, in section 38a-459-8(d)(2)(C), "that are" should be deleted for consistency.
27. On page 8, in the first line of section 38a-459-8(f), "The" should be bracketed and "For purposes of this section, the" should be inserted before "minimum value", and in the sixth line, "actuary's" should be [actuary's] actuarial for consistency.
28. On page 8, in section 38a-459-8(g)(2), an opening bracket should be inserted after "employer-sponsored plan", and the opening bracket before "that is" should be deleted, for proper form; an underlined opening parenthesis should be inserted before "for example", "for example" should be "e.g." and an underlined closing paren should be inserted after "transfer" for consistency.

29. On page 8, in section 38a-459-8(g)(3), the separate paragraphs should be combined into a single paragraph and "the pooled fund" should be "such pooled fund" for consistency; designator "(i)" before "known plan sponsor", the comma after "withdrawals" and designator "(ii)" before "a prudent estimate" should be deleted for consistency; "A" should be "An insurance company shall determine a", "shall be determined" should be replaced by an underlined comma and "that shall be" should be inserted before "equal" for clarity; the colon after "of" should be deleted, "(i) the expected return" should be "the (i) expected return", the comma after "assets" should be deleted and "the blended spot" should be "blended spot" for consistency; "subsection (g)(2) of this section" should be "subdivision (2) of this subsection" for consistency; "such modeled" should be deleted, and "modeled under this subdivision" should be inserted after "termination payments" for clarity.
30. On page 9, in section 38a-459-8(k)(1) and (5)(A), "his or her" should be bracketed, and "the valuation actuary's" should be inserted after the closing bracket for consistency.
31. On page 9, in section 38a-459-8(k)(4), "An" should be "[a] An" for proper form and "section 38a-459-8(l) of the Regulations of Connecticut State Agencies" should be bracketed, and "subsection (l) of this section" should be inserted after the closing bracket for consistency.
32. On page 9, in section 38a-459-8(l)(1), "section 38a-459-8(a) of the Regulations of Connecticut State Agencies" should be bracketed, and "subsection (a) of this section" should be inserted after the closing bracket for consistency.
33. On page 9, in sections 38a-459-8(l)(3) and (4), "section 38a-459-8(f) of the Regulations of Connecticut State Agencies" should be bracketed, and "subsection (f) of this section" should be inserted after the closing bracket for consistency.
34. On page 10, in section 38a-459-8(n)(2), "Clearly [D]describe" should be "[Describe] Clearly describe" for proper form; and "would include" should be "includes" for clarity.
35. On page 10, in sections 38a-459-8(n)(3) to (5), inclusive, "Clearly [D]describe" should be "[Describe] Clearly describe" for proper form.
36. On page 11, in section 38a-459-11(6), ", inclusive," should be inserted after "38a-459-20" for proper form.
37. On page 12, in section 38a-459-11(9), "e.g.," should be inserted before "(GIC)" for clarity.
38. On page 12, in section 38a-459-11(17), an underlined period should be inserted after "reserves" for proper form.
39. On page 12, in section 38a-459-11(18), "of this subdivision" should be inserted after both "subparagraph (C)" and "subparagraph (A) or (B)" for consistency.

