

Delaware Compensation Rating Bureau, Inc.



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July 28, 2003

**VIA OVERNIGHT DELIVERY**

The Honorable Donna Lee Williams  
Insurance Commissioner  
Department of Insurance  
State of Delaware  
841 Silver Lake Boulevard  
Dover, DE 19901

Attention: Darryl Reese

RE: Bureau Filing No. 0303 - Workers Compensation Residual  
Market Rate and Voluntary Market Loss Cost Filing  
**Proposed Effective December 1, 2003**

Dear Commissioner Williams:

On behalf of the members of the Delaware Compensation Rating Bureau, Inc. (DCRB) I am filing herewith proposed revisions to:

- Delaware's Residual Market Plan for workers compensation insurance
- Loss costs and related rating values for use in the voluntary workers compensation insurance market in Delaware
- Amendments to selected Manual rules in Delaware

This filing is made in compliance with provisions of H.B. 241, workers compensation insurance legislation enacted in 1993. These revisions are proposed to be **effective** on a new and renewal basis for workers compensation insurance policies with normal anniversary rating dates on or after 12:01 a.m., **December 1, 2003**.

The following narrative will provide you with a summary discussion of the content, background and supporting information for this filing. Attachments to this letter comprise the balance of the filing and provide pertinent detail information regarding the proposed residual market rates, voluntary market loss costs, rating values, supplementary rate information and classification procedures and supporting information for this filing.

**I: CONTENT OF THE FILING**

**A: RESIDUAL MARKET RATES**

Delaware law requires that a “residual market plan” be filed with the Insurance Commissioner by the advisory organization. Residual market coverage is provided under the auspices of the Delaware Workers Compensation Insurance Plan (hereafter, the “Plan”). Employers unable to obtain workers compensation insurance in the voluntary market may apply to the Plan, whereupon an insurance carrier is assigned to administer coverage for that employer, either as a servicing carrier on behalf of the Plan or on a direct assignment basis.

Historically, rates for the Plan have been promulgated based on statewide experience. Since August 1, 1997, employers insured in the Plan which are eligible for experience rating and which produce an experience modification greater than 1.000 in accordance with the approved Experience Rating Plan have been subject to a surcharge program. This surcharge program is intended to provide incentives for employers to improve their workers compensation loss experience and/or to secure workers compensation coverage from the voluntary market. In the DCRB’s five most recent residual market rate and voluntary market loss cost filings, the expected amounts of such Plan surcharges were accounted for in the form of nominal off-sets to proposed voluntary market loss costs. This filing proposes to continue the practice of using statewide experience for purposes of deriving the indicated overall residual market rate change. The filing also proposes to maintain a Plan surcharge program sensitive to individual risk experience and to reduce voluntary market loss costs to the extent necessary to offset the expected amount of Plan surcharges thus generated. The average change in collectible rate level for the residual market prior to the effect of Plan surcharges proposed in this filing is a decrease of 7.09 percent.

The components of the proposed overall change in residual market rates are set forth following:

**Component Analysis of Indicated December 1, 2003 Change in Residual Market Rates**

(1) Indicated change in rates from indemnity loss experience	0.960086
(2) Indicated change in rates from medical loss experience	0.988090
(3) Indicated change in rates from loss ratio trend	1.001959
(4) Indicated change in rates from loss-adjustment expense	0.977042
(5) Indicated change in rates from loss-based assessments	1.000898
(6) Indicated change in rates from other expenses	0.995889
(7) Indicated change in rates from July 1, 2004 benefit change	1.003673
Indicated overall change in rates	0.9291
(1) x (2) x (3) x (4) x (5) x (6) x (7) rounded to 4 decimal places	

In preparing the above decomposition of the proposed overall change in residual market rates into discrete components, it was necessary to serially measure the impact of the change in each component of interest while keeping all other variables constant. In this exercise nominal differences in the attributed impact of most specific variables occur when the sequence of calculating the effects is changed. Thus, the above values are reasonable representations of the observed impacts of each variable, but some differences in results could be obtained through alternative analytical approaches. Such differences would be offsetting, however, and would not affect the overall rate level change itself.

