

FIRST REGULAR SESSION

HOUSE BILL NO. 70

98TH GENERAL ASSEMBLY

INTRODUCED BY REPRESENTATIVE GOSEN.

0146H.02I

D. ADAM CRUMBLISS, Chief Clerk

AN ACT

To repeal sections 376.370, 376.380, and 376.670, RSMo, and to enact in lieu thereof four new sections relating to valuation of reserves for life insurance.

Be it enacted by the General Assembly of the state of Missouri, as follows:

Section A. Sections 376.370, 376.380, and 376.670, RSMo, are repealed and four new sections enacted in lieu thereof, to be known as sections 376.365, 376.370, 376.380, and 376.670, to read as follows:

376.365. 1. Sections 376.365 to 376.380 shall be known and may be cited as the "Standard Valuation Law".

2. As used in sections 376.365 to 376.380, the following terms shall mean and apply on or after the operative date of the valuation manual:

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

(2) "Appointed actuary", a qualified actuary who is appointed in accordance with the valuation manual to prepare the actuarial opinion required under subsection 5 of section 376.380;

(3) "Company", an entity which has written, issued, or reinsured life insurance contracts, accident and health insurance contracts, or deposit-type contracts:

(a) In Missouri and has at least one such policy in force or on claim; or

(b) In any state and is required to hold a certificate of authority to write life insurance, accident and health insurance, or deposit-type contracts in Missouri;

EXPLANATION — Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted from the law. Matter in bold-face type in the above bill is proposed language.

- 16 (4) "Deposit-type contract", a contract that does not incorporate mortality or
17 morbidity risks and as may be specified in the valuation manual;
- 18 (5) "Life insurance", contracts that incorporate mortality risk including annuity
19 and pure endowment contracts and as may be specified in the valuation manual;
- 20 (6) "NAIC", the National Association of Insurance Commissioners;
- 21 (7) "Operative date of the valuation manual", January first of the first calendar
22 year that the valuation manual is effective, as described in subdivision (2) of subsection 6
23 of section 376.380;
- 24 (8) "Policyholder behavior", any action a policyholder, contract holder, or any
25 other person with the right to elect options, such as a certificate holder, may take under a
26 policy or contract subject to sections 376.365 to 376.380 including, but not limited to, lapse,
27 withdrawal, transfer, deposit, premium payment, loan, annuitization, or benefit elections
28 prescribed by the policy or contract but excluding events of mortality or morbidity that
29 result in benefits prescribed in their essential aspects by the terms of the policy or contract;
- 30 (9) "Principle-based valuation", a reserve valuation that uses one or more methods
31 or one or more assumptions determined by the insurer and is required to comply with
32 subsection 7 of section 376.380 as specified in the valuation manual;
- 33 (10) "Qualified actuary", an individual who is qualified to sign the applicable
34 statement of actuarial opinion in accordance with the American Academy of Actuaries
35 qualification standards for actuaries signing such statements and who meets the
36 requirements specified in the valuation manual;
- 37 (11) "Tail risk", a risk that occurs either if the frequency of low probability events
38 is higher than expected under a normal probability distribution or if there are observed
39 events of very significant size or magnitude;
- 40 (12) "Valuation manual", the manual of valuation instructions adopted by the
41 NAIC as specified in sections 376.365 to 376.380.

376.370. 1. (1) The director of the department of insurance, financial institutions and
2 professional registration shall annually value, or cause to be valued, the reserve liabilities, herein
3 called "reserves", for all outstanding life insurance policies and [annuities] **annuity** and pure
4 endowment contracts of every life insurance company doing business in this state[, and may
5 certify the amount of any such reserves, specifying the mortality table or tables, rate or rates of
6 interest and methods, net level premium method or other, used in the calculation of such
7 reserves] **issued on or after the operative date provided in subsection 20 of section 376.670**
8 **and prior to the operative date of the valuation manual.** In calculating such reserves, [he]
9 **the director** may use group methods and approximate averages for fractions of a year or
10 otherwise. In lieu of the valuation of the reserves herein required of any foreign or alien

11 company, [he] **the director** may accept any valuation made, or caused to be made, by the
12 insurance supervisory official of any state or other jurisdiction when such valuation complies
13 with the minimum standard herein provided [and if the official of such state or jurisdiction
14 accepts as sufficient and valid for all legal purposes the certificate of valuation of the director
15 when such certificate states the valuation to have been made in a specified manner according to
16 which the aggregate reserves would be at least as large as if they had been computed in the
17 manner prescribed by the law of that state or jurisdiction].

18 **(2) The provisions of subsection 3 of this section and subsections 1 to 3 of section**
19 **376.380 shall apply to all policies and contracts, as appropriate, issued on or after the**
20 **operative date provided in subsection 20 of section 376.670 and prior to the operative date**
21 **of the valuation manual, and the provisions of subsections 6 and 7 of section 376.380 shall**
22 **not apply to such policies and contracts.**

23 **(3) The minimum standard for the valuation of policies and contracts issued prior**
24 **to the operative date provided in subsection 20 of section 376.670 shall be that provided by**
25 **the laws in effect immediately prior to the operative date provided in subsection 20 of**
26 **section 376.670.**

27 **2. (1) The director shall annually value or caused to be valued the reserves for all**
28 **outstanding life insurance contracts, annuity and pure endowment contracts, accident and**
29 **health insurance contracts, and deposit-type contracts of every company issued on or after**
30 **the operative date of the valuation manual. In lieu of the valuation of the reserves herein**
31 **required of any foreign or alien company, the director may accept any valuation made or**
32 **caused to be made by the insurance supervisory official of any state or other jurisdiction**
33 **if such valuation complies with the minimum standard provided herein.**

34 **(2) The provisions of subsections 6 and 7 of section 376.380 shall apply to all**
35 **policies and contracts issued on or after the operative date of the valuation manual.**

36 [2.] **3.** Reserves for all policies and contracts issued prior to August 28, 1993, may be
37 calculated, at the option of the company, according to any standards which produce greater
38 aggregate reserves for all such policies and contracts than the minimum reserves required by the
39 laws in effect immediately prior to such date. Reserves for any category of policies, contracts
40 or benefits as established by the director, issued on or after August 28, 1993, may be calculated,
41 at the option of the company, according to any standards which produce greater aggregate
42 reserves for such category than those calculated according to the minimum standard herein
43 provided, but the rate or rates of interest used for policies and contracts, other than annuity and
44 pure endowment contracts, shall not be higher than the corresponding rate or rates of interest
45 used in calculating any nonforfeiture benefits provided therein. Any such company which at any
46 time shall have adopted any standard of valuation producing greater aggregate reserves than

47 those calculated according to the minimum standard herein provided may, with the approval of
48 the director, adopt any lower standard of valuation, but not lower than the minimum herein
49 provided; however, for purposes of this subsection, the holding of additional reserves previously
50 determined by a qualified actuary to be necessary to render the opinion required by [subsection
51 4] **subsections 4 and 5** of section 376.380 shall not be deemed to be the adoption of a higher
52 standard of valuation.

376.380. 1. The legal minimum standard for valuation of policies and contracts and the
2 reserves to be maintained thereon shall be as follows:

3 (1) For those policies and contracts issued prior to the operative date provided in
4 subsection [14] **20** of section 376.670:

5 (a) Except as otherwise provided in subdivision (3) of this subsection, the legal
6 minimum standard for valuation of policies of life insurance or annuity contracts issued prior to
7 April 13, 1934, shall be the Actuaries' or Combined Experience Table of Mortality, with interest
8 at the rate of five percent per annum for group annuity contracts and four percent per annum for
9 all other policies and contracts; and for policies of life insurance and annuity contracts issued on
10 and after April 13, 1934, such minimum standard shall be the American Experience Table of
11 Mortality with interest at the rate of five percent per annum for group annuity contracts and three
12 and one-half percent per annum for all other policies and contracts;

13 (b) The director may vary the legal minimum standards of interest and mortality for
14 annuity contracts and in particular cases of invalid or substandard lives and other extra hazards,
15 and shall have the right and authority to designate the legal minimum standard for valuation of
16 total and permanent disability benefits and additional accidental death benefits;

17 (c) Policies issued by companies doing business in this state may provide for not more
18 than one year preliminary term insurance by incorporating in the provisions thereof, specifying
19 the premium consideration to be received, a clause plainly showing that the first year's insurance
20 under such policies is term insurance, purchased by the whole or a part of the premium to be
21 received during the first policy year and shall be valued accordingly; provided, that if the
22 premium charged for term insurance under a limited payment life preliminary term policy
23 providing for the payment of all premiums thereon in less than twenty years from the date of the
24 policy, or under an endowment preliminary term policy, exceeds that charged for life insurance
25 twenty payment life preliminary term policies of the same company, the reserve thereon at the
26 end of any year, including the first, shall not be less than the reserve on a twenty payment life
27 preliminary term policy issued in the same year and at the same age, together with an amount
28 which shall be equivalent to the accumulation of a net level premium sufficient to provide for
29 a pure endowment at the end of the premium payment period equal to the difference between the
30 value at the end of such period of such twenty payment life preliminary term policy and the full

31 reserve at such time of such a limited payment life or endowment policy. The premium payment
32 period is the period during which premiums are concurrently payable under such twenty payment
33 life preliminary term policy and such limited payment life or endowment policy;

34 (d) Reserves for all such policies and contracts may be calculated, at the option of the
35 company, according to any standards which produce greater aggregate reserves for all such
36 policies and contracts than the minimum reserves required by subdivision (1) of this subsection.
37 In the case of policy obligations of an insolvent life insurance company assumed or reinsured in
38 bulk by an insurance company upon a basis requiring a separate accounting of the business and
39 assets of such insolvent company and an application of any part of the earnings therefrom upon
40 obligations which are not implicit in the original terms of the policies or contracts assumed or
41 reinsured, the director, in order to protect all policyholders of the reinsuring company, including
42 the holders of all policies so assumed or reinsured, and to safeguard the future solvency of such
43 reinsuring company, shall have the right and authority to designate standards of valuation for
44 such reinsured policies and contracts which will produce greater aggregate reserves for all such
45 policies and contracts than the minimum reserves required by subdivision (1) of this subsection
46 or the terms and provisions of the policies and contracts so assumed or reinsured, and, in such
47 event, such reinsuring company shall not, thereafter, adopt any lower standards of valuation
48 without the approval of the director.