40. On page 13, in section 38a-459-11(19), "the" after the colon should be "[the] (A) The" for proper form and clarity; "or the currency" should be "[or] (B) the currency" for clarity; and "(C)" should be inserted after "or" for clarity.
41. On page 13, in section 38a-459-11(23), '"Prudent estimate" assumption' should be '"Prudent estimate assumption"' for clarity.
42. On page 13, in section 38a-459-11(26), '"Spot rate"' should be bracketed for clarity; and designator "(A)" should be deleted, and '"Treasury-based spot rate"' should appear on the same line as designator "(26)", for consistency.
43. On page 13, throughout section 38a-459-11(26)(A), '"spot rate"' should be '"treasury-based spot rate"' for accuracy.
44. On page 13, in section 38a-459-11(26)(B), designator "(B)" should be "(27)", "(x) the" should be "the (A)", an underlined comma should be inserted after "(for a given time benefit payment under one year)" and "(y) the" should be "(B)" for consistency.
45. On page 14, in section 38a-459-11(26)(C), designator "(C)" should be "(28)", "%" should be "percent", "(i) the" should be "the (A)", "(ii) the" should be "(B)" and "blended spot rate" should be '"blended spot rate"' for consistency.
46. On page 14, in section 38a-459-11, designators "(26)" to "(28)", inclusive, should be "[(26)] (29)", "[(27)] (30)" and "[(28)] (31)", respectively, for consistency.
47. On page 14, in section 38a-459-11(29), the space between "opinion" and "pursuant" should not be underlined for proper form.
48. On page 15, in section 38a-459-12(d)(6)(G), designator "(i)" should be inserted after the colon for clarity; "a" after the colon should be "A" for proper form; "for contract issuance" should be "issuance of a contract to" and "and (ii)" should be inserted after the semicolon for clarity; and "insurer" should be "insurance company" for consistency.
49. On page 16, in section 38a-459-12(e), the space between the closing bracket and "such" should not be underlined for proper form; "such as" should be "(e.g.,", "that anticipated" should be "the investment portfolio anticipated" and an underlined paren should be added after "by the plan of operations" for clarity; and "rates" should be "rate" for proper form.
50. On page 17, in section 38a-459-13, the brackets around designator "(D)" should be deleted for proper form.
51. On page 18, in section 38a-459-14(c), "that" should be "equal to the percentage deduction" for clarity.
52. On page 19, in section 38a-459-14(f)(1), the space between designator "(1)" and "For" should not be underlined for proper form; an underlined comma should be

- inserted after "assets", and the opening parenthesis after "assets" should be deleted, for clarity; "that" should be deleted for proper form; the closing parenthesis after "rates" should be deleted for clarity; "prescribed" should be "described" for consistency; "38a-459-12(c)(5)" should be "38a-459-12(d)(5)" for accuracy; the second sentence should begin a new subdivision, designator "(2)" should be inserted before "In", the comma after "benefits" should be an underlined colon, designator "(A)" should be inserted before "all" and should begin a new subparagraph, "all" should be bracketed and "All" should be inserted after the closing bracket for clarity.
53. On page 19, in section 38a-459-14(f)(2), designator "(2)" should be "(B)" for clarity.
 54. On pages 19 and 20, in section 38a-459-14(f)(3), the separate paragraphs should be combined into a single paragraph, designator "(3)" should be "(C)" and "that pooled fund" should be "such pooled fund" for consistency; "A" should be "An insurance company shall determine a", "shall be determined" should be ", consistent with subdivision (1) of this subsection, that shall be", designator "(i)" should be inserted before "expected return" and "or the blended spot rate" should be "or (ii) blended spot rate" for clarity; "This" should be "The" for consistency; "subdivision (2) of this subsection" should be "subparagraph (B) of this subdivision" for accuracy; "such modeled" should be deleted, and "modeled under this subparagraph" should be inserted after "termination payments", for clarity.
 55. On page 20, in section 38a-459-15(b), "held" should be inserted after "liabilities" for clarity.
 56. On page 20, in the introductory language for Section 4, "Sections 38a-459-17 to 38a-459-18, inclusive," should be "Sections 38a-459-17 and 38a-459-18" for proper form.
 57. On page 21, in section 38a-459-17(a), "a[n]" should be "[an] a" for proper form.
 58. On page 21, in section 38a-459-17(c), "are" should be "is" for proper form.
 59. On page 21, in section 38a-459-17(d), "his or her" should be "the commissioner's" for consistency; and "such" should be "an" for consistency.
 60. On page 21, in section 38a-459-17(f)(1), "his or her" should be "the valuation actuary's" for consistency.
 61. On page 21, in section 38a-459-17(f)(3), "data, procedures or assumptions regarding" should be inserted after "e.g.," for consistency, an underlined parenthesis should be inserted after "scenarios" and the underlined parenthesis after "Agencies" should be deleted for clarity.
 62. On page 21, in section 38a-459-17(f)(4), "An opinion" should be "[A] An opinion" for proper form.

