The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court (2015-2016)

SENATE, Thursday, July 21, 2016

The committee on Ways and Means, to whom was referred the Senate Bill relative to principle-based reserving for life insurance (Senate, No. 539),-- reports, recommending that the same ought to pass with an amendment substituting a new draft with the same title (Senate, No. 2450).

For the committee, Karen E. Spilka

SENATE No. 2450

The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court (2015-2016)

An Act relative to principle-based reserving for life insurance.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Chapter 175 of the General Laws is hereby amended by inserting after
 section 9 the following section:-

3 Section 9 ¹/₂. (a) As used in this section, the following words shall have the following
4 meanings unless the context clearly requires otherwise:

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

8 "Appointed actuary", a qualified actuary who is appointed in accordance with the
9 valuation manual to prepare the actuarial opinion required by section 9B¹/₂.

10 "Company", an entity, which: (i) has written, issued or reinsured life insurance contracts, 11 accident and health insurance contracts or deposit-type contracts in the commonwealth and has at 12 least 1 such policy in force or on claim; or (ii) has written, issued or reinsured life insurance 13 contracts, accident and health insurance contracts or deposit-type contracts in any state and is 14 required to hold a certificate of authority to write life insurance, accident and health insurance or15 deposit-type contracts in the commonwealth.

16 "Deposit-type contract", contracts that do not incorporate mortality or morbidity risks and17 as may be specified in the valuation manual.

18 "Life insurance", contracts that incorporate mortality risk, including annuity and pure19 endowment contracts and as may be specified in the valuation manual.

20 "Policyholder behavior", any action a policyholder, contract holder or other person with 21 the right to elect options, such as a certificate holder, may take pursuant to a policy or contract 22 subject to this section including, but not limited to, lapse, withdrawal, transfer, deposit, premium 23 payment, loan, annuitization or benefit elections prescribed by the policy or contract but 24 excluding events of mortality or morbidity that result in benefits prescribed in their essential 25 aspects by the terms of the policy or contract.

26 "Principle-based valuation", a reserve valuation that uses 1 or more methods or 1 or more 27 assumptions determined by the insurer and is required to comply with subsection (f), as specified 28 in the valuation manual.

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

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

36 "Valuation manual", the manual of valuation instructions adopted by the NAIC as37 specified in this section or as subsequently amended.

(1) The commissioner shall annually value, or cause to be valued, the reserve 38 (b) liabilities for all outstanding life insurance policies and annuity and pure endowment contracts of 39 40 every life insurance company doing business in the commonwealth issued before the operative date of the valuation manual. In calculating reserve liabilities, the commissioner may use group 41 methods and approximate averages for fractions of a year or otherwise. In lieu of the valuation of 42 43 the reserve liabilities required of a foreign or alien company, the commissioner may accept a valuation made, or caused to be made, by the insurance supervisory official of any state or other 44 jurisdiction when the valuation complies with the minimum standard provided in this section. 45

46 (2) The minimum standard for the valuation of all policies and contracts, as
47 appropriate, subject to this section issued before the operative date of the valuation manual shall
48 be that provided by the laws in effect immediately before the effective date of this section.
49 Subsections (d), (e) and (f) shall not apply to such policies and contracts.

50 (c) (1) The commissioner shall annually value, or cause to be valued, the reserve 51 liabilities for all outstanding life insurance contracts, annuity and pure endowment contracts, 52 accident and health contracts and deposit-type contracts of every company issued on or after the 53 operative date of the valuation manual. In lieu of the valuation of the reserve liabilities required 54 of a foreign or alien company, the commissioner may accept a valuation made, or caused to be made, by the insurance supervisory official of any state or other jurisdiction when the valuationcomplies with the minimum standard provided in this section.

57 (2) Subsections (d), (e) and (f) shall apply to all policies and contracts issued on
58 or after the operative date of the valuation manual. Section 9 shall not apply to policies and
59 contracts issued on or after the operative date of the valuation manual.

(3) Notwithstanding the valuation manual, a mortality table shall only be applied
to an individual or group annuity or pure endowment contract subject to this subsection on a
gender-neutral or gender-blended basis in accordance with regulations promulgated by the
commissioner.

64 (d) For accident and health insurance contracts issued on or after the operative date of the
65 valuation manual, the standard prescribed in the valuation manual is the minimum standard of
66 valuation required pursuant to subsection (c).

(e) (1) For policies issued on or after the operative date of the valuation manual, the
standard prescribed in the valuation manual is the minimum standard of valuation required
pursuant to subsection (c), except as provided pursuant to paragraphs (5) or (7).

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

(i) the valuation manual has been adopted by the NAIC by an affirmative
vote of not less than 42 members or ³/₄ of the members voting, whichever is greater;

(ii) the NAIC standard valuation law, as amended by the NAIC in 2009,
including substantially similar terms and provisions, has been enacted by states representing

greater than 75 per cent of the direct premiums written as reported in life, accident and health
annual statements, health annual statements or fraternal annual statements submitted in 2008;
and

(iii) the NAIC a standard valuation law, as amended by the NAIC in 2009,
including substantially similar terms and provisions, has been enacted by not less than 42 of the
55 jurisdictions comprising the United States, American Samoa, the United States Virgin Islands,
the District of Columbia, Guam and the commonwealth of Puerto Rico.

