

Delaware Compensation Rating Bureau, Inc.



United Plaza Building • Suite 1500  
30 South 17th Street  
Philadelphia, PA 19103-4007  
(302) 654-1435 (215) 568-2371  
FAX (215) 564-4328  
www.dcrb.com

August 8, 2008

**VIA OVERNIGHT DELIVERY**

The Honorable Matthew Denn  
Insurance Commissioner  
Department of Insurance  
State of Delaware  
841 Silver Lake Boulevard  
Dover, DE 19904-2465

Attention: Gene Reed

RE: Bureau Filing No. 0807  
Workers Compensation Residual Market Rate and Voluntary Market Loss Cost Filing  
**Proposed Effective December 1, 2008 (Selected Portions Effective June 1, 2009)**

Dear Commissioner Denn:

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 and forms in Delaware

This filing is made in compliance with provisions of H.B. 241, workers compensation insurance legislation enacted in 1993. Most of 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, 2008**. The portions of this filing updating the table of qualifying wages and credits for the Delaware Construction Classification Premium Adjustment Program are proposed to be **effective** on a new and renewal basis for workers compensation policies with normal anniversary rating dates on or after 12:01 a.m., **June 1, 2009**.

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 (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 residual market rate and voluntary market loss cost filings since the inception of the surcharge program, the expected amounts of such Plan surcharges were accounted for in the form of nominal offsets 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 8.64 percent.

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

**Component Analysis of Indicated December 1, 2008 Change in Residual Market Rates\***

(1)	Indicated change in rates from limited indemnity loss experience	0.9834014
(2)	Indicated change in rates from limited medical loss experience	1.0433562
(3)	Indicated change in rates from limited indemnity loss ratio trend	0.9724019
(4)	Indicated change in rates from limited medical loss ratio trend	0.9179024
(5)	Indicated change in rates from excess indemnity loss provision	0.9932059

(6)	Indicated change in rates from excess medical loss provision	0.9969386
(7)	Indicated change in rates from loss adjustment expense	0.9862717
(8)	Indicated change in rates from loss-based assessments	1.0045215
(9)	Indicated change in rates from other expenses	1.0160057
(10)	Indicated change in rates from July 1, 2009 benefit change	1.0009000
	Indicated overall change in rates	0.9136
	(1) x (2) x (3) x (4) x (5) x (6) x (7) x (8) x (9) x (10) rounded to 4 decimal places	

\* - The DCRB's review of available data and preliminary experience indications in previous filings found evidence that medical case reserves had been materially strengthened during part or all of the experience period that would have customarily been applicable to this filing. Accordingly, the DCRB considered approaches to estimating ultimate medical losses that would restate medical case reserves at various points during the experience period to their perceived level of adequacy at the end of the experience period for this filing or December 31, 2007. Consistent with the procedure filed and approved for the December 1, 2007 residual market rate and voluntary market loss cost filing, the Bureau has elected to derive medical incurred loss development factors from an experience period selected so as to exclude calendar periods within which the most material case reserve strengthening had occurred.

In preparing the above decompositions 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.

While there are several factors for which the Bureau has accounted as contributing to the proposed rate level change, limited medical loss ratio trend is the largest single factor contributing to the overall rate change indication. Other factors, as shown above, have much smaller effects and considered together are largely offsetting, as the medical loss ratio trend change alone is within approximately 4/10 of a point of the proposed overall residual market rate change.

## **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, 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 provisions 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 on the following page, 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	66.35	64.30
Loss-Adjustment Expense	7.41	7.97
Commission	7.39	6.82
Other Acquisition	2.57	2.76
General Expenses	3.06	3.17
Premium Discount	8.89	8.33
State Premium Tax	2.00	2.00
Other State Taxes	0.33	0.36
Uncollectible Premium	1.25	2.00
Administrative Assessment*	2.51	2.84
Workers Compensation Fund	2.00	2.00
Underwriting Profit	(3.76)	(2.55)

\* 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 75.11 percent of the Bureau's proposed Plan rates (64.30 + 7.97 + 2.84 = 75.11). 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 0.7511. This approach produces an average indicated decrease in voluntary market loss costs of 10.03 percent that can be computed as follows:

$$0.9136 \times .7511 / .7627 = 0.8997$$

In the above equation, 0.7511 is the portion of proposed residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments, and 0.7627 is the portion of current residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments (i.e.,  $66.35 + 7.41 + 2.51 = 76.27$ ).

