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Synthetic Guaranteed Investment Contracts

Sec. 38a-459-1. Scope and application

Sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies prescribe the terms and conditions in this State under which life insurance companies may issue group annuity contracts and other agreements that in whole or in part establish the insurance company's obligation by reference to a segregated portfolio of assets that is not owned by the insurance company; the essential operational features of the segregated portfolio of assets; and the reserve requirements for these group annuity contracts and agreements. In addition, sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies apply to that portion of a group annuity contract or other agreement described in section 38a-459-2(24) of the Regulations of Connecticut State Agencies and issued by a life insurance company functioning as an accounting record for an accumulation fund and having benefit guarantees relating to a principal amount and levels of interest at a fixed rate of return specified in advance. The fixed rates of return shall be constant over the applicable rate periods, and may reflect prior and current market conditions with respect to the segregated portfolio but may not reference future changes in market conditions. Any contract that has been approved by the insurance commissioner prior to June 1, 2002 need not be re-filed with the insurance commissioner.

(Adopted effective June 1, 2002)

Sec. 38a-459-2. Definitions

As used in sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies:

(1) "Account assets" means the assets in the segregated portfolio plus any assets held in the general account or a separate account to meet the asset maintenance requirements.

(2) "Actuarial opinion and memorandum" means the opinion and memorandum of the valuation actuary required pursuant to section 38a-459-8(f) of the Regulations of Connecticut State Agencies.

(3) "Affirmatively approved" means approval of an insurance company's plan of operation for a class of contracts containing the form of contract under review, after the plan of operation associated with the class of contracts has been reviewed by the insurance company's domiciliary insurance department, and the plan of operation has been found to be in compliance with requirements substantially similar to those contained in sections 38a-459-1 to 38a-459-9 of the Regulations of Connecticut State Agencies by the domiciliary insurance department. Affirmatively approved does not mean approval as a result of an expiration of the time for review, such as when a plan of operation is "deemed approved" as set forth in sections 38a-459-3(c) or 38a-459-4(b) of the Regulations of Connecticut State Agencies.

(4) "Affiliate" means "affiliate" as defined in section 38a-1 of the Connecticut General Statutes.

(5) "Appointed actuary" means the qualified actuary appointed or retained either directly by or by the authority of the board of directors through an executive officer of the insurance company to prepare the annual statement of actuarial opinion for the insurance company as a whole pursuant to section 38a-78 of the Connecticut General Statutes.

(6) "Asset maintenance requirement" means the requirement to maintain assets to fund contract benefits in accordance with section 38a-459-8(a) of the Regulations of Connecticut State Agencies.

(7) "Class of contracts" means the set of all contracts to which a given plan of operation pertains.

(8) "Contract value record" means an accounting record, provided by the contract in relation to a segregated portfolio of assets, that is credited with a fixed rate of return over regular periods, and that is used to measure the extent of the insurance company's obligation to the contract holder. The fixed rate of return credited to the contract value record is determined by means of a crediting rate formula or declared at the inception of the contract and valid for the entire term of the contract.

(9) "Crediting rate formula" means a mathematical formula used to calculate the fixed rate of return credited to the contract value record during any rate period and based in part upon the difference between the contract value record and the market value record amortized over an appropriate period. The fixed rate of return calculated by means of this formula may reflect prior and current market conditions with respect to the segregated portfolio, but shall not be based on future changes in market conditions.

(10) "Date of filing," with respect to a filing for approval of a contract form, means the date the form is filed pursuant to section 38a-8-14 of the Regulations of Connecticut State Agencies.

(11) "Duration" means, with respect to the segregated portfolio assets or guaranteed contract liabilities, a measure of price sensitivity to changes in interest rates, such as the Macaulay duration or option-adjusted duration.

(12) "Fair market value" means a reasonable estimate of the amount that a buyer of an asset would be willing to pay, and a seller of an asset would be willing to accept, for the asset without duress in an arm's length transaction. In the case of a publicly traded security, the fair market value is the price at which the security is traded or, if no price is available, a price that appropriately reflects the latest bid and asked prices for the security. In the case of a debt instrument that is not publicly traded, the fair market value is the discounted present value of the asset calculated at a reasonable discount rate. For all other non-publicly traded assets, fair market value shall be determined in accordance with valuation practices customarily used within the financial industry.

(13) "Guaranteed minimum benefits" means contract benefits on a specified date that shall be either:

(A) A principal guarantee, with or without a fixed minimum interest rate guarantee, related to the segregated portfolio;

(B) An assurance as to the future investment return or performance of the segregated portfolio; or

(C) The fair market value of the segregated portfolio, to the extent that the fair market value of the assets determines the contract holder's benefits.

(14) "Hedging instrument" means:

(A)(i) An interest rate futures agreement or foreign currency futures agreement, an option to purchase or sell an interest rate futures agreement or foreign currency futures agreement, or any option to purchase or sell a security or foreign currency, used in a bona fide hedging transaction; or

(ii) A financial agreement or arrangement entered into with a broker, dealer, or bank qualified under applicable federal or state securities or banking law, in connection with investments in one or more securities in order to reduce the risk of changes

in market valuation or to create a synthetic investment that, when added to the portfolio, reduces the risk of changes in market valuation.

(B) An instrument shall not be considered a hedging instrument or a part of a bona fide hedging transaction if it is purchased in conjunction with another instrument where the effect of the combined transaction is an increase in the portfolio's exposure to market risk.

(15) ''Investment guidelines'' means a set of written guidelines, established in advance by the person with investment authority over the segregated portfolio, to be followed by the investment manager. The guidelines shall include a description of:

(A) The segregated portfolio's investment objectives and limitations;

(B) The investment manager's degree of discretion;

(C) The duration, asset class, quality, diversification, and other requirements of the segregated portfolio; and

(D) The manner in which derivative instruments may be used, if at all, in the segregated portfolio.

(16) ''Investment manager'' means the person (including the contract holder) responsible for managing the assets in the segregated portfolio in accordance with the investment guidelines in a fiduciary capacity to the owner of the assets.

(17) ''Market value record'' means an accounting record provided by the contract to reflect the fair market value of the segregated portfolio.

(18) ''Permitted custodial institution'' means a bank, trust company, or other corporate entity providing trust or custodial services.

(19) ''Plan of operation'' means a written plan meeting the requirements of section 38a-459-3(c) of the Regulations of Connecticut State Agencies.

(20) ''Qualified actuary'' means an individual who meets the qualification standards set forth in section 38a-53-1 of the Regulations of Connecticut State Agencies.

(21) ''Rate period'' means the period of time during which the fixed rate of return credited to the contract value record is applicable between crediting rate formula adjustments.

(22) ''Segregated portfolio'' means:

(A) A portfolio or sub-portfolio of assets to which the contract pertains that is held in a custody or trust account by the permitted custodial institution and identified on the records of the permitted custodial institution as special custody assets held for the exclusive benefit of the retirement plans or other entities on whose behalf the contract holder holds the contract; and

(B) Any related cash or currency received by the permitted custodial institution for the account of the contract holder and held in a deposit account for the exclusive benefit of the retirement plans or other entities on whose behalf the contract holder holds the contract.

(23) ''Spot rate'' corresponding to a given time of benefit payment means the yield on a zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at that time, or the zero-coupon yield implied by the price of a representative sampling of coupon-bearing, non-callable, non-indexed, and non-prepayable United States government obligations in accordance with a formula set forth in the plan of operation. If a zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at the time of payment does not exist, then the ''spot rate'' for such benefit payment shall be the yield on the zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at the date closest to the benefit payment or the yield determined through a methodology set forth in the plan of

operation designed to reach a comparable result. To the extent that guaranteed contract liabilities are denominated in the currency of a foreign country rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency acceptable to the insurance commissioner and are supported by investments denominated in the currency of the foreign country, the spot rate may be determined by reference to substantially similar obligations of the government of the foreign country. For liabilities other than those described in this subdivision, the spot rate shall be determined on a basis mutually agreed upon by the insurance company and the insurance commissioner.

(24) ''Synthetic guaranteed investment contract'' or ''contract'' means a group annuity contract or other agreement that in whole or in part establishes the insurance company's obligations by reference to a segregated portfolio of assets that is not owned by the insurance company.

(25) ''Unilateral contract termination event'' means an event allowing the insurance company to unilaterally and immediately terminate the contract without future liability or obligation to the contract holder.

(26) ''United States government obligation'' means a direct obligation issued, assumed, guaranteed or insured by the United States or by an agency or instrumentality of the United States government.

