

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

<u>ACTUARIAL AND CLASSIFICATION & RATING COMMITTEES –</u>

RECORD OF JOINT MEETING

A meeting of the Actuarial and Classification & Rating Committees of the Pennsylvania Compensation Rating Bureau was held in the Terrace Ballroom of the Holiday Inn Express Midtown, 1305 Walnut Street, Philadelphia, Pennsylvania on Monday, December 8, 2008 at 10 a.m.

The following members were present:

Actuarial Committee

Ms. M. Gaillard*

American Home Assurance Company
Mr. G. Bushe

Continental Casualty Company
Donegal Mutual Insurance Company
Mr. A. Becker*

Harleysville Mutual Insurance Company
Liberty Mutual Insurance Company
Mr. K. Brady

American Home Assurance Company
Donegal Mutual Insurance Company
Harleysville Mutual Insurance Company
PMA Insurance Company

Mr. A. Becker** Selective Insurance Company

Mr. J. Schmidt Travelers Property & Casualty Company

Classification and Rating Committee

Ms. M. Gaillard* American Home Assurance Company
Mr. R. Butera Amerihealth Casualty Insurance Company

Mr. S. Reaser Amguard Insurance Company

Mr. R. Irons Eastern Alliance Insurance Company

Not Represented Graphic Arts Association

Mr. A. Becker* Harleysville Mutual Insurance Company
Mr. K. Shivers** National Federation of Independent Business
Mr. J. Devlin** Pennsylvania Automotive Association

Not Represented

Not Represented

Not Represented

Not Represented

Pennsylvania Food Merchants Association

Pennsylvania Newspaper Association

Pennsylvania Retailers' Association

Mr. W. Carney PMA Insurance Company
Not Represented SeaBright Insurance Company

Note – One employer organization position on the Classification & Rating Committee was vacant as of the date of this meeting

Mr. T. Wisecarver Chair - Ex Officio

Also present were:

Mr. D. Broadwater Coal Mine Compensation Rating Bureau of Pennsylvania

Mr. S. Cooley Duane Morris LLP

Mr. K. Creighton Pennsylvania Insurance Department Mr. E. Zhou Pennsylvania Insurance Department

Ms. K. Ayres National Council on Compensation Insurance, Inc.

Mr. M. Pozaic** State Workers' Insurance Fund

Ms. F. Barton

Ms. D. Belfus

Mr. B. Decker

Mr. M. Doyle

Mr. P. Yoon

Bureau Staff

Bureau Staff

Bureau Staff

Bureau Staff

Bureau Staff

Bureau Staff

- * Member of Both Committees
- ** Present for Part of Meeting

The Antitrust Preamble was read at the beginning of the meeting for the benefit of all participants.

All Committee members and other attendees made self-introductions.

Staff noted the electronic distribution of agenda materials in advance of the meeting and encouraged all Committee members and other attendees to participate in the meeting by raising questions or posing suggestions as those arose during the course of discussion.

The meeting discussion proceeded to first address the loss cost change indication and its supporting materials. Questions were posed, responses were given and/or discussion ensued as indicated by the "Question," "Answer," "Discussion" and "Comment" entries inserted below:

Overall Loss Cost Change Indication

Exhibit 12 of the agenda materials supported this section of the meeting discussion. Staff provided a handout updating both versions of this exhibit previously mailed to the Committees, noting that the changes did not alter any key results of the exhibit. Discussion used the handout counterpart of this exhibit.

Loss ratios selected for indemnity and medical benefits had been posted for each of the three most recent available completed policy years, i.e., 2004, 2005 and 2006. These loss ratios and the resultant average ratios were shown on Lines (1) through (4) on Page 12.1 of Exhibit 12.

Trended loss ratios based on each of the Policy Years 2004, 2005 and 2006 were presented on Lines (5) through (7) on Page 12.1 of Exhibit 12, with the resultant average trended loss ratio shown on Line (8) of that same page.

Consistent with the approach in recent previous filings, trend procedures applied in the development of this filing had separated historical experience into frequency and severity components by adjusting policy year on-level loss ratios for actual changes in claim frequency. Historical claim frequencies and the derivation of a prospective claim frequency trend were

presented on Page 12.3 of Exhibit 12. The function used to project future claim frequencies was noted. Historical loss ratios had been converted to "severity ratios" by adjusting for actual changes in claim frequency, and the resulting indemnity and medical "severity ratios" had been trended over seven-point experience periods using exponential trend models, as shown on Page 12.2. The annual indemnity severity trend thus obtained was noted as +3.3 percent, and the counterpart annual medical severity trend was observed to be +5.8 percent.

The average trended on-level loss ratio obtained by applying the combined claim frequency and severity trends was shown on Line (9) of Exhibit 12, and at 1.0070 this ratio produced an indicated 0.70 percent increase in collectible loss costs.

Staff noted that nominal changes in Experience Rating Plan off-balances, measured using the currently-approved Experience Rating Plan and differing by industry group, had been applied to produce the indicated average changes in manual loss costs by industry group.

The Committees continued discussion of supporting analyses contributing to the overall loss cost change indication as outlined below.

Question: Staff was asked what annual rate of change in frequency trend was incorporated in the filing's proposed indication.