(3) Unless a change in the valuation manual specifies a later effective date,
changes to the valuation manual shall be effective on January 1 following the date that the
changes are adopted by the NAIC by an affirmative vote that satisfies the following
requirements:

87 (i) not less than ³/₄ of the members of the NAIC voting, but not less than a
88 majority of the total membership; and

(ii) members of the NAIC representing jurisdictions totaling greater than
75 per cent of the direct premiums written as reported in life, accident and health annual
statements, health annual statements or fraternal annual statements most recently available before
the vote in clause (i).

93 (4) The valuation manual shall specify the following:

94 (i) the minimum valuation standards for and definitions of the policies or
95 contracts subject to subsection (c), including: (A) the commissioners reserve valuation method
96 for life insurance contracts, other than annuity contracts, subject to subsection (c); (B) the

97 commissioners annuity reserve valuation method for annuity contracts subject to said subsection98 (c); and (C) minimum reserves for all other policies or contracts subject to said subsection (c);

(ii) which policies or contracts or types of policies or contracts that are
subject to the requirements of a principle-based valuation in paragraph (1) of subsection (f) and
the minimum valuation standards consistent with those requirements;

(iii) for policies and contracts subject to a principle-based valuation
pursuant to subsection (f): (A) requirements for the format of reports to the commissioner
pursuant to clause (iii) of paragraph (2) of subsection (f) and which shall include information
necessary to determine if the valuation is appropriate and in compliance with this section; (B)
assumptions for risks over which the company does not have significant control or influence; and
(C) procedures for corporate governance and oversight of the actuarial function and a process for
appropriate waiver or modification of those procedures;

(iv) for policies not subject to a principle-based valuation pursuant to subsection (f), the minimum valuation standard shall either be consistent with the minimum standard of valuation before the operative date of the valuation manual, or develop reserves that quantify the benefits and guarantees, and the funding, associated with the contracts and their risks at a level of conservatism that reflects conditions that include unfavorable events that have a reasonable probability of occurring;

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

(vi) the data and form of the data required pursuant to subsection (g), and
to whom the data shall be submitted and may specify other requirements including data analyses
and reporting of analyses.

(5) In the absence of a specific valuation requirement or if a specific valuation
requirement in the valuation manual is not, in the determination of the commissioner, in
compliance with this section, then the company shall, with respect to those requirements, comply
with minimum valuation standards prescribed by the commissioner through regulation.

(6) The commissioner may engage a qualified actuary, at the expense of an
insurance company, to perform an actuarial examination of that company and determine the
appropriateness of a reserve assumption or method used by the company or to review and
determine an insurance company's compliance with the requirements of this section. The
commissioner may rely upon the opinion of a qualified actuary engaged by the commissioner of
another state, district or territory of the United States. For purposes of this paragraph, the term
"engage" shall include employment and contracting.

(7) The commissioner may require a company to change an assumption or method
that is determined by the commissioner to be necessary in order to comply with the requirements
of the valuation manual or this section and the company shall adjust the reserves as required by
the commissioner. The commissioner may take other disciplinary action as permitted pursuant to
this chapter and chapter 176D.

(f) (1) A company shall establish reserves using a principle-based valuation that
meets the following conditions for policies or contracts, as specified in the valuation manual:

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

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

(iii) incorporate assumptions that are derived in 1 of the following
manners: (A) the assumption is prescribed in the valuation manual; (B) for assumptions that are
not prescribed, the assumptions shall: be established utilizing the company's available
experience, to the extent it is relevant and statistically credible; or to the extent that company
data is not available, relevant or statistically credible, be established utilizing other relevant,
statistically credible experience; and

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

157 (2) A company using a principle-based valuation for 1 or more policies or158 contracts subject to this section as specified in the valuation manual shall:

(i) establish procedures for corporate governance and oversight of theactuarial valuation function consistent with those described in the valuation manual;

(ii) provide to the commissioner and the board of directors of the company an annual certification of the effectiveness of the internal controls with respect to the principlebased valuation, and those controls shall be designed to insure that all material risks inherent in the liabilities and associated assets subject to that valuation are included in the valuation, and that valuations are made in accordance with the valuation manual, and the certification shall be based on the controls in place as of the end of the preceding calendar year; and

167 (iii) develop and file with the commissioner upon request a principle-168 based valuation report that complies with standards prescribed in the valuation manual.

(3) A principle-based valuation may include a prescribed formulaic reserve
component. A company shall submit mortality, morbidity, policyholder behavior or expense
experience and other data as required by the valuation manual.