49 (2) For those policies and contracts issued on or after the operative date provided in
50 subsection [14] **20** of section 376.670:

51 (a) Except as otherwise provided in subdivision (3) of this subsection and subsection 2
52 of this section, the minimum standard for the valuation of all such policies and contracts shall
53 be the commissioners reserve valuation methods defined in paragraphs (b), (c), (d), (e), and (h)
54 of this subdivision, three and one-half percent interest on all such policies and contracts except
55 those contracts specified in subparagraph c. of **this** paragraph [(a) of this subdivision] which
56 consist of single premium annuity contracts and in subparagraph d. of **this** paragraph [(a) of this
57 subdivision] which consists of group annuity contracts where the interest rate shall be five
58 percent, and except policies and contracts, other than annuity and pure endowment contracts,
59 issued on or after September 28, 1975, where the interest rate shall be four percent interest for
60 such policies issued prior to September 28, 1979, and four and one-half percent interest for such
61 policies issued on or after September 28, 1979, and the following tables:

62 a. For all ordinary policies of life insurance issued prior to the operative date provided
63 in subsection [10] **12** of section 376.670 on the standard basis, excluding any disability and
64 accidental death benefits in such policies, the Commissioners 1941 Standard Ordinary Mortality
65 Table, and for such policies issued on or after the operative date provided in subsection [10] **12**
66 of section 376.670, and prior to the operative date of subsection [10b] **14** of section 376.670, the

67 Commissioners 1958 Standard Ordinary Mortality Table; provided that for any category of such
68 policies issued on or after September 28, 1979, on female risks all modified net premiums and
69 present values referred to in this section may be calculated according to an age not more than six
70 years younger than the actual age of the insured; and for such policies issued on or after the
71 operative date of subsection [10b] **14** of section 376.670:

72 i. The Commissioners 1980 Standard Ordinary Mortality Table; or

73 ii. At the election of the company for any one or more specified plans of life insurance,
74 the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality
75 Factors; or

76 iii. Any ordinary mortality table, adopted after 1980 by the [National Association of
77 Insurance Commissioners] **NAIC**, that is approved by regulation promulgated by the director for
78 use in determining the minimum standard of valuation for such policies;

79 b. For all industrial life insurance policies issued on the standard basis, excluding any
80 disability and accidental death benefits in such policies, the 1941 Standard Industrial Mortality
81 Table for such policies issued prior to the operative date of subsection [10a] **13** of section
82 376.670 and for such policies issued on or after such operative date, the Commissioners 1961
83 Standard Industrial Mortality Table or any industrial mortality table, adopted after 1980 by the
84 [National Association of Insurance Commissioners] **NAIC**, that is approved by regulation
85 promulgated by the director for use in determining the minimum standard of valuation for such
86 policies;

87 c. For individual annuity and pure endowment contracts, excluding any disability and
88 accidental death benefits in such policies, the 1937 Standard Annuity Mortality Table or, at the
89 option of the company, the Annuity Mortality Table for 1949, Ultimate, or any modification of
90 either of these tables approved by the director;

91 d. For group annuity and pure endowment contracts, excluding any disability and
92 accidental death benefits in such policies, the Group Annuity Mortality Table for 1951, any
93 modification of such table approved by the director, or, at the option of the company, any of the
94 tables or modifications of tables specified for individual annuity and pure endowment contracts;

95 e. For total and permanent disability benefits in or supplementary to ordinary policies
96 or contracts, for policies or contracts issued on or after January 1, 1966, the tables of period two
97 disablement rates and the 1930 to 1950 termination rates of the 1952 disability study of the
98 Society of Actuaries, with due regard to the type of benefit or any tables of disablement rates and
99 termination rates, adopted after 1980 by the [National Association of Insurance Commissioners]
100 **NAIC**, that are approved by regulation promulgated by the director for use in determining the
101 minimum standard of valuation for such policies; for policies or contracts issued on or after
102 January 1, 1961, and prior to January 1, 1966, either such tables or at the option of the company,

103 the Class (3) Disability Table (1926); and for policies issued prior to January 1, 1961, the Class
104 (3) Disability Table (1926). Any such table shall, for active lives, be combined with a mortality
105 table permitted for calculating the reserves for life insurance policies;

106 f. For accidental death benefits in or supplementary to policies issued on or after January
107 1, 1966, the 1959 Accidental Death Benefits Table or any accidental death benefits table, adopted
108 after 1980 by the [National Association of Insurance Commissioners] NAIC, that is approved
109 by regulation promulgated by the director for use in determining the minimum standard of
110 valuation for such policies; for policies issued on or after January 1, 1961, and prior to January
111 1, 1966, either such table or, at the option of the company, the Inter-Company Double Indemnity
112 Mortality Table; and for policies issued prior to January 1, 1961, the Inter-Company Double
113 Indemnity Mortality Table. Either table shall be combined with a mortality table permitted for
114 calculating the reserves for life insurance policies;

115 g. For group life insurance, life insurance issued on the substandard basis and other
116 special benefits, such tables as may be approved by the director;

117 (b) Except as otherwise provided in paragraphs (d), (e), and (h) of this subdivision,
118 reserves according to the commissioners reserve valuation method, for the life insurance and
119 endowment benefits of policies providing for a uniform amount of insurance and requiring the
120 payment of uniform premiums shall be the excess, if any, of the present value, at the date of
121 valuation, of such future guaranteed benefits provided for by such policies, over the then present
122 value of any future modified net premiums therefor. The modified net premiums for any such
123 policy shall be such uniform percentage of the respective contract premiums for such benefits
124 that the present value, at the date of issue of the policy, of all such modified net premiums shall
125 be equal to the sum of the then present value of such benefits provided for by the policy and the
126 excess of a. over b., as follows:

127 a. A net level annual premium equal to the present value, at the date of issue, of such
128 benefits provided for after the first policy year, divided by the present value, at the date of issue,
129 of an annuity of one per annum payable on the first and each subsequent anniversary of such
130 policy on which a premium falls due; provided, however, that such net level annual premium
131 shall not exceed the net level annual premium on the nineteen year premium whole life plan for
132 insurance of the same amount at an age one year higher than the age at issue of such policy;

133 b. A net one year term premium for such benefit provided for in the first policy year;
134 provided, that for any life insurance policy issued on or after January 1, 1986, for which the
135 contract premium in the first policy year exceeds that of the second year and for which no
136 comparable additional benefit is provided in the first year for such excess and which provides
137 an endowment benefit or a cash surrender value or a combination thereof in an amount greater
138 than such excess premium, the reserve according to the commissioners reserve valuation method

139 as of any policy anniversary occurring on or before the assumed ending date defined herein as
140 the first policy anniversary on which the sum of any endowment benefit and any cash surrender
141 value then available is greater than such excess premium shall, except as otherwise provided in
142 paragraph (h) of this subdivision, be the greater of the reserve as of such policy anniversary
143 calculated as described in paragraph (b) of this subdivision and the reserve as of such policy
144 anniversary calculated as described in paragraph (b) of this subdivision, but with:

145 i. The value defined in subparagraph a. of paragraph (b) **of this subdivision** being
146 reduced by fifteen percent of the amount of such excess first year premium;

147 ii. All present values of benefits and premiums being determined without reference to
148 premiums or benefits provided for by the policy after the assumed ending date;

149 iii. The policy being assumed to mature on such date as an endowment; and

150 iv. The cash surrender value provided on such date being considered as an endowment
151 benefit. In making the above comparison the mortality and interest bases stated in paragraph (a)
152 of this subdivision and subsection 2 of this section shall be used;

153 (c) Reserves according to the commissioners reserve valuation method for:

154 a. Life insurance policies providing for a varying amount of insurance or requiring the
155 payment of varying premiums;

156 b. Group annuity and pure endowment contracts purchased under a retirement plan or
157 plan of deferred compensation, established or maintained by an employer (including a
158 partnership or sole proprietorship) or by an employee organization, or by both, other than a plan
159 providing individual retirement accounts or individual retirement annuities under section 408 of
160 the Internal Revenue Code, as now or hereafter amended;

161 c. Disability and accidental death benefits in all policies and contracts; and

162 d. All other benefits, except life insurance and endowment benefits in life insurance
163 policies and benefits provided by all other annuity and pure endowment contracts, shall be
164 calculated by a method consistent with the principles of paragraph (b) of this subdivision;

165 (d) Paragraph (e) of this subdivision shall apply to all annuity and pure endowment
166 contracts other than group annuity and pure endowment contracts purchased under a retirement
167 plan or plan of deferred compensation, established or maintained by an employer (including a
168 partnership or sole proprietorship), or by an employee organization, or by both, other than a plan
169 providing individual retirement accounts or individual retirement annuities under section 408 of
170 the Internal Revenue Code, as now or hereafter amended;

171 (e) Reserves according to the commissioners annuity reserve method for benefits under
172 annuity or pure endowment contracts, excluding any disability and accidental death benefits in
173 such contracts, shall be the greatest of the respective excesses of the present values, at the date
174 of valuation, of the future guaranteed benefits, including guaranteed nonforfeiture benefits,

175 provided for by such contracts at the end of each respective contract year, over the present value,
176 at the date of valuation, of any future valuation considerations derived from future gross
177 considerations, required by the terms of such contract, that become payable prior to the end of
178 such respective contract year. The future guaranteed benefits shall be determined by using the
179 mortality table, if any, and the interest rate, or rates, specified in such contracts for determining
180 guaranteed benefits. The valuation considerations are the portions of the respective gross
181 considerations applied under the terms of such contracts to determine nonforfeiture values;

182 (f) In no event shall a company's aggregate reserves for all life insurance policies,
183 excluding disability and accidental death benefits, be less than the aggregate reserves calculated
184 in accordance with the method set forth in paragraphs (b), (c), (d), (e), (h) and (i) of this
185 subdivision and the mortality table or tables and rate or rates of interest used in calculating
186 nonforfeiture benefits for such policies;

187 (g) In no event shall the aggregate reserves for all policies, contracts and benefits be less
188 than the aggregate reserves determined by the qualified actuary to be necessary to render the
189 opinion required by [subsection 4] **subsections 4 and 5** of this section;

190 (h) If in any contract year the gross premium charged by any life insurance company on
191 any policy or contract is less than the valuation net premium for the policy or contract calculated
192 by the method used in calculating the reserve thereon but using the minimum valuation standards
193 of mortality and rate of interest, the minimum reserve required for such policy or contract shall
194 be the greater of either the reserve calculated according to the mortality table, rate of interest, and
195 method actually used for such policy or contract, or the reserve calculated by the method actually
196 used for such policy or contract but using the minimum valuation standards of mortality and rate
197 of interest and replacing the valuation net premium by the actual gross premium in each contract
198 year for which the valuation net premium exceeds the actual gross premium. The minimum
199 valuation standards of mortality and rate of interest referred to in this section are those standards
200 stated in paragraph (a) of this subdivision and subsection 2 of this section; provided, that for any
201 life insurance policy issued on or after January 1, 1986, for which the gross premium in the first
202 policy year exceeds that of the second year and for which no comparable additional benefit is
203 provided in the first year for such excess and which provides an endowment benefit or a cash
204 surrender value or a combination thereof in an amount greater than such excess premium, the
205 foregoing provisions of this paragraph shall be applied as if the method actually used in
206 calculating the reserve for such policy were the method described in paragraph (b) of this
207 subdivision. The minimum reserve at each policy anniversary of such a policy shall be the
208 greater of the minimum reserve calculated in accordance with paragraphs (b) and (c) **of this**
209 **subdivision** and the minimum reserve calculated in accordance with this paragraph;

210 (i) In the case of any plan of life insurance which provides for future premium
211 determination, the amounts of which are to be determined by the insurance company based on
212 then estimates of future experience, or in the case of any plan of life insurance or annuity which
213 is of such a nature that the minimum reserves cannot be determined by the methods described
214 in paragraphs (b) to (e) of this subdivision, and paragraph (h) of this subdivision, the reserves
215 which are held under any such plan must:

216 a. Be appropriate in relation to the benefits and the pattern of premiums for that plan; and

217 b. Be computed by a method which is consistent with the principles of this section as
218 determined by regulations promulgated by the director.