Answer: The claim frequency trend projection relied on a function that produced different (and lower) changes in claim frequency each year, but the average effective frequency trend used in the proposed filing was -4.9 percent. That trend rate was derived fitting the selected claim frequency function through the most recent seven available policy years.

Question: A further question was posed regarding what annual claim severity trends were underlying the proposed filing.

Answer: The indemnity severity trend rate was +3.3 percent per year, and the medical severity trend rate was +5.9 percent per year. These indications, like the claim frequency trend curve, were derived from the most recent seven available policy years.

Trended Ultimate Loss Ratios - Indemnity

Exhibit 5 was identified as providing historical financial data upon which the proposed filing's analysis was based. The exclusion of large deductible experience and Catastrophe Code 48 (September 11, 2001) losses from Exhibit 5 was noted.

Participants were reminded that for numerous previous loss cost filings the Bureau had adopted an approach of adjusting financial data to "post-law" levels, as respects the medical provisions of Act 44 of 1993 (Act 44) and the indemnity provisions of Act 57 of 1996 (Act 57). This methodology, which offered efficiencies in the overall filing analysis, was continued for purposes of the analysis offered for discussion at this meeting.

Page 1 of Exhibit 5 provided the two most recent calendar years of premium development data, which staff noted was supplemented by additional older experience taken from previous filings' documentation for the analysis supporting this proposed filing.

Reported indemnity losses were identified as appearing on Page 3 (case-incurred indemnity loss) and Page 5 (paid indemnity loss) of Exhibit 5. Pages 7 through 21 of Exhibit 5 were noted as presenting details of the adjustment of indemnity experience to a post-Act 57 basis. The original such adjustments had been prepared using data from the April 1, 1999 Loss Cost Filing. Those adjustments had been balanced, so that indications obtained using historical data adjusted to a "post-law" level were comparable to alternative indications derived using historical data stated on a "pre-law" level, in combination with savings factors related to legislation. Adjustments for subsequent calendar years' data had been constructed serially based on policy year distributions of data and impacts attributable to the Act 57 law changes. Adjustments for calendar years prior to 2006 in this filing reflected factors that had been derived in previous Bureau filings. The adjustment for Calendar Year 2006 shown on Page 21 of Exhibit 5 in this filing had been recomputed using the most recent available data, and the adjustment for Calendar Year 2007 shown on Page 22 of Exhibit 5 had been made for the first time in this proposed filing. The revised Calendar Year 2006 adjustments and the Calendar Year 2007 adjustments applied in this filing had been performed in a manner similar to adjustments for prior years, using parameters consistent with those prior adjustments and/or ongoing assumptions about the extent to which data had responded to the effects of the law change.

The adjusted indemnity financial data, stated on a post-Act 57 basis, was shown on Pages 41 (incurred loss) and 43 (paid loss) of Exhibit 5.

Exhibit 6 presented the Bureau's loss development analysis in support of the filing, as well as significant portions of the special trend procedure proposed for use therein. Staff reviewed the pertinent portions of Exhibit 6 and related supporting documentation for indemnity benefits as follows.

Page 6.1 of Exhibit 6 provided premium and/or expected loss development history and estimated ultimate, on-level expected losses for use in computing loss ratios. Pages 6.2 through 6.6 provided steps in the application of incurred and/or paid loss development approaches to indemnity benefits. Staff advised that, consistent with a proposal first advanced and agreed upon during discussion of the April 1, 2005 Loss Cost Filing, the underlying loss data had been adjusted for the limited indemnity provisions of Act 44 for purposes of the analysis presented at this meeting. The benefit factors applied for the purpose of stating indemnity loss data on a post-Act 44 basis were shown on Page 6.4.

One of the approaches shown in Exhibit 6 used a case-incurred loss development method to estimate ultimate indemnity losses. Another estimate had been constructed using paid loss development for the maximum period of reporting supported by available financial data (to 20th report) and then converting cumulative paid losses to equivalent case-incurred losses and applying case-incurred loss development for the remaining development period to ultimate. Finally, the Bureau had derived estimates using the average of the case-incurred loss development method and the paid loss development method applied to 20th report. Results of these methods were presented at the top of Page 6.6 in Exhibit 6.

Staff noted that public comments submitted in regard to recent Bureau loss cost filings had focused in substantial part on the differences between the case-incurred and paid loss development methods when applied to indemnity losses. Authors of those comments had argued that those differences were attributable to effects of prior reforms that were reflected more fully and appropriately in case reserve estimates than in payment data. Those comments

asserted that these reform changes caused the paid loss development method to be overstated and called for greater or exclusive reliance on incurred loss development estimates of indemnity loss as a basis for the Bureau's filings. In response, Bureau staff had observed that the indemnity reforms of note in Pennsylvania were approaching ten years' vintage and questioned whether and how assimilation of those changes into the system could still have not been fairly represented in changes to paid loss development patterns. The Committees were asked to provide thoughts about these respective positions and their ramifications for the April 1, 2009 filing.

The following discussion concerning the wider divergence of case incurred and paid loss development methods for indemnity benefits than for medical benefits took place:

Question: An attendee asked whether the Bureau had examined claim closure rates to see whether changes in those rates might explain the loss development results.