As demonstrated above, there are several factors contributing to the proposed rate level change. The single most influential factor is indemnity loss experience, which in and of itself would produce a reduction in rate level of approximately 4.0 percent. Next in order of importance is a change in the impact of loss adjustment expense, a factor producing an indicated decrease of about 2.3 percent. The third most significant factor is medical loss experience, accounting for a further decline in indicated rate level of approximately 1.2 percent. The four remaining factors identified above would individually produce very small changes in indicated residual market rate level. Trend from the mid-point of currently-approved rates to the mid-point of the proposed rates, loss-based assessments and the effect of the July 1, 2004 benefit change each would require very small increases in residual market rates. The "other expenses" item (including the proposed provision for profit and contingency, which remains negative, thus requiring that loss and expenses incurred by carriers will exceed premium income) would in and of itself support a very small reduction in residual market rates.

## **B: VOLUNTARY MARKET LOSS COSTS**

Since the enactment of H.B. 241 in 1993, Delaware law has applied a "loss cost" approach to pricing of workers compensation insurance written in the voluntary market. Under this system the advisory organization (i.e., the Bureau) filings are limited to prospective loss costs, policy forms, uniform classification and experience rating plans and rules, and supporting information relating thereto. Advisory organization filings specifically exclude provisions for profit or for expenses other than loss-adjustment expenses and loss-based assessments. Provisions for profit and expenses other than loss-adjustment expenses and loss-based assessments are incorporated into voluntary market workers compensation rates by virtue of competitive filings made by each insurer. Insurer expense filings may adopt by reference, with or without deviation, either loss costs filed by the advisory organization or the rates and supplementary information filed by another insurer.

Consistent with past practice, in this filing the Bureau has derived indicated changes in voluntary market loss costs directly from the proposed residual market rate change discussed above. This derivation is accomplished by removing from those rate proposals the combined effects of all provision for profit and expenses other than loss-adjustment expenses and loss-based assessments. As a result, like the proposed changes in Plan rates, these proposed revisions in overall voluntary market loss costs are based on statewide experience.

The proposed premium structure for residual market rates in this filing is shown below, with comparative values from the approved current rates for ease of reference.

<u>Item</u>	<u>Current Provision As a Percent of Premium</u>	<u>Proposed Provision As a Percent of Premium</u>
Loss	60.11	61.21
Loss-Adjustment Expense	10.41	9.54
Commission	6.65	6.94
Other Acquisition	2.25	2.03
General Expenses	4.56	3.83
Premium Discount	10.41	10.42
State Premium Tax	2.00	2.00
Other State Taxes	0.40	0.38
Administrative Assessment*	2.66	2.72
Workers Compensation Fund	4.00	4.50
Underwriting Profit	(3.45)	(3.57)

\* Denotes loss-based assessment

Under Delaware law, loss-adjustment expenses and loss-based assessments are included in the loss costs filed by the Bureau. Thus, in combination the provisions for loss, loss-adjustment expense and loss-based assessments account for 73.47 percent of the Bureau's proposed Plan rates (61.21 + 9.54 + 2.72 = 73.47). The Bureau's proposed voluntary market loss costs in this filing are thus based on rating values computed by multiplying the proposed Plan rates (before application of some applicable surcharges) by a factor of .7347. This approach produces an average indicated decrease in voluntary market loss costs of 6.72 percent that can be computed as follows:

$$0.9291 \times .7347 / .7318 = 0.9328$$

In the above equation 0.7347 is the portion of proposed residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments, and 0.7318 is the portion of current residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments (i.e., 60.11 + 10.41 + 2.66 = 73.18).

The proposed increase in voluntary market loss costs is attributable to the same factors previously identified in the discussion of residual market rates, except that the effects of expense provisions other than loss-adjustment expense and loss-based assessments do not apply to loss costs.

