# Statutory Valuation of Individual Life and Annuity Contracts

Errata for Volume I

Last Updated: October 20, 2023

# **Table of Contents**

1. Intr	oduction	.1
2. <b>Cha</b>	pter 5	.2
	Page 104	
3. <b>Cha</b>	pter 10	3
	Page 197	
3.2	Page 205	
3.3	Page 208	
	pter 12	
4.1	Page 251	5
5. <b>Cha</b>	pter 14	.6
5.1	Page 329	6
5.2	Page 349	8
	pter 16	
6.1	Page 387	9
6.2	Page 390	
6.3	Page 398	10

## 1. Introduction

The purpose of this document is to provide a list of the errata for Volume 1 of the  $Statutory\ Valuation\ of\ Individual\ Life\ and\ Annuity\ Contracts.$ 

#### 2.1 Page 104

The last two sentence of the first paragraph on Page 104 of Section 5.3:

This includes individual life policies and individually underwritten certificates issued under a group life insurance contract. It excludes annuity contracts, credit life contracts, industrial life, and pre-need life insurance contracts.

#### should be changed to:

This only includes individual life policies. It excludes individually underwritten certificates issued under a group life insurance contract, annuity contracts, credit life contracts, industrial life, and pre-need life insurance contracts.

The first sentence of the last paragraph on Page 104 of Section 5.3:

There are three tests that permit the life insurance to just calculate the NPR for certain policies.

#### should be replaced with:

There are three tests that may simplify the valuation process.

#### 3.1 Page 197

The first sentence of the second paragraph on Page 197 of Section 10.1.1:

For plans of insurance with separate premium rates (or cost of insurance rates) for preferred and standard lives, the super preferred, preferred, and standard classifications, provided that at least 20% of the business to be valued using this table is in one or more of the preferred classes, may be elected.

should be replaced with:

For plans of insurance with separate premium rates (or cost of insurance rates) for super preferred, preferred and standard lives, the life insurance company must demonstrate that at least 20% of the business must be in one or more of the preferred classes before the life insurance company can use the preferred versions of the 2001 CSO Mortality Tables.

#### 3.2 Page 205

The formula for  $i_{CY}$  on Page 205 of Section 10.3.1 is better expressed as follows:

$$i_{CY} = \begin{cases} 0.03 + w_1 \cdot (r_{CY}^1 - 0.03) + 0.50 \cdot w_2 \cdot (r_{CY}^2 - 0.09) & \text{for life} \\ 0.03 + w_1 \cdot (r_{CY} - 0.03) & \text{for SPIA} \end{cases}$$

where

CY = calendar year

 $i_{CY}$  = maximum valuation interest rate in calendar year CY

 $w_1, w_2$  = weighting factors

 $r_{CY}$  = reference interest rate in calendar year CY

 $r_{CY}^1 = Min(r_{CY}, 0.09);$ 

 $r_{CY}^2 = Max(r_{CY}, 0.09).$ 

The valuation interest rate for other annuities is based on the life formula above if the annuity contract satisfies all of the following criteria:

- Has cash settlement options
- Valued on issue year basis
- Guarantee duration > 10 years

All other annuities not satisfying the above criteria should use the SPIA formula.

## 3.3 Page 208

The following exhibit has a mistake (highlighted in yellow):

			Valuation Interest Rate	
Year	Fund Value	Change in Fund Value	Issue Year Method	Change in Fund Method
2000	50,000	50,000	7.00%	7.75%
2001	70,000	20,000	7.00	7.50
2002	85,000	15,000	7.00	7.25
2003	90,000	10,000	7.00	6.50
2004	95,000	5,000	7.00	6.00

It should be replaced with the following exhibit:

			Valuation Interest Rate	
Year	Fund Value	Change in Fund Value	Issue Year Method	Change in Fund Method
2000	50,000	50,000	7.00%	7.75%
2001	70,000	20,000	7.00	7.50
2002	85,000	15,000	7.00	7.25
2003	90,000	5,000	7.00	6.50
2004	95,000	5,000	7.00	6.00

#### 4.1 Page 251

The Consolidated Appropriations Act was passed by Congress at the end of 2020. This act revised Section 7702 of the Internal Revenue Code that affects the nonforfeiture interest rate discussed in the valuation manual.

