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July 29, 2005

VIA OVERNIGHT DELIVERY

The Honorable Matthew Denn Insurance Commissioner Department of Insurance State of Delaware 841 Silver Lake Boulevard Dover, DE 19901

Attention: Gene Reed

RE: Bureau Filing No. 0502 Workers Compensation Residual Market Rate and Voluntary Market Loss Cost Filing Proposed Effective December 1, 2005 (Selected Portions Effective January 1, 2006 and July 1, 2006)

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, 2005**. The portions of this filing specifically related to domestic terrorism, earthquakes and catastrophic industrial accidents 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., **January 1, 2006**, while 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, 2006.**

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 an increase of 10.22 percent.

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

Component Analysis of Indicated December 1, 2005 Change in Residual Market Rates

(1)	Indicated change in rates from limited indemnity loss experience	0.9986279
(2)	Indicated change in rates from limited medical loss experience	1.0620254
(3)	Indicated change in rates from limited indemnity loss ratio trend	1.0123507

(4)	Indicated change in rates from limited medical loss ratio trend	0.9944319
(5)	Indicated change in rates from excess indemnity loss provision	1.0003011
(6)	Indicated change in rates from excess medical loss provision	1.0176464
(7)	Indicated change in rates from loss-adjustment expense	1.0000740
(8)	Indicated change in rates from loss-based assessments	0.9984954
(9)	Indicated change in rates from other expenses	1.0101155
(10)	Indicated change in rates from July 1, 2006 benefit change	1.0054000
	Indicated overall change in rates (1) x (2) x (3) x (4) x (5) x (6) x (7) x (8) x (9) x (10) rounded to 4 decimal places	1.1022

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.

While there are several factors for which the Bureau has accounted as contributing to the proposed rate level change, medical loss experience (both within and above the loss limitations applied in the filing analysis, as discussed further in this letter) in combination are the predominant causes for the overall rate change indication. Limited medical loss experience in and of itself would produce an increase in rate level of more than 6.20 percent, and the excess medical loss provision alone would result in an increase in rate level of over 1.76 percent. Together these factors account for almost 8.08 points of the overall 10.22 percent residual market rate level increase indication. Within the remaining factors, increases attributable to limited indemnity loss ratio trend, the excess indemnity loss provision, loss-adjustment expense, other expenses and the July 1, 2006 benefit change are mitigated in part by indicated reductions produced by limited indemnity loss experience, limited medical loss ratio trend and loss-based assessments.

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 <u>exclude</u> 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.

Item	Current Provision As a Percent of Premium	Proposed Provision As a Percent of Premium
Loss	64.54	64.65
Loss-Adjustment Expense	8.37	7.64
Commission	7.13	7.50
Other Acquisition	2.29	2.42
General Expenses	3.12	3.00
Premium Discount	10.58	10.81
State Premium Tax	2.00	2.00
Other State Taxes	0.32	0.32
Uncollectible Premium	1.00	1.00
Administrative Assessment*	2.61	2.50
Workers Compensation Fund	4.00	2.00
Underwriting Profit	(5.96)	(3.84)

* 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 74.49 percent of the Bureau's proposed Plan rates (64.65 + 7.64 + 2.50 = 74.79). 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 0.7479. This approach produces an average indicated increase in voluntary market loss costs of 9.15 percent that can be computed as follows:

1.1022 x .7479 / .7552 = 1.0915

In the above equation, 0.7479 is the portion of <u>proposed</u> residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments, and 0.7552 is the portion of <u>current</u> residual market rates attributable to loss costs, loss-adjustment expense and loss-based assessments (i.e., 64.54 + 8.37 + 2.61 = 75.52).

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 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 23 percent in the period 1998–2002.

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 x (1.000 - 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 21.12 percent. This estimate is based on the most recent available policy year, 2004.

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 20.2 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 9.8 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 2.62 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, during 2005, the Department of Insurance has authorized the establishment of a Carrier Pricing Benchmark application on the Bureau's website to assist 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. Further, the Department of Insurance and Delaware Department of Labor have given the Bureau approval to publish Plan depopulation reports on its website as a further means of addressing the size of the Plan in Delaware. This second application will allow

carriers to identify risks presently resident in the Plan that may fit underwriting criteria established by their companies, potentially facilitating movement of insureds out of the Plan and into the voluntary market. 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: ENDORSEMENTS, MANUAL LANGUAGE AND AUDITABLE PAYROLLS

This filing includes a limited number of proposals to update prevailing Manual language in Delaware. A series of Bureau staff memoranda speaking to these proposed changes is provided with this filing letter in support of each of these proposed revisions. A brief synopsis of each proposal is also 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 maximum auditable payroll for corporate officers.