Answer: Staff answered that claim closure rates from unit statistical data had been compiled and reviewed as part of the Bureau's analysis of the proposed filing.

Question: The attendee inquired about the results of that review.

Answer: For illustrative purposes staff responded by providing the portions of reported indemnity claims remaining open at fifth report for Policy Years 1994 through 2001. The percentages cited, in sequence from oldest to newest policy year, were: 7.3, 7.0, 6.7, 5.7, 5.2, 5.3, 5.2 and 4.8

Question: A committee member recalled that the financial data underlying the Bureau's loss development analysis had been adjusted for the effects of Act 57 and sought confirmation of that recollection.

Answer: Staff responded affirmatively that the financial data used for indemnity loss development had been adjusted for the effects of Act 57 of 1996.

Question: The committee member observed that the divergence between case-incurred and paid loss development seemed to begin around Policy Year 1997 and wondered whether some feature of the law change and/or the Bureau's adjustment could be contributing to the observed differences between loss development methods.

Answer: Staff related the nature of the law change adjustments used in the proposed filing, noting that immediately after a law change the approach had been to use pre-law data to estimate loss cost indications prior to the effects of the law and then apply law amendment factors. Once a useable body of post-law data had been obtained, the procedure changed to adjust pre-law change data to be consistent with post-law provisions. The initial adjustment for the second approach had been constructed to closely approximate the filing indications most recently obtained using the previous method, and the parameters thus obtained had been used consistently in subsequent years. Committee members and attendees were invited to consider the Bureau's methods and comment on possible improvements and/or corrections.

Staff also pointed out that the procedures used to adjust indemnity and medical data for law changes had been similar and that the medical losses did not show nearly as much difference between the case-incurred and paid loss development methods as did indemnity losses.

Question: Another committee member observed that past frequency improvements may have been concentrated in less serious claims, producing a changing book of losses for the Bureau's loss development methods. Staff was asked if any information was available to shed light on this possibility.

Answer: Staff indicated that unit statistical data supported a review of claim frequency by type of loss. As a point of illustration, staff provided claim frequencies per \$1 million of payroll for serious and non-serious losses at first report. The serious claim frequencies started at 0.0079 for Policy Year 1998 and declined to 0.0065 for Policy Year 2005, while non-serious claim frequencies for the same policy years ranged from 0.43 to 0.26. It was noted that the greater proportionate decrease in non-serious claims would have the effect of amplifying severity trends, all else being equal.

Question: A further question was posed, asking whether the Bureau had reviewed loss development by type of injury or for serious and non-serious claims.

Answer: Staff pointed out that financial data was not reported in a level of detail that would support the comparative loss development analyses being described. Limitations on the length of development experience available from unit statistical data (ten years) and the volatility of such loss development for more serious claims that would occur in relatively small numbers were noted. Finally, staff opined that, while details of the type being described were not evident from financial data loss development, the influences of changing mixes of claims and/or varying development patterns by type of loss over time should nonetheless be captured in the aggregate data.

Comment: An attendee stated that reviewing the most recent age-to-age loss development factors did not show any striking anomalies or changes that might raise questions about the data or system features.

Answer: Staff agreed, noting comparisons of the most recent age-to-age loss development factors to those two years before (which compared the new loss development data to the data being replaced by that new information).

Exhibit 7 presented the Bureau's derivation of "tail factors" for use in its array of possible loss development methods. The methodology applied had been used in prior filings in response to recommendations in regulatory examinations. Pages 2, 4, 6 and 8 of this exhibit each provided a tail factor estimate for indemnity benefits based on a different calendar year of development experience. An indemnity tail factor for the proposed filing had been selected as the average of these four separate indications, as shown on Page 1 of Exhibit 7.

Staff recalled the proposed filling's approach to trend analysis which adjusted estimated ultimate on-level loss ratios derived in Exhibit 6 for the effects of changes in claim frequency presented in the Bureau data, excluding deductible business from Exhibit 8. The results of

these adjustments were referred to as "severity ratios" and were presented on the bottom of Page 6.6 of Exhibit 6. The Bureau had then applied its customary linear and exponential trend models to the severity ratios thus derived over numbers of data points ranging from four to ten. For each trend model and loss development method in combination, severity trend factors were calculated for each of the three most recent policy years. This severity trend analysis for indemnity was shown on Pages 6.7 through 6.10 of Exhibit 6.

As presented on Exhibit 8, staff had obtained counts of indemnity claims and exposures (measured by expected losses at a constant set of Bureau loss costs) from unit statistical reports. This data was available by policy year from 1987 through 2006, with the last year having a mid-point of January 1, 2007. Compilations of this experience were provided separately for non-deductible business (Pages 3 and 4 of Exhibit 8) and for all business including deductible coverages (Pages 5 and 6 of Exhibit 8.) Staff had also reviewed trends in claim frequency by industry group, and indications for that review were provided on Page 8 of Exhibit 8.