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 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 higher than that of employers insured in the voluntary market. Consistent with that observation, the loss ratio of Plan accounts was higher than that of voluntary business by more than 21 percent in the period 2001–2005.

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 higher than those of the voluntary market. The portion of the Delaware workers compensation market insured under the Plan began to increase in 2000 and continued to rise substantially through 2004. Since then, the residual market share has declined from a peak of approximately 22 percent. For this filing, the Plan market share is estimated at 7.48 percent. This estimate is based on the most recent available policy year, 2007, and represents the third year in succession in which the Plan market share appears to have decreased compared to the previous year.

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 20.9 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 9.3 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 0.75 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. We are encouraged that, since the 2005 authorization of the establishment of a Carrier Pricing Benchmark application on the Bureau's website (assisting producers and/or employers in identifying alternative sources for workers compensation insurance and the benchmark rating values in effect for each licensed carrier by risk classification) and the 2006 approval from the Department of Insurance and Delaware

Department of Labor for publication of Plan depopulation reports on its website as a further means of addressing the size of the Plan in Delaware, Plan volumes have begun to decrease. These and other possible future endeavors will be focused on maintaining the Delaware Insurance Plan at as small a portion of the overall workers compensation market as possible.

#### **D: MANUAL LANGUAGE AND AUDITABLE PAYROLLS**

This filing includes proposals to update prevailing Manual language in Delaware. A brief synopsis of those proposals is set forth following for ease of reference.

##### Corporate Officer Weekly Minimum and Maximum Payrolls to be Audited in Delaware and Premium Determination for Sole Proprietors or Partners

Corporate officer remuneration is subject to specified minimum and maximum amounts, which are updated routinely in accordance with reported changes in the Statewide Average Weekly Wage. This proposal will accomplish such an update to the auditable payrolls for corporate officers, retaining the minimum weekly payroll amount for such individuals at \$450 and revising the maximum weekly payroll for corporate officers from \$2,200 to \$2,250. These parameters also apply to sole proprietors or partners in instances when payrolls cannot otherwise be established.

##### Delaware Construction Classification Premium Adjustment Program (DCCPAP)

It is proposed to update the reference to calendar quarter(s) used as the basis for determining qualifying wages for the DCCPAP.

#### **E: OTHER FILING PROVISIONS**

In addition to proposed Plan rates, voluntary market loss costs and residual market surcharges, 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

**NOTE:** The table of qualifying wages and credits for DCCPAP is proposed to be effective **June 1, 2009**.

<u>ITEM</u>	<u>PROPOSAL</u>	<u>PURPOSE</u>
Minimum premium (residual market)	Update minimum premium parameters	Update values for wage inflation
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, tax multiplier and expected loss size group ranges	Reflect current experience
Small Deductible Program	Revise 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:

- A: Effects of large losses on experience analysis
- B: Estimation of limited policy year ultimate loss and loss adjustment expense ratios
- C: Trend provisions for limited loss experience
- D: 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: EFFECTS OF LARGE LOSSES ON EXPERIENCE ANALYSIS**

Workers compensation benefits include partial wage replacement during periods of inability to work, various forms of permanent disability awards, and payment of costs of medical and rehabilitative services necessary to gain maximum medical improvement from the effects of work-related injuries and illnesses. In concert, these benefits and, in particular, medical benefits can produce extremely large obligations in individual cases. Claims incurring benefits totaling millions of dollars can and do occur. The analysis performed by the Bureau in reviewing prevailing residual market rates and voluntary market loss costs must include reasonable provisions for the potential for such occurrences but attempts to avoid being unduly impacted by the occurrence (or absence) of rare or unusual claims. Historically, the Bureau has considered the extent to which large claims have been present in Delaware experience and has employed various techniques designed to accomplish these stated objectives. The Bureau's prior filings had, on occasion, excluded a specific policy year from the determination of prospective trend factors when the policy year in question contained an unusually large loss, since such a policy year would tend to overstate future trends if it were to be included as a new trend point, and it would subsequently understate those trends if it were included as an old trend point.