(g) (1) For purposes of this subsection, "regulatory agency," "law enforcement
agency" and the "NAIC" shall include, but shall not be limited to, employees, agents, consultants
and contractors of those entities. The term "confidential information" shall mean:

(i) a memorandum in support of an opinion submitted pursuant to section
9B¹/₂ and other documents, materials and other information including, but not limited to, all
working papers, and copies thereof, created, produced or obtained by or disclosed to the
commissioner or other person in connection with the memorandum;

(ii) all documents, materials and other information including, but not
limited to, all working papers, and copies thereof, created, produced or obtained by or disclosed
to the commissioner or other person in the course of an examination made pursuant to paragraph
(6) of subsection (e), provided, that if an examination report or other material prepared in

183 connection with an examination made pursuant to section 4 is not held as private and
184 confidential information pursuant to said section 4, an examination report or other material
185 prepared in connection with an examination made pursuant to said paragraph (6) of said
186 subsection (e) shall not be considered confidential information to the same extent as if the
187 examination report or other material had been prepared pursuant to section 4;

(iii) reports, documents, materials and other information developed by a
company in support of or in connection with an annual certification by the company pursuant to
clause (ii) of paragraph (2) of subsection (f) evaluating the effectiveness of the company's
internal controls with respect to a principle-based valuation and any other documents, materials
and other information including, but not limited to, all working papers, and copies thereof,
created, produced or obtained by or disclosed to the commissioner or other person in connection
with the reports, documents, materials and other information;

(iv) a principle-based valuation report developed pursuant to clause (iii) of
paragraph (2) of subsection (f) and other documents, materials and other information including,
but not limited to, all working papers, and copies thereof, created, produced or obtained by or
disclosed to the commissioner or other person in connection with the report; and

(v) documents, materials, data and other information submitted by a
company pursuant to subsection (i) and any other documents, materials, data and other
information including, but not limited to, all working papers, and copies thereof, created or
produced in connection with such experience data, in each case that include potentially
company-identifying or personally identifiable information, that is provided to or obtained by the
commissioner and any other documents, materials, data and other information including, but not

205 limited to, all working papers, and copies thereof, created, produced or obtained by or disclosed206 to the commissioner or other person in connection with such experience materials.

(2) Except as provided in this subsection, a company's confidential information is
confidential by law and privileged and shall not be subject to chapter 66 or the Twenty-sixth
clause of section 7 of chapter 4, shall not be subject to subpoena and shall not be subject to
discovery or admissible in evidence in a private civil action. The commissioner may use
confidential information in the furtherance of a regulatory or legal action brought against the
company as a part of the commissioner's official duties.

Neither the commissioner nor a person who received confidential information while
acting under the authority of the commissioner may testify in a private civil action concerning
confidential information.

216 In order to assist in the performance of the commissioner's duties, the commissioner may 217 share confidential information with other state, federal and international regulatory agencies and 218 with the NAIC and its affiliates and subsidiaries and, in the case of confidential information 219 specified in clauses (i) and (iv) of paragraph (1), with the Actuarial Board for Counseling and 220 Discipline or its successor upon request stating that the confidential information is required for 221 the purpose of professional disciplinary proceedings and with state, federal and international law 222 enforcement officials; provided, however, that the recipient agrees and has the legal authority to 223 agree to maintain the confidentiality and privileged status of the documents, materials, data and 224 other information in the same manner and to the same extent as required for the commissioner.

The commissioner may receive documents, materials, data and other information,
including otherwise confidential and privileged documents, materials, data or information, from

the NAIC and its affiliates and subsidiaries, from regulatory or law enforcement officials of other foreign or domestic jurisdictions and from the Actuarial Board for Counseling and Discipline or its successor and shall maintain as confidential or privileged any document, material, data or other information received with notice or the understanding that it is confidential or privileged under the laws of the jurisdiction that is the source of the document, material or other information.

The commissioner may enter into agreements governing sharing and use of informationconsistent with this paragraph.

No waiver of an applicable privilege or claim of confidentiality in the confidential information shall occur as a result of disclosure to the commissioner pursuant to this section or as a result of sharing as authorized in the third paragraph of this paragraph.

A privilege established pursuant to the law of any state or jurisdiction that is substantially similar to the privilege established pursuant to this paragraph shall be available and enforced in a proceeding in and in any court of the commonwealth.

(3) Notwithstanding paragraph (2), confidential information specified in clauses(i) and (iv) of paragraph (1):

(i) may be subject to subpoen to defend an action seeking damages from
the appointed actuary submitting the related memorandum in support of an opinion submitted
pursuant to section 9B¹/₂ or principle-based valuation report developed pursuant to clause (iii) of
paragraph (2) of subsection (f) by reason of an action required by this section or through
regulation;

(ii) may otherwise be released by the commissioner with the writtenconsent of the company; and

(iii) once a portion of a memorandum in support of an opinion submitted
pursuant to section 9B¹/₂ or a principle-based valuation report developed pursuant to clause (iii)
of paragraph (2) of subsection (f) is cited by the company in its marketing or is publicly
volunteered to or before a governmental agency other than a state insurance department or is
released by the company to the news media, all portions of that memorandum or report shall no
longer be confidential.

(h) (1) The commissioner may exempt specific product forms or product lines of a domestic company that is licensed and doing business only in the commonwealth from the requirements of subsection (e) provided that the: (i) commissioner has issued an exemption in writing to the company and has not subsequently revoked the exemption in writing; and (ii) company computes reserves using assumptions and methods used before the operative date of the valuation manual in addition to any requirements established by the commissioner and promulgated by regulation.