(27) ''Valuation actuary'' means the appointed actuary or, alternatively, a qualified actuary designated by the appointed actuary to render the actuarial opinion. Written documentation of any such designation shall be on file at the insurance company and available for review by the insurance commissioner upon request.

(28) ''Withdrawal hierarchy'' means a protocol establishing the order of payment of amounts payable from the segregated portfolio and other funding arrangements other than at contract termination.

(Adopted effective June 1, 2002)

Sec. 38a-459-3. Financial requirements and plan of operation for synthetic guaranteed investment contracts

(a) A contract shall not be delivered or issued for delivery in this state unless the issuing insurance company is licensed to do life insurance business in this state pursuant to section 38a-41 of the Connecticut General Statutes and is financially qualified under the provisions of subsection (b) of this section. In addition, a domestic insurance company shall not deliver or issue for delivery, either in this state or outside this state, and an affiliate of a domestic insurance company shall not issue for delivery in this state a contract belonging to a specific class of contracts unless the insurance company has satisfied the requirements of subsection (c) of this section with respect to that class.

(b) An insurance company is financially qualified under this section if its most recent statutory financial statements reflect at least $1 billion in admitted assets or $100 million in capital and surplus, and its risk-based capital results do not trigger a regulatory action level event as set forth in section 38a-72-4 of the Regulations of Connecticut State Agencies. In lieu of the requirements in the preceding sentence, the insurance company may be required to satisfy such other financial qualification requirements set forth by the insurance commissioner as necessary or appropriate in a particular case to protect the insurance company's policyholders or the public.

(c) A domestic insurance company satisfies the requirements of this section with respect to a class of contracts if the insurance company has filed a plan of operation pertaining to the class of contracts, together with copies of the forms of contract in the class, with the insurance commissioner and the filing of the plan of operation

has been approved or has not been disapproved within the sixty-day period following the date of filing, in which event the plan of operation shall be deemed approved. An affiliate of a domestic insurance company satisfies the requirements of this section with respect to a class of contracts if the insurance company has filed a plan of operations pertaining to the class of contracts, together with copies of forms of the contracts in the class, with the insurance commissioner and the filing has been approved, has not been disapproved, or the insurance commissioner has not provided to the affiliate in writing a detailed listing of all additional information necessary to make a determination on the filing within the thirty-day period following the date of the filing, in which event the plan of operations shall be deemed approved. If additional information is requested, the affiliate satisfies the requirements of this section once it has submitted a response to the insurance commissioner that to the best of the affiliate's knowledge and belief is responsive to the insurance commissioner's request and the filing, along with the response, has been approved or has not been disapproved within the thirty-day period following the date the response has been submitted, in which event the plan of operations shall be deemed approved. The plan of operation for a class of contracts shall describe the financial implications for the insurance company of the issuance of contracts in the class, and shall include at least the following:

(1) A statement that the plan of operation will be administered in accordance with the requirements prescribed by the insurance commissioner pursuant to sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies, along with a statement that the insurance company shall comply with the plan of operation in its administration of the contract;

(2) A statement describing the methods and procedures used to value statutory liabilities for purposes of section 38a-459-8 of the Regulations of Connecticut State Agencies;

(3) A description of the criteria used by the insurance company in approving the investment manager for the segregated portfolio of assets associated with a contract in the class, if the investment manager is an entity other than the insurance company or its wholly owned subsidiary;

(4) A description of the insurance company's requirement for reports concerning the assets in each segregated portfolio and transactions involving the assets, and a description of how the insurance company can use the information in a report to determine that the segregated portfolio is being managed in accordance with its investment guidelines. The insurance company shall require that the report be prepared no less frequently than quarterly, and include a complete statement of segregated portfolio holdings and their fair market value;

(5) A statement of the anticipated financial results for one or more sample contracts from the class of contracts, showing at a minimum the projected contract value records, the applicable fixed rate or rates of return, and the projected market value records, describing how the investments in the segregated portfolio reflect provision for benefits insured by the contract and how the contract value and market values and the rates of return may be affected by changes in the investment returns of the segregated portfolio and reasonably anticipated deposits to and withdrawals from the segregated portfolio by the contract holder, as well as any advances made by the insurance company to the contract holder. The sample contracts shall be chosen to reasonably represent the range of results that could be expected from possible combinations of contract provisions of all contracts within the class. The statement shall include at least three hypothetical return scenarios (level, increasing, and

decreasing) and for each of these scenarios, at least three withdrawal scenarios (zero, moderate, and high) shall be modeled. The insurance commissioner may require additional scenarios to fully understand the risks under the class of contracts. The period covered by the statement shall be the greater of five years or the minimum period the insurance company has to underwrite the risk;

(6) A statement that all contracts in the class of contracts satisfy the requirements regarding unilateral contract terminations of section 38a-459-7 of the Regulations of Connecticut State Agencies, together with a description of all termination events, discontinuation triggers and options, notice requirements, corrective action procedures, all other contract safeguards, and the procedures to be followed when a unilateral contract termination event occurs;

(7) A description of the allowable investment parameters (such as objectives, asset classes, quality, duration, and diversification requirements applied to the assets held within the segregated portfolio) to be reflected in the investment guidelines applicable to each contract issued in the class to which the submitted plan of operation applies; and a description of the procedures that shall be followed by the insurance company in evaluating the appropriateness of any specific investment guidelines submitted by the contract holder. If the insurance company chooses to operate a contract in accordance with investment guidelines not meeting the criteria established pursuant to this subdivision, the non-conforming set of investment guidelines shall be filed with the insurance commissioner in accordance with the filing requirements of this subsection;

(8) An unqualified opinion by a qualified actuary with expertise in such matters as to the adequacy of the consideration charged by the insurance company for the risks it has assumed with respect to the contracts in the class to which the plan of operation applies. A statement that the actuarial opinion and memorandum required pursuant to section 38a-459-8 of the Regulations of Connecticut State Agencies, with respect to the class of contracts to which the plan of operation applies, includes:

(A) If a payment has been made by the insurance company in the prior reporting period under a contract in the class, the amount of aggregate risk charges, i.e., the consideration charged by the insurance company for the risks it has assumed under the contract (net of administrative expenses, i.e., the amount of insurance company overhead or expense that is directly or indirectly allocable to a contract) for contracts in the class, and the aggregate amount of any losses incurred; and

(B) An inventory, by class of contracts, of all material events that could have, but did not, trigger a unilateral contract termination event by the insurance company during the prior reporting period and which have not been cured during the time period allowed for curing under the contract;

(9) A description of the withdrawal hierarchy, if any; and

(10) A statement that a review of the plan of operation by the insurance commissioner may necessitate requests for information pursuant to subsection (c) of this section.

(Adopted effective June 1, 2002)

Sec. 38a-459-4. Required contract provisions and filing requirements for synthetic guaranteed investment contracts

(a) A contract may not be delivered or issued for delivery in this state unless the contract satisfies the requirements of this subsection and the issuing insurance company has satisfied the requirements of subsection (b) of this section with respect to the contract. The contract shall:

(1) Provide that the assets to which the contract pertains and for which a contract value record is established will be maintained in a segregated portfolio of a permitted custodial institution;

(2) Grant the insurance company the right to perform audits and inspections of assets held in the segregated portfolio from time to time upon reasonable notice to the permitted custodial institution;

(3) Provide that the insurance company will receive prior notice of and the right to approve any appointment or change of investment managers;

(4) Give a description of how the contract value record will be determined, and, where applicable, adjusted by a crediting rate formula;

(5) State the maximum rate period between crediting rate formula recalculations that shall be permitted, if any;

(6) Provide the insurance company with the right to refuse to recognize any new deposits to the segregated portfolio unless there is a written agreement between the insurance company and the contract holder as to the permissible levels and timing of new deposits;

(7) Clearly identify all circumstances under which insurance company payments or advances to the contract holder are to be made;

(8) Clearly identify the types of withdrawals made on a market value basis;

(9) Provide either a fixed maturity schedule or a settlement option that permits the contract holder to receive the contract value record over time, provided that no unilateral contract termination event has occurred; and

(10) Include a provision stating, or substantially similar to, the following:

"No waiver of remedies by the insurance company that is a party to this agreement, following the breach of any contractual provision of the agreement or of the investment guidelines applicable to it, or failure to enforce the provisions or guidelines, which constitutes grounds for termination of this agreement for cause by the insurance company, and is not cured within 30 days following the insurance company's discovery of it, shall be effective against the insurance commissioner in any future rehabilitation or insolvency proceedings against the insurance company unless approved in advance in writing by the insurance commissioner."