In its annual experience filings effective December 1, 2004 and later, the Bureau has applied procedures that performed loss development and trend analyses on a "limited" basis and then accounted for the expectation that claims exceeding the selected limit would occur from time-to-time by adding an excess loss factor to the rate level analysis.

This filing has again approached loss development and trend analysis on a limited loss basis, and the method applied to that purpose is outlined briefly below:

- The December 1, 2004 loss limit (\$1,500,000) and the associated excess loss factor (0.757) were taken as a key reference point for determination of appropriate loss limitations for this filing.
- Approved excess loss factor tables prior to December 1, 2004 were used to establish loss limitations consistent with an excess loss factor of 0.0757.
- An annual trend rate was computed for the series of loss limits established in the previous step described above.
- Loss limits were interpolated for each policy period prior to December 1, 2004 based on the trend in loss limits through December 1, 2004.
- Loss limitations consistent with an excess loss factor of 0.0757 for filings through December 1, 2007 were used to derive a post-2004 annual trend rate.

- Loss limits were projected for each policy period subsequent to December 1, 2004 based on the trend in loss limits through December 1, 2007.
- A series of loss limitations was selected for previous policy years consistent with the trend through December 1, 2004 applied retrospectively from that date, and consistent with the trend through December 1, 2007 applied prospectively from December 1, 2004, such that losses were capped at successively lower levels for older policy years, recognizing the impacts of wage and price inflation and potential changes in utilization over time. For policy years prior to 1983, a constant loss limitation of \$395,600 was applied.
- Reported paid and case-incurred losses were adjusted as needed to limit underlying loss data to the selected limitations by policy year.
- Loss development analysis was performed using the limited loss data produced above.
- Trend analysis was accomplished by dividing the observed limited loss ratios into separate components for claim frequency and claim severity, and prospective trends were selected for each component.
- A loss limitation was selected for the prospective rating period based on the post-2004 projections.
- The percent of losses that the selected loss limitations would be expected to remove from Delaware experience was determined.
- Trended limited loss ratios were adjusted to an unlimited basis by application of an excess loss factor, from which point the rate level analysis could proceed in the usual fashion.

Limiting losses in the course of the filing analysis and accounting separately for expected losses in excess of the effect of the applied limit(s) is a viable means of tempering the potential effects of relatively rare, large claims on rating value change indications. The intent of this approach is to smooth year-to-year results without either raising or lowering rating values over the longer term. In any given filing, the use of a limited loss approach may give either higher or lower results than would a counterpart unlimited method. While other methods could also be considered for this purpose, the Bureau believes that a limited loss technique is the most appropriate available approach to the current filing.

Discussion of the Bureau's estimation of policy year ultimate loss and loss-adjustment expense ratios and trend provisions following below are offered and should be read in the context of the loss limitation procedure outlined above.

## **B: 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. Various 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.

In estimating ultimate policy year loss ratios for indemnity benefits, the paid loss development and case-incurred loss development methods gave similar results across all policy years. Review of Unit Statistical Plan data revealed that claim closure rates had remained relatively stable over the past few years.

With the benefit of extensive staff review and discussion by both the Actuarial and Classification and Rating Committees, the Bureau has based estimates of ultimate indemnity losses in the filing on the average of the case-incurred loss development method and paid-loss development applied over as long a development period as is available from the Bureau's data, with case-incurred loss development used for the remaining development to an ultimate basis.

This filing's indemnity loss development methodology has been used as the basis for the Bureau's annual rating value filings made each year since and including 2002.