(2) The minimum standards for the valuation of all applicable policies and
contracts provided by the laws in effect immediately before the effective date of this section shall
be applicable for a company granted an exemption pursuant to this section or section 9B¹/₂.

(i) The commissioner may, pursuant to chapter 30A, upon notice and opportunity for all
interested parties to be heard, issue rules, regulations and orders as shall be necessary to carry out
this section.

(j) This section shall apply to all life insurance contracts, accident and health insurance
contracts and deposit-type contracts issued on or after the operative date of the valuation manual
as defined herein.

SECTION 2. Said chapter 175 is hereby further amended by inserting after section 9B
the following section:-

274 Section 9B¹/₂. (a) For purposes of this section, the definitions in subsection (a) of section 275 9¹/₂ shall apply unless the context clearly requires otherwise.

276 (b) After the operative date of the valuation manual as defined in section $9\frac{1}{2}$, every 277 company with outstanding life insurance contracts, accident and health insurance contracts or deposit-type contracts in the commonwealth and subject to regulation by the commissioner shall 278 annually submit the opinion of the appointed actuary as to whether the reserves and related 279 280 actuarial items held in support of the policies and contracts are computed appropriately, are 281 based on assumptions that satisfy contractual provisions, are consistent with prior reported 282 amounts and comply with applicable laws of the commonwealth. The valuation manual shall 283 prescribe the specifics of this opinion including items necessary to the scope of the opinion.

(c) After the effective date of this section and before the operative date of the valuation manual as defined in section $9\frac{1}{2}$, the specifics of the opinion and the manner in which the confidentiality of the memorandum in support of the opinion shall be protected shall be as prescribed by section 9B.

(d) After the operative of the valuation manual as defined in section 9¹/₂, every company
 with outstanding life insurance contracts, accident and health insurance contracts or deposit-type
 contracts in the commonwealth and subject to regulation by the commissioner, except as

exempted in the valuation manual, shall also annually include in the opinion required by subsection (b) an opinion of the same appointed actuary as to whether the reserves and related actuarial items held in support of the policies and contracts specified in the valuation manual, when considered in light of the assets held by the company with respect to the reserves and related actuarial items including, but not limited to, the investment earnings on the assets and the considerations anticipated to be received and retained under the policies and contracts, make adequate provision for the company's obligations under the policies and contracts including, but not limited to, the benefits under and expenses associated with the policies and contracts.

(e) The commissioner may provide by regulation for a transition period for establishing
higher reserves that the appointed actuary may deem necessary in order to render the opinion
required by subsection (b).

(f) A memorandum, in form and substance as specified in the valuation manual, and
 acceptable to the commissioner, shall be prepared to support each actuarial opinion required by
 subsection (b).

If the insurance company fails to provide a supporting memorandum at the request of the commissioner within a period specified in the valuation manual or the commissioner determines that the supporting memorandum provided by the insurance company fails to meet the standards prescribed by the valuation manual or is otherwise unacceptable to the commissioner, the commissioner may engage a qualified actuary at the expense of the company to review the opinion and the basis for the opinion and prepare the supporting memorandum required by the commissioner. 312 The opinion shall be in form and substance as specified in the valuation manual and 313 acceptable to the commissioner.

The opinion shall be submitted with the annual statement reflecting the valuation of reserve liabilities for each year ending on or after the operative date of the valuation manual.

The opinion shall apply to all policies and contracts subject to subsection (d) in additionto any other actuarial liabilities specified in the valuation manual.

The opinion shall be based on standards adopted from time to time by the Actuarial Standards Board or its successor and on such additional standards as may be prescribed in the valuation manual.

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

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

328 Disciplinary action by the commissioner against the company or the appointed actuary 329 shall be defined in regulations by the commissioner.

After the operative date of the valuation manual as defined in section $9\frac{1}{2}$, a memorandum in support of an opinion submitted pursuant to section $9B\frac{1}{2}$ and other documents, materials and information including, but not limited to, all working papers, and copies thereof, created, 333 produced or obtained by or disclosed to the commissioner or other person in connection with the 334 memorandum is deemed confidential information pursuant to clause (i) of paragraph (1) of 335 subsection (j) of section 9½ and shall be treated and protected as required pursuant to that 336 section.

(g) The commissioner may, pursuant to chapter 30A, upon notice and opportunity for all
 interested parties to be heard, issue rules, regulations and orders as shall be necessary to carry out
 this section.

340 SECTION 3. Said chapter 175 is hereby further amended by inserting after section 144341 the following section:-

Section 144¹/₂. (a) Section 144 shall not apply to policies issued on and after the operative date of the valuation manual as defined by section 9¹/₂. For the purposes of this section, the term "operative date of the valuation manual" shall mean January 1 of the first calendar year that the valuation manual is effective.

(b) In the case of policies issued on and after the operative date of the valuation manual
as defined in subsection (a), no policy of life insurance, except as provided in subsection (i),
shall be delivered or issued for delivery in the commonwealth unless it contains in substance the
following or corresponding provisions which are, in the opinion of the commissioner, at least as
favorable to the defaulting or surrendering policyholder as are the minimum requirements
specified here and are in compliance with subsection (h).

