



## Pennsylvania Compensation Rating Bureau

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

December 15, 2009

### VIA HAND DELIVERY

The Honorable Joel Ario  
Insurance Commissioner  
Commonwealth of Pennsylvania  
Insurance Department  
1311 Strawberry Square  
Harrisburg, PA 17120

Attention: Chuck Romberger

RE: Bureau Filing No. C-358 - April 1, 2010 Loss Cost Filing

Dear Commissioner Ario:

On behalf of the members of the Pennsylvania Compensation Rating Bureau (PCRB), I am filing herewith workers compensation loss costs, rating values and rules proposed to be **effective 12:01 a.m., April 1, 2010** with respect to new and renewal policies having normal anniversary rating dates on or after that date.

This filing proposes an overall average increase in loss costs (prior to application of the assessment for the Office of the Small Business Advocate, Pennsylvania Construction Classification Premium Adjustment Program loadings, Merit Rating Plan off-balance and Certified Safety Committee loadings) of 0.68 percent effective April 1, 2010.

This letter and its attachments present a discussion and explanation of the filing's supporting analysis and conclusions based thereon and are presented in the following topical sequence:

- Summary
- Principal Findings and Conclusions
- Recognition of Effects of Prior Legislation
- Loss Development
- Trend
- Indicated Change in Loss Costs
- Employer Assessment Factor and Loss Cost Loadings
- Experience Rating Plan Procedures and Parameters

- Optional Retrospective Loss Development Factors
- Classification Loss Cost Relativities
- Excess Loss (Pure Premium) Factors, State and Hazard Group Relativities and Loss Elimination Ratios
- Manual Language Revisions

## SUMMARY

In preparing and reviewing supporting information for this filing, the PCRB has attempted to identify and estimate the relative contributions to the filed overall loss cost indication arising from several factors. The resulting attribution of effects upon the overall loss cost indication is set forth below:

1) Changes in indemnity loss experience from provisions in approved April 1, 2009 loss costs	1.033347
2) Changes in medical loss experience from provisions in approved April 1, 2009 loss costs	0.990669
3) Changes in indemnity trend rate and period from provisions in approved April 1, 2009 loss costs	1.008181
4) Changes in medical trend rate and period from provisions in approved April 1, 2009 loss costs	0.975506
5) Indicated change in loss costs effective April 1, 2010 (1) x (2) x (3) x (4)	1.0068

Line 5) above combines the separate effects described in Lines 1) through 4) by compounding the individual increases or reductions in loss cost indications, resulting in the proposed loss cost increase of 0.68 percent ( $1.0068 - 1.0000 = + 0.0068$ ).

The PCRB has generally employed procedures and analyses consistent with those supporting previous annual rating value filings for purposes of Bureau Filing No. C-358. In selected portions of this filing, however, the methodologies used to review available experience and/or the approaches ultimately selected for use in preparing the filing do differ from recent PCRB practices. The following areas of Bureau Filing No. C-358 are identified as having the more significant departures from methodologies of previous filings:

- Claim Frequency Trend

As has been the case in many previous PCRB filings, an extensive review of available claim frequency data was conducted in support of Bureau Filing No. C-358. In filings before the April 1, 2009 filing, exponential trends in claim frequency were selected based on specified numbers of prior policy year data points. Last year, the PCRB's review of claim frequency data

disclosed a tendency for improvements in claim frequency to occur at diminishing levels in recent years. That observation led to the selection of a curve form consistent with that observed pattern. For Bureau Filing No. C-358, claim frequency trend has again been estimated using an exponential trend, based on the most recent seven policy year data points.

- Claim Severity Trend

Typically the PCRB estimates claim severity trend using an exponential model applied to a selected number of recent policy year data points. This year, the PCRB observed a significant increase in the most recent policy year (2007) severity ratio. Various diagnostics were applied to consider apparent causes for this recent change and the likely course of subsequent claim severity ratios in light of the 2007 data point. Ultimately, the PCRB has elected to apply a claim severity trend calculated as the average of an exponential fit through the most recent available seven data points (including Policy Year 2007) and an exponential fit through the oldest six of the last seven data points (excluding Policy Year 2007). This approach gives some weight to Policy Year 2007 but less than would be the case for the seven-point exponential model alone.

- Employer Assessment

As was first done in the April 1, 2009 filing, the Bureau of Workers Compensation has again provided the PCRB with membership share amounts of the component budgetary amounts incorporated in the employer assessment directly to the PCRB, and we have used them in our derivation of the Employer Assessment Factor.

For Bureau Filing No. C-358, the assessment premium base has been adjusted so that large deductible premium credits are stated at company (rate) levels, consistent with the treatment of individual employer calculations.

## **PRINCIPAL FINDINGS AND CONCLUSIONS**

The following comments summarize the most important considerations and concepts pertinent to each of the specific factors contributing to the overall loss cost indication as set forth above.

### Changes in Indemnity Loss Experience from Provisions in Approved April 1, 2009 Loss Costs

The PCRB's analysis of the most recent available experience data for indemnity benefits produces estimates of loss costs notably higher than the expectations underlying the current schedule of PCRB rating values. For this filing, the PCRB has again adjusted available historical indemnity data to be consistent with provisions of Act 57 of 1996 (Act 57) and applied benefit on-level factors to adjust historical indemnity data to a post-Act 44 of 1993 basis (Act 44) before proceeding with our loss development and trend analyses.