It is important to note that the net effect of the proposed loss costs on ultimate prices for employers that will be insured in the voluntary market (the vast majority of all insured risks) may differ significantly from employer-to-employer and from insurer-to-insurer. Workers compensation insurance prices for these employers will be a function of individual carrier decisions as respects profit and expense provisions. Further, each carrier may elect to use the Bureau's loss costs by reference, to deviate from those loss costs, to file independent loss

costs or to use loss costs filed by another insurer by reference. In addition, employers may obtain their future workers compensation insurance from a different insurance carrier than the carrier providing their current policy, further expanding the range of possible price changes that individual risks may experience. This complexity is a natural consequence of the competitive pricing system implemented under H.B. 241 in Delaware and is analogous to circumstances in many other states also having adopted competitive pricing systems for workers compensation insurance.

### **C: RESIDUAL MARKET SURCHARGE**

Experience of employers insured under the Plan in Delaware has historically presented an aggregate loss ratio substantially higher than that of employers insured in the voluntary market. In fact, the loss ratio of Plan accounts was higher than that of voluntary business by approximately 44 percent in the period 1996–2000.

In addition, during the late 1980s and early 1990s, Delaware had seen persistent increases in the portion of the market insured in the Plan. In previous response to these concerns the Bureau filed and the Insurance Commissioner approved a Plan surcharge program in 1997 that incorporated the following features:

- Surcharges are limited to risks eligible for experience rating and only apply to risks with debit experience modifications (i.e., those employers with demonstrably worse than average experience).
- To avoid redundant or inequitable penalties, surcharges are applied only to the extent that each employer is not fully credible in the Experience Rating Plan. This procedure assesses larger proportional surcharges to small employers who are largely protected from the effects of their own experience in the Experience Rating Plan but reduces surcharges applicable to larger employers whose premiums significantly respond to their own loss records.
- Surcharges are limited to the debit portion of each risk's experience modification. This limitation provides a smooth transition from non-rated to experience-rated risks and/or from small experience rating credits to small experience rating debits.

The surcharge expressed as a factor to be applied to standard premium is computed using the following formula:

$$0.50 \times (1.000 - \text{risk credibility in the Experience Rating Plan})$$

As noted above, Plan loss ratios continue to be much higher than those of the voluntary market. While the portion of the Delaware workers compensation market insured under the Plan declined after 1994, this measure of the residual market turned around and began to increase in 2000. For this filing the Plan market share is estimated at 13.13 percent. This estimate is based on the most recent available policy year, 2002.

This filing retains the above-described Plan surcharge program as a disincentive for employers to have their Delaware workers compensation insurance coverage placed in the Plan.

The Bureau estimates that the above-described surcharge program will produce an average surcharge for subject risks of approximately 20.5 percent of premium. Recognizing that some employers insured in the Plan do not qualify for experience rating and that other employers insured in the Plan qualify for experience rating but produce credit modifications, the surcharges produced by the proposed procedure would represent approximately 8.6 percent of total Plan premium.

The full amount of this surcharge premium is recognized in the promulgation of proposed voluntary market loss costs for this filing. This approach allows a reduction of manual loss costs by approximately 1.3 percent and essentially produces three different benchmark loss cost levels underlying workers compensation insurance rates in Delaware. These different underlying loss cost levels are as defined below:

1. Plan risks subject to surcharges (highest level depending on individual risk experience)
2. Plan risks not subject to surcharges (based on statewide average experience)
3. Voluntary market risks (based on statewide average experience reduced by offset for surcharges applied to first group above)

The Bureau believes that this Plan surcharge proposal remains an equitable and reasonable step toward reducing Plan subsidies and providing meaningful disincentives for placement of employers in the Plan. The Bureau also continues to believe that the Bureau and the Department of Insurance should again consider additional measures, such as the publication of Plan depopulation reports, as means of addressing the size of the Plan in Delaware. The Bureau has been and remains aware that pricing plans, including rate surcharges, mandatory retrospective rating plans, elimination of premium discounts and increased premium deposit requirements, have been invoked in residual markets in other jurisdictions. The Bureau is also mindful that the Delaware Department of Insurance has historically not been inclined to consider broad, generic differentials between residual market and voluntary market price levels. Given this regulatory preference, it is imperative that Delaware's Plan be maintained at as small a portion of the overall workers compensation market as possible.