In the event of default in a premium payment, the company will grant, upon proper request not later than 60 days after the due date of the premium in default, a paid-up nonforfeiture benefit on a plan stipulated in the policy, effective as of the due date, of an amount 355 as may be hereinafter specified. In lieu of the stipulated paid-up nonforfeiture benefit, the 356 company may substitute, upon proper request not later than 60 days after the due date of the 357 premium in default, an actuarially equivalent alternative paid-up nonforfeiture benefit which 358 provides a greater amount or longer period of death benefits or, if applicable, a greater amount or 359 earlier payment of endowment benefits.

Upon surrender of the policy not later than 60 days after the due date of a premium payment in default after premiums have been paid for at least 3 years in the case of ordinary insurance or 5 years in the case of industrial insurance, the company will pay, in lieu of a paid-up nonforfeiture benefit, a cash surrender value of an amount as may be hereinafter specified.

A specified paid-up nonforfeiture benefit shall become effective as specified in the policy unless the person entitled to make the election elects another available option not later than 60 days after the due date of the premium in default.

367 If the policy shall have become paid-up by completion of all premium payments or if it is 368 continued under a paid-up nonforfeiture benefit which became effective on or after the third 369 policy anniversary in the case of ordinary insurance or the fifth policy anniversary in the case of 370 industrial insurance, the company will pay, upon surrender of the policy not later than thirty 30 371 days after a policy anniversary, a cash surrender value of an amount as may be hereinafter 372 specified.

In the case of policies which cause, on a basis guaranteed in the policy, unscheduled changes in benefits or premiums, or which provide an option for changes in benefits or premiums other than a change to a new policy; a statement of the mortality table, interest rate and method used in calculating cash surrender values and the paid-up nonforfeiture benefits available under the policy. In the case of all other policies, a statement of the mortality table and interest rate used in calculating the cash surrender values and the paid-up nonforfeiture benefits available under the policy, together with a table showing the cash surrender value, if any, and paid-up nonforfeiture benefit, if any, available under the policy on each policy anniversary either during the first 20 policy years or during the term of the policy, whichever is shorter, such values and benefits to be calculated upon the assumption that there are no dividends or paid-up additions credited to the policy and that there is no indebtedness to the company on the policy.

384 A statement that the cash surrender values and the paid-up nonforfeiture benefits available under the policy are not less than the minimum values and benefits required by or 385 386 pursuant to the insurance law of the state in which the policy is delivered; an explanation of the 387 manner in which the cash surrender values and the paid-up nonforfeiture benefits are altered by 388 the existence of any paid-up additions credited to the policy or any indebtedness to the company 389 on the policy; if a detailed statement of the method of computation of the values and benefits 390 shown in the policy is not stated therein, a statement that a method of computation has been filed with the insurance supervisory official of the state in which the policy is delivered; and a 391 392 statement of the method to be used in calculating the cash surrender value and a paid-up 393 nonforfeiture benefit available under the policy on a policy anniversary beyond the last 394 anniversary for which values and benefits are consecutively shown in the policy.

Any of the foregoing provisions or portions thereof not applicable by reason of the planof insurance may, to the extent inapplicable, be omitted from the policy.

397 The company shall reserve the right to defer the payment of a cash surrender value for a398 period of 6 months after demand therefor with surrender of the policy.

399 (c) (1) A cash surrender value available under the policy in the event of default in a premium payment due on a policy anniversary, whether or not required by subsection (b), shall 400 be an amount not less than the excess, if any, of the present value, on the anniversary, of the 401 future guaranteed benefits which would have been provided for by the policy, including any 402 403 existing paid-up additions, if there had been no default, over the sum of: (i) the then present 404 value of the adjusted premiums as defined in subsection (e), corresponding to premiums which 405 would have fallen due on and after the anniversary; and (ii) the amount of any indebtedness to the company on the policy. 406

407 (2) For a policy issued on or after the operative date of subsection (e), which 408 provides supplemental life insurance or annuity benefits at the option of the insured and for an 409 identifiable additional premium by rider or supplemental policy provision, the cash surrender 410 value referred to in paragraph (1) shall be an amount not less than the sum of the cash surrender 411 value for an otherwise similar policy issued at the same age without the rider or supplemental 412 policy provision and the cash surrender value as defined in paragraph (1) for a policy which 413 provides only the benefits otherwise provided by the rider or supplemental policy provision.

(3) For a family policy issued on or after the operative date of subsection (e),
which defines a primary insured and provides term insurance on the life of the spouse of the
primary insured expiring before the spouse reaches the age of 71, the cash surrender value
referred to in paragraph (1) shall be an amount not less than the sum of the cash surrender value
for an otherwise similar policy issued at the same age without term insurance on the life of the
spouse and the cash surrender value as defined in paragraph (1) for a policy which provides only
the benefits otherwise provided by term insurance on the life of the spouse.