Estimated ultimate medical losses were substantially more sensitive to the choice of loss development method than was the case for indemnity losses. Notable differences arose for most policy years. The case-incurred loss development method gave higher answers for medical benefits than did the paid-loss development method.

In one of the Department of Insurance's actuarial reviews of the December 1, 2006 filing, it had been noted that cumulative medical case-incurred loss development factors exceeded comparable medical paid loss development factors at many maturities. Such differences were counterintuitive, since loss development methods endeavor to estimate ultimate loss values by projecting either paid or case-incurred amounts from interim evaluations to a final level by applying those cumulative loss-development factors, and, by definition, case-incurred

losses are higher than paid losses at any evaluation point by the amount of case reserves established for open cases. In retrospect, the Bureau determined that similar differences had also arisen in the December 1, 2005 filing and found upon examination that a number of cumulative case-incurred loss development factors again exceeded the counterpart paid loss development factors for medical benefits in this filing.

With the benefit of staff research and discussion by the Actuarial and Classification & Rating Committees prior to submission of the December 1, 2007 filing, the Bureau elected for purposes of that filing to exclude medical case-incurred loss development reported during Calendar Years 2003 and 2004 from the estimation of medical ultimate losses. Thus, while indications of a paid loss development method were based on the most recent available four years experience, age-to-age medical incurred loss development factors were derived based on experience reported in Calendar Years 2001, 2002, 2005 and 2006. This approach removed the effects of case reserve changes made in 2003 and 2004 from the calculation of development factors but retained the December 31, 2006 medical case reserves as the base to which incurred loss development factors were applied. The average result for application of these two separate techniques was then selected as the basis for limited medical ultimate loss estimates in the December 1, 2007 filing.

For this filing, the Bureau has updated and carefully reviewed its available medical loss development data. The most recent data is much more comparable to that seen outside of Calendar Years 2003 and 2004, and, accordingly, the Bureau has proposed continuing the anticipated transition process set forth as part of its December 1, 2007 filing. By setting aside Calendar Year 2003 and/or 2004 incurred loss development from future filings, the Bureau's 2008 filing uses 2002, 2005, 2006 and 2007 incurred loss development for medical losses. It is expected, subject to further review of emerging loss development data as it becomes available, that the 2009 filing will use 2005 through 2008 experience, the same experience period relative to the prospective rating period as had historically been applied in Bureau filings prior to 2007.

In applying its loss development methods including the selection of medical incurred loss development experience periods described above, the Bureau has again used the following procedures to smooth fluctuations arising due to the limited volume of data available for the analysis:

- Use of four-year average loss development factors
- 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 comparison of results of loss development methods used in 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.

## **C: TREND PROVISIONS**

Historical data available for ratemaking relates to prior periods 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 each of its rating value filings submitted in the Years 2002 – 2007 inclusive, the Bureau adopted a trend approach that separated policy year loss ratio trends into “severity” and “frequency” components. As this alternative approach provides greater detail about significant features of Delaware workers compensation experience and allows 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 policy year severity ratios produced by the 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.

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 loss and severity ratios over the past several years for selected models, supported the selection of an exponential trend model applied to the most recent available six policy year severity ratios. Notably, this approach excludes Policy Year 2000, which the Insurance Commissioner’s adjudication of the December 1, 2006 filing found to be extraordinary and unreliable as a basis for forecasting future loss experience. This selected model produces an indicated annual trend for indemnity severity ratios of +0.4 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 –7.8 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 2006, and then applying a prospective claim frequency trend of  $-7.8$  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  $+5.5$  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 2006, and then applying a prospective claim frequency trend of  $-7.8$  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.

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

The 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 -2.55 percent, i.e., an underwriting loss of approximately 2.5 percent. This proposed underwriting loss is smaller than the underwriting loss contemplated in current residual market rates (-3.76 percent), primarily due to declines in available investment returns since the Bureau’s previous filing.