For use in conjunction with the indemnity severity trend factors, the Bureau had projected future claim frequencies based on non-deductible business over the Policy Years 2000 – 2006 inclusive from Exhibit 8. The curve used in making those claim frequency projections produced declining percentage improvements in claim frequency over time and resulted in an effective annual claim frequency trend over the trend projection period for the filing (to April 1, 2010, the mid-point of the 12-month policy period beginning April 1, 2009). Staff noted that the observed effective annual rates of change in claim frequency had been quite stable over a period of several years through Policy Year 2002, with effective rates of change since 2002 tending to decline from -6.1 percent for the period 2002-2006 to -3.4 percent for the most recent period, 2005-2006. The claim frequency trend factors consistent with this procedure were set forth on Page 6.6 of Exhibit 6.

Previous Bureau filings had included reference to data provided by the Department of Labor & Industry (L&I) regarding counts of injuries and illnesses reported in the Commonwealth, together with non-federal payrolls. The work injuries and illnesses shown in those reports were incidents resulting in lost time beyond the day or shift of occurrence. For this filing, updates had been received from L&I through June 30, 2008. The history of these injury reports and payrolls was available on a calendar year basis from 1985 through 2007 and for the 12-month periods ending June 30 of each year from 1996 through 2008 inclusive.

Staff noted that data for counts of injuries and illnesses from L&I had previously exhibited fluctuations attributed to an unknown extent to changes in reporting practices by some of that Department's data sources. Bureau staff was not clear whether, how and/or the extent to which such changes might have contributed to the observed variances between L&I claim frequencies and those derived from Bureau data.

For reference purposes, the historical data from L&I was provided on Pages 1 and 2 of Exhibit 8.

Question: Staff was asked how "expected losses" used in the claim frequency calculations were derived.

Answer: The expected losses in question were computed by applying current loss costs by classification to exposures reported in each policy year.

Question: The attendee asked what schedule of loss costs was being described as "current."

Answer: The April 1, 2008 loss costs had been used for purposes of constructing Exhibit 8 in the proposed filing.

Question: A committee member asked whether changes in filing methodologies had been perceived as problematic in the course of regulatory review of the Bureau's past filings.

Answer: Staff stated that consistency of methods and approaches was thought to be desirable unless compelling reasons for changing methods arose. When changes were invoked, staff aspired to provide explanations and support for the selections being offered. Staff noted the change in approach with respect to claim frequency in the proposed filing and indicated that discussion and explanation of the basis for that change (i.e., observed declines in the rate of change in claim frequency) would be included in the supporting information for the filing.

In Exhibits 9a and 9b, goodness-of-fit tests had been applied to trend models applied to loss ratios (Exhibit 9a) and severity ratios (Exhibit 9b). Staff observed that using severity ratios had significantly improved the results of fitting tests, with r-squared values for severity ratios being materially higher than those of counterpart efforts to fit loss ratios for almost all tested trend periods. Severity ratios also showed somewhat smaller proportional residual differences in the goodness-of-fit testing done by the Bureau for the trend model and period underlying the proposed filing.

Exhibits 11a and 11b, respectively, provided further examinations of the effectiveness of trend models by testing predictive abilities of the respective models and trend periods prepared in support of this proposed filing. Staff noted that, for the trend period and model selected for use in this filing, limited comparisons could be made between projections of loss and severity ratios and that the results thus obtained were evenly divided.

Indemnity loss ratio trend factors computed as the product of the indemnity severity trend factors and frequency trend factors described above were shown on Page 6.11 of Exhibit 6.

Exhibit 10 provided graphs of indemnity loss ratios (Page 10.1) and indemnity severity ratios (Page 10.3). In addition, Exhibit 10 provided a graph of indemnity loss ratios, indemnity severity ratios and claim frequency each indexed to a common starting point (Policy Year 1995) on Page 10.5.

Pages 6.12 and 6.13 of Exhibit 6 showed arrays of possible trended indemnity loss ratios produced by the methods described above, with the Bureau's selected result (0.4763) highlighted with a border on Page 6.13. The selected result was produced using the average

of a case-incurred loss development approach and the paid loss development method to 20th report loss development. An exponential seven-point severity trend was used in combination with projected claim frequency changes averaging –4.9 percent per year to trend selected policy year results forward through the mid-point of the prospective rating period, April 1, 2010.

Trended Ultimate Loss Ratios - Medical

Staff indicated that the analysis done for medical losses paralleled that described above for indemnity losses in most important respects. It was observed that the alternative loss development methods had not produced material differences in estimated ultimate losses for medical benefits, in contrast to the prior discussion of indemnity loss. Staff noted the inclusion of counterpart exhibits in the meeting agenda materials for medical loss pertaining to each of the analytical steps previously addressed for indemnity loss.

For the sake of reference, the pertinent exhibit and page references for medical loss development and trend analysis in support of the proposed filing are provided below. (These detailed references were not read, provided or requested at the time of the meeting discussion.)