421 (4) A cash surrender value available not later than 30 days after a policy
422 anniversary under a policy paid-up by completion of all premium payments or a policy continued
423 pursuant to a paid-up nonforfeiture benefit, whether or not required by subsection (b), shall be an
424 amount not less than the present value, on the anniversary, of the future guaranteed benefits
425 provided for by the policy, including any existing paid-up additions, decreased by any
426 indebtedness to the company on the policy.

(d) The present value of a paid-up nonforfeiture benefit available under the policy in the event of default in a premium payment due on a policy anniversary shall be, as of that anniversary, at least equal to the cash surrender value then provided for by the policy or, if none is provided for, that cash surrender value which would have been required by this section in the absence of the condition that premiums shall have been paid for at least a specified period.

432 (e) (1) Except as provided in paragraph (7), the adjusted premiums for a policy shall be calculated on an annual basis and shall be such uniform percentage of the respective 433 434 premiums specified in the policy for each policy year, excluding amounts payable as extra premiums to cover impairments or special hazards and also excluding any uniform annual 435 436 contract charge or policy fee specified in the policy in a statement of the method to be used in 437 calculating the cash surrender values and paid-up nonforfeiture benefits, that the present value, at 438 the date of issue of the policy, of all adjusted premiums shall be equal to the sum of: (i) the then present value of the future guaranteed benefits provided for by the policy; (ii) 1 per cent of either 439 the amount of insurance, if the insurance is uniform in amount, or the average amount of 440insurance at the beginning of each of the first 10 policy years; and (iii) 125 per cent of the 441 442 nonforfeiture net level premium as hereinafter defined, provided, however, that in applying this percentage no nonforfeiture net level premium shall be deemed to exceed 4 per cent of either the 443

amount of insurance, if the insurance is uniform in amount, or the average amount of insuranceat the beginning of each of the first 10 policy years.

The date of issue of a policy for the purpose of this section shall be the date as of which the rated age of the insured is determined.

(2) The nonforfeiture net level premium shall be equal to the present value, at the date of issue of the policy, of the guaranteed benefits provided for by the policy divided by the present value, at the date of issue of the policy, of an annuity of 1 per annum payable on the date of issue of the policy and on each anniversary of the policy on which a premium falls due.

452 (3) In the case of policies which cause, on a basis guaranteed in the policy, unscheduled changes in benefits or premiums, or which provide an option for changes in benefits 453 or premiums other than a change to a new policy, the adjusted premiums and present values shall 454 455 initially be calculated on the assumption that future benefits and premiums do not change from 456 those stipulated at the date of issue of the policy. At the time of any change in the benefits or 457 premiums, the future adjusted premiums, nonforfeiture net level premiums and present values 458 shall be recalculated on the assumption that future benefits and premiums do not change from those stipulated by the policy immediately after the change. 459

(4) Except as otherwise provided in paragraph (7), the recalculated future adjusted
premiums for a policy shall be a uniform percentage of the respective future premiums specified
in the policy for each policy year, excluding amounts payable as extra premiums to cover
impairments and special hazards, and also excluding any uniform annual contract charge or
policy fee specified in the policy in a statement of the method to be used in calculating the cash
surrender values and paid-up nonforfeiture benefits, that the present value, at the time of change

466 to the newly defined benefits or premiums, of all future adjusted premiums shall be equal to the 467 excess of the sum of the then present value of the then future guaranteed benefits provided for by 468 the policy and the additional expense allowance, if any, over the then cash surrender value, if 469 any, or present value of any paid-up nonforfeiture benefit under this policy.

(5) The additional expense allowance, at the time of the change to the newly
defined benefits or premiums, shall be the sum of: (i) 1 per cent of the excess, if positive, of the
average amount of insurance at the beginning of each of the first 10 policy years subsequent to
the change over the average amount of insurance before the change at the beginning of each of
the first 10 policy years subsequent to the time of the most recent previous change, or, if there
has been no previous change, the date of issue of the policy; and (ii) 125 per cent of the increase,
if positive, in the nonforfeiture net level premium.

477 (6) The recalculated nonforfeiture net level premium shall be equal to the result obtained by dividing (i) by (ii), where (i) equals the sum of the nonforfeiture net level premium 478 479 applicable before the change times the present value of an annuity of 1 per annum payable on each anniversary of the policy on or subsequent to the date of the change on which a premium 480 481 would have fallen due had the change not occurred and the present value of the increase in future 482 guaranteed benefits provided for by the policy, and (ii) equals the present value of an annuity of 1 per annum payable on each anniversary of the policy on or subsequent to the date of change on 483 which a premium falls due. 484

(7) Notwithstanding this section or any other general or special law to the
contrary, in the case of a policy issued on a substandard basis which provides reduced graded
amounts of insurance so that, in each policy year, the policy has the same tabular mortality cost

as an otherwise similar policy issued on the standard basis which provides higher uniform
amount of insurance, adjusted premiums and present values for the substandard policy may be
calculated as if it were issued to provide higher uniform amounts of insurance on the standard
basis.