219 (3) Except as provided in subsection 2 of this section, the minimum standard for the
220 valuation of all individual annuity and pure endowment contracts issued on or after the operative
221 date of this subdivision, as defined herein, and for all annuities and pure endowments purchased
222 on or after such operative date under group annuity and pure endowment contracts, shall be the
223 commissioners reserve valuation methods defined in paragraphs (b), (c), (d), and (e) of
224 subdivision (2) of this subsection, and the following tables and interest rates:

225 (a) For individual annuity and pure endowment contracts issued prior to September 28,
226 1979, excluding any disability and accidental death benefits in such contracts, the 1971
227 Individual Annuity Mortality Table, or any modification of this table approved by the director,
228 and six percent interest for single premium immediate annuity contracts, and four percent interest
229 for all other individual annuity and pure endowment contracts;

230 (b) For individual single premium immediate annuity contracts issued on or after
231 September 28, 1979, excluding any disability and accidental death benefits in such contracts, the
232 1971 Individual Annuity Mortality Table, or any individual annuity mortality table adopted after
233 1980 by the [National Association of Insurance Commissioners] **NAIC**, that is approved by
234 regulation promulgated by the director for use in determining the minimum standard of valuation
235 for such contracts, or any modification of these tables approved by the director, and seven and
236 one-half percent interest;

237 (c) For individual annuity and pure endowment contracts issued on or after September
238 28, 1979, other than single premium immediate annuity contracts, excluding any disability and
239 accidental death benefits in such contracts, the 1971 Individual Annuity Mortality Table, or any
240 individual annuity mortality table adopted after 1980 by the [National Association of Insurance
241 Commissioners] **NAIC**, that is approved by regulation promulgated by the director for use in
242 determining the minimum standard of valuation for such contracts, or any modification of these
243 tables approved by the director, and five and one-half percent interest for single premium
244 deferred annuity and pure endowment contracts and four and one-half percent interest for all
245 other such individual annuity and pure endowment contracts;

246 (d) For all annuities and pure endowments purchased prior to September 28, 1979, under
247 group annuity and pure endowment contracts, excluding any disability and accidental death
248 benefits purchased under such contracts, the 1971 Group Annuity Mortality Table, or any
249 modification of this table approved by the director, and six percent interest;

250 (e) For all annuities and pure endowments purchased on or after September 28, 1979,
251 under group annuity and pure endowment contracts, excluding any disability and accidental
252 death benefits purchased under such contracts, the 1971 Group Annuity Mortality Table, or any
253 group annuity mortality table adopted after 1980 by the [National Association of Insurance
254 Commissioners] NAIC, that is approved by regulation promulgated by the director for use in
255 determining the minimum standard of valuation for such annuities and pure endowments, or any
256 modification of these tables approved by the director, and seven and one-half percent interest;

257 (f) On and after September 28, 1975, any company may file with the director a written
258 notice of its election to comply with the provisions of this subdivision after a specified date
259 before January 1, 1980, which shall be the operative date of this subdivision for such company,
260 provided a company may elect a different operative date for individual annuity and pure
261 endowment contracts from that elected for group annuity and pure endowment contracts. If a
262 company makes no such election, the operative date of this subdivision for such company shall
263 be January 1, 1980.

264 2. (1) The calendar year statutory valuation interest rates as defined in this subsection
265 shall be the interest rates used in determining the minimum standard for the valuation of:

266 (a) All life insurance policies issued in a particular calendar year, on or after the
267 operative date of subsection [10b] 14 of section 376.670;

268 (b) All individual annuity and pure endowment contracts issued in a particular calendar
269 year on or after January 1, 1983;

270 (c) All annuities and pure endowment contracts purchased in a particular calendar year
271 on or after January 1, 1983, under group annuity and pure endowment contracts; and

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

274 (2) The calendar year statutory valuation interest rates, I, shall be determined as follows
275 and the results rounded to the nearer one-quarter of one percent:

276 (a) For life insurance:

277 $I = .03 + W(R_1 - .03) + W/2(R_2 - .09)$;

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

281 $I = .03 + W (R - .03)$, where R_1 is the lesser of R and $.09$; R_2 is the greater of R and $.09$;
 282 R is the reference interest rate defined in this subsection; and W is the weighting factor defined
 283 in this subsection;

284 (c) For other annuities with cash settlement options and guaranteed interest contracts
 285 with cash settlement options, valued on an issue year basis, except as stated in paragraph (b) of
 286 this subdivision, the formula for life insurance stated in paragraph (a) of this subdivision shall
 287 apply to annuities and guaranteed interest contracts with guarantee durations in excess of ten
 288 years and the formula for single premium immediate annuities stated in paragraph (b) of this
 289 subdivision shall apply to annuities and guaranteed interest contracts with guarantee durations
 290 of ten years or less;

291 (d) For other annuities with no cash settlement options and for guaranteed interest
 292 contracts with no cash settlement options, the formula for single premium immediate annuities
 293 stated in paragraph (b) of this subdivision shall apply;

294 (e) For other annuities with cash settlement options and guaranteed interest contracts
 295 with cash settlement options, valued on a change in fund basis, the formula for single premium
 296 immediate annuities stated in paragraph (b) of this subdivision shall apply. If the calendar year
 297 statutory valuation interest rate for any life insurance policies issued in any calendar year
 298 determined without reference to this sentence differs from the corresponding actual rate for
 299 similar policies issued in the immediately preceding calendar year by less than one-half of one
 300 percent, the calendar year statutory valuation interest rate for such life insurance policies shall
 301 be equal to the corresponding actual rate for the immediately preceding calendar year. For
 302 purposes of applying the immediately preceding sentence, the calendar year statutory valuation
 303 interest rate for life insurance policies issued in a calendar year shall be determined for 1980
 304 (using the reference interest rate defined for 1979) and shall be determined for each subsequent
 305 calendar year regardless of when subsection [10b] 14 of section 376.670 becomes operative.

306 (3) The weighting factors referred to in the formulas stated in subdivision (2) of this
 307 subsection are given in the following tables:

308 (a) Weighting factors for life insurance:

Guarantee	Weighting
Duration	Factors
(Years)	
10 or less	.50
More than 10, but not more than 20	.45
More than 20	.35

315

316 For life insurance, the guarantee duration is the maximum number of years the life insurance can
317 remain in force on a basis guaranteed in the policy or under options to convert to plans of life
318 insurance with premium rates or nonforfeiture values or both which are guaranteed in the original
319 policy;

320 (b) Weighting factor for single premium immediate annuities and for annuity benefits
321 involving life contingencies arising from other annuities with cash settlement options and
322 guaranteed interest contracts with cash settlement options: .80;

323 (c) Weighting factors for other annuities and for guaranteed interest contracts, except as
324 stated in paragraph (b) of this subdivision, shall be as specified in subparagraphs a., b., and c. of
325 this paragraph, according to the rules and definitions in subparagraphs d., e., and f. of this
326 paragraph:

327 a. For annuities and guaranteed interest contracts valued on an issue year basis:

328

329 Guarantee	Weighting Factor		
330 Duration	for Plan Type		
331 (Years)	A	B	C
332 5 or less:	.80	.60	.50
333 More than 5, but not more than 10:	.75	.60	.50
334 More than 10, but not more than 20:	.65	.50	.45
335 More than 20:	.45	.35	.35;

336 b. For annuities and guaranteed interest contracts valued on a change in fund basis, the
337 factors shown in subparagraph a. of this paragraph increased by:

338 Plan Type			
339 A B C			
340 .15 .25 .05;			

341 c. For annuities and guaranteed interest contracts valued on an issue year basis (other
342 than those with no cash settlement options) which do not guarantee interest on considerations
343 received more than one year after issue or purchase and for annuities and guaranteed interest
344 contracts valued on a change in fund basis which do not guarantee interest rates on
345 considerations received more than twelve months beyond the valuation date, the factors shown
346 in subparagraph a. of this paragraph or derived in subparagraph b. of this paragraph increased
347 by:

348 Plan Type			
349 A B C			
350 .05 .05 .05;			

351 d. For other annuities with cash settlement options and guaranteed interest contracts with
352 cash settlement options, the guarantee duration is the number of years for which the contract
353 guarantees interest rates in excess of the calendar year statutory valuation interest rate for life
354 insurance policies with guarantee duration in excess of twenty years. For other annuities with
355 no cash settlement options and for guaranteed interest contracts with no cash settlement options,
356 the guarantee duration is the number of years from the date of issue or date of purchase to the
357 date annuity benefits are scheduled to commence;

358 e. Plan type as used in subparagraphs a., b., and c. of this paragraph is defined as follows:

359 Plan Type A: At any time policyholder may withdraw funds only with an adjustment to
360 reflect changes in interest rates or asset values since receipt of the funds by the insurance
361 company, or without such adjustment but in installments over five years or more, or as an
362 immediate life annuity, or no withdrawal permitted;

363 Plan Type B: Before expiration of the interest rate guarantee, policyholder may withdraw
364 funds only with an adjustment to reflect changes in interest rates or asset values since receipt of
365 the funds by the insurance company, or without such adjustment but in installments over five
366 years or more, or no withdrawal permitted. At the end of interest rate guarantee, funds may be
367 withdrawn without such adjustment in a single sum or installments over fewer than five years;

368 Plan Type C: Policyholder may withdraw funds before expiration of interest rate
369 guarantee in a single sum or installments over fewer than five years either without adjustment
370 to reflect changes in interest rates or asset values since receipt of the funds by the insurance
371 company, or subject only to a fixed surrender charge stipulated in the contract as a percentage
372 of the fund;

373 f. A company may elect to value guaranteed interest contracts with cash settlement
374 options and annuities with cash settlement options on either an issue year basis or on a change
375 in fund basis. Guaranteed interest contracts with no cash settlement options and other annuities
376 with no cash settlement options must be valued on an issue year basis. As used in this subsection
377 an issue year basis of valuation refers to a valuation basis under which the interest rate used to
378 determine the minimum valuation standard for the entire duration of the annuity or guaranteed
379 interest contract is the calendar year valuation interest rate for the year of issue or year of
380 purchase of the annuity or guaranteed interest contract, and the change in fund basis of valuation
381 refers to a valuation basis under which the interest rate used to determine the minimum valuation
382 standard applicable to each change in the fund held under the annuity or guaranteed interest
383 contract is the calendar year valuation interest rate for the year of the change in the fund.