#### **D: OTHER FILING PROVISIONS**

In addition to proposed Plan rates, voluntary market loss costs, residual market surcharges and classification procedures, this filing addresses a number of rating values, programs, rules and procedures which are integral parts of the Delaware workers compensation insurance system. In general, the filing's proposals simply reflect parametric changes in various rating values consistent with the most recent available Delaware experience. Detailed information supporting each of these proposals is provided elsewhere in this filing. Brief synopses of each of these issues and their purposes are provided immediately following for reference purposes.

<u>ITEM</u>	<u>PROPOSAL</u>	<u>PURPOSE</u>
DCCPAP Program	Revise manual rating value offsets & wage table	Maintain revenue balance of program
Expense constant (residual market)	Change from \$230 to \$235	Update value for price inflation
Minimum premium (residual market)	Update minimum premium parameters	Adjust values toward long-term objective (factor representing one-half of one full-time worker at SAWW)
Excess loss factors	Update ELFs	Maintain accuracy of rating values per current data
Excess loss premium factors	Update ELPFs	Maintain accuracy of rating values per current data
Experience Rating Plan	Update rating values	Reflect current experience
Retrospective rating	Revise optional development factors and tax multiplier	Reflect current experience
Small Deductible Program	Review existing premium credit and loss elimination ratio schedules	Reflect current experience
State and hazard group relativities	Revise retrospective rating plan values	Reflect current experience
Workplace Safety Program	Revise manual rating value offsets	Maintain revenue balance in Program
Merit Rating Plan	Revise manual rating value offsets	Maintain revenue balance in Program
Minimum and maximum corporate officer payrolls	Revise current values	Update values for wage inflation

## **II: SUPPORTING INFORMATION FOR THE FILING**

Attached exhibits and materials provide technical support for each of the proposals advanced in this filing. For purposes of understanding and in order to highlight some of the more important aspects of the technical analysis that the Bureau has undertaken in the preparation of this filing, the following discussion will address each of the listed topics in turn:

- Estimation of policy year ultimate loss and loss-adjustment expense ratios
- Trend provisions
- Determination of the proper permissible loss ratio for proposed residual market rates

These subject areas embrace the primary determinants of the proposed changes in residual market rates and voluntary market loss costs.

### **A: ESTIMATION OF POLICY YEAR ULTIMATE LOSS AND LOSS ADJUSTMENT EXPENSE RATIOS**

Much of the analytical effort required in workers compensation insurance ratemaking is devoted to the evaluation of loss experience from prior periods of time. The following points are important in considering this aspect of workers compensation ratemaking:

- Results of past experience form a vitally important base of knowledge from which prospective estimates pertinent to ratemaking are generally made.
- Because workers compensation losses may be paid out over an extended period of time after the occurrence of an accident and the filing of a claim, results of recent periods of experience must themselves be estimated before ratemaking analysis based on those prior periods of time may proceed.

The Bureau has considered the matter of estimating ultimate policy year loss and loss-adjustment expense ratios at length in the preparation of this filing. A variety of actuarial methods were tested prior to the final selection of estimates used in support of this filing. In evaluating results of these methods, information gleaned from the Bureau's Unit Statistical Plan data was also taken into account.

Key findings in the Bureau's analysis of ultimate indemnity loss and loss-adjustment expense ratios include the following:

1. The case-incurred loss development method gave the lower estimates of ultimate indemnity loss than did a long-term application of the paid loss development method for almost all policy years except the most recent two years, 2000 and 2001. For 2000 and 2001 the results of the case-incurred and long-term paid loss development methods were very comparable, with the case-incurred method producing slightly higher results. Generally, application of variations of the paid loss development method that used paid loss link ratios

for initial periods of time and then converted to a case-incurred loss development method for later development periods tended to give higher estimates of ultimate loss as the length of time over which paid loss development was used increased.