492 (8) All adjusted premiums and present values referred to in this section shall for 493 all policies: (i) of ordinary insurance be calculated on the basis of the Commissioners 1980 Standard Ordinary Mortality Table or, at the election of the company for specified plans of life 494 insurance, the Commissioners 1980 Standard Ordinary Mortality Table with 10 year select 495 mortality factors; (ii) of industrial insurance be calculated on the basis of the Commissioners 496 497 1961 Standard Industrial Mortality Table; and (iii) issued in a particular calendar year be 498 calculated on the basis of a rate of interest not exceeding the nonforfeiture interest rate as defined 499 in this section, for policies issued in that calendar year.

At the option of the company, calculations for all policies issued in a particular calendar year may be made on the basis of a rate of interest not exceeding the nonforfeiture interest rate, as defined in this section, for policies issued in the immediately preceding calendar year.

503 Under a paid-up nonforfeiture benefit, including any paid-up dividend additions, any cash 504 surrender value available, whether or not required by subsection (b), shall be calculated on the 505 basis of the mortality table and rate of interest used in determining the amount of a paid-up 506 nonforfeiture benefit and paid-up dividend additions.

507 A company may calculate the amount of a guaranteed paid-up nonforfeiture benefit 508 including paid-up additions under the policy on the basis of an interest rate not lower than that 509 specified in the policy for calculating cash surrender values. 510 In calculating the present value of paid-up term insurance with accompanying pure 511 endowment, if any, offered as a nonforfeiture benefit, the rates of mortality assumed shall not be 512 more than those shown in the Commissioners 1980 Extended Term Insurance Table for policies 513 of ordinary insurance or not more than the Commissioners 1961 Industrial Extended Term 514 Insurance Table for policies of industrial insurance.

515 For insurance issued on a substandard basis, the calculation of adjusted premiums and 516 present values may be based on appropriate modifications of the aforementioned tables.

517 For policies issued on or after the operative date of the valuation manual, the valuation manual shall provide the Commissioners Standard Mortality Table for use in determining the 518 minimum nonforfeiture standard that may be substituted for the Commissioners 1980 Standard 519 520 Ordinary Mortality Table with or without 10 year select mortality factors or for the 521 Commissioners 1980 Extended Term Insurance Table. If the commissioner approves by 522 regulation a commissioners standard ordinary mortality table adopted by the NAIC for use in 523 determining the minimum nonforfeiture standard for policies issued on or after the operative date 524 of the valuation manual then that minimum nonforfeiture standard supersedes the minimum nonforfeiture standard provided by the valuation manual. 525

526 For policies issued on or after the operative date of the valuation manual the valuation 527 manual shall provide the Commissioners Standard Mortality Table for use in determining the 528 minimum nonforfeiture standard that may be substituted for the Commissioners 1961 Standard 529 Industrial Mortality Table or the Commissioners 1961 Industrial Extended Term Insurance 530 Table. If the commissioner approves by regulation a Commissioners Standard Industrial 531 Mortality Table adopted by the NAIC for use in determining the minimum nonforfeiture standard for policies issued on or after the operative date of the valuation manual then that
minimum nonforfeiture standard supersedes the minimum nonforfeiture standard provided by the
valuation manual.

(9) For policies issued on and after the operative date of the valuation manual, the
nonforfeiture interest rate per annum for a policy issued in a particular calendar year shall be
provided by the valuation manual.

(10) Notwithstanding this chapter or any general or special law to the contrary, a
refiling of nonforfeiture values or their methods of computation for a previously approved policy
form which involves only a change in the interest rate or mortality table used to compute
nonforfeiture values shall not require refiling of other provisions of that policy form.

(f) In the case of a plan of life insurance which provides for future premium
determination, the amounts of which are to be determined by the insurance company based on
estimates of future experience, or in the case of a plan of life insurance which is of such a nature
that minimum values cannot be determined by the methods described in subsections (b), (c), (d)
or (e):

(i) the commissioner shall be satisfied that the benefits provided under the plan
are substantially as favorable to policyholders and insureds as the minimum benefits otherwise
required by said subsections (b), (c), (d) or (e);

(ii) the commissioner shall be satisfied that the benefits and the pattern ofpremiums of that plan are not such as to mislead prospective policyholders or insureds; and

(iii) the cash surrender values and paid-up nonforfeiture benefits provided by the plan shall not be less than the minimum values and benefits required for the plan computed by a method consistent with the principles of this section, as determined by regulations promulgated by the commissioner.

556 (g) Any cash surrender value and paid-up nonforfeiture benefit available under the policy in the event of default in a premium payment due at any time other than on the policy 557 anniversary shall be calculated with allowance for the lapse of time and the payment of fractional 558 559 premiums beyond the last preceding policy anniversary. All values referred to in subsections (c), (d) and (e) may be calculated upon the assumption that a death benefit is payable at the end of 560 561 the policy year of death. The net value of any paid-up additions, other than paid-up term 562 additions, shall not be less than the amounts used to provide those additions. Notwithstanding 563 said subsection (c), additional benefits payable: (i) in the event of death or dismemberment by 564 accident or accidental means; (ii) in the event of total and permanent disability; (iii) as reversionary annuity or deferred reversionary annuity benefits; (iv) as term insurance benefits 565 provided by a rider or supplemental policy provision to which, if issued as a separate policy, this 566 567 section would not apply; (v) as term insurance in the life on a child or on the lives of children 568 provided in a policy on the life of a parent of the child, if that term insurance expires before the child's age is 26, is uniform in amount after the child's age is 1, and has not become paid-up by 569 reason of the death of a parent of the child; and (vi) as other policy benefits additional to life 570 insurance and endowment benefits, and premiums for all such additional benefits, shall be 571 572 disregarded in ascertaining cash surrender values and nonforfeiture benefits required by this section and no such additional benefits shall be required to be included in any paid-up 573 nonforfeiture benefits. 574

575 (h) (1) This subsection shall apply to all policies issued on or after the operative date 576 of the valuation manual.