384 (4) The "reference interest rate" referred to in subdivision (2) of this subsection shall be
385 defined as follows:

386 (a) For all life insurance, the lesser of the average over a period of thirty-six months and
387 the average over a period of twelve months, ending on June thirtieth of the calendar year next
388 preceding the year of issue, of the Monthly Average of the Composite Yield on Seasoned
389 Corporate Bonds, as published by Moody's Investors Service, Inc.;

390 (b) For single premium immediate annuities and for annuity benefits involving life
391 contingencies arising from other annuities with cash settlement options and guaranteed interest
392 contracts with cash settlement options, the average over a period of twelve months, ending on
393 June thirtieth of the calendar year of issue or purchase, of the Monthly Average of the Composite
394 Yield on Seasoned Corporate Bonds, as published by Moody's Investors Service, Inc.;

395 (c) For other annuities with cash settlement options and guaranteed interest contracts
396 with cash settlement options, valued on a year of issue basis, except as stated in paragraph (b)
397 of this subdivision, with guarantee duration in excess of ten years, the lesser of the average over
398 a period of thirty-six months and the average over a period of twelve months, ending on June
399 thirtieth of the calendar year of issue or purchase, of the Monthly Average of the Composite
400 Yield on Seasoned Corporate Bonds, as published by Moody's Investors Service, Inc.;

401 (d) For other annuities with cash settlement options and guaranteed interest contracts
402 with cash settlement options, valued on a year of issue basis, except as stated in paragraph (b)
403 of this subdivision, with guarantee duration of ten years or less, the average over a period of
404 twelve months, ending on June thirtieth of the calendar year of issue or purchase, of the Monthly
405 Average of the Composite Yield on Seasoned Corporate Bonds, as published by Moody's
406 Investors Service, Inc.;

407 (e) For other annuities with no cash settlement options and for guaranteed interest
408 contracts with no cash settlement options, the average over a period of twelve months, ending
409 on June thirtieth of the calendar year of issue or purchase, of the Monthly Average of the
410 Composite Yield on Seasoned Corporate Bonds, as published by Moody's Investors Service, Inc.;

411 (f) For other annuities with cash settlement options and guaranteed interest contracts
412 with cash settlement options, valued on a change in fund basis, except as stated in paragraph (b)
413 of this subdivision, the average over a period of twelve months, ending on June thirtieth of the
414 calendar year of the change in the fund, of the Monthly Average of the Composite Yield on
415 Seasoned Corporate Bonds, as published by Moody's Investors Service, Inc.

416 (5) In the event that the Monthly Average of the Composite Yield on Seasoned
417 Corporate Bonds is no longer published by Moody's Investors Service, Inc., or in the event that
418 the [National Association of Insurance Commissioners] NAIC determines that the Monthly
419 Average of the Composite Yield on Seasoned Corporate Bonds as published by Moody's
420 Investors Service, Inc., is no longer appropriate for the determination of the reference interest
421 rate, then an alternative method for determination of the reference interest rate, which is adopted

422 by the [National Association of Insurance Commissioners] NAIC and approved by regulation
423 promulgated by the director, may be substituted.

424 3. [The director shall promulgate a regulation containing the minimum standards
425 applicable to the valuation of health, disability and sickness and accident plans] **For accident
426 and health insurance contracts issued on or after the operative date of the valuation
427 manual, the standard prescribed in the valuation manual is the minimum standard of
428 valuation required under subsection 2 of section 376.370. For disability, accident and
429 sickness, and accident and health insurance contracts issued on or after the operative date
430 provided in subsection 20 of section 376.670 and prior to the operative date of the valuation
431 manual, the minimum standard of valuation is the standard adopted by the director by
432 regulation.**

433 4. (1) **This subsection shall apply to actuarial opinion of reserves prior to the date
434 of the valuation manual.**

435 (2) Every life insurance company doing business in this state shall annually submit the
436 opinion of a qualified actuary as to whether the reserves and related actuarial items held in
437 support of the policies and contracts specified by the director by regulation are computed
438 appropriately, are based on assumptions which satisfy contractual provisions, are consistent with
439 prior reported amounts and comply with applicable laws of this state. The director by regulation
440 shall define the specifics of this opinion and add any other items deemed to be necessary to its
441 scope.

442 [(2)] (3) (a) Every life insurance company, except as exempted by or pursuant to
443 regulation, shall also annually include in the opinion required by subdivision [(1)] (2) of this
444 subsection, an opinion of the same qualified actuary as to whether the reserves and related
445 actuarial items held in support of the policies and contracts specified by the director by
446 regulation, when considered in light of the assets held by the company with respect to the
447 reserves and related actuarial items, including but not limited to the investment earnings on the
448 assets and the considerations anticipated to be received and retained under the policies and
449 contracts, make adequate provision for the company's obligations under the policies and
450 contracts, including but not limited to the benefits under and expenses associated with the
451 policies and contracts.

452 (b) The director may provide by regulation for a transition period for establishing any
453 higher reserves which the qualified actuary may deem necessary in order to render the opinion
454 required by this subsection.

455 [(3)] (4) Each opinion required by subdivision [(2)] (3) of this subsection shall be
456 governed by the following provisions:

457 (a) A memorandum, in form and substance acceptable to the director as specified by
458 regulation, shall be prepared to support each actuarial opinion; and

459 (b) If the insurance company fails to provide a supporting memorandum at the request
460 of the director within a period specified by regulation or the director determines that the
461 supporting memorandum provided by the insurance company fails to meet the standards
462 prescribed by the regulations or is otherwise unacceptable to the director, the director may
463 engage a qualified actuary at the expense of the company to review the opinion and the basis for
464 the opinion and prepare such supporting memorandum as is required by the director.

465 [(4)] (5) Every opinion **required by this subsection** shall be governed by the following
466 provisions:

467 (a) The opinion shall be submitted with the annual statement reflecting the valuation of
468 such reserve liabilities for each year ending on or after December 31, 1993;

469 (b) The opinion shall apply to all business in force including individual and group health
470 insurance plans, in form and substance acceptable to the director as specified by regulation;

471 (c) The opinion shall be based on standards adopted from time to time by the Actuarial
472 Standards Board and on such additional standards as the director may by regulation prescribe;

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

477 (e) For the purposes of this section, "qualified actuary" means a member in good
478 standing of the American Academy of Actuaries who meets the requirements set forth in such
479 regulations;

480 (f) Except in cases of fraud or willful misconduct, the qualified actuary shall not be liable
481 for damages to any person, other than the insurance company and the director, for any act, error,
482 omission, decision or conduct with respect to the actuary's opinion;

483 (g) Disciplinary action by the director against the company or the qualified actuary shall
484 be defined in regulations by the director; and

485 (h) Any memorandum in support of the opinion, and any other material provided by the
486 company to the director in connection therewith, shall be kept confidential by the director and
487 shall not be made public and shall not be subject to subpoena, other than for the purpose of
488 defending an action seeking damages from any person by reason of any action required by this
489 section or by regulations promulgated hereunder; except that the memorandum or other material
490 may otherwise be released by the director:

491 a. With the written consent of the company; or

492 b. To the American Academy of Actuaries upon request stating that the memorandum
493 or other material is required for the purpose of professional disciplinary proceedings and setting
494 forth procedures satisfactory to the director for preserving the confidentiality of the memorandum
495 or other material. Once any portion of the confidential memorandum is cited by the company
496 in its marketing or is cited before any governmental agency other than a state insurance
497 department or is released by the company to the news media, all portions of the confidential
498 memorandum shall be no longer confidential.

499 **5. (1) This subsection shall apply to actuarial opinion of reserves after the**
500 **operative date of the valuation manual.**

501 **(2) Every company with outstanding life insurance contracts, accident and health**
502 **insurance contracts, or deposit-type contracts in Missouri and subject to regulation by the**
503 **director shall annually submit the opinion of the appointed actuary as to whether the**
504 **reserves and related actuarial items held in support of the policies and contracts are**
505 **computed appropriately, are based on assumptions that satisfy contractual provisions, are**
506 **consistent with prior reported amounts, and comply with applicable Missouri law. The**
507 **valuation manual shall prescribe the specifics of such opinion, including any items deemed**
508 **to be necessary to its scope.**

509 **(3) Every company with outstanding life insurance contracts, accident and health**
510 **insurance contracts, or deposit-type contracts in Missouri and subject to regulation by the**
511 **director, except as exempted in the valuation manual, shall also annually include in the**
512 **opinion required under subdivision (2) of this subsection an opinion of the same appointed**
513 **actuary as to whether the reserves and related actuarial items held in support of the**
514 **policies and contracts specified in the valuation manual, when considered in light of the**
515 **assets held by the company with respect to the reserves and related actuarial items**
516 **including, but not limited to, the investment earnings on the assets and the considerations**
517 **anticipated to be received and retained under the policies and contracts, make adequate**
518 **provision for the company's obligations under the policies and contracts including, but not**
519 **limited to, benefits under and expenses associated with the policies and contracts.**

520 **(4) Each opinion required by subdivision (3) of this subsection shall be governed**
521 **by the following provisions:**

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

524 **(b) If the insurance company fails to provide a supporting memorandum at the**
525 **request of the director within a period specified in the valuation manual or the director**
526 **determines that the supporting memorandum provided by the insurance company fails to**
527 **meet the standards prescribed by the valuation manual or is otherwise unacceptable to the**

528 director, the director may engage a qualified actuary at the expense of the company to
529 review the opinion and the basis for the opinion and prepare the supporting memorandum
530 required by the director.

531 (5) Every opinion required by this subsection shall be governed by the following:

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

534 (b) The opinion shall be submitted with the annual statement reflecting the
535 valuation of such reserve liabilities for each year ending on or after the operative date of
536 the valuation manual;

537 (c) The opinion shall apply to all policies and contracts subject to subdivision (3)
538 of this subsection, plus other actuarial liabilities as may be specified in the valuation
539 manual;

540 (d) The opinion shall be based on standards adopted from time to time by the
541 Actuarial Standards Board or its successor, and on such additional standards as may be
542 prescribed in the valuation manual;

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

547 (f) Except in cases of fraud or willful misconduct, the appointed actuary shall not
548 be liable for damages to any person, other than the insurance company and the director,
549 for any act, error, omission, decision, or conduct with respect to the appointed actuary's
550 opinion; and

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

553 6. (1) For policies issued on or after the operative date of the valuation manual, the
554 standard prescribed in the valuation manual is the minimum standard of valuation
555 required under subsection 2 of section 376.370, except as provided under subdivision (5)
556 or (7) of this subsection.