Review of Unit Statistical Plan data revealed that, on average, paid indemnity benefits reported for closed claims have generally been changing more adversely than incurred indemnity losses reported for open claims for quite some time. This suggests that indemnity case reserve adequacy has declined over time. Such a decline in case reserve adequacy would tend to cause the case-incurred loss development method to understate actual ultimate losses.

2. Unit Statistical Plan data showed that claim closure rates have fluctuated from year-to-year depending on the policy year(s) and claims maturities observed. With the notable exceptions of Policy Years 1999 and 2000 at first report (which show significant declines in claim closure rates) and Policy Year 1999 at second report (where the decline in closure rates observed at first report substantially persists), Delaware workers compensation claims have not shown a pronounced or consistent trend toward either slower or faster closures in the past several years. In general, when claims remain open longer, their benefit and expense costs tend to increase.

Estimates of ultimate indemnity loss and loss-adjustment expense ratios in the proposed filing have been the subject of extensive staff review and discussion by both the Actuarial and the Classification & Rating Committees. With the benefit of such review and discussion, the Bureau has based these estimates in the filing on the average of separate applications of two different loss development approaches. The first of the methods included in the average estimates incorporated in this filing is the case-incurred loss development method. The second method applies paid loss development over as long a development period as is available from the Bureau's data (varying up to as late as 20th report depending on policy year) and then converts to a case-incurred loss development method for the remaining development to an ultimate basis.

This filing's indemnity loss development methodology was specifically considered during the Department of Insurance's review of the Bureau's 2001 residual market rate and voluntary market loss cost filing, and was used as the basis for the Bureau's 2002 filing.

Key findings in the Bureau's analysis of ultimate medical loss and loss-adjustment expense ratios include the following:

1. Estimated ultimate medical losses were much less sensitive to the choice of loss development method than were indemnity losses.
2. Unit Statistical Plan data and the conclusions based thereon regarding claim closure rates referenced above for indemnity losses are generally applicable to medical losses as well. While most workers compensation claims involve no indemnity losses and are thus "medical-only" cases, the majority of medical losses are attributable to compensable claims also involving indemnity benefits. Thus, although the Bureau's Unit Statistical Plan data does show both indemnity and medical-only claims separately and in combination, the

Bureau's conclusions regarding claim closure rates are based primarily on the data for indemnity claims. For medical losses the comparison of ongoing changes in average claim size were less consistent than was seen for indemnity loss, with average costs of medical benefits for closed and open claims being somewhat more balanced in their rates of change over time than was seen for indemnity benefits.

Estimates of ultimate medical loss and loss-adjustment expense ratios in the proposed filing have been the subject of extensive staff review and discussion by both the Actuarial and the Classification & Rating Committees. With the benefit of such review and discussion, the Bureau has based these estimates in the filing on the same approach as was described above for indemnity losses. This choice is supported by the same reasoning set forth as respects indemnity loss estimates, although the choice of loss development methodology is not as significant a determinant of ultimate loss estimates for medical benefits in this filing as it is for indemnity benefits.

The Bureau has considered the potential effects of extreme losses on loss development methods in general and on this filing in particular. Ultimately, the Bureau has applied its loss development methods to total, unlimited losses, with the following procedures used to mitigate the potential effects of large losses on the aggregate analysis and the filings proposed changes in rating values:

- Use of four-year or eight-year average loss development factors rather than two or three-year averages
- Smoothing of loss development factors using various mathematical models and curves fitted through the observed multi-year averages
- Using trend procedures which rely on multi-year averages rather than individual year ultimate loss and loss-adjustment expense ratios

A comprehensive comparison of results of a variety of loss development methods tested in preparation of the filing may be seen on the enclosed Exhibit 2, Page 2.5 for indemnity loss and Page 2.17 of the same exhibit for medical loss.