Partners, Officers and Other Exclusion Endorsement – WC 00 03 08 Sole Proprietors, Partners, Officers and Others Coverage Endorsement – WC 00 03 10 Mid-Term Application and Procedures for Changes in Status or Carrier Group Providing Coverage

It is proposed to clarify existing procedures that generally limit attachment of the desired endorsement(s) to the policy effective date and require written approval of any exceptions by the carrier.

Delaware Construction Classification Premium Adjustment Program (DCCPAP)

It is proposed to update the schedule of calendar quarters 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, 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>

DCCPAP Program

Revise manual rating value offsets & wage table

Maintain revenue balance of program

PURPOSE

NOTE: The revised table of qualifying wages and credits for DCCPAP is proposed to be effective **June 1, 2006**.

Expense constant (residual market)	Change from \$240 to \$250	Update value for price inflation
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	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

<u>ITEM</u>

PROPOSAL

Domestic Terrorism, Earthquake & Catastrophic Industrial Accident Values Establish statistical code and rating values for referenced hazards

PURPOSE

Include rating values for exposures not reflected in historical data. Specify provisions in rating procedures to exclude future losses arising from named causes from pricing experience.

NOTE: The provisions of this filing specific to domestic terrorism, earthquake and catastrophic industrial accidents are proposed to be effective **January 1, 2006.**

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
- E: Domestic terrorism, earthquake and catastrophic industrial accidents

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 reviewing experience for the December 1, 2004 filing, the Bureau noted several relatively large claims attributable to Policy Year 2002 (the most recent complete policy year of data available for this filing). After careful consideration of available analytical alternatives, the Bureau elected not to simply exclude Policy Year 2002 from its analysis of loss development and/or trend. While the practice of excluding policy years with an unusually large claim(s) can effectively avoid undue impacts resulting from those claims, the Bureau believes that routinely ignoring experience that contains large claims will bias indications toward understating rating value needs.

In preparing the December 1, 2004 filing, the Bureau applied a procedure that performed loss development and trend analyses on a "limited" basis and then accounted for the expectation that claims exceeding the selected limit will occur from time-to-time by adding an excess loss factor to the rate level analysis. The method used as the basis for that filing is outlined briefly below:

- A loss limitation of \$1.5 million was selected for the prospective rating period. This limitation represented approximately one percent of on-level standard earned premium at residual market rates.
- It was determined that the selected loss limitation would be expected to remove some 7.57 percent of losses from Delaware experience.
- A series of loss limitations was selected for Policy Years 2002 through 1983, 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. The loss limitations so selected declined at an annual rate of 6.37 percent. For policy years prior to 1983, a constant loss limitation of \$387,530 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, and the selected loss limitations were imposed on developed losses such that the ultimate loss estimates derived remained consistent with those limitations.
- 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.
- 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.

The Bureau's purpose in applying a loss limitation in its analysis of the December 1, 2004 filing was to produce a more stable and accurate indication than might be obtained from other analytical approaches. For the benefit of readers interested in the quantitative effects of this selected procedure, the following comparisons are provided.

Had the loss development and trend procedures adopted for purposes of this filing been applied on an unlimited basis, the resulting residual market rate level change indication would have been +32.04 percent instead of +10.22 percent. The reason that the unlimited analysis would have produced a much higher indication is that including large losses in the specific policy years in which they occurred, especially in Policy Years 2002 and 2003, would have given substantially higher trend factors than those obtained from the limited loss approach.

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. While other methods could also be considered for this purpose, the Bureau believes that its application of a limited loss technique to the current filing is appropriate.

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 lossadjustment 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 for most policy years. For older policy years, the case-incurred loss development method tended to produce nominally

lower results than did the paid loss development method. For Policy Years 1999 and later, the case-incurred loss development method generally produced somewhat higher results than did the paid loss development method, and the differences between the methods became more significant for the newest policy years.

Review of Unit Statistical Plan data revealed that claim closure rates had declined noticeably at early evaluation points for several of the most recent three available policy years, particularly Policy Years 1999, 2000 and 2001. It is possible that in such circumstances the paid loss development method might be expected to understate ultimate loss estimates to a more substantial and persistent extent than might the case-incurred loss development method. This tendency would be consistent with the observed shift in relative estimates between these two approaches.

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 separate applications of two different loss development approaches. The first of the methods included in the average estimates incorporated in this filing is the caseincurred loss development method. The second method applies paid-loss development over as long a development period as is available from the Bureau's data and then converts to a caseincurred 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, 2003 and 2004 filings.