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, 2008 Residual Market Rate Filing

(1) Target Rate of Return	+10.02%
(2) Indicated Expense Provisions	
(a) Commissions	+6.82%
(b) Other Acquisition	+2.76%
(c) General	+3.17%
(d) Premium Discount	+8.33%
(e) State Premium Tax	+2.00%
(f) Uncollectible Premium	+2.00%
(g) Other State Taxes	+0.36%
(h) Workers Compensation Fund Assessment	+2.00%

(3) Investment Income	
(a) Pre-Tax Return on Assets Net of Investment Expenses	+5.26%
(b) Post-Tax Return on Assets Net of Investment Expenses	+4.09%
(4) Profit & Contingencies	-2.55%
(5) Permissible Loss Ratio	+75.11% *

\*75.11% includes loss (64.30%), loss-adjustment expense (7.97%) and loss-based assessment (2.84%)

In conformance with provisions of Forms and Rates Bulletin No. 1 as amended April 15, 1992, two copies of the cover letter of this filing are provided with each set of supporting materials. The cover letter identifies the line of insurance (workers compensation), the effective date of the filing (generally December 1, 2008 with selected portions effective June 1, 2009) and the name and telephone number of the person to be contacted by the Department of Insurance in regard to the filing (Timothy L. Wisecarver, 215-320-4413). An interrogatory in the format provided with the referenced forms and rates bulletin has been completed and is included herewith. Two CDs, each containing a copy of the entire filing in pdf format, are also enclosed.

In addition, 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, August 6, 2008  
*Note that 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. The following exhibits taken from the Actuarial and Classification & Rating Committees' August 6, 2008 meeting agenda package or prepared or modified in consideration of discussions at that meeting:

Exhibit 1	Limited Losses	Table I - Summary of Financial Call Data
Exhibit 1a		Excess Loss Ratios and Loss Limitations
Exhibit 1b		Table I Reported Losses in Excess of Loss Limitations
Exhibit 2	Limited Losses	Paid and Incurred Loss Development and Trend
Exhibit 2a	Limited Losses	Graphs of Selected Loss Development Projections
Exhibit 2b	Limited Losses	Comparisons of Adjusted and Unadjusted Medical Loss Ratios – Limited Losses
Exhibit 3	Limited Losses	Measures of Goodness-of-Fit in Trend Calculations Using Severity Ratios
Exhibit 5		Graphs of Ultimate and Trended Experience Components
Exhibit 6	Limited Losses	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 7/1/09 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 ALAE
Exhibit 17c	Excess Loss Premium Factors
Exhibit 17d	Excess Loss Premium Factors with Adjustment for 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 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
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
Exhibit 32	NCCI Filing Memorandum R-1396
Exhibit 1	Unlimited Losses Table I – Summary of Financial Call Data
Exhibit 2	Unlimited Losses Paid and Incurred Loss Development and Trend
Exhibit 2a	Unlimited Losses Graphs of Selected Loss Development Projections
Exhibit 2b	Unlimited Losses Comparison of Adjusted and Unadjusted Medical Loss Ratios – Unlimited Losses

Exhibit 3 Unlimited Losses Measures of Goodness of Fit in Trend Calculations Using Severity Ratios  
Exhibit 6 Unlimited Losses Retrospective Test of Trend Projections for Severity Ratios

DCRB Staff Memorandum of June 11, 2008: Corporate Officer Weekly Minimum and Maximum Payrolls to be Audited in Delaware and Weekly Minimum and Maximum Payrolls for Sole Proprietors or Partners

Proposed Manual Language Pertaining to Calendar Quarters Used to Determine Qualifying Wages for Delaware Construction Classification Premium Adjustment Program

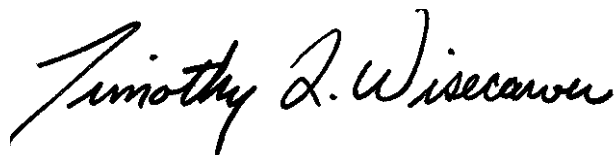
Completed Copies of the Following Property & Casualty Filing Forms  
Filing Fee Form  
State-Specific Requirements  
Property & Casualty Transmittal Document  
Rate/Rule Filing Schedule

### 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