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

559 (a) The valuation manual has been adopted by the NAIC by an affirmative vote of
560 at least forty-two members or three-fourths of the members voting, whichever is greater;

561 (b) Sections 376.365 to 376.380 as amended by the NAIC in 2009 or legislation
562 including substantially similar terms and provisions has been enacted by states
563 representing greater than seventy-five percent of the direct premiums written as reported

564 in the following annual statements submitted for 2008: life, accident, and health annual
565 statements; health annual statements; or fraternal annual statements;

566 (c) Sections 376.365 to 376.380 as amended by the NAIC in 2009 or legislation
567 including substantially similar terms and provisions has been enacted by at least forty-two
568 of the following fifty-five jurisdictions: the fifty states of the United States, American
569 Samoa, the American Virgin Islands, the District of Columbia, Guam, and Puerto Rico;
570 and

571 (d) The valuation manual becomes effective under an order of the director.

572 (3) Unless a change in the valuation manual specifies a later effective date, changes
573 to the valuation manual shall be effective on January first following the date when all of
574 the following have occurred:

575 (a) The change to the valuation manual has been adopted by the NAIC by an
576 affirmative vote representing:

577 a. At least three-fourths of the members of the NAIC voting, but not less than a
578 majority of the total membership; and

579 b. Members of the NAIC representing jurisdictions totaling greater than seventy-
580 five percent of the direct premiums written as reported in the following annual statements
581 most recently available prior to the vote in subparagraph a. of this paragraph: life,
582 accident, and health annual statements; health annual statements; or fraternal annual
583 statements;

584 (b) The valuation manual becomes effective under an order of the director.

585 (4) The valuation manual shall specify all of the following:

586 (a) Minimum valuation standards for and definitions of the policies or contracts
587 subject to subsection 2 of section 376.370. Such minimum standards shall be:

588 a. The commissioners reserve valuation method for life insurance contracts, other
589 than annuity contracts, subject to subsection 2 of section 376.370;

590 b. The commissioners annuity reserve valuation method for annuity contracts
591 subject to subsection 2 of section 376.370; and

592 c. Minimum reserves for all other policies and contracts subject to subsection 2 of
593 section 376.370;

594 (b) Which policies or contracts or types of policies or contracts are subject to the
595 requirements of a principle-based valuation under subdivision (1) of subsection 7 of this
596 section and the minimum valuation standards consistent with such requirements;

597 (c) For policies and contracts subject to principle-based valuation under subsection
598 7 of this section:

599 **a. Requirements for the format of reports to the director under paragraph (c) of**
600 **subdivision (2) of subsection 7 of this section and which shall include information necessary**
601 **to determine if the valuation is appropriate and in compliance with sections 376.365 to**
602 **376.380;**

603 **b. Assumptions which shall be prescribed for risks over which the company does**
604 **not have significant control or influence;**

605 **c. Procedures for corporate governance and oversight of the actuarial function, and**
606 **a process for appropriate waiver or modification of such procedures;**

607 **(d) For policies not subject to a principle-based valuation under subsection 7 of this**
608 **section, the minimum valuation standard shall either:**

609 **a. Be consistent with the minimum standard of valuation prior to the operative date**
610 **of the valuation manual; or**

611 **b. Develop reserves that quantify the benefits and guarantees, and the funding,**
612 **associated with the contracts and their risks at a level of conservatism that reflects**
613 **conditions that include unfavorable events that have a reasonable probability of occurring;**

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

618 **(f) The data and form of the data required under subsection 8 of this section, to**
619 **whom the data shall be submitted, and may specify other requirements, including data**
620 **analyses and reporting of analyses.**

621 **(5) In the absence of a specific valuation requirement or if a specific valuation**
622 **requirement in the valuation manual is not, in the opinion of the director, in compliance**
623 **with sections 376.365 to 376.380, the company shall, with respect to such requirements,**
624 **comply with minimum valuation standards prescribed by the director by regulation.**

625 **(6) The director may engage a qualified actuary, at the expense of the company, to**
626 **perform an actuarial examination of the company and opine on the appropriateness of any**
627 **reserve assumption or method used by the company, or to review and opine on a**
628 **company's compliance with any requirement set forth in sections 376.365 to 376.380. The**
629 **director may rely upon the opinion regarding provisions contained in sections 376.365 to**
630 **376.380 of a qualified actuary engaged by the director of another state, district, or territory**
631 **of the United States. As used in this subdivision, engage includes employment and**
632 **contracting.**

633 **(7) The director may require a company to change any assumption or method that**
634 **in the opinion of the director is necessary in order to comply with the requirements of the**

635 valuation manual or sections 376.365 to 376.380, and the company shall adjust the reserves
636 as required by the director. The director may take other disciplinary action as permitted
637 under chapter 354 and chapters 374 to 385.

638 7. (1) A company shall establish reserves using a principle-based valuation that
639 meets the following conditions for policies or contracts as specified in the valuation
640 manual:

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

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

650 (c) Incorporate assumptions that are derived in one of the following manners:

651 a. The assumption is prescribed in the valuation manual; or

652 b. For assumptions that are not prescribed, the assumption shall:

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

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

657 (d) Provide margins for uncertainty, including adverse deviation and estimation
658 error, such that the greater the uncertainty the larger the margin and resulting reserve.

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

661 (a) Establish procedures for corporate governance and oversight of the actuarial
662 valuation function consistent with those described in the valuation manual;

663 (b) Provide to the director an annual certification of the effectiveness of the internal
664 controls with respect to the principle-based valuation. Such controls shall be designed to
665 ensure that all material risks inherent in the liabilities and associated assets subject to such
666 valuation are included in the valuation and that valuations are made in accordance with
667 the valuation manual. The certification shall be based on the controls in place as of the end
668 of the preceding calendar year;

669 (c) Develop, and file with the director upon request, a principle-based valuation
670 report that complies with standards prescribed in the valuation manual.

671 (3) A principal-based valuation may include a prescribed formulaic reserve
672 component.

673 8. For policies in force on or after the operative date of the valuation manual, a
674 company shall submit mortality, morbidity, policyholder behavior, or expense experience
675 and other data as prescribed in the valuation manual.

676 9. (1) For purposes of this subsection, "confidential information" means:

677 (a) A memorandum in support of an opinion submitted under subsection 4 or 5 of
678 this section and any other documents, materials, and other information including, but not
679 limited to, all working papers and copies thereof created, produced, or obtained by or
680 disclosed to the director or any other person in connection with such memorandum;

681 (b) All documents, materials, and other information including, but not limited to,
682 all working papers and copies thereof created, produced, or obtained by or disclosed to the
683 director or any other person in the course of an examination made under subdivision (6)
684 of subsection 6 of this section; provided, however, that if an examination report or other
685 material prepared in connection with an examination made under section 374.205 is not
686 held as private and confidential information under section 374.205, an examination report
687 or other material prepared in connection with an examination made under subdivision (6)
688 of subsection 6 of this section shall not be confidential information to the same extent as
689 if such examination report or other material had been prepared under section 374.205;

690 (c) Any reports, documents, materials, and other information developed by a
691 company in support of or in connection with an annual certification by the company under
692 paragraph (b) of subdivision (2) of subsection 7 of this section evaluating the effectiveness
693 of the company's internal controls with respect to a principle-based valuation and any
694 other documents, materials, and other information including, but not limited to, all
695 working papers and copies thereof created, produced, or obtained by or disclosed to the
696 director or any other person in connection with such reports, documents, material, and
697 other information;

698 (d) Any principle-based valuation report developed under paragraph (c) of
699 subdivision (2) of subsection 7 of this section and any other documents, materials, and
700 other information including, but not limited to, all working papers and copies thereof
701 created, produced, or obtained by or disclosed to the director or any other person in
702 connection with such report; and

703 (e) Any documents, materials, data, and other information submitted by a company
704 under subsection 8 of this section (collectively, "experience data") and any other
705 documents, materials, data, and other information including, but not limited to, all
706 working papers and copies thereof created or produced in connection with such experience

707 data, in each case that include any potentially company-identifying or personally
708 identifiable information, that is provided to or obtained by the director (together with any
709 "experience data", the "experience materials") and any other documents, materials, data,
710 and other information including, but not limited to, all working papers and copies thereof
711 created, produced, or obtained by or disclosed to the director or any other person in
712 connection with such experience materials.

713 (2) (a) Except as provided in this subsection, a company's confidential information
714 is confidential by law and privileged, and shall not be subject to chapter 610, shall not be
715 subject to subpoena, and shall not be subject to discovery or admissible in evidence in any
716 private civil action; provided, however, that the director is authorized to use the
717 confidential information in the furtherance of any regulatory or legal action brought
718 against the company as a part of the director's official duties.

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

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

724 a. Other state, federal, and international regulatory agencies and with the NAIC
725 and its affiliates and subsidiaries; and

726 b. In the case of confidential information specified in paragraphs (a) and (d) of
727 subdivision (1) of this subsection only, the Actuarial Board for Counseling and Discipline
728 or its successor upon request stating that the confidential information is required for the
729 purpose of professional disciplinary proceedings and with state, federal, and international
730 law enforcement officials.

731 (d) The sharing of confidential information detailed in paragraph (c) of this
732 subdivision shall be contingent on such recipient agreeing and having the legal authority
733 to agree to maintain the confidentiality and privileged status of such documents, materials,
734 data, and other information in the same manner and to the same extent as required for the
735 director.

736 (e) The director may receive documents, materials, data, and other information,
737 including otherwise confidential and privileged documents, materials, data, or information,
738 from the NAIC and its affiliates NAD subsidiaries, from regulatory or law enforcement
739 officials of other foreign or domestic jurisdictions, and from the Actuarial Board for
740 Counseling and Discipline or its successor and shall maintain as confidential or privileged
741 any document, material, data, or other information received with notice or the

742 **understanding that it is confidential or privileged under the laws of the jurisdiction that**
743 **is the source of the document, material, or other information.**

744 **(f) The director may enter into agreements governing sharing and use of**
745 **information consistent with this subdivision.**

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

749 **(h) A privilege established under the law of any state or jurisdiction that is**
750 **substantially similar to the privilege established under this subdivision shall be available**
751 **and enforced in any proceeding in, and in any court of, Missouri.**

752 **(i) In this subsection, regulatory agency, law enforcement agency, and the NAIC**
753 **include, but are not limited to, their employees, agents, consultants and contractors.**

754 **(3) Notwithstanding subdivision (2) of this subsection, any confidential information**
755 **specified in paragraphs (a) and (d) of subdivision (1) of this subsection:**

756 **(a) May be subject to subpoena for the purpose of defending an action seeking**
757 **damages from the appointed actuary submitting the related memorandum in support of**
758 **an opinion submitted under subsection 4 or 5 of this section or principle-based valuation**
759 **report developed under paragraph (c) of subdivision (2) of subsection 7 of this section by**
760 **reason of an action required by sections 376.365 to 376.380 or by regulations promulgated**
761 **hereunder;**

762 **(b) May otherwise be released by the director with the written consent of the**
763 **company; and**