(b) An insurance company satisfies the filing and approval requirements of this section with respect to a contract if the insurance company has filed the form of the contract with the insurance commissioner and it is accompanied by the items specified in subdivisions (1) to (3), inclusive, of this subsection, and the form has been approved or has not been disapproved within the thirty-day period following the date of filing, in which event the form of contract shall be deemed approved. Notwithstanding the provisions of this section, the requirement for filing and approval of the form of contract may be waived at the discretion of the insurance commissioner.

(1) The form of contract filed for approval shall be accompanied by a statement that the contract meets the conditions of subsection (a) of this section.

(2) The form of contract filed for approval shall be accompanied by a statement:

(A) Specifying the range of variation of variable contract provisions, if any, that could have a material effect on the risk assumed by the insurance company under the contract, including withdrawal methodology, crediting rate formula, and termination events;

(B) Describing how the fair market value shall be determined, including a description of the rules for valuing securities and other assets that are not publicly traded;

(C) Describing the crediting rate formula, if any, and how it shall operate to take into account the difference between the market value record and the contract value record over time; and

(D) Listing events that give the insurance company the right to terminate the contract immediately.

(3) (A) In the case where the plan of operation pertaining to the class of contracts to which the contract belongs has been affirmatively approved by the insurance commissioner of the state in which the issuing insurance company is domiciled, the form of contract filed for approval shall be accompanied by a statement indicating the receipt of approval, and that the approval was an affirmative approval.

(B) In the case where the plan of operation pertaining to the class of contracts to which the contract belongs has been deemed approved in the state in which the issuing insurance company is domiciled, the form of contract filed for approval shall be accompanied by a statement indicating that the issuing insurance company has met the requirements for deemed approval.

(C) In the case where the plan of operation pertaining to the class of contracts to which the contract belongs has not been approved in the state in which the issuing insurance company is domiciled, the form of contract filed for approval shall be accompanied by a statement of this fact, together with a plan of operation pertaining to the contract.

(Adopted effective June 1, 2002)

Sec. 38a-459-5. Investment management of the segregated portfolio

(a) The investment manager shall be responsible for, and have control over, the management of all segregated portfolio assets within the constraints specified in the investment guidelines.

(b) The investment guidelines shall be submitted to the insurance company for underwriting review before the contract becomes effective.

(c) If the insurance company accepts a proposed change to the investment guidelines or allows the contract to operate in accordance with investment guidelines not meeting the criteria established in the description of allowable investment parameters in section 38a-459-3(c)(7) of the Regulations of Connecticut State Agencies, approval of the non-conforming investment guidelines shall be requested pursuant to section 38a-459-3(c)(7) of the Regulations of Connecticut State Agencies.

(Adopted effective June 1, 2002)

Sec. 38a-459-6. Purchase of annuities from segregated account assets

For group annuity contracts, which make available to the contract holder the purchase of immediate or deferred annuities for the benefit of individual members of the group, an annuity may not be purchased without the delivery of the contractually agreed upon consideration in cash to the insurance company from the segregated portfolio for allocation to the insurance company's general account or a separate account. The insurance company shall collect adequate consideration for the cost of annuities purchased under contract option by transfer from the segregated portfolio.

(Adopted effective June 1, 2002)

Sec. 38a-459-7. Unilateral synthetic guaranteed investment contract terminations

A contract subject to sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies shall allow the insurance company to unilaterally and immediately terminate, without future liability of the insurance company or

obligation to provide further benefits, upon the occurrence of any one of the following events that is material and that is not cured within 30 days following the insurance company's discovery of it:

(1) The investment guidelines are changed without the advance consent of the insurance company and the investment manager is not controlling, controlled by, or under common control with the insurance company;

(2) The segregated portfolio, if managed by an entity that is not controlling, controlled by, or under common control with the insurance company, is invested in a manner that does not comply with the investment guidelines; or

(3) Investment discretion over the segregated portfolio is exercised by or granted to anyone other than the investment manager.

(Adopted effective June 1, 2002)

Sec. 38a-459-8. Reserves for synthetic guaranteed investment contracts

(a) An insurance company, at all times, shall hold minimum reserves in the general account or one or more separate accounts, as appropriate, equal to the excess, if any, of the value of the guaranteed contract liabilities, determined in accordance with subsections (f) and (g) of this section, over the market value of the assets in the segregated portfolio less the deductions provided for in subsection (b) of this section. The reserve requirements of this section shall be applied on a contract by contract basis.

(b) In determining compliance with the asset maintenance requirement and the reserve for guaranteed contract liabilities, the insurance company shall deduct a percentage of the market value of an asset as follows:

(1) For debt instruments, the percentage shall be the National Association of Insurance Commissioners asset valuation reserve "reserve objective factor," as set forth in the instructions for the National Association of Insurance Commissioners Annual and Quarterly Statement Blank, but the factor shall be increased by 50 percent for the purpose of this calculation if the difference in durations of the assets and liabilities is more than 184 days.

(2) For assets that are not debt instruments, the percentage shall be the National Association of Insurance Commissioners asset valuation reserve "maximum reserve factor," as set forth in the instructions for the National Association of Insurance Commissioners Annual and Quarterly Statement Blank.

(c) To the extent that guaranteed contract liabilities are denominated in the currency of a foreign country and are supported by segregated portfolio assets denominated in the currency of the foreign country, the percentage deduction for these assets shall be the percentage deduction for a substantially similar investment denominated in the currency of the United States.

(d) To the extent that guaranteed contract liabilities are denominated in the currency of the United States and are supported by segregated portfolio assets denominated in the currency of a foreign country, and to the extent that guaranteed contract liabilities are denominated in the currency of a foreign country and are supported by segregated portfolio assets denominated in the currency of the United States, the deduction for debt instruments shall be increased by 15 percent of the market value of the assets unless the currency exchange risk on the assets has been adequately hedged, in which case the percentage deduction shall be increased by one-half percent. No guaranteed contract liabilities denominated in the currency of a foreign country shall be supported by segregated portfolio assets denominated in the currency of another foreign country without the approval of the insurance

commissioner. For purposes of this section, the currency exchange risk on an asset is deemed adequately hedged if:

(1) It is an obligation of

(A) A jurisdiction rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency acceptable to the insurance commissioner;

(B) Any political subdivision or other governmental unit of such a jurisdiction, or any agency or instrumentality of a jurisdiction, political subdivision, or other governmental unit; or

(C) An institution that is organized under the laws of any such jurisdiction; and

(2) The principal amount of the obligation and scheduled interest payments on the obligation are hedged against the United States dollar pursuant to contracts or agreements that are:

(A) Issued by or traded on a securities exchange or board of trade regulated under the laws of the United States, Canada, or a province of Canada;

(B) Entered into with a United States banking institution that has assets in excess of $5 billion and has obligations outstanding, or has a parent corporation that has obligations outstanding, rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency, or with a broker-dealer registered with the Securities and Exchange Commission that has net capital in excess of $250 million; or

(C) Entered into with any other banking institution that has assets in excess of $5 billion and that has obligations outstanding, or has a parent corporation that has obligations outstanding, rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency and that is organized under the laws of a jurisdiction that is rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency.

(e) A contract may provide for the allocation to one or more separate accounts of all or any portion of the amount needed to meet the asset maintenance requirement. If the contract provides that the assets in the separate account shall not be chargeable with liabilities arising out of any other business of the insurance company, the insurance company shall maintain in a distinct separate account that is so chargeable:

(1) That portion of the amount needed to meet the asset maintenance requirement that has been allocated to separate accounts; less

(2) The amounts contributed to separate accounts by the contract holder in accordance with the contract and the earnings on the contract.

(f) The minimum value of guaranteed contract liabilities is the sum of all expected guaranteed contract benefits, each discounted at a rate corresponding to the expected time of payment of the contract benefit that is not greater than the maximum multiple of the spot rate supportable by the expected return from the segregated portfolio assets, and in no event greater than 105 percent of the spot rate as described in the plan of operation (pursuant to section 38a-459-3 of the Regulations of Connecticut State Agencies) or the actuary's opinion and memorandum (pursuant to subsection (h) of this section), except that if the expected time of payment of a contract benefit is more than 30 years, it shall be discounted from the expected date of payment to year 30 at a rate of no more than 80 percent of the thirty year spot rate and from year 30 to the date of valuation at a rate not greater than 105 percent of the thirty year spot rate.

