

Q2

A newsletter of developments at QuasarSystems

Issue 63 - June 2010

This forum is used to inform you of changes and enhancements we've made to our Reinsurance Administration System as we continue to improve the processing of R² - *The Reinsurance Resolution*.

Waiver of Premium Reserve Calculations

(AKA: Why do I need this special coding on my Waiver Plan Headers?)

The R² System is designed to calculate standard, traditional reserves for Life Insurance, Accidental Death Benefit and Waiver of Premium Benefits. Life Insurance Reserves involve a complex calculation using a specific CSO (Commissioners' Standard Ordinary) Mortality Table and Interest Rates. The tables and rates can be specified in the Plan Header and overridden by Treaty Coding. There are options to specify reserve calculations as:

YRT	Yearly Renewable Term
MRT	Monthly Renewable Term
NLP	Net Level Premium
CRVM	Commissioners' Reserve Valuation Method

For each method you can choose to use Curtate, Continuous or Semi-Continuous reserve calculations. Each of these options has advantages and disadvantages in overall financial reporting.

In addition to the Mortality Table, calculation of reserves for Waiver of Premium Benefits involves a table of "rates of disablement". The Society of Actuaries developed and published one such table in 1952 called the "1952 Waiver of Premium Disability Table". In conjunction with the rates of disablement, there is also a table of expected *continuance* of disability based on age at disablement and duration of disablement.

These tables were developed from Insured experience and were a good representation of these values in 1950. There have been no updates to these tables since then. One primary reason may be that Reserves for Waiver of Premium Benefits

do not have a significant material impact on the overall financial results of companies. Small changes in these reserves, which would result from updating the tables, have not been deemed a priority. The cost of developing these updated tables would far exceed the economic value of such a change for the Life Insurance Industry.

The R² System Plan Header for Waiver Benefits has been designed to hold certain important information used in the calculation of Net Premiums and Reserves for Waiver. One item is the specification of the Table to be used for this valuation. We provide the 1952 Disability Tables as part of the "CSO" file included with each System Installation. The table key is "DIS52RUA". The "UA" indicates that the table is "unisex, aggregate." That is, the rates do not differ by sex, smoker or class. In fact, at the time they were developed, industry experience would only have been available by sex, as there were no companies offering discounts for non-smokers or preferred classes of insurance. And most of the disability experience was for males, so development of a separate female table was not even feasible. We suggest that you code the "Waiver of Premium Code" on screen 4 of the Waiver Plan Header with "DIS52R" (or leave it blank). Any other coding in this field would lead to an error.

Riders

ADB Code

Waiver of Premium Code DIS52R

Waiver of Premium Reserve Calculations *continued*

There is also a “Continuance Table”, which contains data for calculating the likelihood that someone disabled today will continue to be disabled months or years in the future. The table key for this is “DIS52AUA”.

Historically, companies were not comfortable insuring the risk of disablement near retirement age (usually 65) for extended periods of time. And they were unwilling to offer benefits for disablement after age 65, on the assumption that people who were planning on retiring at 65 could easily ‘fake’ disablement and get a free ride on their Life Insurance Premiums. However, they were willing to offer such benefits for long term disablement at younger ages. In addition, they didn’t want to take the risk of short term disabilities, so typically the actual benefit would begin 4 or 6 months after disablement. Typical Waiver benefits for a Whole Life policy would look something like this:

We will waive all premiums due after six months of continuous disability during the continuation of disability, if disablement occurs before age 60. We will waive premiums to the later of age 65 or two years for disablement between 60 and 65.

This is a sort of ‘step-rate’ benefit which can be specified on Screen 4 of the Plan Header for each Waiver plan. That is, you can code four values on this screen that represent the following:

Waiver of Premium Fields

Disability Before Age	60	Benefit ending Age	99
Disability Before Age	65	Benefit ending Age	65

Upon disablement before age 60 we will waive premiums for life (to age 99).

Upon disablement after age 60 but before age 65, we will waive benefits until age 65.

We also “hard code” the two-year minimum benefit in the reserve calculations.