764 **(c) Once any portion of a memorandum in support of an opinion submitted under**
765 **subsection 4 or 5 of this section or a principle-based valuation report developed under**
766 **paragraph (c) of subdivision (2) of subsection 7 of this section is cited by the company in**
767 **its marketing, or is publicly volunteered to or before a governmental agency other than a**
768 **state insurance department, or is released by the company to the news media, all portions**
769 **of such memorandum or report shall no longer be confidential.**

770 **10. The director may exempt specific product forms or product lines of a domestic**
771 **company that is licensed and doing business only in Missouri from the requirements of**
772 **subsection 6 of this section provided:**

773 **(1) The director has issued an exemption in writing to the company and has not**
774 **subsequently revoked the exemption in writing; and**

775 **(2) The company computes reserves using assumptions and methods used prior to**
776 **the operative date of the valuation manual in addition to any requirements established by**
777 **the director and promulgated by regulation.**

778 **For any company granted an exemption under this section, subsection 3 of section 376.370**
779 **and subsections 1 to 5 of this section shall be applicable. With respect to any company**
780 **applying this exemption, any reference to subsection 6 of this section found in subsection**
781 **3 of section 376.370 and subsections 1 to 5 of this section shall not be applicable.**

376.670. 1. **As used in this section, "operative date of the valuation manual" shall**
2 **have the same meaning as set forth in section 376.365.**

3 **2.** In the case of policies issued on or after the operative date of this section, as defined
4 in subsection [14] **20 of this section**, no policy of life insurance, except as stated in subsection
5 [13] **19 of this section**, shall be delivered or issued for delivery in this state unless it shall
6 contain in substance the following provisions, or corresponding provisions which in the opinion
7 of the director of the department of insurance, financial institutions and professional registration
8 are at least as favorable to the defaulting or surrendering policyholder as are the minimum
9 requirements specified in this section and are essentially in compliance with subsection [12a] **18**
10 of this section:

11 (1) That, in the event of default in any premium payment, the company will grant, upon
12 proper request not later than sixty days after the due date of the premium in default, a paid-up
13 nonforfeiture benefit on a plan stipulated in the policy, effective as of such due date, of such
14 amount as may be herein specified. In lieu of such stipulated paid-up nonforfeiture benefit, the
15 company may substitute, upon proper request not later than sixty days after the due date of the
16 premium in default, an actuarially equivalent alternative paid-up nonforfeiture benefit which
17 provides a greater amount or longer period of death benefits or, if applicable, a greater amount
18 or earlier payment of endowment benefits;

19 (2) That, upon surrender of the policy within sixty days after the due date of any
20 premium payment in default after premiums have been paid for at least three full years in the
21 case of ordinary insurance or five full years in the case of industrial insurance, the company will
22 pay, in lieu of any paid-up nonforfeiture benefit, a cash surrender value of such amount as may
23 be herein specified;

24 (3) That a specified paid-up nonforfeiture benefit shall become effective as specified in
25 the policy unless the person entitled to make such election elects another available option not
26 later than sixty days after the due date of the premium in default;

27 (4) That, if the policy shall have become paid up by completion of all premium payments
28 or if it is continued under any paid-up nonforfeiture benefit which became effective on or after
29 the third policy anniversary in the case of ordinary insurance or the fifth policy anniversary in
30 the case of industrial insurance, the company will pay, upon surrender of the policy within thirty
31 days after any policy anniversary, a cash surrender value of such amount as may be herein
32 specified;

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

44 (6) A statement that the cash surrender values and the paid-up nonforfeiture benefits
45 available under the policy are not less than the minimum values and benefits required by or
46 pursuant to the insurance law of the state in which the policy is delivered; an explanation of the
47 manner in which the cash surrender values and the paid-up nonforfeiture benefits are altered by
48 the existence of any paid-up additions credited to the policy or any indebtedness to the company
49 on the policy; if a detailed statement of the method of computation of the values and benefits
50 shown in the policy is not stated therein, a statement that such method of computation has been
51 filed with the insurance supervisory official of the state in which the policy is delivered; and a
52 statement of the method to be used in calculating the cash surrender value and paid-up
53 nonforfeiture benefit available under the policy on any policy anniversary beyond the last
54 anniversary for which such values and benefits are consecutively shown in the policy.

55 [2.] 3. Any of the foregoing provisions or portions thereof not applicable by reason of
56 the plan of insurance may, to the extent inapplicable, be omitted from the policy.

57 [3.] 4. The company shall reserve the right to defer the payment of any cash surrender
58 value for a period of six months after demand therefor with surrender of the policy.

59 [4.] 5. (1) Any cash surrender value available under the policy in the event of default
60 in a premium payment due on any policy anniversary, whether or not required by subsection [1]
61 **2 of this section**, shall be an amount not less than the excess, if any, of the present value, on such
62 anniversary, of the future guaranteed benefits which would have been provided for by the policy
63 if there had been no default, including any existing paid-up additions, over the sum of the then
64 present value of the adjusted premiums as defined in subsections [6, 7, 8, 8a, 9, 10, 10a, and 10b]
65 **7, 8, 9, 10, 11, 12, 13, and 14 of this section** corresponding to premiums which would have
66 fallen due on and after such anniversary, and the amount of any indebtedness to the company on
67 the policy.

68 (2) For any policy issued on or after the operative date of subsection [10b] **14** of this
69 section which provides supplemental life insurance or annuity benefits at the option of the
70 insured for an identifiable additional premium by rider or supplemental policy provision, the cash
71 surrender value referred to in subdivision (1) of this subsection shall be an amount not less than
72 the sum of the cash surrender value for an otherwise similar policy issued at the same age
73 without such rider or supplemental policy provision and the cash surrender value for a policy
74 which provides only the benefits otherwise provided by such rider or supplemental policy
75 provision.

76 (3) For any family policy issued on or after the operative date of subsection [10b] **14** of
77 this section which defines a primary insured and provides term insurance on the life of the spouse
78 of the primary insured expiring before the spouse's age seventy-one, the cash surrender value
79 referred to in subdivision (1) of this subsection shall be an amount not less than the sum of the
80 cash surrender value for an otherwise similar policy issued at the same age without such term
81 insurance on the life of the spouse and the cash surrender value for a policy which provides only
82 the benefits otherwise provided by such term insurance on the life of the spouse.

83 (4) Any cash surrender value available within thirty days after any policy anniversary
84 under any policy paid up by completion of all premium payments or any policy continued under
85 any paid-up nonforfeiture benefit, whether or not required by subsection [1] **2 of this section**,
86 shall be an amount not less than the present value, on such anniversary, of the future guaranteed
87 benefits provided for the policy, including any existing paid-up additions, decreased by any
88 indebtedness to the company on the policy.

89 [5.] **6.** Any paid-up nonforfeiture benefit available under the policy in the event of
90 default in a premium payment due on any policy anniversary shall be such that its present value
91 as of such anniversary shall be at least equal to the cash surrender value then provided for by the
92 policy or, if none is provided for, that cash surrender value which would have been required by
93 this section in the absence of the condition that premiums shall have been paid for at least a
94 specified period.

95 [6.] **7.** This subsection and subsections [7, 8, 8a, and 9] **8, 9, 10, and 11** of this section
96 shall not apply to policies issued on or after the operative date of subsection [10b] **14** of this
97 section. Except as provided in subsection [8a] **10 of this section**, the adjusted premiums for any
98 policy shall be calculated on an annual basis and shall be such uniform percentage of the
99 respective premiums specified in the policy for each policy year, excluding any extra premiums
100 charged because of impairments or special hazards, that the present value, at the date of issue of
101 the policy, of all such adjusted premiums shall be equal to the sum of:

102 (1) The then present value of the future guaranteed benefits provided for by the policy;

103 (2) Two percent of the amount of insurance, if the insurance be uniform in amount, or
104 of the equivalent uniform amount, as herein defined, if the amount of insurance varies with
105 duration of the policy;

106 (3) Forty percent of the adjusted premium for the first policy year;

107 (4) Twenty-five percent of either the adjusted premiums for the first policy year or the
108 adjusted premium for a whole life policy of the same uniform or equivalent uniform amount with
109 uniform premiums for the whole of life issued at the same age for the same amount of insurance,
110 whichever is less.

111 [7.] **8.** Provided, however, that in applying the percentages specified in subdivisions (3)
112 and (4) of subsection [6] **7 of this section**, no adjusted premium shall be deemed to exceed four
113 percent of the amount of insurance or uniform amount equivalent thereto. The date of issue of
114 a policy for the purpose of subsections [6, 7, 8, 8a and 9] **7, 8, 9, 10, and 11 of this section** shall
115 be the date as of which the rated age of the insured is determined.

116 [8.] **9.** In the case of a policy providing an amount of insurance varying with duration of
117 the policy, the equivalent uniform amount thereof for the purpose of subsections [6, 7, 8, 8a and
118 9] **7, 8, 9, 10, and 11 of this section** shall be deemed to be the uniform amount of insurance
119 provided by an otherwise similar policy, containing the same endowment benefit or benefits, if
120 any, issued at the same age and for the same term, the amount of which does not vary with
121 duration and the benefits under which have the same present value at the date of issue as the
122 benefits under the policy; provided, however, that in the case of a policy providing a varying
123 amount of insurance issued on the life of a child under age ten, the equivalent uniform amount
124 may be computed as though the amount of insurance provided by the policy prior to the
125 attainment of age ten were the amount provided by such policy at age ten.

126 [8a.] **10.** The adjusted premiums for any policy providing term insurance benefits by
127 rider or supplemental policy provision shall be equal to (a) the adjusted premiums for an
128 otherwise similar policy issued at the same age without such term insurance benefits, increased,
129 during the period for which premiums for such term insurance benefits are payable, by (b) the
130 adjusted premiums for such term insurance, the foregoing items (a) and (b) being calculated
131 separately and as specified in subsections [6, 7 and 8] **7, 8, and 9 of this section** except that, for
132 the purposes of subdivisions (2), (3) and (4) of subsection [6] **7 of this section**, the amount of
133 insurance or equivalent uniform amount of insurance used in the calculation of the adjusted
134 premiums referred to in (b) shall be equal to the excess of the corresponding amount determined
135 for the entire policy over the amount used in the calculation of the adjusted premiums in (a).

136 [9.] **11.** Except as otherwise provided in subsections [10 and 10a] **12 and 13 of this**
137 **section**, all adjusted premiums and present values referred to in this section shall, for all policies
138 of ordinary insurance, be calculated on the basis of the Commissioners 1941 Standard Ordinary

139 Mortality Table, provided that for any category of ordinary insurance issued on and after the
140 effective date of this amendment on female risks, adjusted premiums and present values may be
141 calculated according to an age not more than three years younger than the actual age of the
142 insured and such calculations for all policies of industrial insurance shall be made on the basis
143 of the 1941 Standard Industrial Mortality Table. All calculations shall be made on the basis of
144 the rate of interest, not exceeding three and one-half percent per annum, specified in the policy
145 for calculating cash surrender values and paid-up nonforfeiture benefits; provided, however, that
146 in calculating the present value of any paid-up term insurance with accompanying pure
147 endowment, if any, offered as a nonforfeiture benefit, the rates of mortality assumed may be not
148 more than one hundred and thirty percent of the rates of mortality according to such applicable
149 table; provided, further, that for insurance issued on a substandard basis, the calculation of any
150 such adjusted premiums and present values may be based on such other table of mortality as may
151 be specified by the company and approved by the director.