(g) In calculating the minimum value of guaranteed contract benefits:

(1) All guaranteed benefits potentially available to the contract holder on an ongoing basis shall be considered in the valuation process and analysis, and the reserve held has to be sufficient to fund the greatest present value of each independent guaranteed contract benefit. For purposes of this subdivision, the right granted to the contract holder to exit the contract by discharging the insurance company of its guarantee obligation under the contract and taking control of the assets in the segregated portfolio shall not be considered a guaranteed benefit.

(2) To the extent that future guaranteed cash flows are dependent upon the benefit responsiveness of an employer-sponsored plan, that is, the ability of a plan participant or contract owner to elect to receive a benefit or make an investment transfer, a best estimate based on insurance company experience or other reasonable criteria if insurance company experience is not available shall be used in the projections of future cash flows.

(h) An insurance company that issues a synthetic guaranteed investment contract subject to sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies shall submit an actuarial opinion and, upon request, a memorandum to the insurance commissioner annually by March 1 following the December 31 valuation date showing the status of the accounts as of the prior December 31. The actuarial opinion and memorandum shall be in form and substance satisfactory to the insurance commissioner.

(i) The actuarial memorandum required by subsection (h) of this section is a memorandum as set forth in subdivision (9) of section 38a-78(b) of the Connecticut General Statutes. The actuarial memorandum may include any matter required by section 38a-78 of the Connecticut General Statutes and is subject to the confidentiality protections of subdivision (11) of section 38a-78(b) of the Connecticut General Statutes.

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

(k) The statement of actuarial opinion submitted shall consist of:

(1) A paragraph identifying the valuation actuary and his or her qualification;

(2) A paragraph identifying the subjects on which the opinion is to be expressed and describing the scope of the valuation actuary's work;

(3) A paragraph describing those areas, if any, where the valuation actuary has deferred to other experts in developing data, procedures, or assumptions;

(4) A paragraph expressing the valuation actuary's opinion with respect to the matters described in section 38a-459-8(*l*) of the Regulations of Connecticut State Agencies; and

(5) One or more additional paragraphs as needed in individual insurance company cases as follows:

(A) If the valuation actuary considers it necessary to state a qualification of his or her opinion;

(B) If the valuation actuary has to disclose an inconsistency in the method of analysis used at the prior opinion date with that used for this opinion;

(C) If the valuation actuary chooses to add a paragraph briefly describing the assumptions that form the basis of the actuarial opinion.

(*l*) The actuarial opinion shall state that after taking into account any risk charge payable, the segregated portfolio assets, and the amount of any reserve liability with

respect to the asset maintenance requirement, the account assets make adequate provision for contract liabilities. The opinion shall also state:

(1) That reserves for contract liabilities are calculated pursuant to the requirements of section 38a-459-8(a) of the Regulations of Connecticut State Agencies;

(2) That after taking into account any reserve liability with respect to the asset maintenance requirement, the amount of the account assets satisfied the asset maintenance requirement;

(3) That the fixed-income segregated portfolio conformed to and justified the rates used to discount contract liabilities for valuation pursuant to section 38a-459-8(f) of the Regulations of Connecticut State Agencies;

(4) Whether rates used, pursuant to section 38a-459-8(f) of the Regulations of Connecticut State Agencies, to discount guaranteed contract liabilities and other items applicable to the segregated portfolio were modified from the rate or rates described in the plan of operation pursuant to section 38a-459-3 of the Regulations of Connecticut State Agencies; and

(5) That the level of risk charges, if any, retained in the general account was appropriate in view of such factors as the nature of the guaranteed contract liabilities and losses experienced in connection with account contracts and other pricing factors.

(m) The opinion shall be accompanied by a certificate of an officer of the insurance company responsible for monitoring compliance with the asset maintenance requirements for synthetic guaranteed investment contracts describing the extent to and manner in which, during the preceding year:

(1) Actual benefit payments conformed to the benefit payment estimated to be made as described in the plan of operation;

(2) The determination of the fair market value of the segregated portfolio conformed to the valuation procedures described in the plan of operation, including a statement of the procedures and sources used during the year; and

(3) Any assets were transferred to or from the insurance company's general account, or any amounts were paid to the insurance company by any contract holder to support the insurance company's guarantee.

(n) The actuarial memorandum shall:

(1) Substantially conform with those portions of section 38a-459-17 of the Regulations of Connecticut State Agencies that are applicable to asset adequacy testing and either:

(A) Demonstrate the adequacy of account assets based upon cash flow analysis, or

(B) Explain why cash flow testing analysis is not appropriate, describe the alternative methodology of asset adequacy testing used, and demonstrate the adequacy of account assets under that methodology;

(2) Describe the assumptions the valuation actuary used in support of the actuarial opinion, including any assumptions made in projecting cash flows under each class of assets, and any dynamic portfolio hedging techniques utilized and the tests performed on the utilization of the techniques. As used in this section, "dynamic portfolio hedging techniques" means techniques whereby an underlying portfolio of liabilities and their corresponding assets are hedged through the purchase or sale (owned or not owned by the hedger) of a hedging instrument, and such purchase or sale is managed so as to decrease the probability or severity of loss of the underlying portfolio due to changes in economic, market, insurable, or other events and the hedge is regularly adjusted or re-balanced through additional purchases or sales of assets, liabilities, or financial instruments (including options, futures, and

derivatives) at regular, small intervals as the risks and characteristics of the underlying portfolio change, in a manner that incorporates recent events;

(3) Describe how the valuation actuary has reflected the cost of capital;

(4) Describe how the valuation actuary has reflected the risk of default and downgrades on obligations and mortgage loans, including obligations and mortgage loans that are not investment grade;

(5) Describe how the valuation actuary has reflected withdrawal risks, if applicable, including a discussion of the positioning of the contracts within the withdrawal hierarchy pertaining to the contracts;

(6) If the plan of operation provides for investments in segregated portfolio assets other than United States government obligations, demonstrate that the rates used to discount contract liabilities accurately reflect expected investment returns, taking into account any foreign exchange risks;

(7) If the contracts provide that in certain circumstances they would cease to be funded by a segregated portfolio and instead become contracts funded by the general account, clearly describe how any increased reserves would be provided for if and to the extent these circumstances occurred;

(8) State the amount of account assets maintained in a separate account that are not chargeable with liabilities arising out of any other business of the insurance company;

(9) State the amount of reserves and supporting assets as of December 31 and where the reserves are shown in the annual statement;

(10) State the amount of any contingency reserve carried as part of surplus;

(11) State the market value of the segregated asset portfolio; and

(12) Where separate account assets are not chargeable with liabilities arising out of any other business of the insurance company, describe how the level of risk charges payable to the general account provides an appropriate compensation for the risk taken by the general account.

(o) When the insurance company issues a synthetic guaranteed investment contract complying with asset maintenance requirements it need not maintain an asset valuation reserve with respect to those account assets.

(p) Reserves for synthetic guaranteed investment contracts subject to sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies shall be an amount equal to the sum of the following:

(1) The amounts determined as the minimum reserve as required under subsection (a) of this section;

(2) Any additional amount determined by the insurance company's valuation actuary as necessary to make adequate provision for all contract liabilities; and

(3) Any additional amount determined as necessary by the insurance commissioner due to the nature of the benefits.

(q) The amount of any reserves required by this section shall be established by either:

(1) Allocating sufficient assets to one or more separate accounts; or

(2) Setting up the additional reserves in the general account.

(Adopted effective June 1, 2002)

Sec. 38a-459-9. Severability

If any provision of sections 38a-459-1 to 38a-459-9, inclusive, of the Regulations of Connecticut State Agencies or its application to any person or circumstance is held to be invalid, the remainder of the regulation and the application of such provision to other persons or circumstances shall not be affected thereby.

(Adopted effective June 1, 2002)

Separate Accounts Funding Guaranteed Minimum Benefits Under Group Contracts

Sec. 38a-459-10. Scope and application

Sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies prescribes rules for separate accounts that fund guaranteed minimum benefits under group contracts. In addition, the regulation sets the procedures for establishing and maintaining these separate accounts and the reserve requirements for these accounts. The following requirements apply to group life insurance contracts, group annuity contracts, or funding agreements issued for delivery on or after June 1, 2002 if the contract is a group contract utilizing a separate account and providing guaranteed minimum benefits. However, for contracts issued on or before twenty-four months after June 1, 2002, the insurance company may continue to operate in accordance with the issued contract and plan of operations, if any, until such time as the applicable contract terms or provisions are substantially changed, at which time a filing in compliance with sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies shall be required. Sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies shall not apply to modified guaranteed annuities, modified guaranteed life insurance, variable annuities, variable life insurance, or equity index products but sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies shall apply to index contracts as defined in section 38a-459-11 of the Regulations of Connecticut State Agencies.