Besides statutory changes, indemnity experience is affected by a variety of additional factors. These include ongoing interpretation and administration of various provisions of the Workers Compensation Act. The initiation and/or continuation of various accident prevention and loss management programs by the Commonwealth, insurers and employers may affect loss experience. Economic conditions and fraud detection, prosecution and/or prevention initiatives

have potential direct and indirect influences on the workers compensation system of the Commonwealth and its costs. Circumstances in the administrative system by means of which claims for work-related injuries and illnesses are processed and disputes pertaining thereto are resolved may alter system experiences and costs. These and other similar considerations are reflected in experience data and are thereby incorporated into the loss development analyses performed in conjunction with each PCRB loss cost filing.

The net effect of all factors that have affected indemnity loss experience in the current filing would be to increase the overall loss cost indication by approximately 3.33 points.

#### Changes in Medical Loss Experience from Provisions in Approved April 1, 2009 Loss Costs

Consistent with the approach adopted in prior recent filings, the PCRB has continued to state medical loss experience on a post-Act 44 basis. While the PCRB's analysis of medical loss experience suggests that the favorable effects of Act 44 on workers compensation medical costs in Pennsylvania remain substantially in place, a separate analysis of the direct effects of that important legislation on current and prospective loss cost levels is not possible with historical data organized and adjusted as has been done for several previous filings to date.

While certain provisions of the Workers Compensation Act and supporting administrative system are specific to medical benefits instead of indemnity benefits, medical losses are also generally subject to influence by the same system considerations as enumerated above for indemnity losses. The PCRB's most recent evaluation of medical loss experience shows a decrease in loss cost levels from those contemplated in the April 1, 2009 filing, resulting in an incremental decrease in the overall loss cost indication of approximately 0.93 points.

#### Changes in Indemnity Trend Rate and Period from Provisions in Approved April 1, 2009 Loss Costs

In the April 1, 2009 Loss Cost Filing, the PCRB's trend provisions were based upon separate analyses of claim frequency and claim severity experience for the Pennsylvania workers compensation system.

For the April 1, 2009 filing, the PCRB applied a curve-fitting technique to historical claim frequencies to project future claim frequencies to the mid-point of the policy period for which new rating values were proposed. The curve form used for this purpose produced continuing improvements in claim frequency over the forecast period for this filing but at decreasing rates of change year-over-year.

For Bureau Filing No. C-358, the PCRB has applied an exponential trend model fitted through the most recent available seven policy years as basis for estimating claim frequency trend. The result of that analysis is an annual decline of 5.9 percent.

Components of trend other than claim frequency, collectively referred to herein as "severity trend" for sake of brevity, have been reviewed using commonly accepted and applied trend models applied to the PCRB's estimated ultimate on-level loss ratios, adjusted for effects of previous changes in claim frequency. Testing done by the PCRB in regard to this trend

analysis indicates that goodness-of-fit results for indemnity experience is improved significantly by virtue of the separation of trend into frequency and severity components instead of treating loss ratios alone.

The Policy Year 2007 indemnity severity ratio shows a more rapid increase from the 2006 ratio than is apparent in immediate prior periods. The PCRB reviewed components of its data, including the presence of large losses and settlement rates, in an attempt to determine whether the Policy Year 2007 claim severity ratio would likely be representative of subsequent year-to-year changes. Based on that review, the PCRB was not inclined to either rely on Policy Year 2007 as a part of an exponential trend model for claim severity or to omit Policy Year 2007 from the determination of a claim severity trend for the April 1, 2010 Loss Cost Filing. Accordingly, the PCRB has used a claim severity trend that is the average of two separate exponential trend methods: a seven-point model including Policy Year 2007 and a six-point model using the Policy Years 2001-2006 and excluding Policy Year 2007.

The trend thus produced show an indemnity severity trend which had been estimated at an annual rate of approximately +3.3 percent in last year's filing, as being +4.84 percent for this filing.

On balance, the selected future claim frequency trend and the indicated indemnity claim severity trend, applied in this filing to the mid-point of the proposed schedule of loss costs, would support an increase of approximately 0.82 points from those approved effective April 1, 2009.

#### Changes in Medical Trend Rate and Period from Provisions in Approved April 1, 2009 Loss Costs

The claim frequency trend discussed above with respect to indemnity benefits has also been applied for medical benefits. Medical severity ratios have been separately analyzed based on the same experience period used for indemnity benefits.

Considerations pertaining to the Policy Year 2007 claim severity ratio for indemnity losses noted above were also applicable to medical claim severity experience. Accordingly, the PCRB applied the same approach to determining medical claim severity trend for this filing as was described above for indemnity benefits. The medical claim severity trend thus obtained for this filing shows an annual medical severity trend (+5.72 percent) that is very close to the counterpart value in the information supporting the April 1, 2009 Loss Cost Filing (approximately +5.8 percent.)

On balance, the selected claim frequency trend and medical claim severity trends applied in this filing to the mid-point of the proposed schedule of loss costs would decrease the proposed loss costs from those approved effective April 1, 2009 by approximately 2.45 points.

## **RECOGNITION OF EFFECTS OF PRIOR LEGISLATION**

The predominant legislative changes which must be recognized in preparing and reviewing this filing are Act 44 of 1993 and Act 57 of 1996.