For Base plans with premiums varying according to a specified pattern (e.g. ART or 5-year

Renewable Term plans), R² will calculate the pattern of premiums and use it as the benefit stream for the WP benefit. These increasing premiums reflect an increasing benefit to be Waived. Using the projected premium streams, the valuation system will apply the appropriate rates and continuance of disablement to determine the Net Premiums and Reserves for the Waiver Benefit. These are then included in the R²VL database on the Waiver records, for both direct and ceded amounts.

There is no CRVM method for Waiver of Premium reserves, so the primary options for Waiver valuation are:

YRT	Yearly Renewable Term
NLP	Net Level Premium

The YRT method uses only the Benefit and Rate for the current policy year, so future premiums are not relevant to this method. Similarly, Plan Headers for “Waiver of Monthly Deduction” can be coded using YRT method, and the current benefit amount.

In cases where the R² Valuation System does not accommodate your specific Waiver products, we offer the alternative of loading in Net Premium Rates and Reserve factors from a Client-provided file. Contact your Liaison for further information on this option. ✓

Q: What is the difference between Original Retention and Current Retention in the RS file?

A: Original Retention is the amount used to allocate the policies at issue through the transaction program. **Current**

Retention is the amount used for retention management, since companies can increase their retention limits after policies are issued. Policies need to meet the specified selection criteria for this company and variation, as specified in the Treaty. For Band Limits (maximum and minimum cession amounts), the specified Treaty multiple of this amount is used. ✓

We would be delighted to answer any questions you might have. If you would like a back issue of Q² please check our website at www.qsi-r2.com and visit the Documentation page. The main topics of past issues were:

For previous issue information, please see our website.

Issue 11 - Viewing Inforce Files

Issue 12 - Extracting Test Data, Status Codes, Transaction Codes

Issue 13 - Trailers

Issue 14 - R² Windows

Issue 15 - What's in a footer?

Issue 16 - Expanded Files

Issue 17 - Retention Management, Reserves Q&A

Issue 18 - T\$POSrt.Idx, Trailers Q&A

Issue 19 - Sorting Files

Issue 20 - Testing Billing/Valuation Samples

Issue 21 - Standards for Backup Procedures

Issue 22 - Warnings and Errors

Issue 23 - Manual Overrides and Conversions

Issue 24 - CF Flags and Resorting

Issue 25 - Parsing

Issue 26 - Manual Override O, Qsxt19p

Issue 27 - Priors and Allocation

Issue 28 - Premium & Allowance Information

Issue 29 - Command Line Ad-hoc, qsre10p.exe

Issue 30 - Schedule S, Financial Adjustments

Issue 31 - Hot Keys, Printing Files, Electronic Files

Issue 32 - Event Extracts, How to Rerun a Previous Cycle

Issue 33 - Electronic Output Viewing Package, Manual Override T

Issue 34 - End of Year Processing

Issue 35 - Initializing New Company Area

Issue 36 - Programs in Review

Issue 37 - Waivers: Past and Present

Issue 38 - Dates in R²

Issue 39 - Cleaning up System Directories; tracing through TX database

Issue 40 - Sequences; Status 19

Issue 41 - Expanded System

Issue 42 - Technical Considerations

Issue 43 - Allocate Error

Issue 44 - Automating routine processing; Testing

Issue 45 - RM Duplicate Report

Issue 46 - Printing Rate Tables

Issue 47 - Valuation Reserve Options

Issue 48 - Coding Valuation Reserves

Issue 49 - Side Files

Issue 50 - Going Paperless

Issue 51 - Manual Override F

Issue 52 - Anatomy of an Error Message

Issue 53 - Transaction Codes

Issue 54 - Gross Premium and Allowances

Issue 55 - Suppressed Errors Report and Qsrf01p

Issue 56 - Dual Use Programs

Issue 57 - Ad-Hoc Enhancements

Issue 58 - Age Changes

Issue 59 - Beginning Paid-to-Date

Issue 60 - Single Line Transaction File

Issue 61 - Single Line Inforce File, Status and Transaction Codes

Issue 62 - Transaction History Search

Issue 63 - WP Reserve Calculations

The current version of the Electronic Output Viewing Package is 02g.



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