(Adopted effective June 1, 2002)

Sec. 38a-459-11. Definitions

As used in sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies:

(1) ''Account assets'' means separate account assets plus any assets held in the general account or a supplemental account utilized to meet the asset maintenance requirements.

(2) ''Account contracts'' means contracts providing guaranteed minimum benefits or other benefits and funded by a separate account and, if applicable, funded in part by the general account or a supplemental account in order to meet the asset maintenance requirements.

(3) ''Actuarial opinion'' means the opinion of the valuation actuary as required by section 38a-459-17 of the Regulations of Connecticut State Agencies.

(4) ''Actuarial memorandum'' means the memorandum of the valuation actuary required by section 38a-459-17 of the Regulations of Connecticut State Agencies.

(5) ''Affiliate'' means ''affiliate'' as defined in section 38a-1 of the Connecticut General Statutes.

(6) ''Affirmatively approved'' means approval of an insurance company's plan of operation for a class of contracts containing the form of contract under review after the plan of operations associated with the class of contracts has been reviewed by the insurance company's domiciliary insurance department or regulatory authority, and the plan of operations has been found to be in compliance with requirements substantially similar to those contained in sections 38a-459-10 to 38a-459-20 of the Regulations of Connecticut State Agencies. Affirmatively approved does not mean approval is 'deemed approved' as set forth in sections 38a-459-12(b) or (c), or 38a-459-13(b) of the Regulations of Connecticut State Agencies.

(7) "Appointed actuary" means the qualified actuary appointed or retained either directly by or by the authority of the board of directors through an executive officer of the insurance company to prepare the annual statement of actuarial opinion for the insurance company as a whole pursuant to section 38a-78 of the Connecticut General Statutes.

(8) "Asset maintenance requirements" means the requirement to maintain assets to fund contract benefits in accordance with sections 38a-459-14 to 38a-459-16, inclusive, of the Regulations of Connecticut State Agencies.

(9) "Book value contract" means a fixed accumulation contract, purchased through a retirement plan or deferred compensation plan, established or maintained by an employer, which contract does not participate in the investment experience of a separate account, with a fixed interest rate guarantee, including a guarantee based on an external index, and that is supported by a separate account, the plan of operations of which provides that the separate account's assets are valued as if the assets were held in the insurance company's general account.

(10) "Class of contracts" means the set of all contracts to which a given plan of operations pertains.

(11) "Contract" means a group life insurance policy, group annuity contract, or funding agreement that is within the scope of sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies as set forth in section 38a-459-10 of the Regulations of Connecticut State Agencies.

(12) "Contract benefits" means the amounts obligated to be paid by the insurance company under an account contract.

(13) "Contract liabilities" means the liabilities of the insurance company under account contracts, including liabilities with respect to which guarantees as to amount are provided by the insurance company and liabilities with respect to which guarantees as to amount are not provided by the insurance company.

(14) "Date of filing," with respect to a filing for approval of a form of contract under sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies, means the date the form is filed pursuant to section 38a-8-14 of the Regulations of Connecticut State Agencies.

(15) "Derivative instrument" means an agreement, option, instrument, or a series or combination of them:

(A) To make or take delivery of, or assume or relinquish, a specified amount of one or more underlying interests, or to make a cash settlement in lieu thereof; or

(B) That has a price, performance, value, or cash flow based primarily upon the actual or expected price, level, performance, value, or cash flow of one or more underlying interests.

(C) Derivative instruments include options, warrants used in a hedging transaction and not attached to another financial instrument, caps, floors, collars, swaps, forwards, futures, and any other agreements, options, or substantially similar instruments, or any series or combination of them and any agreements, options, or other instruments permitted under sections 38a-102 to 38a-102i, inclusive, of the Connecticut General Statutes.

(16) "Duration" means, with respect to separate account or supplemental account assets or guaranteed contract liabilities, a measure of the price sensitivity of a stream of cash flows to interest rate movements, including, but not limited to, modified duration or option adjusted duration.

(17) "General account" means the assets of the insurance company other than separate account and supplemental account assets, and associated reserves.

(18) ''Guaranteed minimum benefits'' means benefits payable under the terms of the contract that are based on either subparagraph (C) or the greater of subparagraph (A) or (B):

(A) That part of the market value of account assets that determines the contract holder's benefits, i.e., to the extent the assets are beneficially ''client'' assets; provided, that if asset performance does not determine the contract holder's benefit, this subparagraph equals zero;

(B) A fixed minimum guarantee related to all or part of the considerations received under the contract;

(C) An amount based upon a publicly available interest rate series or an index of the aggregate market value of a group of publicly traded financial instruments, either of which is specified in the contract.

(19) ''Hedging transaction'' means a derivative transaction, involving the use of one or more derivative instruments, entered into and maintained to reduce: the risk of a change in the value, yield, price, cash flow, or quantity of assets or liabilities that the insurance company has acquired or incurred or anticipates acquiring or incurring; or the currency exchange risk or the degree of exposure as to assets or liabilities that an insurance company has acquired or incurred or anticipates acquiring or incurring; and other derivative transactions specified as hedging transactions in rules adopted by the insurance commissioner.

(20) ''Index contract'' means a contract under which benefits shall be based upon a publicly available interest rate series or an index of the aggregate market value of a group of publicly traded financial instruments, either of which is specified in the contract, and that does not provide a guarantee of some or all of the consideration received plus earnings at a fixed rate specified in advance and that does not provide any secondary guarantees on elective benefits or maturity values.

(21) ''Market value separate account'' means a separate account in which the account assets are valued at their market value.

(22) ''Plan of operations'' means a written plan meeting the requirements of section 38a-459-12 of the Regulations of Connecticut State Agencies.

(23) ''Qualified actuary'' means an individual who is qualified to sign statements of actuarial opinion in accordance with the qualification standards set forth in section 38a-53-1 of the Regulations of Connecticut State Agencies.

(24) ''Separate account'' means an account established pursuant to section 38a-433 or 38a-459 of the Connecticut General Statutes.

(25) ''Spot rate'' corresponding to a given time of benefit payment means the yield on a zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at that time, or the zero-coupon yield implied by the price of a representative sampling of coupon-bearing, non-callable, non-indexed, and non-prepayable United States government obligations, in accordance with a formula set forth in the plan of operations. If a zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at the time of payment does not exist, then the ''spot rate'' for such benefit payment shall be the yield on the zero-coupon, non-callable, non-indexed, and non-prepayable United States government obligation maturing at the date closest to the benefit payment or the yield determined through a methodology set forth in the plan of operation designed to reach a comparable result. To the extent that guaranteed contract liabilities are denominated in the currency of a foreign country rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency acceptable to the insurance commissioner and are

supported by investments denominated in the currency of the foreign country, the spot rate may be determined by reference to substantially similar obligations of the government of the foreign country. For liabilities other than those described in this subdivision, the spot rate shall be determined on a basis mutually agreed upon by the insurance company and the insurance commissioner.

(26) "Supplemental account" means a separate account established pursuant to sections 38a-459-14 to 38a-459-16, inclusive, of the Regulations of Connecticut State Agencies to which assets may be contributed by the insurance company for the purpose of complying, in whole or in part, with the asset maintenance requirement and with respect to which neither the account contracts nor applicable law shall provide that the assets of the supplemental account are not chargeable with liabilities arising out of any other business of the insurance company.

(27) "United States government obligation" means a direct obligation issued, assumed, guaranteed, or insured by the United States or by an agency or instrumentality of the United States.

(28) "Valuation actuary" means the appointed actuary or, alternatively, a qualified actuary designated by the appointed actuary to render the actuarial opinion. Written documentation of any such designation shall be on file at the insurance company and available for review by the insurance commissioner upon request.

(Adopted effective June 1, 2002)

Sec. 38a-459-12. Plan of operations requirements for separate accounts supporting book value contracts

(a) A contract may not be delivered or issued for delivery in this state unless the issuing insurance company is licensed to do life insurance business in this state pursuant to section 38a-41 of the Connecticut General Statutes. In addition,

(1) A domestic insurance company may not deliver or issue for delivery, either in this state or outside this state, a contract belonging to a specific class of contracts unless the insurance company has satisfied the requirements of subsection (b) of this section with respect to that class; and

(2) An affiliate of a domestic insurance company may not deliver or issue for delivery in this state a contract belonging to a specific class of contracts unless the insurance company has satisfied the requirements of subsection (c) of this section with respect to that class.