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 each of the most recent 11 policy years, and the magnitude of the differences tended to become larger as the policy years progressed from oldest to newest. The case-incurred loss development method tended to give higher answers for medical benefits than did the paid-loss development method. Further, and especially for case-incurred loss development estimates of ultimate medical losses, estimates derived in this filing were noticeably higher than those prepared in support of the December 1, 2004 filing. After adjusting for the effects of the December 1, 2004 rate change, the case-incurred loss development method's estimates of ultimate medical losses in this analysis were higher than those contained in the December 1, 2004 filing for every policy year since 1988, and the differences became quite large for policy years after 1996.

The upward movement of ultimate loss estimates observed above is problematic in preparing a proposal like this filing. If the recent shifts in development patterns that are precipitating those changes prove temporary and are largely reversed in subsequent periods, then the Bureau's use of long-term averages for age-to-age development factors and other smoothing techniques will have substantially (and appropriately) mitigated the impact of those fluctuations on overall rating value indications. However, if the recent loss development experience persists, several additional future filings will each, in turn, see additional upward development in these estimates, and, all else being equal, those filings will see additional increase components attributable to this phenomenon. In a worse case, where the upward movement

of age-to-age factors like that observed in recent experience continues beyond Calendar Year 2004, then the horizon over which such adverse development would be observed could become very protracted. In either of the later two circumstances, the rating value indications embodied in this filing could prove to be materially inadequate.

Given the uncertainty and volatility that could accompany an attempt to respond more fully to recent loss development experience and/or to project future changes of this nature, the Bureau has elected to retain its loss development methodologies from previous filings for purposes of this proposal. Based on similar considerations and discussions as those underlying selection of a methodology for indemnity loss, the Bureau has based estimates of ultimate medical losses in the filing on the same approach as was described above for indemnity losses.

In applying its loss development methods, the Bureau has 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 tested in preparation of the filing may be seen on the enclosed Exhibit 2, Page 2.6 for indemnity loss and Page 2.19 of the same exhibit for medical loss.

C: 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, December 1, 2003 and December 1, 2004 filings, 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, supports the selection of an exponential trend model applied to the most recent available six policy year severity ratios. This selected model produces an indicated annual trend for indemnity severity ratios of +6.6 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 –6.0 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 2003, and then applying a prospective claim frequency trend of -6.0 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 lossadjustment 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 seven policy years was selected. This approach gave an indicated medical severity trend of +8.2 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 2003, and then applying a prospective claim frequency trend of –6.0 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 -3.84 percent, i.e., an underwriting <u>loss</u> of almost four percent. This proposed underwriting loss is smaller than the underwriting <u>loss</u> contemplated in current residual market rates (-5.96 percent) and very close to the counterpart provision from the December 1, 2003 filing (-3.57 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, 2005 Residual Market Rate Filing

(1) Target Rate of Return	+10.28%
(2) Indicated Expense Provisions	
(a) Commissions	+7.50%
(b) Other Acquisition	+2.42%
(c) General	+3.00%
(d) Premium Discount	+10.81%
(e) State Premium Tax	+2.00%
(f) Uncollectible Premium	+1.00%
(g) Other State Taxes	+0.32%
(h) Workers Compensation Fund Assessment	+2.00%
(3) Investment Income	
(a) Pre-Tax Return on Assets Net of	
Investment Expenses	+5.40%
(b) Post-Tax Return on Assets Net of	
Investment Expenses	+4.13%
(4) Profit & Contingencies	-3.84%
(5) Permissible Loss Ratio	+74.79%*

*74.49% includes loss (64.65%), loss-adjustment expense (7.64%) and loss-based assessment (2.50%)

E: Domestic Terrorism, Earthquake and Catastrophic Industrial Accidents

Effective April 1, 2003 the Bureau implemented a statistical code (9740) and rating values (\$0.03 per \$100 of payroll for residual market rates and \$0.02 per \$100 of payroll for voluntary market loss costs) applicable to certified terrorism losses under the Terrorism Risk Insurance Act of 2002 (TRIA).

September 11, 2001 precipitated huge losses for the property casualty insurance industry and raised awareness of the potential for other catastrophic events from a variety of causes. While the rating values established effective April 1, 2003 addressed carrier exposures to acts of terrorism certified under provisions of TRIA, other notable exposures remain present

as potential causes of large workers compensation losses without supporting provisions in benchmark rating values or special pricing programs. Among these remaining gaps in rating values are terrorist acts precipitated by domestic groups and/or individuals (excluded from provisions of TRIA), earthquakes and catastrophic industrial accidents.