Act 44 included the medical cost containment features listed below:

- Implementation of a reimbursement mechanism related to the Medicare system of compensating providers of medical goods and services.
- Authorization of administrative systems that provide both utilization review and peer review of the necessity, appropriateness and reasonableness of fees for medical services.
- Authorization for coordinated care organizations intended to provide comprehensive medical services that recognize timely return to work for injured workers as a primary objective of the workers compensation system.
- Extension of the period of time within which employers may direct injured workers to use medical practitioners selected from a listing of qualified practitioners provided by the employer from 14 to 30 days.

In preparing its April 1, 1999 Loss Cost Filing, the PCRB first adopted an approach of stating experience incurred prior to the implementation of this law on an effective "post-Act 44" basis. Prior to adopting this approach, the PCRB had performed extensive testing of this approach and comparison of results obtained thereby to alternative methods incorporated in previous loss cost filings. This filing continues the procedures first implemented with the April 1, 1999 filing. This analytical approach precludes a new and independent evaluation of the continuing effects of Act 44 on loss costs for each filing. However, it also has many substantial benefits, including efficiency, tractability and the elimination of otherwise remaining requirements to "adjust" the most recent and critical calendar years' experience for effects of law changes occurring several years ago.

In its February 1, 1997 Loss Cost Filing, the PCRB had estimated effects of three key provisions of Act 57 on prospective loss costs. Those provisions were as follow:

- Section 204 - Allows for offsets to workers compensation indemnity benefits otherwise payable to recognize Social Security old age benefits, certain employer-funded pension benefits and/or severance benefits.

- Section 306 - Applies the American Medical Association Guides for the Evaluation of Permanent Impairment to determinations of which cases will be qualified for total disability benefits and, alternatively, which cases will be treated as permanent partial disability cases.
- Section 309 - Revises the procedures applicable to the establishment of workers' wages for purposes of determining indemnity benefit rates.

In each loss cost filing submitted subsequent to February 1, 1997, various technical updates and/or revisions to the original estimates of effects of this legislation have been incorporated as appropriate.

For reasons analogous to those supporting adjustment of prior medical experience to a post-Act 44 basis in preparing the April 1, 1999 Loss Cost Filing, the PCRB adopted a comparable approach for indemnity experience in the April 1, 2000 Loss Cost Filing as respects Act 57. As was the case in the transition for medical experience, the PCRB had previously extensively tested its adjustment of prior data for sensitivity and had verified the equivalence of this approach to the prior procedure. That prior procedure continued to adjust experience incurred after the effective date of the law to a pre-Act 57 basis, producing preliminary filing estimates and then applying savings factors to arrive at a final loss cost indication.

It should be understood that the transition of the PCRB's filing analyses from "pre-law" to "post-law" bases for Acts 44 and 57 does not remove or reduce the favorable impacts of these two important pieces of workers compensation legislation from the filing indications. Neither does this change signal deterioration in the PCRB's perspective about the magnitude of the effects that these laws have had and continue to have on Pennsylvania loss costs. Rather, these analytical changes simply allow the effects of these laws to be incorporated more directly and efficiently into ongoing loss cost filings' supporting information.

The Table I prepared from reported financial data in support of this filing and stated on a post-Act 44 basis for medical losses and a post-Act 57 basis for indemnity losses, as described above, is shown in Exhibit 5 of the enclosures to this filing. Details of adjustment of reported indemnity and medical data is provided in Exhibit 5. As respects the small effects of Act 44 on indemnity losses, the PCRB elected for the first time in preparing its April 1, 2006 filing to adjust historical indemnity loss data for the effects of that legislation. This approach, which has also been applied in preparing this filing, treats the indemnity revisions enacted with Act 44 in the same fashion as previous filings have addressed the medical provisions of Act 44 and the indemnity changes of Act 57, thereby eliminating the need for application of a subsequent savings factor.

## **LOSS DEVELOPMENT**

While the establishment of appropriate levels of loss costs is ultimately a prospective process, a great deal of the supporting analysis and information required in this endeavor pertains to the estimation of loss experience for PRIOR policy periods. Proper evaluation of previous loss experience establishes reference points from which projections of future loss cost requirements

can be made and in the context of which such projections can be reviewed for reasonableness. In simple terms, future loss cost needs cannot reasonably be estimated without first establishing what prior loss cost experience has been.

In preparing this filing and particularly in regard to the estimation of policy year loss ratios, the PCRB has been mindful of numerous technical and analytical considerations. Among the pertinent processes and procedures applied to this filing are the standards set forth in the Casualty Actuarial Society's "Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves" (Principles). A discussion of those Principles, as they pertain to analysis supporting this filing, is included as a separate enclosure with this filing. In this filing the PCRB has applied both case-incurred loss development and the longest-term paid loss development method possible with available data in its analysis of loss experience for prior policy periods. In addition, as was the case for each April 1 loss cost filing since 2002, the PCRB has included loss estimates derived by averaging results from a case-incurred loss development method and a paid loss development method for this filing. This last approach is one alternative (and in some respects a particularly direct) way of balancing the potentially different results from case-incurred and paid loss development methods than the combined development approaches previously applied. Results of these loss development methods are set forth in detail in Exhibits 6, 7 and 10 of the enclosures. This analysis and conclusions drawn therefrom are further described below:

**Indemnity Losses** – As has now been the case in many previous PCRB filings, a relatively broad range of results was obtained from the application of the loss development approaches described above to indemnity losses. The case-incurred loss development method gave lower estimates of policy year losses than did the long-term paid loss development method.