152 [10.] **12.** This subsection shall not apply to ordinary policies issued on or after the
153 operative date of subsection [10b] **14 of this section.** In the case of ordinary policies issued on
154 or after the operative date provided in this subsection, all adjusted premiums and present values
155 referred to in this section shall be calculated on the basis of the Commissioners 1958 Standard
156 Ordinary Mortality Table and the rate of interest specified in the policy for calculating cash
157 surrender values and paid-up nonforfeiture benefits, provided that such rate of interest shall not
158 exceed three and one-half percent per annum, except that a rate of interest not exceeding four
159 percent per annum may be used for policies issued on or after September 28, 1975, and prior to
160 September 28, 1979, and a rate of interest not exceeding five and one-half percent per annum
161 may be used for policies issued on or after September 28, 1979, and provided that for any
162 category of ordinary insurance issued on female risks, adjusted premiums and present values may
163 be calculated according to an age not more than six years younger than the actual age of the
164 insured; provided, however, that in calculating the present value of any paid-up term insurance
165 with accompanying pure endowment, if any, offered as a nonforfeiture benefit, the rates of
166 mortality assumed may be not more than those shown in the Commissioners 1958 Extended
167 Term Insurance Table; provided, further, that for insurance issued on a substandard basis, the
168 calculation of any such adjusted premiums and present values may be based on such other table
169 of mortality as may be specified by the company and approved by the director. After the date
170 when this subsection becomes effective, any company may file with the director a written notice
171 of its election to comply with the provisions of this subsection after a specified date before
172 January 1, 1966. After the filing of such notice, then upon such specified date, which shall be
173 the operative date of this subsection for such company, this subsection shall become operative
174 with respect to the ordinary policies thereafter issued by such company. If a company makes no

175 such election, the operative date of this subsection for such company shall be January 1, 1966.

176 [10a.] **13.** This subsection shall not apply to industrial policies issued on or after the
177 operative date of subsection [10b] **14 of this section.** In the case of industrial policies issued on
178 or after the operative date of this subsection as defined herein, all adjusted premiums and present
179 values referred to in this section shall be calculated on the basis of the Commissioners 1961
180 Standard Industrial Mortality Table and the rate of interest specified in the policy for calculating
181 cash surrender values and paid-up nonforfeiture benefits, provided that such rate of interest shall
182 not exceed three and one-half percent per annum, except that a rate of interest not exceeding four
183 percent per annum may be used for policies issued on or after September 28, 1975, and prior to
184 September 28, 1979, and a rate of interest not exceeding five and one-half percent per annum
185 may be used for policies issued on or after September 28, 1979; provided, however, that in
186 calculating the present value of any paid-up term insurance with accompanying pure endowment,
187 if any, offered as a nonforfeiture benefit, the rates of mortality assumed may be not more than
188 those shown in the Commissioners 1961 Industrial Extended Term Insurance Table; provided,
189 further, that for insurance issued on a substandard basis, the calculation of any such adjusted
190 premiums and present values may be based on such other table of mortality as may be specified
191 by the company and approved by the director. After the date when this subsection becomes
192 effective, any company may file with the director a written notice of its election to comply with
193 the provisions of this subsection after a specified date before January 1, 1968. After the filing
194 of such notice, then upon such specified date, which shall be the operative date of this subsection
195 for such company, this subsection shall become operative with respect to the industrial policies
196 thereafter issued by such company. If a company makes no such election, the operative date of
197 this subsection for such company shall be January 1, 1968.

198 [10b.] **14.** (1) This subsection shall apply to all policies issued on or after the operative
199 date of this subsection as defined herein. Except as provided in subdivision (7) of this
200 subsection, the adjusted premiums for any policy shall be calculated on an annual basis and shall
201 be such uniform percentage of the respective premiums specified in the policy for each policy
202 year, excluding amounts payable as extra premiums to cover impairments or special hazards and
203 also excluding any uniform annual contract charge or policy fee specified in the policy in a
204 statement of the method to be used in calculating the cash surrender values and paid-up
205 nonforfeiture benefits, that the present value, at the date of issue of the policy, of all adjusted
206 premiums shall be equal to the sum of:

207 (a) The then present value of the future guaranteed benefits provided for by the policy;

208 (b) One percent of either the amount of insurance, if the insurance be uniform in amount,
209 or the average amount of insurance at the beginning of each of the first ten policy years; and

210 (c) One hundred twenty-five percent of the nonforfeiture net level premium as
211 hereinafter defined. In applying the percentage specified in paragraph(c) above, no nonforfeiture
212 net level premium shall be deemed to exceed four percent of either the amount of insurance, if
213 the insurance be uniform in amount, or the average amount of insurance at the beginning of each
214 of the first ten policy years. The date of issue of a policy for the purpose of this subsection shall
215 be the date as of which the rated age of the insured is determined.

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

220 (3) In the case of policies which cause, on a basis guaranteed in the policy, unscheduled
221 changes in benefits or premiums, or which provide an option for changes in benefits or premiums
222 other than a change to a new policy, the adjusted premiums and present values shall initially be
223 calculated on the assumption that future benefits and premiums do not change from those
224 stipulated at the date of issue of the policy. At the time of any such change in the benefits or
225 premiums the future adjusted premiums, nonforfeiture net level premiums and present values
226 shall be recalculated on the assumption that future benefits and premiums do not change from
227 those stipulated by the policy immediately after the change.

228 (4) Except as otherwise provided in subdivision (7) of this subsection, the recalculated
229 future adjusted premiums for any such policy shall be such uniform percentage of the respective
230 future premiums specified in the policy for each policy year, excluding amounts payable as extra
231 premiums to cover impairments and special hazards, and also excluding any uniform annual
232 contract charge or policy fee specified in the policy in a statement of the method to be used in
233 calculating the cash surrender values and paid-up nonforfeiture benefits, that the present value,
234 at the time of change to the newly defined benefits or premiums, of all such future adjusted
235 premiums shall be equal to the excess of (A) the sum of the then present value of the then future
236 guaranteed benefits provided for by the policy and the additional expense allowance, if any, over
237 (B) the then cash surrender value, if any, or present value of any paid-up nonforfeiture benefit
238 under the policy.

239 (5) The additional expense allowance, at the time of the change to the newly defined
240 benefits or premiums, shall be the sum of:

241 (a) One percent of the excess, if positive, of the average amount of insurance at the
242 beginning of each of the first ten policy years subsequent to the change over the average amount
243 of insurance prior to the change at the beginning of each of the first ten policy years subsequent
244 to the time of the most recent previous change, or, if there has been no previous change, the date
245 of issue of the policy; and

246 (b) One hundred twenty-five percent of the increase, if positive, in the nonforfeiture net
247 level premium.

248 (6) The recalculated nonforfeiture net level premium shall be equal to the result obtained
249 by dividing (a) by (b) where:

250 (a) Equals the sum of:

251 a. The nonforfeiture net level premium applicable prior to the change times the present
252 value of an annuity of one per annum payable on each anniversary of the policy on or subsequent
253 to the date of the change on which a premium would have fallen due had the change not
254 occurred; and

255 b. The present value of the increase in future guaranteed benefits provided for by the
256 policy; and

257 (b) Equals the present value of an annuity of one per annum payable on each anniversary
258 of the policy on or subsequent to the date of change on which a premium falls due.

259 (7) Notwithstanding any other provisions of this subsection to the contrary, in the case
260 of a policy issued on a substandard basis which provides reduced graded amounts of insurance
261 so that in each policy year such policy has the same tabular mortality cost as an otherwise similar
262 policy issued on the standard basis which provides higher uniform amounts of insurance,
263 adjusted premiums and present values for such substandard policy may be calculated as if it were
264 issued to provide such higher uniform amounts of insurance on the standard basis.

265 (8) All adjusted premiums and present values referred to in this section shall for all
266 policies of ordinary insurance be calculated on the basis of the Commissioners 1980 Standard
267 Ordinary Mortality Table or, at the election of the company for any one or more specified plans
268 of life insurance, the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year
269 Select Mortality Factors. All adjusted premiums and present values referred to in this section
270 shall for all policies of industrial insurance be calculated on the basis of the Commissioners 1961
271 Standard Industrial Mortality Table. All adjusted premiums and present values referred to in this
272 section shall for all policies issued in a particular calendar year be calculated on the basis of a
273 rate of interest not exceeding the nonforfeiture interest rate as defined in this subsection for
274 policies issued in that calendar year.

275 (9) Except as provided in subdivision (8) of this subsection:

276 (a) At the option of the company, calculations for all policies issued in a particular
277 calendar year may be made on the basis of a rate of interest not exceeding the nonforfeiture
278 interest rate, as defined in this subsection, for policies issued in the immediately preceding
279 calendar year;

280 (b) Under any paid-up nonforfeiture benefit, including any paid-up dividend additions,
281 any cash surrender value available, whether or not required by subsection [1] 2 of this section,

282 shall be calculated on the basis of the mortality table and rate of interest used in determining the
283 amount of such paid-up nonforfeiture benefit and paid-up dividend additions, if any;

284 (c) A company may calculate the amount of any guaranteed paid-up nonforfeiture benefit
285 including any paid-up additions under the policy on the basis of an interest rate no lower than
286 that specified in the policy for calculating cash surrender values;

287 (d) In calculating the present value of any paid-up term insurance with accompanying
288 pure endowment, if any, offered as a nonforfeiture benefit, the rates of mortality assumed may
289 be not more than those shown in the Commissioners 1980 Extended Term Insurance Table for
290 policies of ordinary insurance and not more than the Commissioners 1961 Industrial Extended
291 Term Insurance Table for policies of industrial insurance;

292 (e) For insurance issued on a substandard basis, the calculation of any such adjusted
293 premiums and present values may be based on appropriate modifications of the tables listed in
294 [subdivision] **paragraph (d)** of this [subsection] **subdivision**;

295 (f) **For policies issued prior to the operative date of the valuation manual**, any
296 ordinary mortality tables, adopted after 1980 by the [National Association of Insurance
297 Commissioners] **NAIC**, that are approved by regulation promulgated by the director for use in
298 determining the minimum nonforfeiture standard may be substituted for the Commissioners 1980
299 Standard Ordinary Mortality Table with or without Ten-Year Select Mortality Factors or for the
300 Commissioners 1980 Extended Term Insurance Table;