(2) Any cash surrender value available under the policy in the event of default in a premium payment due on a policy anniversary shall be in an amount which does not differ by more than .2 per cent of either the amount of insurance, if the insurance is uniform in amount, or the average amount of insurance at the beginning of each of the first 10 policy years, from the sum of the greater of 0 and the basic cash value hereinafter specified and the present value of any existing paid-up additions less the amount of any indebtedness to the company under the policy.

583 The basic cash value shall be equal to the present value, on the anniversary, of the future guaranteed benefits which would have been provided for by the policy, excluding any existing 584 585 paid-up additions and before deduction of any indebtedness to the company, if there had been no 586 default, less the then present value of the nonforfeiture factors, as defined in this section, 587 corresponding to premiums which would have fallen due on and after the anniversary. Provided, 588 however, that the effects on the basic cash value of supplemental life insurance or annuity 589 benefits or of family coverage, as described in subsection (c), shall be the same as the effects 590 specified in said subsection (c) on the cash surrender values defined in this section.

(3) The nonforfeiture factor for each policy year shall be an amount equal to a percentage of the adjusted premium for the policy year, as defined in subsection (e); provided, however, that no basic cash value may be less than the value which would be obtained if the adjusted premiums for the policy, as defined in subsection (e), were substituted for the nonforfeiture factors in the calculation of the basic cash value. The percentage: (i) shall be the same percentage for each policy year between the second policy anniversary and the later of 597 either the fifth policy anniversary or the first policy anniversary at which there is available under 598 the policy a cash surrender value in an amount, before including any paid-up additions and 599 before deducting any indebtedness, of at least .2 per cent of either the amount of insurance, if the 600 insurance is uniform in amount, or the average amount of insurance at the beginning of each of 601 the first 10 policy years; and (ii) shall be such that no percentage after the later of the 2 policy 602 anniversaries specified in paragraph (2) may apply to fewer than 5 consecutive policy years.

All adjusted premiums and present values referred to in this subsection shall for a
particular policy be calculated on the same mortality and interest bases as are used in
demonstrating the policy's compliance with this section. The cash surrender values referred to in
this section shall include endowment benefits provided for by the policy.

Any cash surrender value available other than in the event of default in a premium payment due on a policy anniversary, and the amount of a paid-up nonforfeiture benefit available under the policy in the event of default in a premium payment shall be determined in manners consistent with the manners specified for determining the analogous minimum amounts in subsections (b), (c), (d), (e) and (g). The amounts of any cash surrender values and of paid-up nonforfeiture benefits granted in connection with additional benefits such as those listed in paragraphs (1) to (6) of subsection (g) shall conform with the principles of this section.

(i) This section shall not apply to: reinsurance; group insurance; pure endowment;
annuity or reversionary annuity contracts; a term policy of uniform amount, which provides no
guaranteed nonforfeiture or endowment benefits, or renewal thereof, of not more than 20 years
expiring before age 71, for which uniform premiums are payable during the entire term of the
policy; a term policy of decreasing amount, which provides no guaranteed nonforfeiture or

619 endowment benefits, on which each adjusted premium, calculated as specified in subsection (e), is less than the adjusted premium so calculated, on a term policy of uniform amount, or renewal 620 thereof, which provides no guaranteed nonforfeiture or endowment benefits, issued at the same 621 age and for the same initial amount of insurance and for a term of 20 years or less expiring 622 before age 71, for which uniform premiums are payable during the entire term of the policy; a 623 624 policy, which provides no guaranteed nonforfeiture or endowment benefits, for which no cash surrender value, if any, or present value of a paid-up nonforfeiture benefit, at the beginning of a 625 policy year, calculated as specified in subsections (c), (d) and (e), exceeds 2 ¹/₂ per cent of the 626 627 amount of insurance at the beginning of the same policy year; or a policy which shall be delivered outside the commonwealth through an agent or other representative of the company 628 629 issuing the policy.

For purposes of determining the applicability of this section, the age at expiration for ajoint term life insurance policy shall be the age at expiration of the oldest life.

(j) The commissioner may, pursuant to chapter 30A, upon notice and opportunity for all
interested parties to be heard, promulgate rules, regulations and orders as shall be necessary for
the implementation and administration of this section.

635 SECTION 4. Subsection (e) of section 144 ¹/₂ of chapter 175of the General Laws shall
636 apply to all policies issued on or after the effective date of this act.