In previous filings the PCRB has used the average of the ultimate indemnity loss estimates derived using these respective loss development methods. This approach gave equal weight to each of the alternative methods, in principal part because the PCRB did not have available information that would lead to the conclusion that either of the two loss development methods was inherently likely to be more accurate than was the other.

In preparing for this filing the PCRB gave considerable thought to the ongoing differences in ultimate loss estimates obtained using paid loss and case incurred loss development methods. Available history of age-to-age development factors was reviewed, as was the development history of these respective methods. Claim settlement patterns were scrutinized, and some carriers whose own data exhibited similar tendencies were asked to provide insights into the features of their experience thought to be causing these differences. Ratios of reported loss to incurred and ultimate losses were tabulated and reviewed. However, none of these analytical efforts surfaced a clear preference for one loss development method over the other. Accordingly, the PCRB has again employed the averages of ultimate loss estimates produced using paid loss development and case incurred loss development for indemnity losses. These estimates again fall, as would be expected, in the mid-range of estimates produced for each policy year.



**Medical Losses** – In prior filings, the results produced when applying the loss estimation methods described above to medical losses were much closer together than is the case for indemnity benefits. For Bureau Filing No. C-358, the results of the paid loss and case-incurred loss development methods for medical losses have diverged in a fashion similar to that seen over a longer term for indemnity losses, although to a lesser extent.

As was the case for indemnity losses, the PCRB's efforts to explain this divergence have been inconclusive. In the short term, such differences could be attributable to a variety of factors which, depending upon which factors hold sway over the data, could cause one, the other or both of our loss development approaches to be affected. Accordingly, for essentially the same reasons as were described above for indemnity losses, the PCRB has again employed the averages of ultimate loss estimates produced using paid loss development and case incurred loss development for indemnity losses.

## **TREND**

**Indemnity Trend** - Insurance experience available for analysis in promulgating loss costs is necessarily limited to policy periods previously completed. On the other hand, the loss costs being determined will apply to some future period. As can readily be seen in the preceding review of policy year loss ratios for this filing, insurance experience often reflects substantive changes over time in response to various economic, legal and social changes. As a result, the establishment of an appropriate overall loss cost change must recognize the time period that is interposed between the historical experience and the application of the new loss costs. This recognition is provided through "trend" analysis, a means of measuring any persistent, systemic changes in experience expected to occur in that interim period of time.

One commonly-applied method of establishing a provision for trend is to attempt to measure year-to-year changes occurring in historical information using mathematical techniques. Based on such measurements, a selected measure(s) is/are applied for the period of time required to connect the available prior experience to the prospective pricing period. The mathematical approaches most often used in this regard involve the fitting of selected curves through the observed historical data and basing the average change or trend rate on the characteristics of the curve(s) that best fit that prior experience.

Two curves usually considered in this type of analysis are a straight line (or "linear" model) and an "exponential" model. The linear model is based on a determination of the constant amount of change in loss ratios which best fits the observed historical data; the exponential model is based on a determination of the constant percentage change in loss ratios which best fits the observed historical data.

In preparing each of the last 11 Pennsylvania loss cost filings (beginning with April 1, 1999 and continuing through April 1, 2009), the PCRB has separated its trend analysis into two component parts: claim frequency and severity factors. Based on detailed analysis of both internal and outside data (when available and credible) pertaining to these phenomena (and, in particular, pertaining to claim frequency), the PCRB has selected methods and/or parameters

to estimate trends for each of these component parts. This approach has sometimes allowed the PCRB to capitalize on available external data pertaining to injury and illness counts and claim frequency and ultimately provided a basis for selection of prospective loss ratio trends based on specific analysis and review of claim frequency data and experience.

Based on separate measures of policy year loss ratio trend and claim frequency trend, implied claim severity trends have been identified in the supporting information for this filing. Review of the resulting claim severity ratios showed a notable increase in indemnity claim severity in the latest available policy year, Policy Year 2007. After attempts to learn about factors contributing to that increase, the PCRB elected to apply exponential trend models to the most recent seven years (including Policy Year 2007) and to the oldest six of the most recent seven policy years (excluding Policy Year 2007) and average the results of those two calculations. This approach gives some weight to Policy Year 2007 but assigns less weight to that year than would be the case using any single exponential model that included Policy Year 2007. The indicated indemnity severity trend inherent in PCRB indemnity experience is equivalent to an annual increase of approximately +4.84 percent per year, still significantly higher than the indemnity claim severity rate applied in the April 1, 2009 Loss Cost Filing (which was +3.3 percent).

The PCRB's most pertinent information pertaining to claim frequency compares indemnity claims incurred to expected losses at a constant (current) loss cost level. The expected losses used to compute claim frequencies in the PCRB's internal data respond to changes in the mix of employments being insured and for which claims are being reported and also incorporate ongoing changes in wage levels in Pennsylvania. As there has been a tendency for the Pennsylvania economy to become more service-oriented and less focused on manufacturing and contracting, this shift has itself contributed to lower claim counts over time.

Historical claim frequency data shows a protracted and persistent trend of declining claim frequencies now extending back for at least 17 years. Since the mid-1990s the long-term trends in claim frequency have fallen in a relatively narrow range. Since a brief period of extraordinary double-digit declines ended in 1996, claim frequency continued to fall at annual rates generally in the 4.0 to 6.1 percent per year range for most experience periods.