<u>Exhibit</u>	Content	Page(s)
5	Medical financial data - Table I reported data Adjustment of medical financial data to post-Act 44 basis Adjusted medical financial data	4 (case incurred), 6 (paid) 23 through 38 42 (case incurred), 44 (paid)
6	Medical loss development Trending of medical severity ratios Medical loss ratio trend factors Trended medical loss ratios	6.14 through 6.186.19 through 6.226.236.24 (linear), 6.25 (exponential)
7	Medical loss development tail factors	Summary on Page 1, detail on Pages 3, 5, 7 and 9
8	Claim frequency	Per indemnity discussion
9a, 9b	Goodness-of-fit tests 9a for loss ratios, 9b for severity ratios	9a1, 9a4, 9a5, 9a8 and 9a9 9b1, 9b4, 9b5, 9b8 and 9b9
11a, 11b	Retrospective tests of prediction for loss ratios (Exhibit 11a) and severity ratios (Exhibit 11b)	11a6 – 11a10 and 11b6 – 11b10

<u>Exhibit</u>	<u>Content</u>	Page(s)
10	Graphs of medical loss ratios Graphs of medical severity ratios Graph of indexed medical loss ratios, severity ratios and frequency trends	10.2 10.4
	combined	10.6

Staff noted that the trend model used for medical severity ratios was an exponential fit through the most recent seven policy year data points estimated, based on the average of the case incurred and paid to 20th report development methods. In combination with the claim frequency trend procedure previously described with the analysis of indemnity experience, this approach gave the trended medical loss ratio (0.5307) highlighted with a border on Page 6.25 of Exhibit 6.

Terrorism Provisions in Pricing

Staff noted that the Bureau had revised the loss cost rating value related to terrorism effective September 1, 2008. Concurrent with that change in rating value, new endorsement forms had also been adopted, with the benefit of changes made by the National Council on Compensation Insurance, Inc. (NCCI) which allowed use of the national terrorism endorsement form, WC 00 04 22 A, in Pennsylvania.

Catastrophes Other Than Certified Acts of Terrorism

Staff noted that the Bureau had revised the loss cost rating value related to catastrophes other than certified acts of terrorism effective September 1, 2008. Concurrent with that change in rating value, new endorsement forms had also been adopted.

Question: Staff was asked to provide information about the most recent changes in rating values being described.

Answer: Before September 1, 2008 Pennsylvania had a loss cost of \$0.03 per \$100 of payroll for "foreign terrorism" and a separate loss cost of \$0.01 per \$100 of payroll for "domestic terrorism, earthquakes and catastrophic industrial accidents". Effective September 1, 2008 Pennsylvania had adopted a loss cost of \$0.02 per \$100 of payroll for "terrorism" and \$0.01 for "catastrophes other than certified acts of terrorism."

Size-of-Loss Analyses

Staff noted that Bureau 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.

Many of the size-of-loss studies and rating values proposed in the filing vary by hazard group. Exhibit 24a presents a proposal for modifying and expanding the hazard groups to which classifications may be assigned. The proposal calls for an expansion from four (designated

I, II, III and IV) hazard groups to seven (designated A, B, C, D, E, F and G). Those seven can also be combined to form four new hazard groups (A&B = 1, C&D = 2, E&F = 3, and G = 4) for use by carriers during a transition period that will provide time for systems changes to be made.

In matching classifications to hazard groups, staff noted that the intention was to be as consistent as possible with NCCI assignments, while acknowledging that the PCRB and NCCI classification plans are significantly different. Assignments were made based on a mapping of PCRB and NCCI classifications. Exhibit 24a shows the hazard group assignments by class, as well as the movement based on number of classes and premium amounts between old and new hazard group definitions.

Question: The representative of NCCI was asked whether NCCI was abandoning use of four hazard groups as an alternative to the newly-established set of seven hazard groups.

Answer: NCCI was polling its members about their preferences and needs in this regard but did expect to eventually abandon the use of four hazard groups.

Question: Staff was asked whether PCRB had issued a circular about the proposed change to seven hazard groups.

Answer: Staff answered that this change would be proposed as part of the April 1, 2009 Loss Cost Filing and would be included in the circulars announcing the filing being made and subsequently approved if that were the case.

Staff briefly described the methods used for the derivation of size-of-loss distributions and excess loss factors in filings prior to April 1, 2008 (relying on an overall empirical loss distribution based on Pennsylvania data, together with relativities by hazard group using loss distributions provided by the NCCI and NCCI indications used to extrapolate Pennsylvania loss limitations above \$1 million) and the study of the topic performed by the Bureau in support of the April 1, 2008 filing (expanding the types of injury ((or combinations of types)) separately considered from death, permanent total/major combined, and minor/temporary combined in the prior approach to death, permanent total, permanent partial and temporary total each being treated individually.) The April 1, 2008 filing analysis had determined that actual loss experience could be used over a significant portion of the size-of-loss range for each type of injury. Various commonly-used distributions had been considered in fitting the empirical sizeof-loss distributions, including Single Parameter Pareto, Generalized Pareto, Lognormal, Gamma, Weibull and Exponential. Separate analyses of claim frequency and loss severity were performed. In generating final loss distributions and excess loss factors, actual data (claim counts and dollars of loss) for limits below \$500,000 had been combined with fitted counts and dollars above \$500,000 and re-accumulated.

Staff then described analysis conducted in support of the April 1, 2009 filing to support expanded hazard groups and excess loss factors applicable thereto.

Exhibit 22 presented the most recent available Pennsylvania size-of-loss distribution, derived by tabulating reported loss amounts and developing open claims, so as to produce ultimate loss estimates on a case-by-case basis consistent with the Bureau's analysis of aggregate financial

data. The exhibit also includes actual excess loss factors based on empirical loss distributions by type of injury (death, permanent total, permanent partial, and temporary total), along with excess loss ratios tied to fitted curves for loss limitations of \$500,000 and higher.