63. On page 21, in section 38a-459-17(f)(5)(D), "38a-459-14(f)" should be "[38-459-14(f)] 38a-459-14(f)" for proper form.
64. On page 22, in section 38a-459-17(h)(2), "would include" should be "includes" for clarity.
65. On page 22, in section 38a-459-17(h)(4), "38a-459-14(f)(3)" should be "38a-459-14(f)(2)(C)" for consistency.
66. Section 38a-459-1 of the Regulations of Connecticut State Agencies should be added to the regulation and its citation to section 38a-459-2(24) should be changed to section 38a-459-2(26) for accuracy.

Recommendation:

<p>Approval in whole with technical corrections with deletions with substitute pages Disapproval in whole or in part <input checked="" type="checkbox"/> Rejection without prejudice</p>

Reviewed by: Brian F. Valko / Bradford M. Towson

Date: October 12, 2017

Sec. 38a-8. (Formerly Sec. 38-4). Duties of commissioner. Regulations. Sharing and maintenance of confidential information. Use of outside experts. Program re electronic rate and form filings. (a) The commissioner shall see that all laws respecting insurance companies and health care centers are faithfully executed and shall administer and enforce the provisions of this title. The commissioner shall have all powers specifically granted, and all further powers that are reasonable and necessary to enable the commissioner to protect the public interest in accordance with the duties imposed by this title. The commissioner shall pay to the Treasurer all the fees that the commissioner receives. The commissioner may administer oaths in the discharge of the commissioner's duties.

(b) The commissioner shall recommend to the General Assembly changes that, in the commissioner's opinion, should be made in the laws relating to insurance.

(c) In addition to the specific regulations that the commissioner is required to adopt, the commissioner may adopt such further regulations, in accordance with the provisions of chapter 54, as are reasonable and necessary to implement the provisions of this title.

(d) The commissioner shall develop a program of periodic review to ensure compliance by the Insurance Department with the minimum standards established by the National Association of Insurance Commissioners for effective financial surveillance and regulation of insurance companies operating in this state. The commissioner shall adopt regulations, in accordance with the provisions of chapter 54, pertaining to the financial surveillance and solvency regulation of insurance companies and health care centers as are reasonable and necessary to obtain or maintain the accreditation of the Insurance Department by the National Association of Insurance Commissioners. The commissioner shall maintain as confidential any confidential documents or information received from the National Association of Insurance Commissioners, or the International Association of Insurance Supervisors, or any documents or information received from state or federal insurance, banking or securities regulators or similar regulators in a foreign country that are confidential in such jurisdictions. The commissioner may share any information, including confidential information, with the National Association of Insurance Commissioners, the International Association of Insurance Supervisors, or state or federal insurance, banking or securities regulators or similar regulators in a foreign country, provided the commissioner determines that such entities agree to maintain the same level of confidentiality in their jurisdictions as is available in this state. At the expense of a domestic, alien or foreign insurer, the commissioner may engage the services of attorneys, actuaries, accountants and other experts not otherwise part of the commissioner's staff as may be necessary to assist the commissioner in the financial analysis of the insurer, the review of the insurer's license applications, and the review of transactions within a holding

company system involving an insurer domiciled in this state. No duties of a person employed by the Insurance Department on November 1, 2002, shall be performed by such attorney, actuary, accountant or expert.

(e) The Insurance Commissioner shall establish a program to reduce costs and increase efficiency through the use of electronic methods to transmit documents, including policy form and rate filings, to and from insurers and the Insurance Department. The commissioner may sit as a member of the board of a consortium organized by or in association with the National Association of Insurance Commissioners for the purpose of coordinating a system for electronic rate and form filing among state insurance departments and insurers.

(f) The commissioner shall maintain as confidential information obtained, collected or prepared in connection with examinations, inspections or investigations, and complaints from the public received by the Insurance Department, if such records are protected from disclosure under federal law or state statute or, in the opinion of the commissioner, such records would disclose, or would reasonably lead to the disclosure of: (1) Investigative information the disclosure of which would be prejudicial to such investigation, until such time as the investigation is concluded; or (2) personal, financial or medical information concerning a person who has filed a complaint or inquiry with the Insurance Department, without the written consent of the person or persons to whom the information pertains.