For this filing, claim frequency data is available through Policy Year 2007. In reviewing historical changes in claim frequency, the PCRB has selected an exponential trend estimate using the most recent available seven policy years, which results in an annual claim frequency trend rate of -5.9 percent per year.

The PCRB would point out that, regardless of the respective component(s) that may be producing changes in trend, loss cost indications are relatively sensitive to such changes. Even a relatively nominal deterioration in claim frequency and/or claim severity trend(s) from the provisions incorporated in this filing could render the indemnity trend used for this filing significantly understated.

**Medical Trend** - The PCRB has proceeded in a manner as respects medical trends similar to that described above for indemnity trend in preparing this filing.

Exponential trend models based on the seven policy years from 2001 through 2007 inclusive and the six policy years ending with 2006 were separately applied to medical claim severity, and the average of those two calculations was selected for use in this filing. This approach produces an effective trend model in which on-level medical severity ratios are increasing at a rate of +5.72 percent per year. The same claim frequency trend as was used for indemnity benefits has been applied to medical losses.

The comments offered above with respect to indemnity losses regarding the sensitivity of loss cost indications and the potential effects of even relatively small adverse changes in claim frequency or claim severity trends are equally applicable to medical losses.

### **INDICATED CHANGE IN LOSS COSTS**

Exhibit 12 enclosed in support of this filing presents the derivation of indicated changes in collectible loss costs effective April 1, 2010. The indicated change in collectible loss costs is derived based on estimates of prior policy year loss ratios, including the effects of Act 44 on both indemnity and medical benefits and of Act 57 on indemnity benefits. These estimated policy year loss ratios are then trended forward to the mid-point of the proposed loss costs (April 1, 2011). The loss ratio thus estimated is 1.0068. Since in the PCRB's loss cost filings the target loss ratio is 1.0000, this result supports the proposed 0.68 percent increase in current loss costs for the policy period beginning April 1, 2010.

Recognizing expected changes in experience modifications during the period for which the proposed loss costs will apply, the average change proposed in manual loss costs is a decrease of 0.83 percent. By industry group, the proposed average changes in manual loss costs effective April 1, 2010 are:

Manufacturing	-0.98%
Contracting	-0.32%
All Other	-0.95%

These indicated changes to manual loss costs were derived by industry group on Page 1 of Exhibit 12, using information regarding the historical operation of the Experience Rating Plan (see Exhibits 18 and 19 of the enclosures to this filing). Anticipated collectible premium ratios are compared to provisions in current rates, with the ratios used to adjust the proposed change in collectible loss costs to appropriate manual levels on the bottom of Page 1 of the Exhibit 12.

### **EMPLOYER ASSESSMENT FACTOR AND LOSS COST LOADINGS**

In each recent loss cost filing, the PCRB has reviewed experience pertinent to the Employer Assessment Factor to be applied to Pennsylvania workers compensation business in accordance with Act 57 of 1997. Exhibit 13 enclosed presents a summary of the PCRB's

determination of the appropriate Employer Assessment Factor. Due to the impact of decreased budgetary provisions for the Administration and Supersedeas Funds, in concert with a change in methodology to state premium credits for large deductible business on a company (rate) level, the proposed employer assessment provision is 0.0207, as compared to the currently-approved provision of 0.0241.

The provision for assessments supporting the Office of the Small Business Advocate, which continues to be part of proposed PCRB loss costs, is proposed to remain at 0.0001.

PCRB loss costs continue to include adjustments for the effects of the Merit Rating Plan and the Certified Safety Committee Program. The Merit Rating Plan increment factor is proposed to be 0.0029, the same as was approved effective April 1, 2009. The Certified Safety Committee Program increment factor is proposed to change from 0.0114 to 0.0112. These proposed values are shown in Exhibit 13 and are separately derived in Exhibits 15 and 16.

This filing also proposes to update classification loss costs to reflect indicated loadings for the Pennsylvania Construction Classification Premium Adjustment Program (PCCPAP).

Since 1991 the PCCPAP program has been in effect for designated construction classifications. This program offers tabular premium credits to employers subject to those specified classifications that demonstrate the payment of wages above certain threshold levels. The PCCPAP program had been revised effective January 1, 2002 to eliminate adjustment of experience modifications in recognition of the effects of PCCPAP credits as the approved means of avoiding providing redundant credits. The adjustment of experience modifications had been seen as a potential impediment to participation in the program. The revised plan makes adjustment within the computation of the credits themselves for the effect of high wages on experience modifications. Manual loss costs for each construction classification then incorporate "offsets" intended to recover the premium credits given to higher-wage employers from all employers insured in each construction classification. Thus, the PCCPAP program is intended to be "revenue-neutral" and should reallocate premium obligations between low- and high-wage employers without either increasing or reducing the overall amount of premium collected in these classifications.

For this filing the PCRB has been able to analyze participation in this program and the level of credits generally obtained by participating employers in each classification using the most recent available experience. Results of that analysis and proposed PCCPAP loads on loss costs by classification are included as Exhibit 14 of the enclosures to this filing.

Available experience, as summarized on Exhibit 14, produces a revised average indicated PCCPAP offset of 3.56 percent of loss costs, up nominally from the current average of 3.42 percent.

The proportion of construction industry premiums and payrolls represented by eligible employers seeking and/or qualifying for credit under the plan has increased slightly in the most recent available experience. Those risks that did qualify for PCCPAP credits again produced somewhat higher average credits than had been the case in the recent past.