301 (g) **For policies issued on or after the operative date of the valuation manual, the**
302 **valuation manual shall provide the mortality table for use in determining the minimum**
303 **nonforfeiture standard that may be substituted for the Commissioners 1980 Standard**
304 **Ordinary Mortality Table with or without Ten-Year Select Mortality Factors or for the**
305 **Commissioners 1980 Extended Term Insurance Table. If the director approves by**
306 **regulation any ordinary mortality table adopted by the NAIC for use in determining the**
307 **minimum nonforfeiture standard for policies issued on or after the operative date of the**
308 **valuation manual, such minimum nonforfeiture standard supersedes the minimum**
309 **nonforfeiture standard provided by the valuation manual**;

310 (h) **For policies issued prior to the operative date of the valuation manual**, any
311 industrial mortality tables, adopted after 1980 by the [National Association of Insurance
312 Commissioners] **NAIC**, that are approved by regulation promulgated by the director for use in
313 determining the minimum nonforfeiture standard may be substituted for the Commissioners 1961
314 Standard Industrial Mortality Table or for the Commissioners 1961 Industrial Extended Term
315 Insurance Table;

316 (i) **For policies issued on or after the operative date of the valuation manual, the**
317 **valuation manual shall provide the mortality table for use in determining the minimum**

318 **nonforfeiture standard that may be substituted for the Commissioners 1961 Standard**
319 **Industrial Mortality Table or the Commissioners 1961 Industrial Extended Term**
320 **Insurance Table. If the director approves by regulation any industrial mortality table**
321 **adopted by the NAIC for use in determining the minimum nonforfeiture standard for**
322 **policies issued on or after the operative date of the valuation manual, such minimum**
323 **nonforfeiture standard supersedes the minimum nonforfeiture standard provided by the**
324 **valuation manual.**

325 (10) The nonforfeiture interest rate is defined as follows:

326 (a) For policies issued prior to the operative date of the valuation manual, the
327 **nonforfeiture rate** per annum for any policy issued in a particular calendar year shall be equal
328 to one hundred twenty-five percent of the calendar year statutory valuation interest rate for such
329 policy as defined in section 376.380 rounded to the nearer one-quarter of one percent;

330 (b) For policies issued on or after the operative date of the valuation manual, the
331 **nonforfeiture interest rate per annum for any policy issued in a particular calendar year**
332 **shall be provided by the valuation manual;**

333 (11) Notwithstanding any other provision of law to the contrary, any refiling of
334 nonforfeiture values or their methods of computation for any previously approved policy form
335 which involves only a change in the interest rate or mortality table used to compute nonforfeiture
336 values shall not require refiling of any other provisions of that policy form;

337 (12) After the effective date of this subsection, any company may file with the director
338 a written notice of its election to comply with the provisions of this subsection after a specified
339 date before January 1, 1989, which shall be the operative date of this subsection for such
340 company. If a company makes no such election, the operative date of this subsection for such
341 company shall be January 1, 1989.

342 [10c.] **15.** In the case of any plan of life insurance which provides for future premium
343 determination, the amounts of which are to be determined by the insurance company based on
344 then estimates of future experience, or in the case of any plan of life insurance which is of such
345 a nature that minimum values cannot be determined by the methods described in subsections 1
346 to [10b] **14** of this section, then:

347 (1) The director must be satisfied that the benefits provided under the plan are
348 substantially as favorable to policyholders and insureds as the minimum benefits otherwise
349 required by subsections 1 to [10b] **14** of this section;

350 (2) The director must be satisfied that the benefits and the pattern of premiums of that
351 plan are not such as to mislead prospective policyholders or insureds;

352 (3) The cash surrender values and paid-up nonforfeiture benefits provided by the plan
353 must not be less than the minimum values and benefits required for the plan computed by a

354 method consistent with the principles of this section, as determined by regulations promulgated
355 by the director.

356 [11.] **16.** Any cash surrender value and any paid-up nonforfeiture benefit, available under
357 the policy in the event of default in a premium payment due at any time other than on the policy
358 anniversary, shall be calculated with allowance for the lapse of time and the payment of
359 fractional premiums beyond the last preceding policy anniversary. All values referred to in
360 subsections [4, 5, 6, 7, 8, 8a, 9, 10, 10a and 10b] **5, 6, 7, 8, 9, 10, 11, 12, 13, and 14** of this
361 section may be calculated upon the assumption that any death benefit is payable at the end of the
362 policy year of death. The net value of any paid-up additions, other than paid-up term additions,
363 shall be not less than the amounts used to provide such additions.

364 [12.] **17.** Notwithstanding the provisions of subsection [4] **5 of this section**, additional
365 benefits payable:

366 (1) In the event of death or dismemberment by accident or accidental means;

367 (2) In the event of total and permanent disability;

368 (3) As reversionary annuity or deferred reversionary annuity benefits;

369 (4) As term insurance benefits provided by a rider or supplemental policy provision to
370 which, if issued as a separate policy, this section would not apply;

371 (5) As term insurance on the life of a child or on the lives of children provided in a
372 policy on the life of a parent of the child, if such term insurance expires before the child's age is
373 twenty-six, is uniform in amount after the child's age is one, and has not become paid up by
374 reason of the death of a parent of the child; and

375 (6) As other policy benefits additional to life insurance and endowment benefits, and
376 premiums for all such additional benefits; shall be disregarded in ascertaining cash surrender
377 values and nonforfeiture benefits required by this section, and no such additional benefits shall
378 be required to be included in any paid-up nonforfeiture benefits.

379 [12a.] **18.** (1) This subsection, in addition to all other applicable subsections of this
380 section, shall apply to all policies issued on or after January 1, 1986. Any cash surrender value
381 available under the policy in the event of default in a premium payment due on any policy
382 anniversary shall be in an amount which does not differ by more than two-tenths of one percent
383 of either the amount of insurance, if the insurance be uniform in amount, or the average amount
384 of insurance at the beginning of each of the first ten policy years, from the sum of the greater of
385 zero and the basic cash value hereinafter specified and the present value of any existing paid-up
386 additions less the amount of any indebtedness to the company under the policy.

387 (2) The basic cash value shall be equal to the present value, on such anniversary, of the
388 future guaranteed benefits which would have been provided for by the policy, excluding any
389 existing paid-up additions and before deduction of any indebtedness to the company, if there had

390 been no default, less the then present value of the nonforfeiture factors, as defined in subdivision
391 (3) of this subsection, corresponding to premiums which would have fallen due on and after such
392 anniversary. The effects on the basic cash value of supplemental life insurance or annuity
393 benefits or of family coverage, as described in subsection [4] **5** of this section or in subsections
394 [6, 7, 8, 8a and 9] **7, 8, 9, 10, and 11** of this section, whichever is applicable, shall be the same
395 as are the effects specified in subsection [4] **5** of this section or in subsections [6, 7, 8, 8a and 9]
396 **7, 8, 9, 10, and 11** of this section, whichever is applicable on the cash surrender values defined
397 in that subsection.

398 (3) The nonforfeiture factor for each policy year shall be an amount equal to a percentage
399 of the adjusted premium for the policy year, as defined in subsections [6, 7, 8, 8a and 9] **7, 8, 9,**
400 **10, and 11** of this section or in subsection [10b] **14** of this section, whichever is applicable.
401 Except as is required by subdivision (4) of this subsection, such percentage:

402 (a) Must be the same percentage for each policy year between the second policy
403 anniversary and the later of the fifth policy anniversary or the first policy anniversary at which
404 there is available under the policy a cash surrender value in an amount, before including any
405 paid-up additions and before deducting any indebtedness, of at least two-tenths of one percent
406 of either the amount of insurance, if the insurance be uniform in amount, or the average amount
407 of insurance at the beginning of each of the first ten policy years; and

408 (b) Must be such that no percentage after the later of the two policy anniversaries
409 specified in paragraph (a) of this subdivision may apply to fewer than five consecutive policy
410 years. No basic cash value may be less than the value which would be obtained if the adjusted
411 premiums for the policy, as defined in subsections [6, 7, 8, 8a and 9] **7, 8, 9, 10, and 11** of this
412 section or in subsection [10b] **14** of this section, whichever is applicable, were substituted for
413 the nonforfeiture factors in the calculation of the basic cash value.

414 (4) All adjusted premiums and present values referred to in this subsection shall for a
415 particular policy be calculated on the same mortality and interest bases as are used in
416 demonstrating the policy's compliance with the other subsections of this section. The cash
417 surrender values referred to in this subsection shall include any endowment benefits provided
418 for by the policy.

419 (5) Any cash surrender value available other than in the event of default in a premium
420 payment due on a policy anniversary, and the amount of any paid-up nonforfeiture benefit
421 available under the policy in the event of default in a premium payment shall be determined in
422 manners consistent with the manners specified for determining the analogous minimum amounts
423 in subsections [3, 4, 5, 10b and 11] **4, 5, 6, 14, and 16** of this section. The amounts of any cash
424 surrender values and of any paid-up nonforfeiture benefits granted in connection with additional

425 benefits such as those listed as subdivisions (1) to (6) in subsection [12] 17 shall conform with
426 the principles of this subsection.

427 [13.] 19. (1) This section shall not apply to any of the following:

428 (a) Reinsurance;

429 (b) Group insurance;

430 (c) Pure endowments;

431 (d) Annuities or reversionary annuity contracts;

432 (e) Term policies of uniform amounts, which provide no guaranteed nonforfeiture or
433 endowment benefits, or renewals thereof of twenty years or less expiring before age seventy-one,
434 for which uniform premiums are payable during the entire term of the policy;

435 (f) Term policies of decreasing amounts, which provide no guaranteed nonforfeiture or
436 endowment benefits, on which each adjusted premium calculated as specified in subsections [6,
437 7, 8, 8a, 9, 10, 10a, and 10b] 7, 8, 9, 10, 11, 12, 13, and 14 of this section is less than the
438 adjusted premium so calculated on a term policy of uniform amount, or renewal thereof, which
439 provides no guaranteed nonforfeiture or endowment benefits, issued at the same age and for the
440 same initial amount of insurance, and for a term of twenty years or less expiring before age
441 seventy-one, for which uniform premiums are payable during the entire term of the policy;

442 (g) Policies, which provide no guaranteed nonforfeiture or endowment benefits, for
443 which no cash surrender value, if any, or present value of any paid-up nonforfeiture benefit, at
444 the beginning of any policy year, calculated as specified in subsections [4 to 10b] 5 to 14 of this
445 section, exceeds two and one-half percent of the amount of insurance at the beginning of the
446 same policy year;

447 (h) Policies which shall be delivered outside this state through an agent or other
448 representative of the company issuing the policies.

449 (2) For purposes of determining the applicability of this section, the expiration date for
450 a joint term life insurance policy shall be the age at expiry of the oldest life.

451 [14.] 20. After the effective date of this section, any company may file with the director
452 a written notice of its election to comply with the provisions of this section after a specified date
453 before January 1, 1948. After the filing of such notice, then upon such specified date, which
454 shall be the operative date for such company, this section shall become operative with respect
455 to the policies thereafter issued by such company. If a company makes no such election, the
456 operative date of this section for such company shall be January 1, 1948.

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