(b) A domestic insurance company satisfies the requirements of this section if the insurance company has filed a plan of operations pertaining to the class of contracts, together with copies of forms of the contracts in the class, with the insurance commissioner and the filing has been approved or has not been disapproved within a sixty-day period following the date of the filing, in which event the plan of operations shall be deemed approved.

(c) An affiliate of a domestic insurance company satisfies the requirements of this section if the insurance company has filed a plan of operations pertaining to the class of contracts, together with copies of forms of the contracts in the class, with the insurance commissioner and the filing has been approved, has not been disapproved, or the insurance commissioner has not provided to the affiliate in writing a detailed listing of all additional information necessary to make a determination on the filing within a thirty-day period following the date of the filing, in which event the plan of operations shall be deemed approved. In the situation where additional information is requested, the affiliate satisfies the requirements of this section once it has submitted a response to the insurance commissioner that to the best of the affiliate's knowledge and belief is responsive to the insurance commissioner's

request and the filing, along with the response, has been approved or has not been disapproved within a thirty-day period following the date the response has been submitted, in which event the plan of operations shall be deemed approved.

(d) The plan of operations for a class of contracts shall describe the financial implications for the insurance company of the issuance of contracts in the class, and shall include at least the following:

(1) A description of the class of contracts to which the plan of operations pertains, including a description of the products, the markets to which the products will be sold, and the benefits that are being offered (including whether those benefits will be paid on a market or book value basis);

(2) A statement that the plan of operations shall be administered in accordance with the requirements prescribed by the insurance commissioner pursuant to sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies, along with a statement that the insurance company shall comply with the plan of operations in its administration of the contract;

(3) A statement of the investment policy for the separate account and any supplemental account, including requirements for diversification, maturity, type and quality of assets, and, as applicable, target duration for matching guaranteed contract liabilities or the degree to which the investment policy is likely to match the performance of an interest rate series or index on which contract benefits are based;

(4) A description of how the value of the separate account assets and any supplemental account is to be determined, including but not limited to, a statement of procedures and rules for valuing securities and other assets that are not publicly traded;

(5) A description of how the guaranteed contract liabilities are to be valued, including, if applicable, with respect to guaranteed minimum benefits or other benefits, a description of the methodology for calculating spot rates and the rates proposed to be used to discount guaranteed contract liabilities if higher than the applicable spot rates, but the rate or rates used shall not exceed 105 percent of the spot rate, except that if the expected time of payment of a contract benefit spans more than 30 years, the guaranteed minimum benefits or other benefits shall be discounted from the expected time of payment to year 30 at a rate of no more than 80 percent of the thirty year spot rate and from year 30 to the date of valuation at a rate not greater than 105 percent of the thirty year spot rate, and shall accurately reflect expected investment returns (taking into account foreign exchange risks);

(6) A statement of how the separate account's operations are designed to provide for payment of contract benefits as they become due, including but not limited to:

(A) A description of the method for estimating the amount and timing of benefit payments;

(B) The arrangements necessary to provide liquidity to cover contingencies:

(C) The method to be used to comply with the asset maintenance requirement;

(D) The manner in which account assets shall be allocated between the separate account, any supplemental account, and the general account;

(E) If applicable, the deductions to be used in determining the market value of an asset when determining the asset maintenance requirement when the investment policy of the separate account and any supplemental accounts is not likely to match the performance of an interest rate series or index on which contract benefits are based; and

(F) For index contracts, the deductions to be used for replicated (synthetic asset) transactions in determining the market value of the separate account.

(7) An unqualified opinion by a qualified actuary with expertise in such matters as to the adequacy of the consideration charged by the insurance company for the risks it has assumed with respect to the contracts in the class to which the plan of operations pertains;

(8) If hedging transactions are to be utilized in managing separate account or any supplemental account assets, a description of the instruments and techniques and an explanation of how they are intended to reduce risk of loss;

(9) If the amount of the asset maintenance requirement depends on the separate account, any supplemental account or a subportfolio of either being duration matched, a description of the method used to determine the durations of separate account and any supplemental account assets and guaranteed contract liabilities;

(10) If a part of the asset maintenance requirement is to be met by maintaining a reserve liability in the general account, a description of:

(A) The circumstances under which increases and decreases in the general account portion of the reserve liability shall be made;

(B) The circumstances under which transfers shall be made between the separate account and the general account; and

(C) Any arrangements needed to provide sufficient liquidity in the general account to enable the insurance company to make transfers to the separate account when due.

(11) A statement as to the extent to which the contracts in the class shall provide that the separate account assets shall not be chargeable with liabilities arising out of any other business of the insurance company; and

(12) If any person other than the insurance company may authorize, approve, or review the acquisition and disposition of investments for the separate account or any supplemental account, a statement of the safeguards adopted by the insurance company to assure that the actions to be taken by these persons are appropriate, including a description of the criteria used by the insurance company in selecting the person.

(e) Notwithstanding the descriptions in the plan of operations, the insurance company may change the rate utilized, pursuant to section 38a-459-14(f) of the Regulations of Connecticut State Agencies, to discount guaranteed contract liabilities and other items applicable to the separate account or any supplemental accounts, provided that the rates used shall not exceed 105 percent of the spot rate, except that if the expected time of payment of a contract benefit is more than 30 years, the guaranteed contract liabilities and other items applicable to the separate account or any supplemental accounts shall be discounted from the expected time of payment to year 30 at a rate of no more than 80 percent of the thirty year spot rate and from year 30 to the date of valuation at a rate not greater than 105 percent of the thirty year spot rate, and shall accurately reflect expected investment returns (taking into account any exchange risks). Any such change shall be disclosed and justified in the actuarial opinion.

(f) The plan of operations may provide that the separate account shall fund guaranteed contract liabilities denominated in the currency of a foreign country with separate account and any supplemental account assets denominated in that currency, provided that at the time of issuance of the account contracts the country is rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency acceptable to the insurance commissioner.

(g) The insurance commissioner, at his or her discretion, may require an insurance company to file additional information as part of the plan of operations upon a determination that the plan of operations is insufficient.

(Adopted effective June 1, 2002)

Sec. 38a-459-13. Contract provisions and filing requirements for separate accounts supporting book values under group contracts

(a) A contract may not be delivered or issued for delivery in this state unless the contract satisfies the following requirements. The contract shall provide:

(1) A description of any contractual safeguards that ensure asset sufficiency, including termination events, discontinuance triggers, or discontinuance options and corrective action procedures;

(2) A description of how charges under the contract are computed, including, but not limited to, risk or surrender charges; and

(3) For a book value contract, a description of how any market value adjustments under the contract are computed.

(b) An insurance company satisfies the filing and approval requirements with respect to a contract if the insurance company has filed the form of the contract with the insurance commissioner, it is accompanied by the items contained within subdivisions (1) to (3), inclusive, of this subsection, and the form of contract has been approved or has not been disapproved within a thirty-day period following the date of filing, in which event the form of contract shall be deemed approved. Notwithstanding the provisions of this section, the requirement for filing and approval of the form of contract may be waived at the discretion of the insurance commissioner.

(1) The form of the contract filed for approval shall be accompanied by a statement that the contract meets the conditions of subsection (a) of this section.

(2) The form of contract filed for approval shall be accompanied by a statement:

(A) Specifying the range of variation of variable contract provisions, if any, that could have a material effect on the risk assumed by the insurance company under the contract, including withdrawal methodology, crediting rate formula, and termination events; and

(B) A statement listing events, if any, that give the insurance company the right to terminate the contract immediately.

(3) (A) If the plan of operations pertaining to the class of contracts to which the contract belongs has been affirmatively approved by the insurance commissioner of the state in which the issuing insurance company is domiciled, the form of a contract filed for approval shall be accompanied by a statement indicating the receipt of approval and that the approval was an affirmative approval; or

(B) If the plan of operations pertaining to the class of contracts to which the contract belongs has been deemed approved in the state in which the issuing insurance company is domiciled, the form of contract filed for approval shall be accompanied by a statement indicating that the issuing insurance company has met the requirements for deemed approval; or

(C) If the plan of operations pertaining to the class of contracts to which the contract belongs has not been approved in the state in which the issuing insurance company is domiciled, the form of contract filed for approval shall be accompanied by a statement of this fact, together with a plan of operations pertaining to the contract.