## **B: TREND PROVISIONS**

Historical data available for ratemaking relates to prior periods of time ending some time before the preparation of a filing. Often the available historical data will exhibit a propensity to change in some general fashion over time. Each Bureau filing applies to a prospective period of time beginning well after the end of the available historical data. Thus, it is necessary to account for any anticipated continuation of (or deviation from) observed historical tendencies for loss ratios to change over time during the period between the end of the available data and the policy period to which the proposed rates will apply. This accounting is accomplished using various forms of "trend" analysis.

In support of its December 1, 2002 filing, the Bureau adopted a trend approach that separated policy year loss ratio trends into "severity" and "trend" components. As this alternative approach appeared to provide greater detail about significant features of Delaware workers

compensation experience and would allow more informed and specific judgments about probable future experience, the Bureau has also applied this approach to the preparation of this filing. The procedure used and results thus obtained are described further below.

Policy year loss ratios were adjusted to a series of "severity ratios" by removing the effects of actual observed changes year-to-year in the frequency of indemnity claims per unit of expected loss at a constant Bureau rate level. The series of severity ratios thus obtained are representative of the policy year loss ratios that would apply absent any change in underlying claim frequency, and thus may be thought of as a series of indices of claim severity.

The Bureau applied linear and exponential trend models to the entire array of policy year severity ratios produced by the variety of loss development methods referred to previously. Indemnity and medical ratios were treated separately, and for each method the linear and exponential models were applied to all possible numbers of policy years from four through ten. As each trend model thus produced seven different trend indications for each type of benefit and loss development method, almost 300 alternative trended severity ratio computations were performed in this initial stage of analysis.

A variety of techniques were employed to evaluate the reasonableness of results of each trend calculation. Statistical goodness-of-fit tests were applied, residual differences between predicted and actual data points were computed, and graphic depictions of selected series of severity ratios were prepared and reviewed.

For indemnity benefits a review of alternative trend model indications, including graphic presentations of indemnity severity ratios over the past several years for selected models, supports the selection of an exponential trend model applied to the most recent available seven policy year severity ratios. This selected model produces an indicated annual trend for indemnity severity ratios of +5.3 percent.

Since future loss ratios will be the combined result of changes in claim severity and claim frequency, the Bureau also considered the most appropriate method to trend claim frequency for this filing. Applying the same trend model and time period as was used to derive indemnity severity ratio trends produced an annual claim frequency trend of -6.7 percent.

Indemnity loss ratios for this filing were then trended to the midpoint of the prospective rating value period by applying the measured annual rate of change in claim severity to each of the most recent four policy year severity ratios, adjusting those separate estimates of trended severity ratios for observed actual changes in claim frequency through Policy Year 2001, and then applying a prospective claim frequency trend of -6.7 percent per year forward to the midpoint of the prospective rating value period. The filing is based on the average trended policy year indemnity loss and loss-adjustment expense ratio thus obtained, effectively the average trended indication for the most recent four policy years in combination.

For medical benefits, the same kind of analysis was applied. Policy year loss and loss-adjustment expense ratios were adjusted by removing actual observed changes in claim frequency, producing a series of policy year severity ratio indices. Various trend models were applied to that time series over varying periods of time, and a trend model using an exponential

model applied over the most recent available six policy years was selected. This approach gave an indicated medical severity trend of +9.0 percent per year. Medical loss ratios for this filing were then trended to the midpoint of the prospective rating value period by applying the measured annual rate of change in claim severity to each of the most recent four policy year severity ratios, adjusting those separate estimates of trended severity ratios for observed actual changes in claim frequency through Policy Year 2001, and then applying a prospective claim frequency trend of -6.7 percent per year forward to the mid-point of the prospective rating value period. The filing is based on the average trended policy year medical loss and loss-adjustment expense ratio thus obtained, effectively the average trended indication for the most recent four policy years in combination.