Specifically, the phrase on the top of Page 251 of Section 12.2:

"... provided, however, that the nonforfeiture interest rate shall not be less than 4.00%." should be replaced with:

"... provided, however, that the nonforfeiture interest rate shall not be less than the Insurance Interest Rate specified in Section 7702 for determining the guideline level premium and 7-pay premium. For 2021 and 2022 the Insurance Interest Rate is 2%. Companies have until 1/1/2022 to comply with the lower interest rate."

#### 5.1 Page 329

The first sentence on Page 329 of Section 14.4.3:

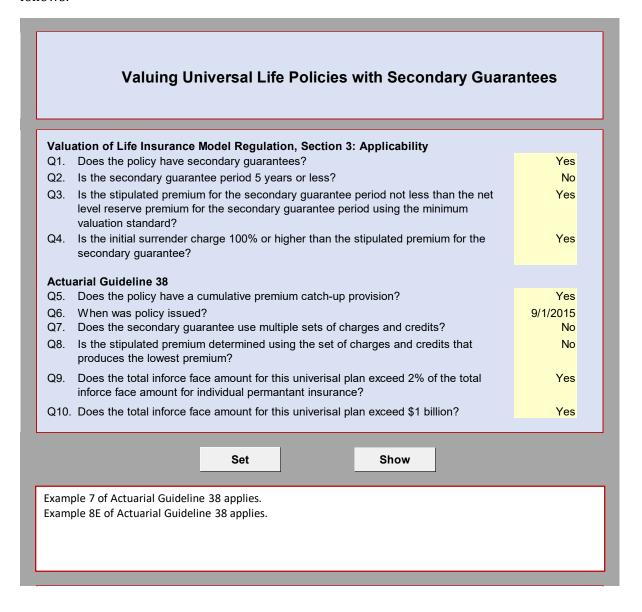
To illustrate this concept, the values in the "CCV" worksheet and the "GMCV" worksheet were based on the contract values assumptions appearing in the worksheet "CVA".

should be replaced with:

To illustrate this concept, the values in the "CCV" worksheet were based on the contract values assumptions appearing in the worksheet "CVA".

#### 5.2 Page 349

The illustration shown for the data entry fields in the Start worksheet should be completed as follows:



#### 6.1 Page 387

The formula at the top of Page 387:

$$ic_{t+1}^{i} = Min \left[ i^{Cap}, r_{t-np}^{P} \cdot \frac{Aindex_{t+1}}{Aindex_{t+1-np}} - i_{t+1-np}^{M \operatorname{arg} in} \right]$$

should be changed to:

$$ic_{t+1}^{i} = Min \left[ i^{Cap}, r_{t-np}^{P} \cdot \frac{Aindex_{t+1}}{Aindex_{t+1-np}} - 1 - i_{t+1-np}^{M \operatorname{arg} in} \right],$$

## 6.2 Page 390

At the top of Page 390, the sentence:

"For the type 2a and 2 methods, the appointed actuary needs to file certifications quarterly regarding the correctness of the reserves."

should be changed to:

"For all three methods, the appointed actuary needs to file certifications quarterly regarding the correctness of the reserves."

#### 6.3 Page 398

On Page 398, the abbreviation:

"(CRVM under UAMV)"

that appears in the subtitle for 16.4.2 and in the first paragraph, should be changed to:

"(CRVM with UAMV)".

In the second paragraph of Section 16.42 on Page 398, the sentences

"Where the methods differ is how the valuation date calculation are done."

and

"Under the IGRM method, the implied rate guarantee is not recalculated as long as neither the interest rate guarantees nor the index based benefit is guarantees"

should be changed to

"Where the methods differ is how the valuation date calculations are done."

and

"Under the IGRM method, the implied rate guarantee is not recalculated as long as neither the interest rate guarantees nor the index based benefits are guarantees"