Question: An attendee inquired whether the empirical loss distributions had been developed by injury type.

Answer: Staff responded affirmatively, noting that the loss distributions had been developed by injury type separately for indemnity and medical. For the April 1, 2009 filing both indemnity and medical losses had been developed by type. In previous filings, indemnity losses had been developed by type of loss, but medical loss development had been done only in total. Staff explained that the differentiation of loss development by type of loss occurred by virtue of the different portions of claims and losses represented by open claims within each type of loss

Question: A committee member asked whether the development factors used against open claims were applied to case-incurred losses or only case reserves for open claims

Answer: Staff indicated that the loss development factors used in this procedure were applied to incurred losses on open claims.

Exhibit 23 derives proposed excess loss (pure premium) factors computed using results in Exhibit 22 and based on the proposed new hazard group assignments. Values as of April 1, 2008 were also recalculated using new hazard group definitions, so that a meaningful indicated change in excess loss ratios for April 1, 2009 could be shown. Note that the process for calculating excess factors in Exhibit 23 is unchanged from prior years, although the loss distributions on which the analysis relies have been updated, and the hazard groups expanded. Staff also commented that, for the 2009 filing, loss development and trend factors for medical were applied separately by type-of-injury for the first time, resulting in a notable increase in the excess loss factors for permanent partial claims and affecting the less risky (A-C) hazard groups to the greatest extent.

Question: An attendee asked why the target loss ratio was 0.9858 instead of 1.000.

Answer: Staff explained that excess loss factors were intended to be applied to published manual loss costs. Surcharges, such as offsets for Merit Rating and Premium Adjustment Program and Safety Committee Program credits, were included in those published loss costs. The target cost ratio reflected the amounts of those surcharges.

Question: Noting the magnitude of some proposed changes in excess loss factors, staff was asked whether the Bureau had considered tempering the amounts of proposed changes.

Answer: Staff replied that consideration had, in fact, been given to limiting changes in excess loss factors. However, it was noted that a considerable amount of tempering had already been incorporated in the Bureau's calculations and, given that the increases

were primarily the result of improvements in the estimation process, it had been thought more appropriate to propose the factors as shown. It was noted that these factors were not applied to all risks but rather were applied by agreement between carriers and insureds, mainly for large deductible policies.

Question: Noting the change in methodology for the April 1, 2009 filing, an attendee asked whether the Bureau had reviewed the impact of those changes on the previous hazard group system using four instead of seven hazard groups.

Answer: Subject to the qualification that the mapping of seven hazard groups into four did not perfectly replicate the original set of four hazard groups, staff responded that comparisons of the type being asked about were shown on Pages 11 through 18 of Exhibit 23.

Comment: An attendee observed that the Bureau's derivation of excess loss factors for the proposed filing had been affected by three different types of changes - the mapping of classes into hazard groups, revised loss development methodology, and the updating of available data with one new year.

Answer: Staff agreed and reiterated the effects of some of those changes on the comparisons shown on Page 18 of Exhibit 23.

Question: Staff was asked whether factors or procedures would be provided to convert the per-accident excess loss factors to an occurrence basis.

Answer: Staff replied in the negative. It was noted that NCCI had looked into the differences in excess loss factors applied on per-claim and per-occurrence bases and had found that the differences between the factors thus derived had been minimal.

Size of loss considerations also applied to the determination of state and hazard group relativities that allow a single table of insurance charges and savings to be used in different jurisdictions where benefit levels and statutory provisions may vary significantly. The proposed filing continued a procedure first implemented for the April 1, 2003 filing, which assigned credibility weights by hazard group rather than on a statewide basis. Unlike recent filings, however, the complement of credibility has been assigned to NCCI countrywide average severities instead of indicated average losses, as was the case in the PCRB's prior filing. Because of the revision and expansion of hazard groups, the Bureau's April 1, 2008 average costs by hazard group did not provide a meaningful complement to credibility. Exhibit 24 presented the derivation of state and hazard group relativities for the proposed filing.

Question: Staff was asked whether carriers would be able to choose to use four hazard groups once the new hazard groups were approved or whether, alternatively, use of the new seven hazard groups would be mandatory.

Answer: Attendees were advised that the <u>new</u> set of four hazard groups would be allowed on an optional basis for at least some initial period of time.

Offering of small deducible coverages at certain specified amounts is mandatory in Pennsylvania. Bureau filings thus provide loss elimination ratios computed consistent with the mandatory deductible levels. Exhibit 25 was distributed as a handout to meeting participants and presented the derivation of loss elimination ratios as the complements of excess loss (pure premium) factors and reflecting the expansion of hazard groups. Staff noted the fact that the mandatory \$1,000 deductible offer fell below the threshold for required individual claim reporting under the approved Statistical Plan, requiring some special treatment and consideration in the course of the analysis of loss elimination ratios. The revised loss distributions of Exhibit 22 have been incorporated in the derivation of values for limits of \$5,000 and \$10,000.