In addition, Exhibit 14 reveals that there continue to be material differences between construction classifications in terms of the portion of employers receiving PCCPAP credits and/or the level of credits provided to such employers. Proposed offsets range from 0.00 percent in Code 662, Appliance Service or Repair, to 9.70 percent in Code 649, Ceiling Installation.

### **EXPERIENCE RATING PLAN PARAMETERS**

The Experience Rating Plan provides a prospective means of recognizing differences in loss potential between employers. This recognition is accomplished by means of a comparison of each qualifying employer's loss and exposure experience over a specified period of time (experience period) to the average experience of all employers engaged in similar businesses.

As part of each loss cost filing, the PCRB reviews the results of its Experience Rating Plan and proposes certain updates or revisions to the plan as are deemed necessary or appropriate to maintain the effective operation of the plan.

Effective April 1, 2004, the Experience Rating Plan was materially revised. Changes adopted at that time included a revised credibility table (generally assigning increased credibility to smaller risks' experience and lower credibility to larger risks' experience than had the legacy Experience Rating Plan) and a new loss limitation procedure in which all losses were limited to a flat amount of \$42,500 (instead of employing a sliding scale of loss limitations that increased with risk size). In addition, a 25 percent limitation was imposed on the extent to which an employer's experience modification could change (up or down) in any one year.

Recognizing the significant changes recently adopted with respect to the Experience Rating Plan, the PCRB has constructed the analytical exhibits pertaining to this plan and offered in support of this filing by applying the revised Experience Rating Plan to prior rating periods. This approach effectively demonstrates what the performance of the new plan would have been, rather than displaying what the performance of the legacy plan actually was.

Exhibit 18a of the enclosures to this filing presents a detailed analysis of results of the new Experience Rating Plan within each industry group over the most recent available five years. These analyses are set forth in tabular form by premium size group and experience modification range by year. Exhibit 19 of this filing presents summaries of collectible premium ratios and detail of the derivation of expected loss cost factors supporting the Experience Rating Plan parameters proposed in this filing. Exhibit 18a is constructed to show the results of the Experience Rating Plan before the application of capping procedures to individual employer modifications.

Effective April 1, 2006 the PCRB modified the previously-adopted capping procedures so that, if an employer's indicated modification was below 1.000 but the capped modification was above 1.000, then a unity modification (a modification factor of 1.000) would be applied.

Exhibit 18b presents a summary page of data comparable to the summary in Exhibit 18a but constructed to reflect results of experience rating after the effects of all currently-approved capping procedures.

The changes in collectible premium ratios presented on Exhibit 19 must be accounted for in establishing manual levels of loss costs, as shown on the bottom portion of Page 1 of Exhibit 12.

Final Experience Rating Plan parameters proposed in this filing are shown in Exhibit 27 and Exhibit 28.

### **OPTIONAL RETROSPECTIVE LOSS DEVELOPMENT FACTORS**

Because loss valuations tend to change (and generally to increase) over time, some retrospective rating plans provide for application of development factors to preliminary loss reports in computing retrospective premiums. The PCRB has historically presented appropriate voluntary loss development factors based on aggregate PCRB experience as part of its filings for use by carriers and insureds in negotiating and agreeing upon their retrospective rating plans.

Exhibit 26 of the enclosures to this filing shows the PCRB's proposed optional retrospective loss development factors on an unlimited basis. In addition, the PCRB includes in its Manual reference to the formula for adjusting unlimited loss development factors to limited bases by reference to the ELF's described above. That formula is also shown in Exhibit 26 for reference.

### **CLASSIFICATION LOSS COST RELATIVITIES**

Workers compensation insurance is written under a classification system that provides varying rating values for different types of businesses, based on the risk of loss inherent in those businesses subject to each distinct classification. As a result, any overall loss cost indication must ultimately be apportioned to each individual classification with due recognition given to the comparative experience of employers subject to each classification.

In preparing individual classification loss costs for this filing, the PCRB has continued to apply pricing procedures established as a result of a 1994 study of the Classification Plan conducted in cooperation with the Insurance Department, Milliman & Robertson, Inc. and the Commonwealth Contractors' Coalition. These procedures have been used and approved in several previous PCRB loss cost filings.

Exhibit 17 of the enclosures to this filing provides an overview of the classification loss cost formulae utilized in preparation of this filing. These procedures are consistent with previously-submitted and approved methods.

The PCRB has elected for purposes of this loss cost filing to apply “swing limits” or allowable fluctuations in classification loss costs of 25 points above and below the average loss cost change within each industry group. In addition, the PCRB applies a testing procedure to identify potential significant reversals in classification loss cost changes relative to overall average indications year-after-year and intervenes where such indicated changes exceed selected amounts. These swing limits apply to “pure” loss costs, which include an adjustment for the operation of the Experience Rating Plan. The values so determined are subsequently adjusted to include appropriate provisions for the following items:

- Offsets for net Merit Rating Plan credits
- Offsets for Pennsylvania Construction Classification Premium Adjustment Program credits
- Offsets for Certified Safety Committee credits
- Assessment for the Office of the Small Business Advocate

The Index to Classification Exhibits and the accompanying Class Book in the filing enclosures present detail of the experience and loss cost indications derived for each classification in this filing. Within the Index to Classification Exhibits, certain parametric components of the classification loss cost review process are presented, and the bases for establishing credibility tables applicable to both payroll and expected losses are provided. Summary unit statistical data pertinent to the classification experience analysis is also included as Exhibits 20a, 20b and 20c of the enclosures to this filing.