Sec. 38a-78. (Formerly Sec. 38-130e). Ascertainment of reserves for insurance policies and contracts issued prior to and on or after operative date of NAIC Valuation Manual. Actuarial opinions and memoranda. Confidentiality. (a)(1)(A) The provisions of this subdivision shall apply, unless otherwise provided in this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a. As used in this section, "Valuation Manual" means the manual of valuation instructions adopted by NAIC as set forth in section 38a-78a 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. In calculating such reserves, the commissioner may use group methods and approximate averages for fractions of a year or otherwise. In lieu of the valuation of the reserves required of any foreign or alien company, the commissioner may accept any 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 (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 38a-78a. 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 38a-78a:

(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 38a-78a;

(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 38a-78a.

(b) (1) The provisions of this subsection shall apply, unless otherwise provided in this title, 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 38a-78a, for policies and contracts issued prior to said operative date.

(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 regulations adopted in accordance with the provisions of chapter 54 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 commissioner shall define by regulation the specifics of such opinion and add any other items 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 actuary determines necessary in order to render the opinion required under this subsection.

(5) 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 31, 1991;

(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

(C) Be based on standards adopted from time to time by the Actuarial Standards Board and on such additional standards as the commissioner may prescribe by regulations adopted in accordance with the provisions of chapter 54.

(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 regulatory official of another state if the commissioner determines that the opinion reasonably meets the requirements applicable to a company domiciled in this state.

(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) (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 38a-78a. 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 38a-78a;

(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 38a-78a 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 38a-78a 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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(2) Except as otherwise provided in subsections (e), (f) and (1) 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 commissioners' reserve valuation methods defined in subsections (g), (h) and (j) of this section, with four and one-half per cent interest and the following tables: (A) For all ordinary policies of life insurance issued on the standard basis, excluding any disability and accidental death benefits in such policies, the Commissioners' 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, 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, (i) the Commissioners' 1980 Standard Ordinary Mortality Table, (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, (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, (iv) issued on or after January 1, 2009, the Commissioners' 2001 Standard Ordinary Mortality Table, or (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; (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; (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; (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 (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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(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' reserve valuation methods defined in subsections (g) and (h) of this section and the following tables and interest rates: (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; (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; (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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(2) The interest rates 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) 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) individual annuity and pure endowment contracts issued in a particular calendar year on or after January 1, 1982; (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.

(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 (5) of this subsection and

W is the weighting factor defined in subdivision (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;

(4) The weighting factors referred to in the formulas stated in subdivision (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 the tables in subparagraphs (C)(i), (C)(ii) and (C)(iii) of this subdivision according to the rules and definitions in 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 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 that do not guarantee interest rates on considerations received more than twelve months beyond the valuation date, the factors shown in subparagraph (C)(i) of this subdivision or derived in 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 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 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;

(5) The reference interest rate referred to in subdivision (3) of this subsection shall be defined as follows: (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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; (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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; (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 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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; (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 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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; (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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.; (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 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 the monthly average of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc.

(6) In the event that 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 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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(2) Except as otherwise provided in subsections (h), (j) and (l) 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 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 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 (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' 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 subparagraph (A) of this 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' reserve valuation method for: (i) Life insurance policies providing for a varying amount of insurance or requiring the payment of varying premiums; (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; (iii) disability and accidental death benefits in all policies and contracts; and (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 this title, to all annuity and pure endowment contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a, 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' 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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(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) 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.

(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 under subdivision (2) of subsection (b) of this section.

(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 greater than the corresponding rate or rates of interest used in calculating any nonforfeiture benefits provided for in the policies or contracts.

(5) Any 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 under subdivision (2) of subsection (b) of this section shall not be deemed to be the adoption of a higher standard of

valuation.

(j) (1) The provisions of this subsection shall apply, unless otherwise provided in this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(2) 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 this title, to policies and contracts issued prior to the operative date of the Valuation Manual, as set forth in section 38a-78a.

(2) In the case of any plan of life insurance 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 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 that are held under any such plan shall be appropriate in relation to the benefits and the pattern of

premiums for that plan, and be computed by a method 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 38a-78a.

(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 38a-78a. 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 38a-78a. 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.