(D) If the plan of operations pertaining to the class of contracts to which the contract belongs has not been approved in the state of domicile of the issuing insurance company, the insurance commissioner, in issuing contract approvals, shall require that the contract be operated in compliance with the plan of operations in order to maintain its approval.

(Adopted effective June 1, 2002)

Sec. 38a-459-14. Asset maintenance requirements for market value separate accounts supporting contracts other than index contracts

(a) An insurance company shall hold sufficient assets as a reserve in the general account, separate account, or supplemental accounts, as appropriate, such that the market value of the assets held in the separate account, plus the market value of any supplemental account, plus assets held in the general account as a reserve for guaranteed contract liabilities (valued in accordance with section 38a-78 of the Connecticut General Statutes), less the deductions provided for in subsection (b) of this section, equals or exceeds the value of guaranteed contract liabilities determined in accordance with subsection (f) of this section.

(b) In determining compliance with the asset maintenance requirement and the reserve for guaranteed contract liabilities, the insurance company shall deduct a percentage of the market value of the separate account or supplemental account asset or an amount attributable to a replicated (synthetic asset) transaction as follows:

(1) For debt instruments, the percentage shall be the National Association of Insurance Commissioners asset valuation reserve ''reserve objective factor,'' as set forth in the instructions for the National Association of Insurance Commissioners Annual and Quarterly Statement Blank, but the factor shall be increased 50 percent for the purpose of this subdivision if the difference in durations of the assets and liabilities is more than 184 days;

(2) For assets that are not debt instruments, the percentage shall be the National Association of Insurance Commissioners asset valuation reserve ''maximum reserve factor,'' as set forth in the instructions for the National Association of Insurance Commissioners Annual and Quarterly Statement Blank; and

(3) For replicated (synthetic asset) transactions, the market value of the separate account or supplemental account assets shall be decreased by an amount equal to the asset valuation reserve for the transaction as if the transaction were occurring in the general account, determined in accordance with section 38a-78 of the Connecticut General Statutes; but to the extent that the National Association of Insurance Commissioners asset valuation reserve maximum reserve factor, as set forth in the instructions for the National Association of Insurance Commissioners Annual and Quarterly Statement Blank, was not used in determining the amount of the deduction, the amount of the deduction shall be increased 50 percent for purposes of this subdivision.

(c) To the extent that guaranteed contract liabilities are denominated in the currency of a foreign country and are supported by separate account or supplemental account assets denominated in the currency of the foreign country, the percentage deduction for these assets shall be the percentage deduction for a substantially similar investment denominated in the currency of the United States.

(d) To the extent that guaranteed contract liabilities are denominated in the currency of the United States and are supported by separate account or supplemental account assets denominated in the currency of a foreign country, and to the extent that guaranteed contract liabilities are denominated in the currency of a foreign country and are supported by separate account or supplemental account assets denominated in the currency of the United States, the deduction for debt instruments and replicated (synthetic assets) transactions shall be increased by 15 percent of its market value unless the currency exchange risk has been adequately hedged, in which case the percentage deduction shall be increased by one-half percent. No guaranteed contract liabilities denominated in the currency of a foreign country shall be supported by separate account or supplemental account assets denominated in

the currency of another foreign country without the approval of the insurance commissioner. For purposes of this subsection, the currency exchange rate on an asset is deemed adequately hedged if:

(1) It is an obligation of a jurisdiction that is rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency acceptable to the insurance commissioner or other governmental unit of the jurisdiction, or is organized under the laws of the jurisdiction; and

(2) At all times, the principal amount and scheduled interest payments on the principal are hedged against the United States dollar pursuant to contracts or agreements that are:

(A) Issued by or traded on a securities exchange or board of trade regulated under the laws of the United States, Canada, or a province of Canada;

(B) Entered into with a United States banking institution that has assets in excess of $5 billion and has obligations outstanding, or has a parent corporation that has obligations outstanding, rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency, or with a broker-dealer registered with the Securities and Exchange Commission that has net capital in excess of $250 million;

(C) Entered into with any other banking institution that has assets in excess of $5 billion and that has obligations outstanding, or has a parent corporation that has obligations outstanding, rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency and that is organized under the laws of a jurisdiction that is rated in one of the two highest rating categories by an independent, nationally-recognized United States rating agency; or

(D) Entered into with an entity permitted under Title 38a of the Connecticut General Statutes enumerating permitted counterparties for currency hedging transactions.

(e) All or a portion of the amount needed to comply with the asset maintenance requirement may be allocated to one or more supplemental accounts. If the account contract or applicable law provides that the assets in the separate account shall not be chargeable with liabilities arising out of any other business of the insurance company, the insurance company shall maintain in a supplemental account or the general account the amount of any account assets in excess of the sum of the amounts contributed (net of withdrawals) by the contract holder, and the earnings attributable to the amounts contributed (net of withdrawals) by the contract holder.

(f) For purposes of this section, the minimum value of guaranteed contract liabilities is defined to be the sum of the expected guaranteed contract benefits, each discounted at a rate corresponding to the expected time of payment of the contract benefit that is not greater than the maximum multiple of the spot rate supportable by the expected return from the separate account and any supplemental account assets provided that the rate used shall not exceed 105 percent of the spot rate, except that if the expected time of payment of a contract benefit is more than 30 years, the expected guaranteed contract benefits shall be discounted from the expected time of payment to year 30 at a rate of no more than 80 percent of the thirty year spot rate and from year 30 to the date of valuation at a rate not greater than 105 percent of the thirty year spot rate, and shall accurately reflect expected investment returns (taking into account any exchange risks) or as described in the actuarial opinion. In calculating the minimum value of contract benefits, all guaranteed contract benefits potentially available to the contract holder shall be considered in the valuation process and analysis, and the reserve held shall be sufficient to fund the greatest

present value of each independent guaranteed benefit stream, including guaranteed annuitization options available. To the extent that future cash flows are dependent upon the benefit responsiveness features of an employer-sponsored plan, a best estimate or an estimate based on the insurance company's experience shall be used in the projections of the future cash flows. In addition, the valuation actuary shall periodically review the actual experience under the contract to validate the assumptions used. In projecting cash flows for contingent benefits involving mortality, mortality tables for these benefits prescribed or authorized by applicable law shall be utilized.

(Adopted effective June 1, 2002)

Sec. 38a-459-15. Asset maintenance requirements for market value separate accounts supporting index contracts

(a) An insurance company shall hold sufficient assets as a reserve in the general account, the separate account, or supplemental accounts, as appropriate, such that the market value of the assets held in the separate account, plus the market value of any supplemental account, plus any assets held in the general account as a reserve for guaranteed contract liabilities (valued in accordance with section 38a-78 of the Connecticut General Statutes), less any deduction provided for in subsection (b) of this section, equals or exceeds the value of guaranteed contract liabilities determined in the manner set forth in the plan of operations.

(b) In determining compliance with the asset maintenance requirement and the reserves for guaranteed contract liabilities, the insurance company shall deduct a percentage of the market value of a separate account or supplemental account asset as set forth in the plan of operations, and for replication (synthetic asset) transactions, the value of the separate account or supplemental account assets shall be decreased in the manner set forth in the plan of operations.

(c) All or a portion of the amount needed to comply with the asset maintenance requirement may be allocated to one or more supplemental accounts. If the account contract or applicable law provides that the assets in the separate account shall not be charged with liabilities arising out of any other business of the insurance company, the insurance company shall maintain in a supplemental account or the general account the amount of any account assets in excess of the sum of the amounts contributed (net of withdrawals) by the contract holder and the earnings attributable to the amounts contributed (net of withdrawals) by the contract holder.

(Adopted effective June 1, 2002)

Sec. 38a-459-16. Asset maintenance requirements for separate account supporting book value contracts

(a) An insurance company, at all times, shall hold sufficient assets in the general account, the separate account, or supplemental accounts, as appropriate, such that the value of the account assets, valued as if the assets were held in the insurance company's general account, equals or exceeds the reserve required for contracts supported by the separate account, determined as if the contracts were held in the general account.

(b) All or any portion of the amount needed to comply with the asset maintenance requirement may be allocated to one or more supplemental accounts. If the account contract or applicable law provides that the assets in the separate account shall not be chargeable with liabilities arising out of any other business of the insurance company, the insurance company shall maintain in a supplemental account or the general account the amount of any account assets in excess of the sum of the

amounts contributed (net of withdrawals) by the contract holder, and the earnings attributable to the amounts contributed (net of withdrawals) by the contract holder.
(Adopted effective June 1, 2002)

Sec. 38a-459-17. Actuarial opinion and memorandum for separate accounts supporting book values under group contracts

(a) An insurance company that maintains any separate accounts governed by sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies shall submit an actuarial opinion rendered by the valuation actuary to the insurance commissioner annually by March 1 showing the status of the accounts as of the preceding December 31. The actuarial opinion shall be supported by an actuarial memorandum prepared by the valuation actuary rendering the opinion. The valuation actuary may be either the appointed actuary of the insurance company or, alternatively, a qualified actuary designated by the appointed actuary to be the valuation actuary for the purpose of sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies.