Item 8 within the Index to Classification Exhibits presents identification of several classifications in which some form of selection or other intervention in the statistical procedures generally applied to the determination of classification loss costs was deemed appropriate. The bases for loss cost selection include special pricing procedures (for example, the explosives, aircraft and temporary staffing classifications), allocation of loss costs between ratable and non-ratable components, recognition of statutory provisions for occupational disease benefits, combinations of separately-defined codes for purposes of determining loss costs and/or responses to data reassignments occurring during the latter stages of classification pricing analysis.

Item 11 of the Index to Classification Exhibits presents “Supplemental Class Book Pages” detailing the derivation of loss costs for classifications treated in combination or subject to reassignments of data from/to another class(es). The Class Book presents detail of the experience and loss cost indications derived for each individual classification in this filing, performed without special consideration using the proposed procedures.

The loss costs developed in accordance with the procedures set forth on Exhibit 17 and presented in portions of the Index to Classification Exhibits and the Class Book exclude the following considerations previously discussed in this letter:

- PCCPAP offsets from Exhibit 14
- Merit Rating Plan credit offsets derived in Exhibit 15
- Offsets for Certified Safety Committee credits derived in Exhibit 16
- Assessment loading for the Office of the Small Business Advocate shown in Exhibit 13

The loss costs prior to application of these latter considerations may be thought of as “pure” loss costs and are the values to which the loss cost change limitations or “swing limits” have been applied.

For this filing, consideration was given to past filings’ changes by classification relative to average or overall indications in making final rating value selections. This procedure mitigated what otherwise would have been substantial fluctuations above and below average levels between successive filings for a limited number of classifications.

Exhibit 28 in support of this filing presents a complete table of proposed loss costs and expected loss factors pertinent to the Experience Rating Plan. Exhibit 29 presents both summary results and classification detail of the PCR’s tests of proposed loss costs against intended levels. Finally, Exhibit 30 depicts in graphic form the distribution of percentage changes in classification loss costs on both an indicated and proposed basis. Classifications subject to capping are also identified.

## **HEPATITIS C LOSS COST SURCHARGES**

HB 1633, enacted in December 2001, established a rebuttable presumption of work-related causality for Hepatitis C, if contracted by professional and volunteer firefighters, volunteer ambulance corps personnel, volunteer rescue and lifesaving squad personnel, emergency services personnel and paramedics.

For the April 1, 2003 Loss Cost Filing, the PCR researched available public documentation and some selected independent reports provided by their authors toward the objective of establishing a benchmark set of surcharges to reflect the increased claims potential precipitated by HB 1633. Selected surcharge amounts were included with that filing for the following classification codes:

- Code 807, Non-Volunteer Ambulance Services
- Code 985, Salaried Police or Firefighters
- Code 993, Volunteer Ambulance Corps
- Code 994, Volunteer Fire Companies

After review of the April 1, 2003 filing by the Insurance Department, surcharge amounts originally proposed for the above-cited classifications were amended to reflect available information regarding the incidence of Hepatitis C in the general U.S. population. For the loss cost filings made since 2003 and continuing through 2009, procedures consistent with those approved levels of surcharges were retained.

At this point, the experience data being applied in the PCR’s derivation of classification relativities all falls after the effective date of HB 1633. Accordingly, the effects of the rebuttable presumption established by that legislation is now reflected in loss experience for the impacted classifications. Accordingly, the PCR has discontinued the application of surcharges for Hepatitis C coverage in the above classifications for this filing.



## **EXCESS LOSS (PURE PREMIUM) FACTORS, STATE AND HAZARD GROUP RELATIVITIES AND LOSS ELIMINATION RATIOS**

PCRB loss cost filings typically include rating values pertinent to various rating plans affected by the size of loss for individual claims or occurrences insured there under. Some such plans provide limitations applicable to the amount(s) of loss that can be used in computing a retrospective premium. Other portions of this analysis facilitate the application of standard tables to Pennsylvania business.

The April 1, 2009 filing adopted a set of seven hazard groups (designated as Hazard Groups A through G), which provided for more homogeneous groupings of classifications according to the potential for more serious losses arising from the businesses included in each hazard group than had the previous hazard group assignments (consisting of only four hazard groups, (I through IV)). An alternative set of four hazard groups (1 through 4) was retained for carrier use, although those hazard groups were not the same as the original four hazard groups had been in terms of classification composition.

The revised hazard groups established for the April 1, 2009 Loss Cost Filing have been maintained for this filing. Parameters associated with those hazard groups have been updated based on the most recent available experience, as discussed below.

Exhibit 22 shows empirical size-of-loss distributions for Pennsylvania workers compensation business. Actual excess loss indications for loss levels below \$500,000 were combined with excess loss indications derived by fitting either Single Parameter Pareto Distributions or Lognormal Distributions to empirical data by type of loss (death, permanent total, permanent partial and temporary total).

Exhibit 23 shows the derivation of excess loss (pure premium) factors from the loss distributions produced in Exhibit 22. Average claim size by hazard group and type of injury were used, together with incurred loss weights by type of injury within each hazard group, to derive excess loss factors at selected size-of-loss limits by hazard group for Hazard Groups A through G and for the translated set of four Hazard Groups 1 through 4.

Exhibit 24 presents the derivation of state and hazard group relativities for Hazard Groups A through G and 1 through 4 in the proposed filing.