(o) (1) The provisions of sections 38a-77 and 38a-433 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. 38a-433. (Formerly Sec. 38-154a). Life insurance or annuities payable in fixed or variable amounts. Accumulation of funds pursuant to funding agreements. (a) A domestic life insurance company, including for the purposes of this section all domestic fraternal benefit societies which operate on a legal reserve basis, may establish one or more separate accounts and may allocate thereto amounts, including without limitation proceeds applied under optional modes of settlement or under dividend options, to provide for life insurance or life or period-certain annuities, and benefits incidental thereto, payable in fixed or variable amounts or both, or to accumulate funds which are paid to or held by such company pursuant to section 38a-459, subject to the following: (1) The income, gains and

losses, realized or unrealized, from assets allocated to a separate account shall be credited to or charged against the account, without regard to other income, gains or losses of the company; (2) except as may be provided with respect to reserves for guaranteed benefits and funds referred to in subdivision (3) of this subsection, amounts allocated to any separate account and accumulations thereon may be invested and reinvested in any class of loans and investments, and such loans and investments shall not be included in applying the limitations provided in sections 38a-102 to 38a-102h, inclusive; (3) except with the approval of the commissioner and under such conditions as to investments and other matters as he may prescribe, which shall recognize the guaranteed nature of the benefits provided, reserves for (A) benefits guaranteed as to dollar amount and duration, and (B) funds guaranteed as to principal amount or stated rate of interest shall not be maintained in a separate account; (4) unless otherwise approved by the commissioner, assets allocated to a separate account shall be valued at their market value on the date of valuation, or if there is no readily available market, then as provided under the terms of the contract or the rules or other written agreement applicable to such separate account, provided, that unless otherwise approved by the commissioner, the portion, if any, of the assets of such separate account equal to the company's reserve liability with regard to the guaranteed benefits and funds referred to in subdivision (3) of this subsection, shall be valued in accordance with the rules otherwise applicable to the company's assets; (5) amounts allocated to a separate account in the exercise of the power granted by this section shall be owned by the company, and the company shall not be, nor hold itself out to be, a trustee with respect to such amounts. If, and to the extent so provided under the applicable contracts, that portion of the assets of any such separate account equal to the reserves and other contract liabilities with respect to such account shall not be chargeable with liabilities arising out of any other business the company may conduct; (6) no sale, exchange or other transfer of assets may be made by a company between any of its separate accounts or between any other investment account and one or more of its separate accounts unless, in case of a transfer into a separate account, such transfer is made solely to establish the account or to support the operation of the contracts with respect to the separate account to which the transfer is made, and unless such transfer, whether into or from a separate account, is made (A) by a transfer of cash, or (B) by a transfer of securities having a readily determinable market value, provided that such transfer of securities is approved by the commissioner. The commissioner may approve other transfers among such accounts if, in his opinion, such transfers would not be inequitable; (7) to the extent such company deems it necessary to comply with any applicable federal or state laws, such company, with respect to any separate account, including without limitation any separate account which is a management investment account or a unit investment trust, may provide for persons having an interest therein appropriate voting and other rights and special procedures for the conduct or the business of such account, including without limitation special rights and procedures relating to investment policy, investment advisory services, selection of independent public

accountants, and the selection of a committee, the members of which need not be otherwise affiliated with such company, to manage the business of such account. The provisions of this subsection shall apply notwithstanding any inconsistent provision in the charter of any such domestic life insurance company or in the general statutes.

(b) Any contract providing benefits payable in variable amounts delivered or issued for delivery in this state shall contain a statement of the essential features of the procedures to be followed by the insurance company in determining the dollar amount of such variable benefits. Any such contract under which the benefits vary to reflect investment experience, including a group contract and any certificate in evidence of variable benefits issued thereunder, shall state that such dollar amount will so vary and shall contain on its first page a statement to the effect that the benefits thereunder are on a variable basis.

(c) Except to the extent permitted under section 38a-459, no domestic, foreign or alien insurance company or fraternal benefit society shall deliver or issue for delivery in this state any such contracts or annuities until the Insurance Commissioner licenses it to do so. Such annuities or other contracts and the sale thereof, and such insurance companies, shall be subject to the exclusive regulatory authority of the Insurance Commissioner and shall not be subject to The Connecticut Securities Act.