(b) The actuarial memorandum required by subsection (h) of this section is a memorandum as set forth in subdivision (9) of section 38a-78(b) of the Connecticut General Statutes. The actuarial memorandum may include any matter required by section 38a-78 of the Connecticut General Statutes and is subject to the confidentiality protections of subdivision (11) of section 38a-78(b) of the Connecticut General Statutes.

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

(d) The statement of actuarial opinion, submitted pursuant to subsection (a) of this section, shall cover the applicable points set forth in sections 38a-78-1 to 38a-78-10, inclusive, of the Regulations of Connecticut State Agencies and at a minimum consist of:

(1) A paragraph identifying the valuation actuary and their qualifications;

(2) A scope paragraph identifying the subjects on which the opinion is to be expressed and describing the scope of the valuation actuary's work;

(3) A paragraph describing those areas, if any, where the valuation actuary deferred to other experts in developing data, procedures, or assumptions supported by a statement of each expert in the form prescribed by sections 38a-78-1 to 38a-78-10, inclusive, of the Regulations of Connecticut State Agencies; and

(4) A paragraph expressing the valuation actuary's opinion that, after taking into account any risk charge payable from the separate account assets and the amount of any reserve liability of the general account and amounts held in any supplemental account with respect to the asset maintenance requirement, the account assets make adequate provision for the contract liabilities.

(5) The opinion shall also state:

(A) That the level of risk charges, if any, payable to the general account was appropriate in view of such factors as the nature of the guaranteed contract liabilities and losses experienced in connection with account contracts, and other pricing factors;

(B) That after taking account of any reserve liability of the general account and amounts held in any supplemental account with respect to the asset maintenance requirement, the amount of the account assets satisfied the asset maintenance requirement;

(C) That the fixed-income asset portfolio conformed to, and justified, the rates used to discount contract liabilities for valuation, if applicable; and

(D) Whether any rates utilized, pursuant to section 38-459-14(f) of the Regulations of Connecticut State Agencies, to discount guaranteed contract liabilities and other items applicable to the separate account or any supplemental account were modified from the rate or rates described in the plan of operations.

(6) One or more additional paragraphs may be needed in individual insurance company cases as follows:

(A) If the valuation actuary considers it necessary to state a qualification of his opinion;

(B) If the valuation actuary has to disclose an inconsistency in the method of analysis used at the prior opinion date with that used for this opinion; or

(C) If the valuation actuary chooses to add a paragraph briefly describing the assumptions which form the basis of the actuarial opinion.

(e) The opinion shall be accompanied by a certificate of an officer of the insurance company responsible for monitoring compliance with the asset maintenance requirements for the separate accounts, describing the extent to and manner in which during the preceding year:

(1) Actual benefit payments conformed to the benefit payment estimated to be made as described in the plan of operations;

(2) The determination of the value of the separate account and any supplemental account conformed to the valuation procedures described in the plan of operations, including, but not limited to, a statement of the procedures and sources of information used during the year; and

(3) Any assets were transferred to or from the insurance company's general account, or any amounts were paid to the insurance company by any contract holder to support the insurance company's guarantee.

(f) The actuarial memorandum shall:

(1) Substantially conform with those portions of section 38a-78-9 of the Regulations of Connecticut State Agencies applicable to asset adequacy testing and:

(A) Demonstrate the adequacy of account assets based upon cash flow analysis; or

(B) Explain why cash flow analysis is not appropriate, describe the alternative methodology of asset adequacy testing used, and demonstrate the adequacy of account assets under such methodology;

(2) Describe the assumptions the valuation actuary used in support of the actuarial opinion, including any assumptions made in projecting cash flows under each class of assets and any dynamic portfolio hedging techniques utilized and the tests performed on the utilization of the techniques. As used in this section, ''dynamic portfolio hedging techniques'' means techniques whereby an underlying portfolio of liabilities and their corresponding assets are hedged through the purchase or sale (owned or not owned by the hedger) of a hedging instrument, and such purchase or sale is managed so as to decrease the probability or severity of loss of the underlying portfolio due to changes in economic, market, insurable, or other events and the hedge is regularly adjusted or re-balanced through additional purchases or sales of assets, liabilities, or financial instruments (including options, futures, and derivatives) at regular, small intervals as the risks and characteristics of the underlying portfolio change, in a manner that incorporates recent events;

(3) Describe how the valuation actuary reflected the risk of default on obligations and mortgage loans, including obligations and mortgage loans that are not investment grade;

(4) Describe how the valuation actuary has reflected withdrawal risks, if applicable, including a discussion of the positioning of the contracts within the benefit withdrawal priority order pertaining to the contracts;

(5) If the plan of operations provides for investments in separate account or supplemental account assets other than United States government obligations, demonstrate that the rates used to discount contract liabilities accurately reflect expected investment returns (taking into account any foreign exchange risks);

(6) If the contracts provide that in certain circumstances they would cease to be funded by a separate account and instead, would become contracts funded by the general account, clearly describe how any increased reserves would be provided for if and to the extent these circumstances occurred;

(7) State the amount of separate account assets that are not chargeable with liabilities arising out of any other business of the insurance company;

(8) State the amount of reserves and supporting assets as of December 31 and where the reserves and assets are shown in the annual statement;

(9) State the amount of any contingency reserve carried as part of surplus;

(10) For book value contracts, state the market value of supporting assets; and

(11) Where separate account assets are not chargeable with liabilities arising out of any other business of the insurance company, describe how the level of risk charges payable to the general account provider are appropriate compensation for the risk taken by the general account.

(Adopted effective June 1, 2002)

Sec. 38a-459-18. Asset valuation reserve exemption for certain market value separate accounts

When the insurance company values separate account or supplemental account assets at market value and complies with the asset maintenance requirements pursuant to sections 38a-459-14 to 38a-459-16, inclusive, of the Regulations of Connecticut State Agencies, it need not maintain an asset valuation reserve with respect to these assets.

(Adopted effective June 1, 2002)

Sec. 38a-459-19. Reserve valuation

(a) Reserves for contracts funded by a market value separate account supporting contracts other than index contracts shall be an amount equal to the following:

(1) The total reserve required to be maintained on the valuation date pursuant to section 38a-459-14 of the Regulations of Connecticut State Agencies;

(2) Plus the excess, if any, of the market value of separate account assets (to the extent that the market value of the assets determines the contract holder's benefits, i.e., to the extent the assets are beneficially "client" assets) over the amount determined in accordance with subsection (a)(1) of this section;

(3) Plus any additional amount determined by the valuation actuary as necessary to make adequate provision for all of the contract liabilities;

(4) Plus any additional amount determined as necessary by the insurance commissioner due to the nature of the benefits.

(b) Reserves for index contracts funded by a market value separate account shall be an amount equal to the following:

(1) The total reserve required to be maintained on the valuation date pursuant to section 38a-459-15 of the Regulations of Connecticut State Agencies;

(2) Plus the excess, if any, of the market value of separate account assets (to the extent that the market value of the assets determines the contract holder's benefits,

i.e., to the extent the assets are beneficially "client" assets) over the amount determined in accordance with subsection (b)(1) of this section;

(3) Plus any additional amounts determined by the valuation actuary as necessary to make adequate provision for all of the contract liabilities;

(4) Plus any additional amount determined as necessary by the insurance commissioner due to the nature of the benefits.

(c) Reserves for book value contracts shall be determined as if the contracts were held in the general account.

(d) The amount of any reserves required by subsections (a)(3) and (a)(4) of this section and subsections (b)(3) and (b)(4) of this section may be established by either:

(1) Allocating sufficient assets to the separate account or a supplemental account to satisfy the requirement; or

(2) Setting up the additional reserves in the general account.

(Adopted effective June 1, 2002)

Sec. 38a-459-20. Severability

If any provision of sections 38a-459-10 to 38a-459-20, inclusive, of the Regulations of Connecticut State Agencies or its application to any person or circumstance is held to be invalid, the remainder of the regulation and the application of such provision to other persons or circumstances shall not be affected thereby.

(Adopted effective June 1, 2002)