### **C: DETERMINATION OF PROPER PERMISSIBLE LOSS RATIO FOR PROPOSED PLAN RATES**

At present, use of methodologies that explicitly recognize investment income in concert with anticipated cash flows, benefit costs and expense needs in preparing workers compensation rate filings is well established. The precise manner in which these methods may be applied in the preparation of such filings, however, differs from jurisdiction to jurisdiction. The Bureau's approach in previous filings has been to use such methods to directly compute a permissible loss and loss-adjustment expense ratio consistent with an independently established target rate of return. This approach has previously been approved by the Department of Insurance and has been retained for the development of this filing as well.

The prospective determination of an appropriate overall rate of return, which workers compensation insurers should be entitled to earn given the risk they assume in underwriting this line of business, is accomplished by a variety of economic analyses which are generally based on expected returns of businesses subject to risk levels comparable to that of underwriting workers compensation insurance. These methodologies next proceed by establishing a set of cash flows representing the various transactions related to the underwriting of workers compensation insurance. These cash flows include the expected patterns for the receipt of premiums, payment of losses and expenses, use of tax credits and/or payment of tax obligations, and maintenance of surplus funds in support of the business. Expense needs to which the expense cash flows will apply are determined based on historical experience.

Estimates of the probable investment results that an insurer underwriting workers compensation insurance may expect to achieve were made by reviewing existing insurer investment portfolios and prevailing investment returns on various forms of investments held therein. Applying these estimates to the cash flows previously established allows an explicit presentation of the effects of investment income throughout the life of a book of workers compensation policies and an estimated accounting of the value of that income to the insurer.

Based on the set of cash flows determined to apply to prospective policies and the estimated parameters of investment yields, federal tax laws, etc., these methods model all expected cash flows over the entire period during which payments attributable to a given policy period are expected to continue. For any given loss provision in rates, the present value of these cash flows can then be consolidated and compared to the target rate of return. The loss provision accomplishing a balance between the expected and target rates of return then becomes the

basis for the permissible loss ratio. Within the concept of the Internal Rate of Return (IRR) Model used by the Bureau, the loss provision includes provision for amounts generally related to losses such as loss-adjustment expense and loss-based assessments.

The recognition of investment income in this analysis allows for a lower profit provision from underwriting than would otherwise be possible. This filing proposes an underwriting "profit" provision of -3.57 percent, i.e., an underwriting loss of between three and four percent. This proposed underwriting loss is nominally larger than the underwriting loss contemplated in current residual market rates (-3.45 percent).

For this filing the Bureau has retained an independent economic consultant to perform the above-described analyses. Results of this work are presented in complete detail in attachments to this filing letter but are also summarized for ease of reference below:

INTERNAL RATE OF RETURN MODEL INPUTS & RESULTS  
December 1, 2003 Residual Market Rate Filing

(1) Target Rate of Return	+9.14%
(2) Indicated Expense Provisions	
(a) Commissions	+6.94%
(b) Other Acquisition	+2.03%
(c) General	+3.83%
(d) Premium Discount	+10.42%
(e) State Premium Tax	+2.00%
(f) Other State Taxes	+0.38%
(g) Workers Compensation Fund Assessment	+4.50%
(3) Investment Income	
(a) Pre-Tax Return on Assets Net of Investment Expenses	+4.90%
(b) Post-Tax Return on Assets Net of Investment Expenses	+3.79%
(4) Profit & Contingencies	-3.57%
(5) Permissible Loss Ratio	+73.47%*

\*73.47% includes loss (61.21%), loss-adjustment expense (9.54%) and loss-based assessment (2.72%)

The following materials accompany this filing letter and present supplementary rating information and supporting information pertinent to the proposals advanced in this filing.