(d) Except for sections 38a-78 and 38a-440 in the case of a variable annuity contract and section 38a-78 in the case of a variable life insurance policy and except as otherwise provided herein, all pertinent provisions of sections 38a-61, 38a-77, 38a-78, 38a-81, 38a-82, 38a-284, 38a-287, 38a-430 to 38a-454, inclusive, and 38a-458 and, with respect to fraternal benefit societies, sections 38a-595 to 38a-626, inclusive, 38a-631 to 38a-640, inclusive, and 38a-800, shall apply to separate accounts and contracts relating thereto. The reserve liability for variable contracts shall be established in accordance with actuarial procedures that recognize the variable nature of the benefits provided and any mortality guarantees.

(e) The commissioner shall have power to enforce the provisions of this section, and may adopt, in accordance with the provisions of chapter 54, such regulations as he deems necessary for that purpose, covering, but not limited to, the form of life insurance or annuity contracts providing for benefits payable in fixed or variable amounts by domestic life insurance companies or domestic fraternal benefit societies operating on a legal reserve basis; separation of the assets of contract accounts; accounting of the income, gains and losses of contract accounts; distribution of the proceeds of accounts; sale, exchange or transfer of assets between accounts; guaranteed benefits; investment and reinvestment of contract or account assets, loans or investments; reserve liabilities; valuation of account assets; voting and other rights and special procedures affecting accounts, including investment policy, advisory services and the management, generally, of accounts.

(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.

Sec. 38a-459. (Formerly Sec. 38-33a). Funding agreements by domestic life insurance companies. Establishment of companies' obligations. Segregation of moneys. (a) Notwithstanding any inconsistent provision in its charter, any domestic life insurance company may enter into written agreements (1) to fund benefits under any employee benefit plan as defined in the Employee Retirement Income Security Act of 1974, as amended from time to time, or any similar plan maintained in a foreign country, (2) to fund the activities of any organization exempt from taxation under Section 501(c) of the Internal Revenue Code of 1986, or any subsequent corresponding internal revenue code of the United States, as from time to time amended, or of any similar organization in any foreign country, (3) to fund any program of the government of the United States, the government of any state, foreign country or political subdivision thereof, or any agency or instrumentality thereof, (4) to fund any agreement providing for periodic payments in satisfaction of a claim, or (5) to fund any program of an institution which has assets in excess of twenty-five million dollars. Under such agreements, the company's obligations may be established by reference to (A) amounts deposited with the company and allocated to such company's general account or to one or more separate accounts in accordance with subsection (b) or (c) of this section or pursuant to section 38a-433, or (B) an asset portfolio that is not owned or possessed by such company. The issuance or delivery of a funding agreement in this state shall constitute doing an insurance business in this state.

(b) After adoption of a resolution by its board of directors and certification thereof to the Insurance Commissioner, any amounts which are paid to or held by such company in accordance with the terms of such written agreements may be allocated to one or more separate accounts. In connection with such separate accounts any such company may issue, subject to the terms of such written agreement, individual or group policies or contracts with benefits payable in fixed or variable amounts. The income, if any, and gains or losses, realized or unrealized, on each such account may be credited to or charged against the amount allocated to such account in accordance with such agreement, without regard to the other income, gains or losses of the company. Notwithstanding any inconsistent provision in its charter or in any section of the general statutes, the amounts allocated to such accounts and accumulations thereon may be invested and reinvested in any class of loans and investments specified in such agreement, and such loans and investments shall not be included in applying the limitations provided in sections 38a-102 to 38a-102h, inclusive. Amounts allocated by an insurance company to separate accounts in the exercise of the power granted by this section shall be owned by the company, and the company shall not be, or hold itself out to be, a trustee in respect to such amounts, except that such amounts

shall not be chargeable with liabilities arising out of any other business the company may conduct.

(c) Reserves for fixed retirement benefits, or other benefits incidental thereto, in the course of payment, may be maintained in a separate account with the approval of the Insurance Commissioner and under such conditions as he may prescribe, except that any such reserves which are attributable to contributions by a self-employed individual on his own behalf, or to contributions subject to Section 403(b) of the Internal Revenue Code of 1986, or any subsequent corresponding internal revenue code of the United States, as from time to time amended, shall not be maintained in a separate account.