Retrospective Rating Plan Optional Loss Development Factors

Carriers may apply loss development factors to early evaluations in order to include a provision for maturation of loss values at subsequent reports. Exhibit 26 of the agenda materials provided such development factors applicable without limitation of losses, as well as a procedure that could be used to apply excess loss factors to compute appropriate loss development factors for various loss limitations and hazard groups.

Loss-Based Assessments and Employer Assessment Factor

Exhibit 13 of the agenda material addressed the above referenced items.

Effective October 1, 1999, the provisions for the Administration Fund, Subsequent Injury Fund and Supersedeas Fund, previously included in published Bureau loss costs, had been removed from those loss costs. Consistent with requirements of HB 1027, these amounts were now treated as a separate charge to insured employers collected through insurers. Loss-based assessments applicable to funding for the Office of the Small Business Advocate remained part of published Bureau loss costs under provisions of this law.

With the enactment of HB 2738, an Uninsured Employers Guaranty Fund had been established, with initial funding granted by legislative appropriation and authority given to the Bureau of Workers' Compensation to issue assessments to insurers and self-insurers for additional funding as the need might arise. Staff noted assessment activity related to that fund, and the proposed filing used the 2008 Assessment as the basis for an additional component of the Employer Assessment Factor effective April 1, 2009. Also consistent with past practice, the Bureau continued to include offset provisions for merit rating and credits granted under the Certified Safety Committee Program in published and proposed Bureau loss costs.

Exhibit 13 provided parameters used to compute the proposed employer assessment factor effective April 1, 2009 (0.0241) and the proposed loading to Bureau loss costs to provide for Merit Rating Plan credit offset, Certified Safety Committee Program credit offset and the Office of Small Business Advocate funding effective April 1, 2009 (0.0144). Staff noted that the proposed employer assessment factor was higher than the current level (0.0226) due primarily to a budgetary increase in Administration Fund expenses compared to the previous year. The loading in Bureau loss costs for the remaining factors listed above was noted as being up nominally from 0.0142 due to increased credit activity in the Certified Safety Committee Credit Program.

Pennsylvania Construction Classification Premium Adjustment Program (PCCPAP)

Exhibit 14 of the agenda materials was reviewed with all attendees.

The purpose of the PCCPAP program was described as responding to wage differentials within the construction industry, providing a program of premium credits to higher-wage employers. These credits were offset by loadings applied to construction classifications, reflecting the portion of employers participating in the program and the average premium credit obtained by those participating businesses, thus maintaining the required premium level in each classification.

The table of qualifying wages applicable to the PCCPAP was regularly amended based on actual changes on statewide average wage levels, with such filings subject to review and approval by the Insurance Department and typically effective each July 1.

Staff noted that the average PCCPAP loading indicated, based on the most recent available data, was nominally higher than that currently in effect (3.42 percent proposed vs. 3.35 percent current). This was attributed to the effects of increases in participation in the program and/or average credits being generated by participating employers.

Staff noted that 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 on the program. The revised plan made adjustment within the computation of the credits themselves for the effect of high wages on experience modifications.

Merit Rating Plan

Exhibit 15 of the agenda materials was used as the basis for this discussion.

The Merit Rating Plan was noted as a statutory requirement intended to provide incentive for the maintenance of safe workplaces for businesses too small to qualify for the uniform Experience Rating Plan. Exhibit 15 presented the offset to manual loss costs required to compensate for the net credit received by all eligible employers under this plan (0.29 percent), a slight decrease from the level currently in effect (0.31 percent).

Certified Safety Committee Credit Program

Exhibit 16 of the agenda materials addressed recent experience under the Certified Safety Committee Credit Program. Experience was available for Policy Years 1994 – 2006 inclusive.

Staff noted that until mid- to late-1996 this program did not allow employers to qualify for credit in more than one policy period. As a result, 1995, 1996 and 1997 data were expected to understate the prospective experience under this program after Act 57 had provided for up to five annual credit periods for qualifying employers. Subsequently, in 1999 and 2000 some

employers began to reach the limit of five years' of credit application under current law. In 2002 new legislation (Senate Bill 813) was passed that removed the limit on the number of times an employer could receive such credits. Based on a monitoring of ongoing certification activity, staff proposed a change in the loading to offset ongoing credits from 1.10 percent to 1.14 percent.

Proposed Loss Cost Relativities by Classification

Exhibits 17, 20a, 20b, 20c, 28, 29 and 30 of the agenda materials and the Class Book were reviewed with the attendees as follows.

Exhibit 17 presented a narrative discussion of the procedures applied to derive classification loss cost relativities. Staff noted that these procedures were generally unchanged from those of the most recent previous loss cost filing.

Exhibits 20a, 20b and 20c of the agenda materials were offered as summary tabulations, based on unit statistical data used to derive certain parameters applied in the determination of classification loss cost relativities.

Exhibit 28 showed proposed classification loss costs and expected loss factors by classification consistent with the proposed overall change in loss cost level. Exhibit 29 provided insight into the derivation of the proposed classification rating values by showing a test of indicated and selected classification rating values, including effects of capping and application of loadings for the various assessments, which would remain a part of published Bureau loss costs.