1. Record of Meeting - Actuarial and Classification & Rating Committees, July 15, 2003  
*Note that, per a recommendation of the most recent Department of Insurance examination of the Bureau, these minutes are in the process of being reviewed and approved by the two committees and accepted by the Governing Board. If there are any changes resulting from this process, a revised final copy will be promptly forwarded to the Department of Insurance.*

2. Summary of material for modification of experience ("Brown Book")
3. Trends in Experience – Questionnaire for Leading Carrier Groups
4. The following exhibits taken from the Actuarial and Classification & Rating Committees' July 15, 2003 meeting agenda package or prepared in consideration of discussions at that meeting:

- Exhibit 1 Table I - Summary of Financial Call Data
- Exhibit 2 Paid and Incurred Loss Development and Trend
- Exhibit 2a Graphs of Selected Loss Development Projections
- Exhibit 2b Comparisons of 2002 and 2003 Filing Estimates of Ultimate Loss
- Exhibit 3a Measures of Goodness-of-Fit in Trend Calculations Using Loss Ratios
- Exhibit 3b Measures of Goodness-of-Fit in Trend Calculations Using Severity Ratios
- Exhibit 5 Graphs of Ultimate and Trended Experience Components
- Exhibit 6a Retrospective Test of Trend Projections Using Loss Ratios
- Exhibit 6b Retrospective Test of Trend Projections Using Severity Ratios
- Exhibit 7 Closure Rates, Payout Ratios and Average Claim Costs
- Exhibit 8 Expense Study
- Exhibit 9 Internal Rate of Return Model
- Exhibit 10 Effect of 7/1/04 Benefit Change
- Exhibit 11 Expense Loading
- Exhibit 12 Indicated Change in Residual Market Rates and Voluntary Market Loss Costs
- Exhibit 13 Experience Rating Plan Performance
- Exhibit 14 Delaware Construction Classification Premium Adjustment Program
- Exhibit 15 Rate and Loss Cost Formulae
- Exhibit 16 Small Deductible Program
- Exhibit 17A Excess Loss Pure Premium Factors
- Exhibit 17B Excess Loss Pure Premium Factors with Adjustment for Serious ALAE
- Exhibit 17C Excess Loss Premium Factors
- Exhibit 17D Excess Loss Premium Factors with Adjustment for Serious ALAE
- Exhibit 18 State & Hazard Group Relativities
- Exhibit 19 Delaware Insurance Plan
- Exhibit 20 Review of Experience Rating Plan Parameters
- Exhibit 21 Table B
- Exhibit 22A Table II - Unit Statistical Data
- Exhibit 22B Table III - Unit Statistical Data
- Exhibit 22C Table IV - Unit Statistical Data
- Exhibit 23 Claim Frequencies
- Exhibit 24 Retrospective Development Factors
- Exhibit 25 Tax Multiplier
- Exhibit 26 Summary of Indicated and Proposed Residual Market Rates
- Exhibit 27 Manual Rates, Loss Costs and Expected Loss Rates
- Exhibit 28 Index to Classification Exhibits  
Class Book
- Exhibit 29 Delaware Workplace Safety Program & Merit Rating Program
- Exhibit 30 Distribution of Residual Market Rate Changes

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4. The following exhibits taken from the Actuarial and Classification & Rating Committees' July 15, 2003 meeting agenda package or prepared in consideration of discussions at that meeting ***continued***:

Exhibit 31A Summary of Indicated and Proposed Residual Market Rates by Class Code

Exhibit 31B Summary of Indicated and Proposed Residual Market Rates by Percentage Change

DCRB Staff Memorandum of June 6, 2003: Minimum and Maximum Corporate Officer Payrolls

### **III: SUMMARY**

In preparing this filing the Bureau has considered current Delaware experience at length and has applied a variety of actuarial and economic analytical techniques that collectively support the proposals advanced herein. The rating value changes proposed herein are necessary and appropriate in order to maintain the equity and adequacy of approved Bureau rating values in Delaware.

Bureau staff will be pleased to cooperate with and assist the Department of Insurance in its prompt consideration of these proposals.

Sincerely,

Timothy L. Wisecarver  
President

TLW/kg  
Enclosures