Exhibit 25 provides loss elimination ratios consistent with specified deductible levels subject to mandatory offer for coverage in Pennsylvania. These loss elimination ratios were also provided for Hazard Groups A through G and 1 through 4, consistent with the excess loss factors noted above. Some computational steps were required to derive loss elimination ratios for \$1,000 deductibles because PCRB's approved Statistical Plan allows "bulk reporting" of losses below \$2,000 per claim.

## **MANUAL LANGUAGE REVISIONS**

Proposed Manual language to accomplish the changes described briefly below is included in this filing.

- ***Designated Auditable Payrolls***

The filing proposes updates to several of these values for the continuing effects of wage inflation, including specifically the following:

Executive officers - the maximum auditable payroll is proposed to change from \$2,000 to \$2,100 per week.

Taxicab operators for leased cab - the annual auditable payroll, absent available payroll records, proposed to change from \$40,350 to \$41,800.

Salaried police or firefighters - the minimum auditable payroll proposed to change from \$4,050 to \$4,200 per year.

Specific Manual language proposed in support of the above changes is provided under cover of a staff memorandum dated October 21, 2009 which accompanies this filing.

- ***Additional Proposed Manual Revisions – Sections 2 and 3***

The PCRB is proposing the following changes in Manual language effective April 1, 2010:

Adding language to clarify the treatment of payrolls for premium computation purposes when an executive officer(s) are included under the provisions of a Professional Employer Organization (PEO) agreement.

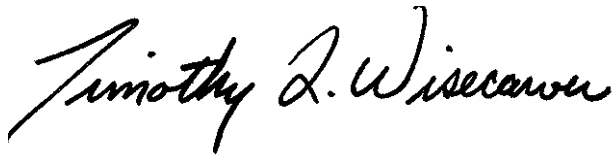
Withdrawing Endorsement WC 00 01 10 and adding Endorsement WC 00 01 11, both pertaining to the Migrant and Seasonal Agricultural Worker Protection Act.

Withdrawing Endorsement WC 00 03 18.

Discussion of these proposed changes and the specific language being affected is contained in a staff memorandum dated November 1, 2009 which accompanies this filing.

This filing, Bureau Filing No. C-358, fully and fairly reflects the most recent available experience indications in Pennsylvania, together with all initial and continuing effects of both Act 44 and Act 57. The PCRB respectfully requests a timely review of this filing toward the objective of its implementation, as proposed, on a new and renewal basis **effective April 1, 2010**. In requesting review of this filing, the PCRB is especially hopeful that adequate and appropriate advance notice of final loss costs and related rating values may be given to all participants in the Pennsylvania marketplace. Such notice would, of course, be assisted by as prompt and expeditious a review of this matter as possible. Toward that objective, the PCRB will be pleased to answer any questions or provide any available supplementary information which you or your staff may require.

Sincerely,



Timothy L. Wisecarver  
President

TLW/kg

Enclosures: Brown Book  
Actuarial and Classification & Rating Committees Minutes  
Discussion of Casualty Actuarial Society's "Statement of Principles Regarding  
Property and Casualty Loss and Loss Adjustment Expense Reserves"  
Index and Supporting Classification Exhibits  
Class Book  
Exhibit 5 Table I - Summary of Financial Call Data  
Exhibit 6 Paid & Incurred Loss Development & Trend  
Exhibit 7 Tail Factors for Loss Development  
Exhibit 8 Claim Frequencies  
Exhibit 9a Measures of Goodness of Fit in Trend Calculations Using Loss  
Ratios  
Exhibit 9b Measures of Goodness of Fit in Trend Calculations Using Severity  
Ratios  
Exhibit 10 Graphs of Indemnity and Medical Loss Ratios  
Exhibit 11a Retrospective Test of Trend Projections for Loss Ratios  
Exhibit 11b Retrospective Test of Trend Projections for Severity Ratios  
Exhibit 12 Indicated Change in Loss Costs  
Exhibit 13 Loss-Based Assessments and Employer Assessment Factor  
Exhibit 14 Pennsylvania Construction Classification Premium Adjustment  
Program ("PCCPAP")  
Exhibit 15 Merit Rating Plan Off-Balance Indications  
Exhibit 16 Pennsylvania Certified Safety Committee Program Offset

Exhibit 17	Loss Cost Formulae
Exhibit 18a	Review of Experience Rating Plan Results - Uncapped Experience Modification Values
Exhibit 18b	Review of Experience Rating Plan Results – Capped Experience Modification Values
Exhibit 19	Review of Experience Rating Plan Parameters
Exhibit 20a	Table II
Exhibit 20b	Table III
Exhibit 20c	Table IV
Exhibit 22	Empirical Pennsylvania Loss Distribution
Exhibit 23	Proposed Excess Loss (Pure Premium) Factors
Exhibit 24	State & Hazard Group Relativities
Exhibit 25	Loss Elimination Ratios
Exhibit 26	Retrospective Development Factors
Exhibit 27	Table B
Exhibit 28	Loss Costs and Expected Loss Factors
Exhibit 29	Tests of Indicated & Selected Loss Costs
Exhibit 30	Distribution of Loss Cost Percentage Changes
	Staff Memorandum of October 21, 2009 - Proposed Revisions to Designated Auditable Payrolls
	Staff Memorandum of November 1, 2009 - Proposed Manual Revisions - Sections 2 and 3