Exhibit 30 showed a histogram of proposed classification rating value changes based on the proposed overall change in loss cost levels. Staff noted that desirable features of classification loss cost changes included relatively narrow distribution around the average change and few, if any, classifications which materially shift from better to worse than average or vice-versa between successive filings.

Staff noted legislation enacting a presumption of work-related causality for Hepatitis C incurred by selected sets of workers (HB 1633) that was passed in 2002. For its April 1, 2003 Loss Cost Filing, the Bureau had conducted an analysis based on available statistics concerning incidence of HCV in the general population in concert with projected costs for Hepatitis C cases in healthcare workers under various scenarios by an independent consulting group (Milliman U.S.A., formerly Milliman & Robertson, Inc.). These projections had been compared with existing loss cost estimates for affected classifications, and indicated surcharges had been derived. The Insurance Department's review of the April 1, 2003 filing had suggested that the incidence of HCV in the affected classifications could arguably be comparable to those of the general U.S. population and thus lower than those originally proposed by the Bureau. Ultimately, the Bureau had adjusted the applicable surcharges to be consistent with the incidence of HCV in the general U.S. population. This filing proposed to continue that procedure, as presented in Exhibit 31.

Various proposals are under consideration by the Pennsylvania legislature at the time of this filing, including HBs 465, 763 and 1025. These proposals would invoke various expansions of the population of workers to which the presumption of work causality for Hepatitis C would apply, with many of those groups being employees of the Commonwealth of Pennsylvania (a self-insured entity).

A Class Book providing detail of historical experience and derivation of proposed rating values had been distributed with agenda materials prior to the meeting. This exhibit contained tabulations of prior experience data by classification, together with the detail of the derivation of individual loss cost proposals in the draft filing. An exhibit labeled "Index and Supporting Classification Exhibits" was provided for use in conjunction with the Class Book.

Experience Rating Plan

Staff reminded the Committees that substantial revisions to the existing Experience Rating Plan had been approved by the Insurance Department effective April 1, 2004. Attendees were advised that the Experience Rating Plan exhibits provided for discussion at this meeting had been constructed by applying the revised Experience Rating Plan to rating periods occurring prior to the actual implementation of the new plan.

Staff referred to Exhibits 18a, 18b, 19 and 27 of the agenda materials.

Exhibit 18a showed historical results of applying the Experience Rating Plan over a period of five successive years, organized by year, industry group, and premium size and modification range. It was noted that Exhibit 18a presented Experience Rating Plan results prior to the effects of capping, recognizing that the selected capping procedures were intended to mitigate year-to-year movement in experience modifications but would not improve the accuracy of the modifications thus issued. An illustration of some of the effects of the new Experience Rating Plan was provided by reference to Exhibit 18a.

Question: Staff was asked to explain the basis for computing "manual" loss ratios.

Answer: Staff explained that the basis for all loss ratios being presented in Exhibit 18 was Bureau loss costs. The analysis was intended to allow comparisons between different groups of risks but did not present data useful for evaluating overall price levels. For example, the losses used throughout the exhibit were reported unit statistical losses, not losses developed to an ultimate and/or on-level basis.

Question: An attendee asked if the Bureau's Experience Rating Plan included separate primary and excess credibilities.

Answer: Staff replied that a single credibility factor was assigned to each risk, based on expected losses.

Exhibit 18b was referenced as a summary page formatted identically to Exhibit 18a but reflecting the impacts of capping procedures adopted incrementally with initial swing limits adopted in 2004 and additional transition capping procedures added effective April 1, 2006.

Exhibit 19 presented derivation of selected parameters within the current Experience Rating Plan. It was noted that the collectible premium ratios derived on Page 19.1 of Exhibit 19 were the basis for the relativities by industry group of manual changes in loss costs previously discussed in Exhibit 12.

Exhibit 27 provided the proposed Table B or credibility table for the current Experience Rating Plan, consistent with parameters developed in Exhibit 19.

Auditable Payroll Values Indexed to the Statewide Average Weekly Wage

Staff noted that maximum remunerations for premium computation purposes with respect to executive officers and salaried police or firefighters were maintained in specified relationships to the statewide average weekly wage. In addition, presumed remuneration for premium computation purposes for some taxicab operators was similarly derived. A staff memorandum outlining appropriate revisions to the currently-approved parameters in these cases was presented for discussion. Changes proposed would move the maximum individual payroll for an executive officer from \$1,950 per week to \$2,000 per week and the minimum payroll for auxiliary police or special school police appointed by municipalities or townships from \$3,900 to \$4,050 per year.

At the conclusion of the meeting, attendees were invited to present remaining questions. The discussion proceeded as shown below.

Question: With respect to the excess loss factors, staff was asked whether the filing would show percentage changes or only the proposed factors.

Answer: Staff answered that the meeting exhibits would all be included in the supporting materials for the filing.

Question: A committee member asked when the Bureau expected to submit the April 1, 2009 Loss Cost Filing.

Answer: Staff indicated that the timing of the filing would depend on any follow-up analyses and/or changes indicated by virtue of the discussion at this meeting but that the filing could conceivably be submitted within a few days of the meeting.

There being no further business for the Committees to consider, the meeting was adjourned.

Respectfully submitted,

Timothy L. Wisecarver Chair - Ex Officio