Subsequent to September 11, 2001, the National Council on Compensation Insurance, Inc. (NCCI) had performed and/or commissioned an extensive analysis of terrorism risk as related to workers compensation insurance. Portions of that work became the basis for rating values filed in NCCI states and elsewhere to provide appropriate premium for carrier exposures to certified terrorism losses under TRIA. In fact, the Bureau derived its own rating values effective April 1, 2003 in part by reference to that body of work.

More recently, NCCI has applied similar analytical work to the exposures presented by earthquakes and catastrophic industrial accidents in an attempt to derive appropriate rating values associated with those risks. While clearly covered under the standard workers compensation policy, these perils each present very low loss frequency and extremely high loss potential that render standard pricing techniques unable to capture and appropriately maintain rating values responsive to them. Combining results of their work with the component part of terrorism losses that NCCI had previously modeled but that fall outside provisions of TRIA (essentially terrorism events cause by domestic as opposed to foreign interests), NCCI prepared Item Filing No. B-1393, Miscellaneous Values for Domestic Terrorism, Earthquakes, and Catastrophic Industrial Accidents, to address these causes of loss.

The Bureau has reviewed Item Filing No. B-1393 and has adapted portions of that filing for application to Delaware. This filing proposes to implement a new statistical code, 9741, to apply to losses caused by domestic terrorism, earthquake and catastrophic industrial accidents. Losses contemplated will be attributable to the named causes and produce \$50 million or more in insured losses in any single event. The proposed residual market rate and voluntary market loss cost proposed for such purposes are each \$0.01 per \$100 of payroll. These rating values are proposed to become effective December 1, 2005 on a new and renewal basis, concurrent with the effective date of other rating value changes proposed herein.

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, 2005 with selected portions effective January 1, 2006 and June 1, 2006) 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, (302) 654-1435). An interrogatory in the format provided with the referenced forms and rates bulletin has been completed and is included herewith.

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, July 26, 2005 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. Trends in Experience Questionnaire for Leading Carrier Groups
- 4. The following exhibits taken from the Actuarial and Classification & Rating Committees' July 26, 2005 meeting agenda package or prepared or modified in consideration of discussions at that meeting:

Exhibit Exhibit Exhibit	1a	Limited Losses	Table I - Summary of Financial Call Data Excess Loss Ratios and Loss Limitations 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 2004 and 2005 Filing Estimates of Ultimate Loss
Exhibit	3		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 7/1/06 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			Excess Loss Premium Factors with Adjustment for ALAE
Exhibit	18		State & Hazard Group Relativities

Exhibit 19 Exhibit 20 Exhibit 21 Exhibit 22a Exhibit 22b Exhibit 22c Exhibit 23 Exhibit 23 Exhibit 24 Exhibit 25 Exhibit 26		Delaware Insurance Plan Review of Experience Rating Plan Parameters Table B Table II - Unit Statistical Data Table III - Unit Statistical Data Table IV - Unit Statistical Data Claim Frequencies Retrospective Development Factors Tax Multiplier 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		
EXHIDIC 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-1388
Exhibit 1	Unlimited Losses	Table I – Summary of Financial Call Data
Exhibit 2		Paid and Incurred Loss Development and Trend
	Unlimited Losses	Graphs of Selected Loss Development Projections
	Unlimited Losses	Comparison of 2004 and 2005 Filing Estimates of
		Ultimate Loss
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 6, 2005: Delaware Construction Classification Premium Adjustment Program Housekeeping Revision

DCRB Staff Memorandum of June 13, 2005: Partners, Officers and Others Exclusion Endorsement – WC 00 03 08; Sole Proprietors, Partners, Officers and Others Coverage Endorsement – WC 00 03 10; Mid-term Application

DCRB Staff Memorandum of June 15, 2005: Corporate Officer Weekly Minimum and Maximum Payrolls to be Audited in Delaware and Weekly Minimum and Maximum Payrolls for Sole Proprietors or Partners

DCRB Staff Memorandum of July 20, 2005: Domestic Terrorism, Earthquake and Catastrophic Industrial Accidents

NCCI Item Filing No. B-1393, Miscellaneous Values for Domestic Terrorism, Earthquakes, and Catastrophic Industrial Accidents

Proposed Revisions – Delaware Basic Manual – Domestic Terrorism, Earthquake and Catastrophic Industrial Accidents

Proposed Revisions – Delaware Statistical Plan Manual

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 D. Wisecower

Timothy L. Wisecarver President

TLW/kg Enclosures